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Water Resources Data for Kansas

Water Year 1975



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT KS-75-1

**Prepared in cooperation with the State of Kansas and with
other agencies**

CALENDAR FOR WATER YEAR 1975

1974

OCTOBER

S	M	T	W	T	F	S
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6	7	8	9	10	11	12
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NOVEMBER

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1975

JANUARY

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JUNE

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AUGUST

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31						

SEPTEMBER

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28	29	30				

Water Resources Data for Kansas Water Year 1975



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other agencies**

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Preface

This report was prepared by the U.S. Geological Survey in cooperation with the State of Kansas and with other agencies by personnel of the Kansas district of the Water Resources Division under the supervision of J. S. Rosenshein, District Chief, and A. Clebsch, Jr., Regional Hydrologist, Central Region.

This report is one of a series issued State by State under the general direction of J. S. Cragwall, Jr., Chief Hydrologist, and G. W. Whetstone, Assistant Chief Hydrologist for Scientific Publications and Data Management.

Prepared in cooperation with

Kansas Water Resources Board
Kansas Department of Health and Environment, Division of Environment
Kansas Geological Survey
Kansas Department of Transportation
City of Wichita
Corps of Engineers, U.S. Army
Environmental Protection Agency
Bureau of Reclamation, U.S. Department of the Interior
Bureau of Sports Fisheries and Wildlife, U.S. Department of the Interior

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Lawrence, Kansas 66045

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FOR WHICH RECORDS ARE PUBLISHED

XI

*[Letters after station name designate type of data: (c) chemical, (b) biological,
(m) microbiological, (t) water temperature, and (s) sediment]*

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MISSOURI RIVER:

KANSAS RIVER BASIN

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WATER RESOURCES DATA FOR KANSAS, 1975

INTRODUCTION

Water resources data for the 1975 water year for Kansas consist of records of stage, discharge, and water quality of streams; stage, contents, and water quality of lakes and reservoirs; and levels and quality of water in wells. This report contains discharge records for 143 gaging stations; stage and contents for 20 lakes and reservoirs; water quality for 69 gaging stations; and water levels for 11 observation wells. Also included are data for 125 crest-stage partial-record stations and 23 low-flow partial-record stations. Locations of complete-record surface-water gaging stations are shown in Figure 1. Locations of partial-record surface-water gaging stations are shown in Figure 2. Locations of water-quality stations are shown in Figure 3. These data represent that part of the National Water Data System operated by the U.S. Geological Survey and cooperating State and Federal agencies in Kansas.

Records of discharge (or stage) of streams, and contents (or stage) of lakes and reservoirs were first published in a series of U.S. Geological Survey water-supply papers entitled, "Surface Water Supply of the United States". Through water year 1960, these water-supply papers were in an annual series and then in a 5-year series for 1961-65 and 1966-70. Records of chemical quality, water temperatures, and suspended sediment were published from 1941 to 1970 in an annual series of water-supply papers entitled, "Quality of Surface Waters of the United States". Records of ground-water levels were published from 1935 to 1974 in a series of water-supply papers entitled, "Ground-Water Levels in the United States".

Beginning with the 1961 water year and continuing through water year 1974, stream-flow data have been released by the Geological Survey in annual reports on a state-boundary basis. Water-quality records beginning with the 1964 water year, and ground-water data since the 1971 water year have been similarly released either in separate reports or in conjunction with streamflow records. These reports provided rapid release of preliminary water data shortly after the end of the water year. The final data were then released in the water-supply paper series mentioned above. Beginning with the 1975 water year, water data will be released on a state-boundary basis in final form and will not be republished in the water-supply paper series. The 1975 and subsequent water year reports will be in a series which will carry an identification number consisting of the two-letter State abbreviation, the last two digits of the water year, and the volume number. For example, this report is identified as "U.S. Geological Survey Water-Data Report KS-75-1". These reports are for sale to the public for a nominal fee from the National Technical Information Service, U.S. Department of Commerce, Springfield, Virginia, 22151. For more information on publications available, see "PUBLICATIONS" on a subsequent page.

COOPERATION

The U.S. Geological Survey and organizations of the State of Kansas have had cooperative agreements for the systematic collection of streamflow records since 1895, for water-quality records since 1957, and for ground-water level records since 1934. Organizations that assisted in collecting data through cooperative agreement with the Survey are:

Kansas Water Resources Board, K. S. Krause, Executive Director
and Chief Engineer

Kansas Department of Health and Environment, Division of
Environment, M. W. Gray, Director of Environment

Kansas Geological Survey, W. W. Hambleton, State Geologist
and Director

Kansas State Board of Agriculture, Division of Water Resources,
G. E. Gibson, Chief Engineer

Kansas Department of Transportation, E. E. Wilkinson,
Bridge Engineer

City of Wichita, M. S. Mitchell, Assistant Superintendent of
Public Works Maintenance

The following Federal agencies assisted in collection of records published in this report by furnishing funds or services:

Corps of Engineers, U.S. Army, in collecting records for
76 gaging stations and 8 water-quality stations.

Environmental Protection Agency, in collecting records
for 6 water-quality stations.

Bureau of Reclamation, U.S. Department of the Interior, in
collecting records for 2 gaging stations and 11 water-
quality stations.

Bureau of Sports Fisheries and Wildlife, U.S. Department of
the Interior, in collecting records for 1 gaging station.

Organizations that supplied data are acknowledged in station descriptions.

DEFINITION OF TERMS

Terms related to streamflow, water-quality, and other hydrologic data, as used in this report, are defined below. See also table for converting English units to International System of units (SI) on inside back cover.

Acre-foot (AC-FT, acre-ft) is the quantity of water required to cover 1 acre to a depth of 1 foot and is equivalent to 43,560 cubic feet or about 326,000 gallons or 1,233 cubic metres.

Aquifer is a geologic formation, group of formations, or part of a formation that contains sufficient saturated permeable material to yield significant quantities of water to wells and springs.

Bed material is the shifting portion of fragmented material of which the streambed is composed.

Cfs-day is the volume of water represented by a flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, approximately 1.9835 acre-feet, or about 646,000 gallons or 2,445 cubic metres. It represents a runoff of approximately 0.0372 inch from 1 square mile or 0.3468 millimetre from 1 square kilometre.

Chemical oxygen demand (COD) indicates the quantity of oxidizable compounds in water and varies with water composition(s), temperature, period of contact, and other factors.

Coliform organisms are a group of bacteria used as an indicator of the sanitary quality of the water. The number of coliform colonies per 100 milliliters is determined by the immediate incubation membrane filter method.

Contents is the volume of water in a reservoir, lake, stream or aquifer. Contents herein is that of a reservoir or lake and unless otherwise indicated, is computed on the basis of a level pool and does not include bank storage.

Control designates a feature downstream from the gage that determines the stage-discharge relation at the gage. This feature may be a natural constriction of the channel, an artificial structure, or a uniform cross section over a long reach of the channel.

Cubic foot per second (CFS, cfs) is the rate of discharge representing a volume of 1 cubic foot passing a given point during 1 second and is equivalent to approximately 7.48 gallons per second or 448.8 gallons per minute or 0.02832 cubic metres per second.

Discharge is the volume of water (or more broadly, total fluids) that passes a given point within a given period of time.

Mean discharge is the arithmetic average of individual daily mean discharges during a specific period.

Instantaneous discharge is the discharge at a given time.

Dissolved refers to the amount of a substance present in true chemical solution. In practice, however, the term includes all forms of the substance that will pass through a 0.45-micrometre membrane filter, and thus may include some very small (colloidal) suspended particles. Analyses are performed on filtered samples.

Drainage area of a stream at a specified location is that area, measured in a horizontal plane, enclosed by a topographic divide from which direct surface runoff from precipitation normally drains by gravity into the stream above the specified point. Figures of drainage area given herein include all closed basins, or noncontributing areas, within the area unless otherwise noted.

Gage height (G.H.) is the water-surface elevation referred to some arbitrary gage datum. Gage height is often used interchangeably with the general term "stage", although gage height is more appropriate when used with a reading on a gage.

Gaging station is a particular site on a stream, canal, lake, or reservoir where systematic observations of gage height or discharge are obtained. When used in connection with a discharge record, the term is applied only to those gaging stations where a continuous record of discharge is computed.

Hardness of water is a physical-chemical characteristic that is commonly recognized by the increased quantity of soap required to produce lather. It is attributable to the presence of alkaline earths (principally calcium and magnesium) and is expressed as equivalent calcium carbonate (CaCO_3).

Micrograms per litre (UG/L, ug/l) is a unit for expressing the concentration of chemical constituents in solution as the weight (micrograms) of solute per unit volume (litre) of water. One thousand micrograms per litre is equivalent to one milligram per litre.

Milligrams per litre (MG/L, mg/l) is a unit for expressing the concentration of chemical constituents in solution. Milligrams per litre represents the weight of solute per unit volume of water. Milligrams or micrograms per litre may be converted to milliequivalents (one thousandth of a gram-equivalent weight of a constituent) per litre by multiplying the factors in table 1, page 5. Concentration of suspended sediment also is expressed in mg/l, and is based on the weight of sediment per litre of water-sediment mixture. Sediment concentrations may be converted to parts per million by using the factors in table 2, p 5.

Partial-record station is a particular site where limited streamflow or water-quality data are collected systematically over a period of years for use in hydrologic analyses.

Particle size is the diameter, in millimetres (mm), of suspended sediment or bed material determined by either sieve or sedimentation methods. Sedimentation methods (pipet, bottom-withdrawal tube, visual-accumulation tube) determine fall diameter of particles in either distilled water (chemically dispersed) or in native water (the river water at the time and point of sampling).

Table 1.--Factors for conversion of chemical constituents in milligrams or micrograms per litre to milliequivalents per litre.

<u>Ion</u>	<u>Multi- ply by</u>	<u>Ion</u>	<u>Multi- ply by</u>
Aluminum (Al^{+3})*.....	0.11119	Iodide (I^{-1}).....	0.00788
Ammonia as NH_4^{+1}.....	.05544	Iron (Fe^{+3})*.....	.05372
Barium (Ba^{+2}).....	.01456	Lead (Pb^{+2})*.....	.00965
Bicarbonate (HCO_3^{-1}).....	.01639	Lithium (Li^{+1})*.....	.14411
Bromide (Br^{-1}).....	.01251	Magnesium (Mg^{+2}).....	.08226
Calcium (Ca^{+2}).....	.04990	Manganese (Mn^{+2})*.....	.03640
Carbonate (CO_3^{-2}).....	.03333	Nickel (Ni^{+2})*.....	.03406
Chloride (Cl^{-1}).....	.02821	Nitrate (NO_3^{-1}).....	.01613
Chromium (Cr^{+6})*.....	.11539	Nitrite (NO_2^{-1}).....	.02174
Cobalt (Co^{+2})*.....	.03394	Phosphate (PO_4^{-3}).....	.03159
Copper (Cu^{+2})*.....	.03148	Potassium (K^{+1}).....	.02557
Cyanide (CN^{-1}).....	.03844	Sodium (Na^{+1}).....	.04350
Fluoride (F^{-1}).....	.05264	Strontium (Sr^{+2})*.....	.02283
Hydrogen (H^{+1}).....	.99209	Sulfate (SO_4^{-2}).....	.02082
Hydroxide (OH^{-1}).....	.05880	Zinc (Zn^{+2})*.....	.03060

*Constituent reported in micrograms per litre; multiply by factor and divide results by 1,000.

Table 2.--Factors for conversion of sediment concentration in milligrams per litre to parts per million.* (All values calculated to three significant figures.)

Range of concentration in 1,000 mg/l	Di- vide by	Range of concentration in 1,000 mg/l	Di- vide by	Range of concentration in 1,000 mg/l	Di- vide by	Range of concentration in 1,000 mg/l	Di- vide by
0 - 8	1.00	201-217	1.13	411-424	1.26	619-634	1.39
8.05- 24	1.01	218-232	1.14	427-440	1.27	636-650	1.40
24.2 - 40	1.02	234-248	1.15	443-457	1.28	652-666	1.41
40.5 - 56	1.03	250-264	1.16	460-473	1.29	668-682	1.42
56.5 - 72	1.04	266-280	1.17	476-489	1.30	684-698	1.43
72.5 - 88	1.05	282-297	1.18	492-506	1.31	700-715	1.44
88.5 -104	1.06	299-313	1.19	508-522	1.32	717-730	1.45
105 -120	1.07	315-329	1.20	524-538	1.33	732-747	1.46
121 -136	1.08	331-345	1.21	540-554	1.34	749-762	1.47
137 -152	1.09	347-361	1.22	556-570	1.35	765-780	1.48
153 -169	1.10	363-378	1.23	572-585	1.36	782-796	1.49
170 -185	1.11	380-393	1.24	587-602	1.37	798-810	1.50
186 -200	1.12	395-409	1.25	604-617	1.38		

*Based on water density of 1.000 g/ml and a specific gravity of sediment of 2.65.

Particle-size classification used in this report agrees with recommendations made by the American Geophysical Union Subcommittee on Sediment Terminology. The classification is as follows:

Classification	Size (mm)	Method of analysis
Clay.....	0.00024 - 0.004	Sedimentation.
Silt.....	.004 - .062	Sedimentation.
Sand.....	.062 - 2.0	Sedimentation or sieve.
Gravel.....	2.0 - 64.0	Sieve.

The particle-size distribution given in this report is not necessarily representative of all particles in transport in the stream. Most of the organic material is removed and the sample is subjected to mechanical and chemical dispersion before analysis in distilled water. Chemical dispersion is not used for native-water analysis.

Plankton is the floating (or weakly swimming) animal or plant life in a body of water consisting chiefly of minute plants (as diatoms and blue-green algae) and of minute animals (as protozoan, entomostracans, and various larvae).

Sediment is solid material that originates mostly from disintegrated rocks and is transported by, suspended in, or deposited from water; it includes chemical and biochemical precipitates and decomposed organic material such as humus. The quantity, characteristics, and cause of the occurrence of sediment in streams are influenced by environmental factors. Some major factors are degree of slope, length of slope, soil characteristics, land usage, and quantity and intensity of precipitation.

Suspended sediment is the sediment that at any given time is maintained in suspension by the upward components of turbulent currents or that exists in suspension as a colloid.

Suspended-sediment discharge is the rate at which dry weight of sediment passes a section of a stream or is the quantity of sediment, as measured by dry weight, or by volume, that is discharged in a given time. It is computed by multiplying discharge times mg/l times 0.0027.

Total sediment discharge or total sediment load is the sum of the suspended-sediment discharge and the bedload discharge. It is the total quantity of sediment, as measured by dry weight or volume, that is discharged during a given time.

Suspended-sediment concentration is the velocity-weighted concentration of suspended sediment in the sampled zone (from the water surface to a point approximately 0.3 ft above the bed) expressed as milligrams of dry sediment per liter of water-sediment mixture (mg/l).

Mean concentration is the time-weighted concentration of suspended sediment passing a stream section during a 24-hour day.

Sodium-adsorption-ratio (SAR) is the expression of relative activity of sodium ions in exchange reactions with soil and is an index of sodium or alkali hazard to the soil. Waters range in respect to sodium hazard from those which can be used for irrigation on almost all soils to those which are generally unsatisfactory for irrigation.

Solute is any substance derived from the atmosphere, vegetation, soil, or rocks that is dissolved in water.

Specific conductance is a measure of the ability of a water to conduct an electrical current and is expressed in micromhos per centimeter at 25.0°C. Because the specific conductance is related to the number and specific chemical types of ions in solution, it can be used for approximating the dissolved-solids contents in the water. Commonly, the amount of dissolved solids (in milligrams per litre) is about 65 percent of the specific conductance (in micromhos per cm at 25.0°C). This relation is not constant from stream to stream or from well to well, and it may even vary in the same source with changes in the composition of the water.

Stage-discharge relation is the relation between gage height and the volume of water per unit of time, flowing in a channel.

Thermograph is a thermometer that continuously and automatically records, on a chart, the water temperature of a stream. "Temperature recorder" is the term used to indicate the presence of a thermograph or a digital mechanism that automatically records water temperatures on paper tape.

Time-weighted average is computed by multiplying the number of days in the sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the total number of days. A time-weighted average represents the composition of water that would be contained in a vessel or reservoir that had received equal quantities of water from the stream each day for the water year.

Tons per acre-foot indicates the dry weight of dissolved solids in 1 acre-foot of water. It is computed by multiplying the concentration in milligrams per litre by 0.00136.

Tons per day is the quantity of a substance in solution or suspension that passes a stream section during a 24-hour day.

Total (as used in tables of chemical analyses) refers to the amount of a substance that is present both in solution and in suspension. Analyses are performed on representative samples of water-suspended sediment mixtures.

Weighted average is used in this report to indicate discharge-weighted average. It is computed by multiplying the discharge for a sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the sum of the discharges. A discharge-weighted average approximates the composition of water that would be found in a reservoir containing all the water passing a given location during the water year after thorough mixing in the reservoir. See also table for converting English Units to International Units on inside back cover.

WRD is used as an abbreviation for "Water-Resources Data" in the summary REVISIONS paragraph to refer to previously published State annual basic-data reports.

WSP is used as an abbreviation for "Water-Supply Paper" in references to previously published reports.

SPECIAL NETWORKS AND PROGRAMS

Hydrologic bench-mark station is one that provides hydrologic data for a basin in which the hydrologic regimen will likely be governed solely by natural conditions. Data collected at a bench-mark station may be used to separate effects of natural from manmade changes in other basins which have been developed and in which the physiography, climate, and geology are similar to those in the undeveloped bench-mark basin.

National stream-quality accounting network is an accounting network designed by the U.S. Geological Survey to meet many of the information demands of agencies or groups involved in national or regional water-quality planning and management. Both accounting and broad-scale monitoring objectives have been incorporated in the network design. Areal configuration of the network is based on river-basin accounting units designated by the Office of Water Data Coordination in consultation with the Water Resources Council. Primary objectives of the network are (1) to depict areal variability of water-quality conditions nationwide on a year-by-year basis and (2) to detect and assess long-term changes in stream quality.

Pesticide program is a network of regularly sampled water-quality stations where additional quarterly samples are collected to determine the concentration and distribution of pesticides in streams whose waters are used for irrigation or in streams in areas where potential contamination could result from the application of the commonly used insecticides and herbicides.

Pesticides are chemical compounds used to control the growth of undesirable plants and animals. Major categories of pesticides includes insecticides, miticides, fungicides, herbicides, and rodenticides. Since the first application of DDT as an insecticide in the early 1930's, there have been almost 60,000 pesticide formulations registered, each containing at least one of the approximately 800 different basic pesticide compounds. The United States annually produces about 1 billion pounds of these compounds. Although efforts are being made to substitute many of the chlorinated hydrocarbon pesticides with more specific, fast-acting, and easily degradable compounds, chlorinated hydrocarbon pesticides are still commonly used in many areas of the country.

Radiochemical program is a network of regularly sampled water-quality stations where additional samples are collected monthly or twice a year (at high and low flow) to be analyzed for radioisotopes. The streams that are sampled represent major drainage basins in the conterminous United States.

Radioisotopes are isotope forms of an element that exhibit radioactivity. Isotopes are varieties of a chemical element that differ in atomic weight, but are very nearly alike in chemical properties. The difference arises because the atoms of the isotopic forms of an element differ in the number of neutrons in the nucleus. For example: Ordinary chlorine is a mixture of isotopes having atomic weights 35 and 37, with the natural mixture having atomic weight about 35.453. Many of the elements similarly exist as mixtures of isotopes, and a great many new isotopes have been produced in the operation of nuclear devices such as the cyclotron (Rose, 1966). There are 275 isotopes of the 81 stable elements in addition to over 800 radioactive isotopes.

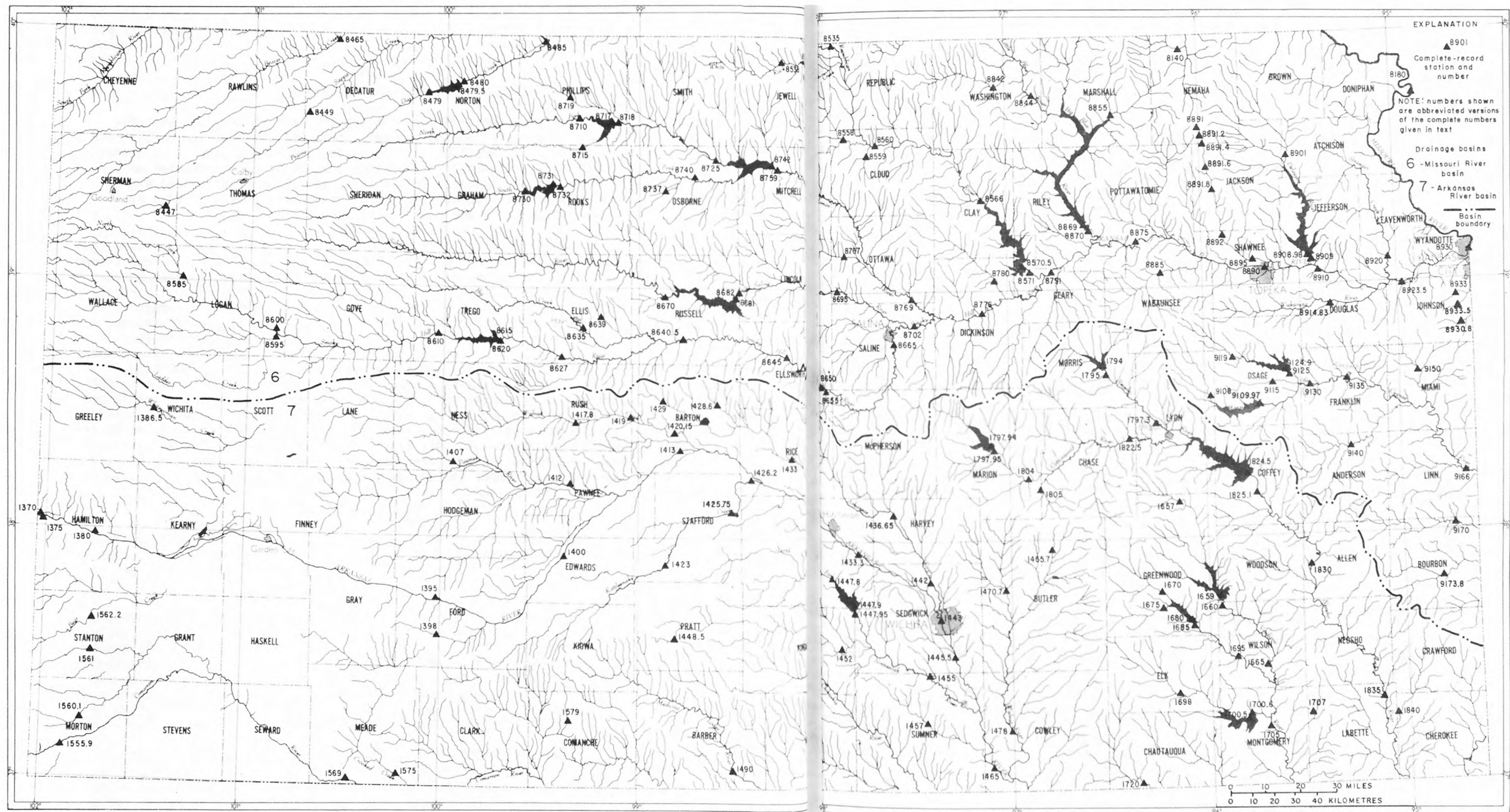
Radioisotopes that are determined in this program are natural uranium in ug/l (micrograms per litre), radium as radium-226 in PC/L (pCi/l, picocuries per litre), gross beta radiation as equivalent strontium/yttrium-90 or cesium-137 in PC/L, and gross alpha radiation as micrograms of uranium equivalent per litre (ug/l). Gross alpha and beta radioactivity associated with the fine-grained (silt and clay sized) sediments in the samples are also determined.

A picocurie (PC,pCi) is one trillionth (1×10^{-12}) of the amount of radioactivity represented by a curie (Ci). A curie is the amount of radioactivity that yields 3.7×10^{10} radioactive disintegrations per second. A picocurie yields 2.22 dpm (disintegrations per minute).

DOWNSTREAM ORDER AND STATION NUMBER

Stations are listed in a downstream direction along the main stream, and stations on tributaries are listed between stations on the main stream in the order in which those tributaries enter the main stream. Stations on tributaries entering above all mainstream stations are listed before the first mainstream station. Stations on tributaries to tributaries are listed in a similar manner. In the lists of gaging stations and water-quality stations in the front of this report the rank of tributaries is indicated by indention, each indention representing one rank.

As an added means of identification, each gaging station, partial-record station, and water-quality station has been assigned a station number. These are in the same downstream order used in this report. In assigning stations numbers, no distinction is made between partial-record stations and gaging stations; therefore, the station number for a partial-record station indicates downstream order position in a list made up of both types of stations. Water-quality stations located at or near gaging stations or partial-record stations have the same number as the gaging or partial-record station. Gaps are left in the series of numbers to allow for new stations that may be established; hence, the numbers are not consecutive. The complete 8-digit number for each station, such as 06814000, which appears just to the left of the station name, includes the 2-digit part number "06" plus the 6-digit downstream order number "814000". In this report, the records are listed in downstream order by parts. The part number refers to an area whose boundaries coincide with certain natural drainage lines. Records in this report are in Part 6 (Missouri River basin) and Part 7 (Arkansas River basin). All records for a drainage basin encompassing more than one State can be arranged in downstream order by assembling pages from the various State reports by station number to include all records in the basin.



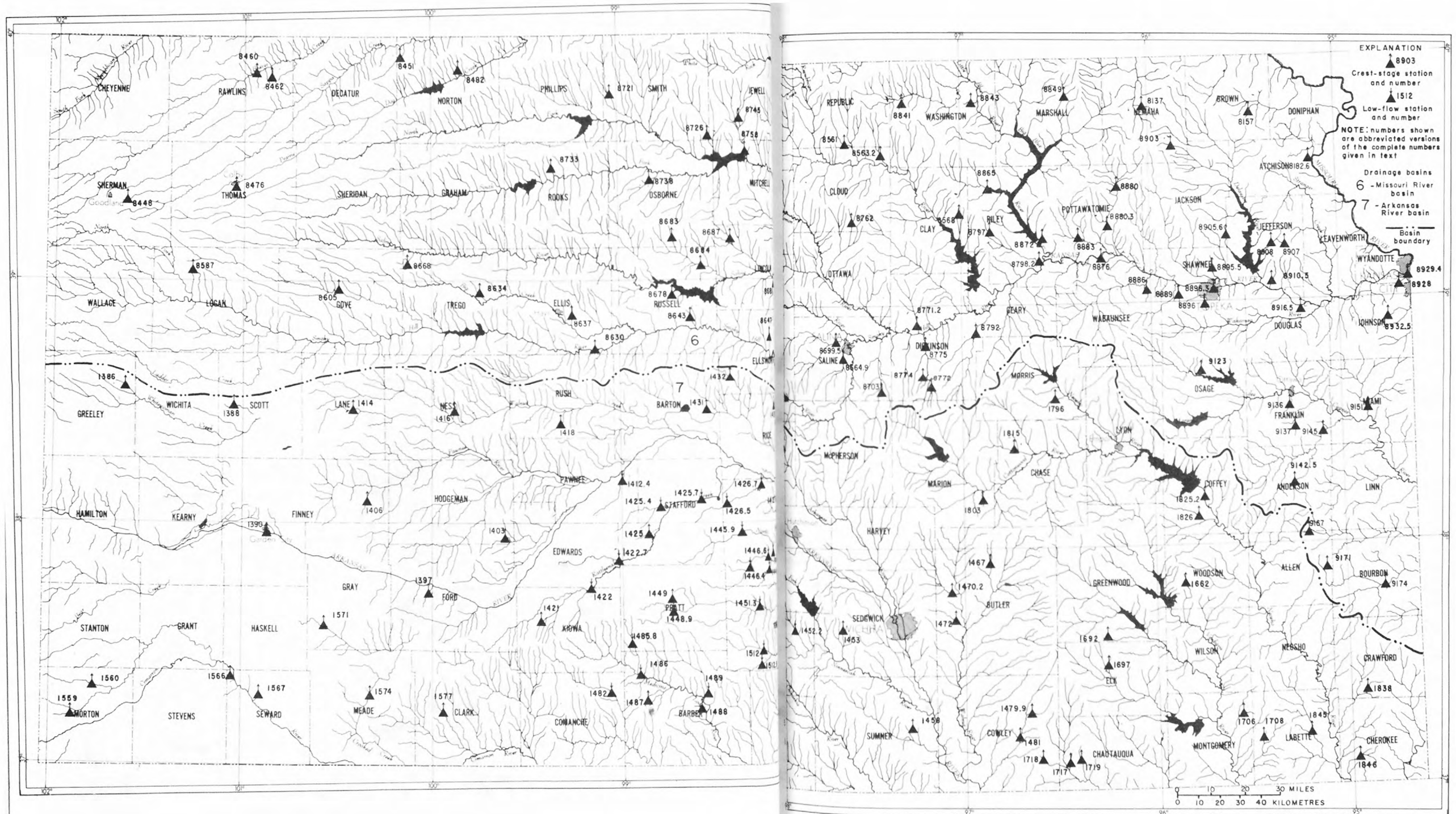
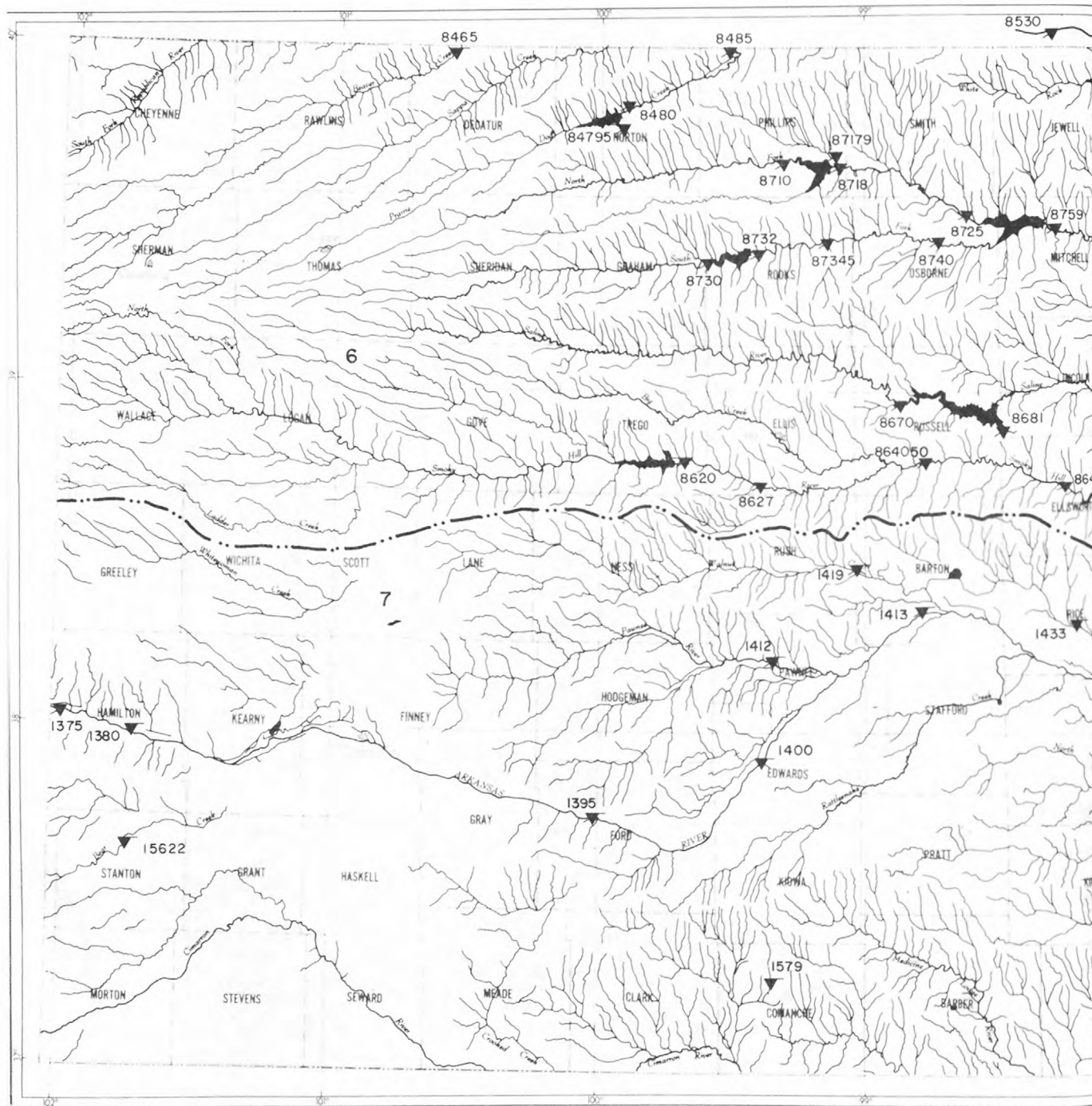


Figure 2.--Map of Kansas showing location of partial-record surface-water gaging stations, 1975 water year.



- ▼ Chemical-measurement site
- ▼ Temperature-measurement site
- ▼ Biological-measurement site
- ▼ Sediment-measurement site

Note: numbers shown are abbreviated versions of the complete numbers given in text

EXPLANATION

Drainage basins
6 - Kansas River basin
7 - Arkansas River basin

Basin boundary

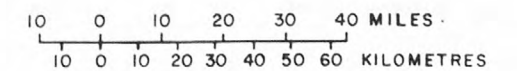


Figure 3.--Map of Kansas showing locations of surface water-quality stations, 1975 water year.

NUMBERING SYSTEM FOR WELLS AND MISCELLANEOUS SITES

Miscellaneous downstream order station numbers are not assigned to wells and miscellaneous sites where only random water-quality samples or discharge measurements are taken.

The well and miscellaneous site number of the U.S. Geological Survey consists of 15 digits. The first 6 digits denote the degrees, minutes, and seconds of latitude, the next 7 digits denote degrees, minutes, and seconds of longitude, and the last 2 digits are a sequential number for wells within a 1-second grid. In the event that the latitude-longitude coordinates for a well and a miscellaneous site are the same, assign sequential numbers "01", "02", etc. as one would for wells. See figure 4 below.

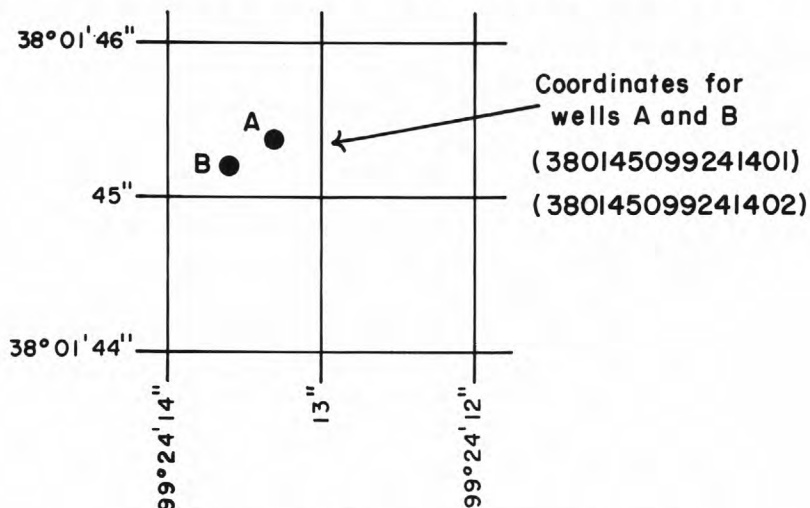


Figure 4.--Example of site numbers for wells.

EXPLANATION OF SURFACE WATER RECORDS

Collection and computation of data

The base data collected at gaging stations consist of records of stage and measurements of discharge of streams or canals, and stage, surface area, and contents of lakes or reservoirs. In addition, observations of factors affecting the stage-discharge relation or the stage-capacity relation, weather records, and other information are used to supplement base data in determining the daily flow or volume of water in storage. Records of stage are obtained from direct readings on a nonrecording gage or from a water-stage recorder that gives either a continuous graph of the fluctuations or a tape punched at 15- or 60-minute intervals. Measurements of discharge are made with a current meter, using the general methods adopted by the Geological Survey on the basis of experience in stream gaging since 1888. These methods are described in standard textbooks, in Water-Supply Paper 888, and in U.S. Geological Survey Techniques of Water Resources Investigations, book 3, chapter A6. Surface areas of lakes or reservoirs are determined from instrument surveys using standard methods. The configuration of the reservoir bottom is determined by sounding at many points.

For stream-gaging stations, rating tables giving the discharge for any stage are prepared from stage-discharge relation curves. If extensions to the rating curves are necessary to express discharge greater than measured, they are made on the basis of indirect measurements of peak discharge (such as slope-area or contracted-opening measurements, computation of flow over dams or weirs), velocity-area studies, and logarithmic plotting. The daily mean discharge is computed from gage heights and rating tables, then the monthly and yearly mean discharge are computed from the daily figures. If the stage-discharge relation is subject to change because of frequent or continual change in the physical features that form the control, the daily mean discharge is computed by the shifting-control method, in which correction factors based on individual discharge measurements and notes by hydrographers and observers are used in applying the gage heights to the rating tables. If the stage-discharge relation for a station is temporarily changed by the presence of aquatic growth or debris on the control, the daily mean discharge is computed by what is basically the shifting-control method.

At some stream-gaging stations the stage-discharge relation is affected by backwater from reservoirs, tributary streams, or other sources. This necessitates the use of the slope method in which the slope or fall in a reach of the stream is a factor in computing discharge. The slope or fall is obtained by means of an auxiliary gage set at some distance from the base gage. At some stations the stage-discharge relation is affected by changing stage; at these stations the rate of change in stage is used as a factor in computing discharge.

At some stream-gaging stations the stage-discharge relation is affected by ice in the winter, and it becomes impossible to compute the discharge in the usual manner. Discharge for periods of ice effect is computed on the basis of the gage-height record and occasional winter discharge measurements, consideration being given to the available information on temperature and precipitation, notes by gage observers and hydrographers, and comparable records of discharge for other stations in the same or nearby basins.

For a lake or reservoir station, capacity tables giving the contents for any stage are prepared from stage-area relation curves defined by surveys. The application of the stage to the capacity table gives the contents, from which the daily, monthly, or yearly change in contents is computed.

If the stage-capacity curve is subject to changes because of deposition of sediment in the reservoir, periodic resurveys of the reservoir are necessary to define new stage-capacity curves. During the period between reservoir surveys the computed contents may be increasingly in error due to the gradual accumulation of sediment.

For some gaging stations there are periods when no gage-height record is obtained or the recorded gage height is so faulty that it cannot be used to compute daily discharge of contents. This happens when the recording instruments malfunction or for various other reasons. For such periods the daily discharges are estimated on the basis of recorded range in stage, adjoining good record, discharge measurements, weather records, and comparison with other station records from the same or nearby basins. Likewise daily contents may be estimated on the basis of operator's log, adjoining good record, inflow-outflow studies, and other information.

The data in this report generally comprise a description of the station and tabulations of daily and monthly figures. For gaging stations on streams or canals a table showing the daily discharge and monthly and yearly discharge is given. For gaging stations on lakes and reservoirs a table showing the daily elevations is given. Records are published for the water year, which begins on October 1 and ends on September 30. A calendar for the current water year is shown on the reverse side of the front cover to facilitate finding the day of the week for any date.

The description of the gaging stations gives the location, drainage area, period of record, type and history of gages, average discharge, extremes of discharge or contents, general remarks, and notations of revisions of previously published records. The location of the gaging station and the drainage area are obtained from the most accurate maps available. River mileage, given under "LOCATION" for some stations, is that determined and used by the Corps of Engineers or other agencies. Periods for which there are published records for the present station or for stations generally equivalent to the present one are given under "PERIOD OF RECORD". The type of gage currently in use, the datum of the present gage above mean sea level, and a condensed history of the types, locations, and datums of previous gages used during the period of record are given under "GAGE". In references to datum of gage, the phrase "mean sea level" denotes "Sea Level Datum of 1929" as used by the Topographic Division of the Geological Survey unless otherwise qualified. The average discharge for the number of years indicated is given under "AVERAGE DISCHARGE"; it is not given for stations having fewer than 5 complete years of record. The maximum discharge (or contents) and the maximum gage height, the minimum discharge (or minimum contents) are given under "EXTREMES". The minimum daily discharge is given if the instantaneous minimum cannot be determined. In the first paragraph headed "Current year", the data given are for the complete current water year unless otherwise specified. In the second paragraph under "EXTREMES" headed "Period of record", the data given are for the period of record given in PERIOD OF RECORD paragraph. Reliable information concerning major floods that occurred outside the period of record is given in the third or last paragraph under "EXTREMES". Unless otherwise qualified, the maximum discharge (or contents) corresponds to the crest stage obtained by use of a water-stage recorder (graphic or digital), a crest-stage gage, or a nonrecording gage read at the time of the crest. If the maximum gage height did not occur at the same time as the maximum discharge (or contents), it is given separately. Information pertaining to the accuracy of the discharge records, to conditions that affect the natural flow at the gaging station, and availability of Water Quality records, is given under "REMARKS"; for reservoir stations information on the dam forming the reservoir, the capacity, outlet works and spillway, and purpose and use of the reservoir, is also given under "REMARKS".

Previously published records of some stations have been found to be in error on the basis of data or information later obtained. Revisions of such records are usually published along with the current records in one of the annual or compilation reports. In order to make it easier to find such revised records, a paragraph headed "REVISIONS (WATER YEARS)" has been added to the description of all stations for which revised records have been published. Listed therein are all the reports in which revisions have been published, each followed by the water years for which figures are revised in that report. In listing the water years only one number is given; for instance, 1965 stands for the water year October 1, 1964, to September 30, 1965. If no daily, monthly, or annual figures of discharge were revised, that fact is brought out by notations after the year dates as follows: "(M)" means that only the instantaneous maximum discharge was revised; "(m)" that only the instantaneous minimum was revised; and "(P)" that only peak discharges were revised. If the drainage area has been revised, the report in which the revised figure was first published is given.

The daily table for stream-gaging stations gives the mean discharge for each day and is followed by monthly and yearly summaries. In the monthly summary below the daily table, the line headed "TOTAL" gives the sum of the daily figures. The line headed "MEAN" gives the average flow in cubic feet per second during the month. The lines headed "MAX" and "MIN" give the maximum and minimum daily discharges, respectively, for the month. Discharge for the month also is expressed in acre-feet (line headed "AC-FT").

In the yearly summary below the monthly summary, the figures following "MAX" are the maximum daily discharges for the calendar and water years; likewise, those following "MIN" are the minimum daily discharges.

Footnotes to the table of daily discharges are introduced by the word "NOTE". Footnotes are used to indicate periods for which the discharge is computed or estimated by special methods because of no gage-height record, backwater from various sources, or other unusual conditions. Periods of no gage-height record are indicated if the period is continuous for a month or more or includes the maximum discharge for the year. Periods of backwater from an unusual source, of indefinite stage-discharge relation, or of any other unusual conditions at the gage site are indicated only if they are a month or more in length and the accuracy of the records is affected. Days on which the stage-discharge relation is affected by ice are not indicated. The methods used in computing discharge for various unusual conditions have been explained in preceding paragraphs.

Peak discharges and their times of occurrence and corresponding gage heights for many stations are listed below the yearly summary. All independent peaks above the selected base are given. The base discharge, which is given in parentheses, is selected so that an average of about three peaks a year can be presented. Peak discharges are given for some stations which are partially regulated and shown as "Peak discharge (regulated)". Peak discharges are not published for any canals, ditches, drains, or for any stream for which the peaks are subjected to complete control by man. Time of day is expressed in 24-hour local standard time; for example, 12:30 a.m. is 0030, 1:30 p.m. is 1330.

For all gaging stations on lakes and reservoirs the data presented comprise a description of the station and a table showing daily elevation. A skeleton table of capacity at given stages is published for all reservoirs.

Data collected at partial-record stations are given in three tables at the end of the surface-water records in this report. The first is a table of discharge measurements at low-flow partial-record stations, the second is a table of annual maximum stage and discharge at crest-stage stations, and the third is a listing of instantaneous gage heights and discharges for flood hydrograph stations.

Accuracy of data

The accuracy of discharge data depends primarily on (1) the stability of the stage-discharge relation, or if the control is unstable, the frequency of discharge measurements, and (2) the accuracy of observations of stage, measurements of discharge, and interpretation of records.

The station description under "REMARKS" states the degree of accuracy of the records. "Excellent" means that about 95 percent of the daily discharges are within 5 percent of true value; "good" within 10 percent; and "fair" within 15 percent. "Poor" means that daily discharges have less than "fair" accuracy.

Figures of daily mean discharge in this report are shown to the nearest hundredth of a cubic foot per second for discharges of less than 1 cfs; to tenths between 1.0 and 10 cfs; to whole numbers between 10 and 1,000 cfs; and to 3 significant figures above 1,000 cfs. The number of significant figures used is based solely on the magnitude of the figure. The same rounding rules apply to discharge figures listed for partial-record stations and miscellaneous sites.

Discharge at most stations, as indicated by the monthly mean, may not reflect natural runoff due to the effects of diversion, consumption, regulation by storage, increase or decrease in evaporation due to artificial causes or to other factors. For this reason, figures of cubic feet per second per square mile and of runoff in inches are not published. Evaporation from a reservoir is not included in the adjustments for changes in reservoir contents, unless it is so stated. Even at those stations where adjustments are made, large errors in computed runoff may occur if adjustments or losses are large in comparison with the observed discharge.

Publications

In each water-supply paper entitled, "Surface Water Supply of the United States" there is a list of numbers of preceding water-supply papers containing streamflow information for the area covered by that report. In addition, there is a list of numbers of water-supply papers containing detailed information on major floods in the area. Records for stations in Kansas for the period October 1960 to September 1965 are in Water-Supply Papers 1919 and 1921.

Two series of summary reports entitled, "Compilation of Records of Surface Waters of the United States" have been published; the first series covers the entire period of record through September 1950 and the second series covers the period October 1950 to September 1960. These reports contain summaries of monthly and annual discharge and monthend storage for all previously published records, as well as some records not contained in the annual series of water-supply papers. All records were reexamined and revised where warranted. Estimates of discharge were made to fill short gaps whenever practical. The yearly summary table for each gaging station lists the numbers of the water-supply papers in which daily records were published for that station. Records for stations in Kansas are compiled in Water-Supply Papers 1310 and 1311 through September 1950, and in 1730 and 1731 for October 1950 to September 1960.

Special reports on major floods or droughts or of other hydrologic studies for the area have been issued in publications other than water-supply papers. Information relative to these reports may be obtained from the district office.

Other data available

Information of a more detailed nature than that published for most of the gaging stations, such as discharge measurements, gage-height records, and rating tables, is on file in the district office. Also, most gaging-station records are available in computer-usable form and many statistical analyses have been made.

EXPLANATION OF WATER QUALITY RECORDS

Collection and examination of data

Water samples for analyses usually are collected at or near gaging stations. The discharge records at these stations are used in conjunction with the computations of the chemical constituents and sediment loads in this report.

Descriptive statements are given for water-quality stations located at or near stream-flow stations. Given are location, drainage area, periods of record for the various water-quality data, extremes of pertinent data, and general remarks, in a format similar to that used for streamflow gaging stations. For ground-water stations, no descriptive statements are given; however, the well number, depth of well, date of sampling, and/or other pertinent data are given in the table containing the chemical analyses of the ground water.

Water-quality information presented includes chemical, biological, microbiological, water temperature, and fluvial sediment data. Chemical quality includes concentrations of individual dissolved constituents and certain properties or characteristics such as hardness, sodium-adsorption-ratio, specific conductance, and pH. The biological information includes qualitative and quantitative analyses of plankton, bottom organisms, and particulate inorganic and amorphous matter present. Microbiological information includes quantitative identification of certain bacteriological indicator organisms. Water-temperature data represent once-daily observations except for stations where a continuous temperature recorder furnished information from which daily minimums and maximums are obtained. Fluvial-sediment information is given for suspended-sediment discharges and concentrations and for particle-size distribution of suspended sediment and bed material.

Prior to the 1968 water year, data for chemical constituents and concentration of suspended sediment were reported in parts per million (ppm) and water temperatures were reported in degrees Fahrenheit (°F). In October 1967 the U.S. Geological Survey began reporting data for chemical constituents and concentrations of suspended sediment in milligrams per litre (mg/l) and water temperatures in degrees Celsius (°C). In waters with a density of 1.000 g/ml (grams per millilitre), parts per million and milligrams per litre can be considered equal. In waters greater than 1.000 g/ml, values in parts per million should be multiplied by the density to convert to milligrams per litre. Temperatures reported in degrees Celsius may be converted to degrees Fahrenheit by using table 3, p. 22.

In October 1968, the Geological Survey began reporting many of the chemical constituents as well as the minor elements in micrograms per liter instead of milligrams per litre. (See "Definition of Terms", p. 4 and table for converting English Units to SI Units, inside back cover).

Solutes

Most methods for collecting and analyzing water samples to determine the kinds and concentrations of solutes are described by Brown, Skougstad, and Fishman. The method for determining elemental constituents by emission spectrographic techniques is described by Barnett and Mallory. Analysis of pesticides, herbicides, and organic substances in water are described by Goerlitz and Lamar; Lamar, Goerlitz, and Law; and Goerlitz and Brown. The collection and analysis of aquatic, biological and microbiological samples are described by Slack and others.

One sample can define adequately the water quality at a given time if the mixture of solutes throughout the stream cross section is homogeneous. However, the concentration of solutes at different locations in the cross section may vary widely with different rates of water discharge, depending on the source of material and the turbulence and mixing of the stream. Some streams must be sampled through several vertical sections to obtain a representative sample needed for an accurate mean concentration and for use in calculating load.

Chemical-quality data published in this report are considered to be the most representative values available for the stations listed. The values reported represent water-quality conditions at the time of sampling, as consistent as possible with available sampling techniques and methods of analysis. In the rare case where an apparent inconsistency exists between the reported pH value and the relative abundance of carbon dioxide species (carbonate and bicarbonate), the inconsistency is the result of a slight uptake of carbon dioxide from the air by the sample between measurement of pH in the field and determination of carbonate and bicarbonate in the laboratory.

For chemical-quality stations equipped with noncontinuous-digital monitors, the records consist of daily mean values for each constituent measured and are based upon hourly punches beginning at 0100 hours and ending at 2400 hours for the day of record. More detailed records (hourly values) may be obtained from the U.S. Geological Survey district office at the address given on the back of the title page of this report.

Ground-water quality normally does not change significantly during short periods of time; infrequent sampling and analysis of ground water adequately define ground-water quality at a given site. Water samples from wells are analyzed individually.

Temperature

Water temperatures are measured at most of the water-quality stations. In addition, water temperatures are taken at time of discharge measurements for surface-water stations.

Table 3.--Degrees Celsius (°C) to degrees Fahrenheit (°F).* (Temperature reported to nearest 0.5°C.)

°C	°F	°C	°F	°C	°F	°C	°F	°C	°F
0.0	32	10.0	50	20.0	68	30.0	86	40.0	104
.5	33	10.5	51	20.5	69	30.5	87	40.5	105
1.0	34	11.0	52	21.0	70	31.0	88	41.0	106
1.5	35	11.5	53	21.5	71	31.5	89	41.5	107
2.0	36	12.0	54	22.0	72	32.0	90	42.0	108
2.5	36	12.5	54	22.5	72	32.5	90	42.5	108
3.0	37	13.0	55	23.0	73	33.0	91	43.0	109
3.5	38	13.5	56	23.5	74	33.5	92	43.5	110
4.0	39	14.0	57	24.0	75	34.0	93	44.0	111
4.5	40	14.5	58	24.5	76	34.5	94	44.5	112
5.0	41	15.0	59	25.0	77	35.0	95	45.0	113
5.5	42	15.5	60	25.5	78	35.5	96	45.5	114
6.0	43	16.0	61	26.0	79	36.0	97	46.0	115
6.5	44	16.5	62	26.5	80	36.5	98	46.5	116
7.0	45	17.0	63	27.0	81	37.0	99	47.0	117
7.5	45	17.5	63	27.5	81	37.5	99	47.5	117
8.0	46	18.0	64	28.0	82	38.0	100	48.0	118
8.5	47	18.5	65	28.5	83	38.5	101	48.5	119
9.0	48	19.0	66	29.0	84	39.0	102	49.0	120
9.5	49	19.5	67	29.5	85	39.5	103	49.5	121

*°C = 5/9 (°F - 32) or °F = 9/5 (°C) + 32.

For daily stations, the water temperatures are taken about the same time each day when sample is collected. Large streams have a small diurnal temperature change, while small, shallow streams may have a daily range of several degrees and may follow closely the changes in air temperature. Some streams may be affected by waste-heat discharges.

At stations equipped with noncontinuous-digital monitors, the records consist of daily mean temperatures for each day and the monthly averages.

Sediment

Suspended-sediment concentrations are determined from samples collected by using depth-integrating samplers. Samples usually are obtained at several verticals in the cross-section, or a single sample may be obtained at a fixed point and a coefficient applied to determine the mean concentration in the cross sections.

During periods of rapidly changing flow or rapidly changing concentration, samples may have been collected more frequently (twice daily or, in some instances, hourly). The published sediment discharges for days of rapidly changing flow or concentration were computed by the sub-divided day method (time-discharge weighted average). Therefore, for those days when the published sediment discharge value differs from the value computed as the product of discharge times mean concentration times 0.0027, the reader can assume that the sediment discharge for that day was computed by the sub-divided day method. For periods when no samples are collected, daily loads of suspended sediment are estimated on the basis of water discharge, sediment concentrations observed immediately before and after the periods, and suspended-sediment loads for other periods of similar discharge.

At other stations, suspended-sediment samples are collected periodically at many verticals in the stream cross section. Although data collected periodically may represent conditions only at the time of observation, such data are useful in establishing seasonal relations between quality and streamflow in predicting long-term sediment-discharge characteristics of the stream.

In addition to the records of the quantities of suspended sediment, records of periodic measurements of the particle-size distribution of the suspended sediment and bed material are given.

Publications

The annual series of water-supply papers that contain information on quality of surface waters in Kansas are listed below.

<u>Water year</u>	<u>WSP No.</u>	<u>Water year</u>	<u>WSP No.</u>	<u>Water year</u>	<u>WSP No.</u>	<u>Water year</u>	<u>WSP No.</u>
1947	1102	1954	1351,1352	1961	1883,1884	1968	2095,2096
1948	1132,1133	1955	1401,1402	1962	1943,1944	1969	2145,2146
1949	1162,1163	1956	1451,1452	1963	1949,1950	1970	2155,2156
1950	1187,1188	1957	1521,1522	1964	1956,1957	1971	2165,2166
1951	1198,1199	1958	1572,1573	1965	1963,1964		
1952	1251,1252	1959	1643,1644	1966	1993,1994		
1953	1291,1292	1960	1743,1744	1967	2013,2014		

EXPLANATION OF GROUND-WATER LEVEL RECORDS

Collection of the data

Only ground-water level data from a basic national network of observation wells are published herein. These water-level measurements are intended to provide a sampling and historical record of water-level changes in the nation's most important aquifers.

Each well is identified by means of (1) a 15-digit number that is based on the grid system of latitude and longitude as shown in figure 4, and (2) local numbers provided for continuity with older reports and for other use as dictated by local needs.

Measurements are made in different types of wells under various conditions, but the equipment and measuring techniques are standardized to insure that measurements at each well are of consistent accuracy and reliability.

Water-level measurements are given in feet with reference to either mean sea level (msl) or land-surface datum (lsd). Mean sea level is the datum plane on which the national network of precise levels is based; land-surface datum is the approximate datum of the land surface at each well. If known, the altitude of the land-surface datum above mean sea level, and the height of the measuring point (MP) above or below land-surface datum are given. Water levels in wells equipped with recording gages are reported for every fifth day and the end of each month (eom).

Water levels are reported to as many significant figures as can be reasonably justified. For example, in a measurement of several hundred feet, the error of determining the absolute value of the total depth to water may be a few tenths of a foot, whereas the error in determining the net change of water level between successive measurements may be only a few hundredths of a foot. For lesser depths to water, the accuracy is greater. Accordingly, some measurements are reported to a hundredth of a foot, but others are given only to a tenth of a foot or a larger unit.

Publications

Publication of ground-water level data for the United States in water-supply papers was begun by the Geological Survey in 1935. From 1935 through 1939, a single water-supply paper for each year, covering the entire nation, was issued (Water-Supply Papers 777, 817, 840, 845, and 886). From 1940 through 1974, separate water-supply papers were issued for 6 sections of the United States. Water-level data for Kansas are in the water-supply papers listed below, each report containing one or more calendar years (January-December) of data. Data in this report are for the 12-month water year ending September 30.

<u>Calendar year</u>	<u>WSP No.</u>	<u>Calendar year</u>	<u>WSP No.</u>	<u>Calendar year</u>	<u>WSP No.</u>	<u>Calendar year</u>	<u>WSP No.</u>
1935	777	1942	946	1949	1158	1956	1456
1936	817	1943	988	1950	1167	1957-61	1781
1937	840	1944	1018	1951	1193	1962-66	1976
1938	845	1945	1025	1952	1223	1967-71	2090
1939	886	1946	1073	1953	1267		
1940	908	1947	1098	1954	1323		
1941	938	1948	1128	1955	1406		

Additional data on ground water in Kansas may be obtained from the District Office, U.S. Geological Survey in Lawrence, KS.

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SECTION 1. SURFACE-WATER RECORDS

BIG NEMAHA RIVER BASIN

06814000 TURKEY CREEK NEAR SENECA, KS

LOCATION.--Lat 39°56'52", long 96°06'30", in SW $\frac{1}{4}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.20, T.1 S., R.12 E., Nemaha County, at downstream side of highway bridge, 2.0 mi (3.2 km) downstream from Clear Creek, 5.0 mi (8.0 km) upstream from Big Nemaha River, and 8.0 mi (12.9 km) northwest of Seneca.

DRAINAGE AREA.--276 mi² (715 km²).

PERIOD OF RECORD.--October 1948 to current year. Monthly discharge only for some periods, published in WSP 1310.

GAGE.--Water-stage recorder. Altitude of gage is 1,160 ft (354 m), from topographic map. Prior to Oct. 19, 1956, water-stage recorder (occasional operation only) and nonrecording gage on former channel 400 ft (120 m) south of present site at present datum. Oct. 19, 1956, to June 15, 1957, nonrecording gage at highway bridge 1.2 mi (1.9 km) upstream at different datum. June 16, 1957, to Mar. 27, 1958, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--27 years, 123 ft³/s (3.483 m³/s), 89,110 acre-ft/yr (110 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,780 ft³/s (78.7 m³/s) May 30, gage height, 16.80 ft (5.121 m); minimum, 0.03 ft³/s (0.001 m³/s) Sept. 10.

Period of record: Maximum discharge, 21,400 ft³/s (606 m³/s) Oct. 11, 1973, gage height, 24.77 ft (7.550 m); no flow at times in 1956-57.

REMARKS.--Records good except those for October thru March, which are poor.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	28	8.8	5.4	11	691	58	60	155	46	11	2.7
2	1.0	8.1	7.8	4.8	11	424	45	56	120	42	11	2.1
3	1.0	4.6	8.8	6.7	13	250	41	62	824	37	12	1.5
4	1.2	3.6	9.2	8.4	150	150	63	55	196	35	10	8.0
5	1.2	3.1	10	6.5	105	100	60	48	116	33	9.0	53
6	1.2	3.3	11	5.5	80	140	65	45	83	30	7.8	19
7	1.1	3.3	11	5.5	60	90	46	44	65	26	7.8	6.9
8	1.2	5.2	8.1	5.5	35	70	88	35	55	25	7.1	3.9
9	1.9	9.2	7.8	5.5	25	50	135	32	62	24	6.1	3.2
10	2.0	13	7.4	7.0	20	40	77	30	96	24	5.7	2.7
11	1.3	13	8.4	6.5	20	35	50	537	769	22	5.3	4.6
12	3.2	9.5	8.4	6.0	18	30	43	177	188	20	4.8	5.4
13	2.5	7.8	9.2	6.0	18	35	40	86	101	19	6.4	4.4
14	2.0	6.7	7.8	6.0	18	40	84	64	75	19	56	3.3
15	1.9	7.0	10	6.0	18	40	117	51	62	18	13	3.4
16	1.9	7.4	8.8	6.5	18	73	68	42	54	16	9.5	3.7
17	1.7	7.4	7.0	7.5	18	576	53	35	54	15	7.3	4.0
18	1.7	7.4	7.4	7.5	20	554	194	31	820	13	6.4	4.1
19	1.6	7.4	7.4	7.5	20	403	201	28	1190	13	5.7	4.7
20	1.8	7.4	7.8	7.5	20	226	95	25	212	55	4.7	4.0
21	1.7	7.4	6.7	7.5	20	147	59	22	137	38	4.2	4.5
22	1.7	7.4	8.8	7.5	20	98	50	20	363	272	3.6	2.8
23	2.0	7.8	6.7	8.0	20	71	124	22	225	144	3.5	2.7
24	2.2	7.0	5.4	11	20	53	1840	21	125	38	2.9	2.3
25	2.2	6.7	6.0	24	25	38	387	18	99	24	2.9	2.8
26	2.0	8.1	6.0	32	46	42	189	22	77	20	3.3	2.8
27	2.5	8.1	6.4	28	142	399	141	20	68	18	2.8	2.8
28	2.5	8.1	7.0	23	380	740	115	43	61	17	4.0	4.8
29	3.0	7.8	8.4	18	---	135	93	87	54	15	5.4	3.8
30	100	8.4	6.0	15	---	85	72	1930	49	13	3.9	4.3
31	80	---	8.4	12	---	73	---	341	---	12	3.3	---
TOTAL	232.3	239.2	247.9	313.8	1371	5898	4693	4089	6555	1143	246.4	178.2
MFAN	7.49	7.97	8.00	10.1	49.0	190	156	132	219	36.9	7.95	5.94
MAX	100	28	11	32	380	740	1840	1930	1190	272	56	53
MTN	1.0	3.1	5.4	4.8	11	30	40	18	49	12	2.8	1.5
AC-FT	461	474	492	622	2720	11700	9310	8110	13000	2270	489	353

CAL YR 1974 TOTAL 22712.8 MEAN 62.2 MAX 1360 MIN 1.0 AC-FT 45050
WTR YR 1975 TOTAL 25206.8 MEAN 69.1 MAX 1930 MIN 1.0 AC-FT 50000

PEAK DISCHARGE (BASE, 3,100 CFS).--NO PEAK ABOVE BASE.

MISSOURI RIVER MAIN STEM

29

06818000 MISSOURI RIVER AT ST. JOSEPH, MO.

LOCATION.--Lat 39°45'12", long 94°51'28", in NW¼SW¼ sec.17, T.57 N., R.35 W., Buchanan County, on left bank at left abutment of St. Joseph & Grand Island Railroad bridge in St. Joseph. River mile, 448.2 (721.2 km).

DRAINAGE AREA.--424,300 mi² (1,099,000 km²), approximately.

PERIOD OF RECORD.--August 1928 to current year. Gage-height records collected in vicinity 1873-99 are contained in reports of Missouri River Commission; since 1900 in reports of National Weather Service.

GAGE.--Water-stage recorder. Datum of gage is 788.19 ft (240.240 m) above mean sea level. Prior to Oct. 21, 1931, nonrecording gage and Oct. 21, 1931, to Dec. 31, 1933, water-stage recorder at same site at datum 5.50 ft (1.676 m) higher.

AVERAGE DISCHARGE.--47 years, 38,710 ft³/s (1,096 m³/s), 28,050,000 acre-ft/yr (34,590 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 92,400 ft³/s (2,620 m³/s) June 26; maximum gage height, 17.55 ft (5.349 m) Sept. 4; minimum discharge, 16,700 ft³/s (473 m³/s) Jan. 16; gage height, 4.12 ft (1.256 m).
Period of record: Maximum discharge, 397,000 ft³/s (11,240 m³/s) Apr. 22, 23, 1952, gage height, 26.82 ft (8.175 m); minimum, 2,300 ft³/s (65.1 m³/s) Jan. 9, 1937; minimum gage height, 0.00 ft (0.000 m) Dec. 18, 19, 1940.
Maximum stage known, 27.2 ft (8.29 m), present datum, Apr. 29, 1881, discharge, about 370,000 ft³/s (10,500 m³/s), computed by Corps of Engineers.
Flood of June 1844 reached a stage of 24.5 ft (7.47 m), discharge, about 350,000 ft³/s (9,910 m³/s), computed by Corps of Engineers.

REMARKS.--Records good, except during periods of ice effect, which are poor. Discharge measurements made 3 or more times a month during winter and 4 or more times monthly during rest of year. Flow partly regulated by many upstream reservoirs.

REVISIONS.--WSP 761: Drainage area.

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40400	48200	29200	24200	26200	29700	47100	66300	50200	63900	65400	72400
2	40300	46000	27200	24300	25800	29700	47400	58200	49200	62900	65400	70600
3	40000	44500	25700	24400	25500	28400	46200	55400	49000	61400	66600	69800
4	40000	43700	25300	24400	25500	28600	42900	54500	49800	59400	67400	77300
5	40500	43100	25800	24400	26100	29000	43300	53200	48800	57700	66800	82500
6	41400	42600	25700	24800	25800	29500	45200	49900	48100	57300	65400	74900
7	42500	41800	26000	25000	25000	30400	45200	50300	48400	57800	64900	72200
8	43200	41100	26200	25000	23900	30200	46600	53800	49200	58900	65200	71200
9	43900	40700	26000	24700	22700	30300	48200	48600	56300	59000	65300	70000
10	43700	41100	25800	25000	22200	30100	49700	49500	53100	58900	65200	70000
11	42800	40600	25000	24500	23100	29700	52400	49200	64600	59100	65100	73500
12	43000	40100	24500	23000	23900	29700	51800	48700	57900	58900	66300	72200
13	43900	40100	25000	22000	23400	29500	49500	47700	56700	58300	68200	70500
14	44700	39800	25300	20000	23200	29600	48800	47200	57000	57900	68200	71200
15	44600	39600	26000	18600	23200	30000	49100	46700	53900	57600	67400	70200
16	44400	39300	26500	16900	23300	30600	48800	45700	52900	56400	66900	68700
17	42600	39200	26000	18800	23200	31600	48700	44900	53000	55400	65800	68900
18	41400	38500	24900	24100	23100	38200	50800	44500	59500	55300	65900	69300
19	40700	38500	24100	25500	23700	41900	50000	44500	79400	55600	67400	69400
20	40100	38800	23500	24700	24000	45100	50000	44600	73000	57400	70900	69600
21	39500	39000	23300	23900	24500	49800	49700	44000	74500	58100	68500	70300
22	39300	39200	23500	23900	25300	46700	49700	43700	73800	59800	66500	70700
23	39700	39400	23700	23900	24900	44700	49000	44200	72700	61200	65800	69900
24	40400	39400	23700	24200	25000	45000	51900	44800	83400	62200	66400	68000
25	40400	39400	23700	25200	25200	46300	54100	45900	85700	62900	68800	67200
26	40600	39200	23900	26000	25600	48500	53000	47800	90500	64200	73800	67500
27	41100	37700	23700	26800	26400	45800	51300	48100	81300	66700	70800	67600
28	41600	35500	23600	27300	27600	47500	53900	48000	72500	68100	71100	68300
29	42300	33000	23900	27000	---	55600	79800	50600	66200	67400	72300	67400
30	43400	31000	24400	26600	---	51900	80100	59000	63900	65900	73300	69100
31	47900	---	24500	26400	---	49400	---	56600	---	65800	75200	---
TOTAL	1300300	1200100	775600	745500	687300	1163000	1534200	1536100	1874500	1871400	2102200	2120400
MEAN	41950	40000	25020	24050	24550	37520	51140	49550	62480	60370	67810	70680
MAX	47900	48200	29200	27300	27600	55600	80100	66300	90500	68100	75200	82500
MIN	39300	31000	23300	16900	22200	28400	42900	43700	48100	55300	64900	67200
AC-FT	2579000	2380000	1538000	1479000	1363000	2307000	3043000	3047000	3718000	3712000	4170000	4206000
CAL YR 1974	TOTAL	15708600	MEAN	43040	MAX	106000	MIN	23000	AC-FT	31160000		
WTR YR 1975	TOTAL	16910600	MEAN	46330	MAX	90500	MIN	16900	AC-FT	33540000		

KANSAS RIVER BASIN

06844700 SOUTH FORK SAPPA CREEK NEAR BREWSTER, KS

LOCATION.--Lat 39°17'07", long 101°27'56", in NW¼NW¼SW¼ sec.9, T.9 S., R.37 W., Sherman County, on left bank at highway bridge 9.0 mi (14.5 km) southwest of Brewster.

DRAINAGE AREA.--74.0 mi² (191.7 km²).

PERIOD OF RECORD.--October 1967 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 3,440 ft (1,049 m), from topographic map.

AVERAGE DISCHARGE.--8 years, 0.226 ft³/s (0.0064 m³/s), 164 acre-ft/yr (0.202 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 875 ft³/s (24.8 m³/s) July 31, gage height, 7.15 ft (2.179 m); no flow most days.
Period of record: Maximum discharge, 875 ft³/s (24.8 m³/s) July 31, 1975, gage height, 7.15 ft (2.179 m); no flow most days.

REMARKS.--Records fair.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1									0	0	2.7	
2									0	0	.12	
3									0	0	0	
4									0	0	0	
5									0	0	0	
6									0	0	0	
7									0	0	0	
8									0	0	0	
9									0	0	0	
10									0	0	0	
11									0	0	0	
12									0	0	0	
13									0	0	0	
14									0	0	0	
15									0	0	0	
16									0	0	0	
17									0	0	0	
18									72	0	0	
19									3.7	0	0	
20									.08	0	0	
21									0	0	0	
22									0	0	0	
23									0	0	0	
24									0	0	0	
25									0	0	0	
26									0	0	0	
27									0	0	0	
28									0	0	0	
29									0	0	0	
30									0	0	0	
31									0	0	0	
TOTAL	0	0	0	0	0	0	0	0	75.78	132	2.82	0
MEAN	0	0	0	0	0	0	0	0	2.53	4.26	.091	0
MAX	0	0	0	0	0	0	0	0	72	132	2.7	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	0	0	0	0	0	150	262	5.6	0

CAL YR 1974 TOTAL 0.09 MEAN .000 MAX .0 MIN 0 AC-FT 0
WTR YR 1975 TOTAL 210.60 MEAN .58 MAX 132 MIN 0 AC-FT 418

PEAK DISCHARGE (BASE, 75 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
06-18	0400	5.76	350	07-31	0600	7.15	875

KANSAS RIVER BASIN

31

06844900 SOUTH FORK SAPPA CREEK NEAR ACHILLES, KS

LOCATION.--Lat 39°40'37", long 100°43'18", in SW $\frac{1}{4}$ SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec.29, T.4 S., R.30 W., Decatur County, on right bank at downstream side of highway bridge, 5.5 mi (8.8 km) southeast of Achilles, 14 mi (23 km) southwest of Oberlin, and 18.5 mi (29.8 km) upstream from confluence with North Fork.

DRAINAGE AREA.--446 mi² (1,155 km²), of which 68 mi² (176 km²) is probably noncontributing.

PERIOD OF RECORD.--July 1959 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,722.42 ft (829.794 m) above mean sea level.

AVERAGE DISCHARGE.--16 years, 5.48 ft³/s (0.155 m³/s), 3,970 acre-ft/yr (4.90 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 5,310 ft³/s (150 m³/s) June 19, gage height, 10.47 ft (3.191 m); no flow for many days.
Period of record: Maximum discharge, 5,310 ft³/s (150 m³/s) June 19, 1975, gage height, 10.47 ft (3.191 m), from rating curve extended above 3,000 ft³/s (85.0 m³/s); no flow for many days in each year.

REMARKS.--Records good.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1							0	0	72	6.2	114	1.1
2							0	0	34	4.1	476	1.2
3							0	0	10	3.3	151	.95
4							0	0	3.2	2.9	49	1.2
5							0	0	.94	2.4	22	1.0
6							0	0	.12	2.1	14	.82
7							.04	0	.03	2.4	11	.70
8							.05	0	74	2.6	7.8	.62
9							0	0	26	2.4	6.2	.47
10							0	0	62	2.4	4.2	.50
11							0	0	60	2.1	3.4	.58
12							0	0	16	1.9	3.2	.54
13							.02	0	5.6	1.8	71	.41
14							.03	0	2.2	1.8	84	.41
15							0	0	.90	1.9	15	.50
16							0	0	.31	1.6	35	.58
17							0	0	.24	1.7	11	.47
18							0	0	312	1.9	6.9	.44
19							0	0	3060	1.8	31	.41
20							0	0	854	1.5	6.9	.38
21							0	0	612	1.3	4.3	.38
22							0	0	275	1.4	3.0	.38
23							0	0	136	1.6	2.5	.32
24							0	0	173	1.2	2.1	.18
25							0	0	58	1.1	1.6	.15
26							0	0	58	1.2	1.7	.14
27							0	4.9	43	1.0	1.4	.12
28							0	2.9	20	.95	1.3	.11
29							0	64	12	.82	1.2	.11
30							0	4.6	8.6	.90	1.1	.10
31		---					---	.15	---	1020	1.1	---
TOTAL	0	0	0	0	0	0	.14	76.55	5989.14	1080.27	1143.9	15.27
MEAN	0	0	0	0	0	0	.005	2.47	200	34.8	36.9	.51
MAX	0	0	0	0	0	0	.05	64	3060	1020	476	1.2
MIN	0	0	0	0	0	0	0	0	.03	.82	1.1	.10
AC-FT	0	0	0	0	0	0	.3	152	11880	2140	2270	30
CAL YR 1974	TOTAL	456.11	MEAN	1.25	MAX	96	MIN	0	AC-FT	905		
WTR YR 1975	TOTAL	8305.27	MEAN	22.8	MAX	3060	MIN	0	AC-FT	16470		

PEAK DISCHARGE (BASE, 100 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
05-29	0300	7.82	358	06-24	0200	7.47	219
06-08	0800	7.78	344	07-31	0900	10.17	4,410
06-18	0100	8.06	470	08-02	0500	8.27	660
06-19	0100	10.47	5,310	08-13	1800	8.11	496
06-21	0900	8.98	1,440				

KANSAS RIVER BASIN

06846500 BEAVER CREEK AT CEDAR BLUFFS, KS

LOCATION.--Lat 39°59'06", long 100°33'35", in NW¼NE¼ sec.10, T.1 S., R.29 W., Decatur County, on right bank at downstream side of bridge on U.S. Highway 83, 0.2 mi (0.3 km) north of Cedar Bluffs, 1.0 mi (1.6 km) south of Kansas-Nebraska state line, and at mile 107.4 (172.8 km).

DRAINAGE AREA.--1,618 mi² (4,191 km²), of which 294 mi² (761 km²) is probably noncontributing.

PERIOD OF RECORD.--October 1945 to current year. Monthly discharge only for some periods, published in WSP 1310.

GAGE.--Water-stage recorder. Datum of gage is 2,520.33 ft (768.197 m) above mean sea level. Prior to Aug. 19, 1971, at site 0.1 mi (0.2 km) upstream at same datum. Aug. 19, 1971, to July 12, 1972, at site 0.8 mi (1.3 km) downstream at datum 5.00 ft (1.524 m) lower.

AVERAGE DISCHARGE.--30 years, 21.8 ft³/s (0.617 m³/s), 15,790 acre-ft/yr (19.5 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 480 ft³/s (13.6 m³/s) July 31, gage height, 8.66 ft (2.640 m); no flow at times.

Period of record: Maximum discharge, 7,940 ft³/s (225 m³/s) June 11, 1960, gage height, 18.71 ft (5.703 m); no flow at times in most years.

Flood in July 1944 reached a stage of 18.16 ft (5.535 m), from floodmark.

REMARKS.--Records fair. Records of suspended sediment loads for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1510: 1947, 1950-51.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1					0		0		9.5	47	14	
2					0		0		76	40	1.0	
3					0		0		36	34	.01	
4					0		0		18	29	0	
5					0		0		10	25	0	
6					0		0		6.5	16	0	
7					0		0		4.3	14	0	
8					0		0		7.7	16	0	
9					0		0		72	16	0	
10					0		0		185	32	0	
11					0		0		95	22	0	
12					0		0		44	16	0	
13					0		0		30	12	61	
14					0		0		22	12	14	
15					0		0		12	10	1.0	
16					0		0		8.6	8.3	0	
17					0		0		9.6	7.4	0	
18					.02		0		150	6.8	0	
19					.22		0		233	5.2	0	
20					.09		0		177	4.5	0	
21					.05		0		279	3.2	0	
22					0		0		290	14	0	
23					0		3.0		303	3.9	0	
24					.08		19		238	1.2	0	
25					.02		7.6		150	.91	0	
26					.17		.88		174	4.7	.26	
27					.05		0		165	2.4	4.8	
28					0		0		103	.79	1.1	
29					---		0		78	1.0	.20	
30					---		0		58	.11	0	
31		---			---		---		---	106	0	---
TOTAL	0	0	0	0	.70	0	30.48	0	3044.2	511.41	97.37	0
MEAN	0	0	0	0	.025	0	1.02	0	101	16.5	3.14	0
MAX	0	0	0	0	.22	0	19	0	303	106	61	0
MIN	0	0	0	0	0	0	0	0	4.3	.11	0	0
AC-FT	0	0	0	0	1.4	0	60	0	6040	1010	193	0
CAL YR 1974	TOTAL	3164.22	MEAN	8.67	MAX	492	MIN	0	AC-FT	6280		
WTR YR 1975	TOTAL	3684.16	MEAN	10.1	MAX	303	MIN	0	AC-FT	7310		

PEAK DISCHARGE (BASE, 300 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
06-23	0600	7.97	324	08-13	1500	8.13	356
07-31	0600	8.66	480				

KANSAS RIVER BASIN

33

06847900 PRAIRIE DOG CREEK ABOVE NORTON RESERVOIR, KS

LOCATION.--Lat 39°46'13", long 100°06'00", in SE¼SE¼ sec.23, T.3 S., R.25 W., Norton County, on right bank, 50 ft (15 m) downstream from bridge on county road, 4 mi (6.4 km) east of Clayton, and at mile 90.4 (145.5 km).

DRAINAGE AREA.--590 mi² (1,528 km²).

PERIOD OF RECORD.--June 1962 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 2,334.94 ft (711.690 m) above mean sea level. Prior to Sept. 30, 1974, at datum 2.00 ft (0.610 m) higher.

AVERAGE DISCHARGE.--13 years, 12.9 ft³/s (0.365 m³/s), 9,346 acre-ft/yr (11.5 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 970 ft³/s (27.5 m³/s) June 8, gage height, 12.10 ft (3.688 m); no flow at times.

Period of record: Maximum discharge, 8,880 ft³/s (251 m³/s) Sept. 6, 1972, gage height, 14.81 ft (4.514 m), present datum, from rating curve extended above 3,500 ft³/s (99.1 m³/s); no flow at times.

Maximum flood known since at least 1944, 65,500 ft³/s (1,850 m³/s) May 28, 1953 at site 9.4 mi (15.1 km) downstream, based on contracted opening measurement of peak flow.

REMARKS.--Records good. Diversions for irrigation above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1			0	.05	.43	1.4	1.8	.89	26	25	295	7.0
2			0	.04	.43	1.6	1.4	.92	13	22	514	6.0
3			0	.05	.45	1.5	1.6	.98	9.2	20	359	6.0
4			0	.05	.52	1.5	1.7	1.0	7.2	19	81	6.0
5			0	.06	.50	1.6	1.8	.96	5.4	16	48	5.0
6			0	.06	.40	1.9	1.7	.78	4.2	15	31	5.0
7			0	.07	.29	1.3	1.6	.70	3.8	14	23	4.0
8			0	.08	.31	1.5	1.8	.63	570	14	19	4.0
9			0	.08	.25	.86	2.0	.58	457	13	16	4.0
10			0	.10	.23	1.4	1.9	.56	375	14	14	4.0
11			0	.09	.27	1.7	1.8	.55	79	12	12	3.0
12			.01	.01	.30	1.7	1.8	.50	38	11	11	3.0
13			.05	0	.38	1.2	1.7	.96	26	10	10	3.0
14			.05	0	.39	1.4	1.9	1.0	20	9.5	53	3.0
15			.03	0	.39	1.7	1.9	.97	16	8.6	112	2.0
16			.04	.08	.39	1.9	1.8	.79	14	8.0	51	2.0
17			.05	.11	.40	2.2	1.8	.60	12	7.0	37	3.6
18			.06	.14	.40	2.3	1.8	.35	107	6.0	43	2.1
19			.07	.20	.50	2.2	1.7	.38	463	5.2	22	1.9
20			.07	.15	.53	2.3	1.5	.29	405	5.0	16	1.6
21			.07	.16	.65	2.2	1.4	.27	761	4.3	20	1.4
22			.09	.13	.64	2.1	1.3	.21	649	4.8	20	1.2
23			.10	.11	.64	2.0	1.3	.18	475	5.3	14	1.1
24			.09	.15	.66	1.8	4.5	.16	219	5.1	11	.92
25			.03	.16	.74	1.5	1.6	.16	102	4.6	10	.92
26			.01	.16	.84	1.3	1.3	.09	68	3.7	9.0	.92
27			.01	.16	.97	2.1	1.1	.21	48	3.1	8.0	.84
28			.03	.16	1.2	1.8	1.9	75	38	3.4	7.0	.77
29			.06	.14	-----	1.8	1.2	27	32	2.8	7.0	.70
30			.07	.50	-----	1.8	1.1	77	28	2.5	9.0	.64
31		-----	.07	.46	-----	1.8	-----	132	-----	325	8.0	-----
TOTAL	0	0	1.06	3.71	14.10	53.36	51.7	326.67	5,070.8	618.9	1,890.0	85.61
MEAN	0	0	.034	.12	.50	1.72	1.72	10.5	169	20.0	61.0	2.85
MAX	0	0	.10	.50	1.2	2.3	4.5	132	761	325	514	7.0
MIN	0	0	0	0	.23	.86	1.1	.09	3.8	2.5	7.0	.64
AC-FT	0	0	2.1	7.4	28	106	103	648	10,060	1,230	3,750	170
CAL YR 1974	TOTAL	1,517.57	MEAN	4.16	MAX	319	MIN	0	AC-FT	3,010		
WTR YR 1975	TOTAL	8,115.91	MEAN	22.2	MAX	761	MIN	0	AC-FT	16,100		

PEAK DISCHARGE (BASE, 700 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
06-08	1200	12.10	970	08-01	2100	10.72	733
06-21	0900	11.08	789				

KANSAS RIVER BASIN

06847950 NORTON RESERVOIR NEAR NORTON, KS

LOCATION.--Lat 39°48'27", long 99°56'04", in SW¼NE¼ sec.8, T.3 S., R.23 W., Norton County, in control tower near left end of Norton Dam on Prairie Dog Creek, 3.0 mi (4.8 km) southwest of Norton, and at mile 74.9 (120.5 km).

DRAINAGE AREA.--683 mi² (1,769 km²).

PERIOD OF RECORD.--October 1964 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Bureau of Reclamation).

EXTREMES.--Current year: Maximum elevation, 2,290.84 ft (698.248 m) June 28, 29, contents, 14,140 acre-ft (17.4 hm³); minimum, 2,276.75 ft (693.953 m) part or all of each day Oct. 20-27, contents, 3,450 acre-ft (4.25 hm³).

Period of record: Maximum elevation, 2,304.59 ft (702.439 m) June 27, 1967, contents, 36,570 acre-ft (45.1 hm³); minimum since conservation pool was first filled, 2,276.75 ft (693.953 m) Oct. 20-27, 1974, contents, 3,450 acre-ft (4.25 hm³).

REMARKS.--Reservoir is formed by compacted earthfill dam; storage began Oct. 6, 1964. Total capacity, 193,023 acre-ft (238 hm³), consisting of the following: Sedimentation, 2,920 acre-ft (3.60 hm³) below elevation 2,275.5 ft (693.572 m); conservation pool, 33,010 acre-ft (40.7 hm³), between elevations 2,275.5 ft (693.572 m) and 2,304.3 ft (702.351 m); flood control pool, 98,800 acre-ft (122 hm³), between elevations 2,304.3 ft (702.351 m) and 2,331.4 ft (710.611 m); and surcharge pool, 58,280 acre-ft (71.9 hm³), between elevations 2,331.4 ft (710.611 m) and 2,341.0 ft (713.537 m). Reservoir is used for flood control and irrigation in Almena Unit, Missouri River Basin project. Figures given herein represent total contents.

Capacity table (elevation, in feet, and contents, in acre-feet)
(Based on field survey by U.S. Bureau of Reclamation in 1955, revised in 1965)

2,276	3,120	2,282	6,280	2,288	11,120
2,278	4,010	2,284	7,720	2,290	13,200
2,280	5,050	2,286	9,320	2,292	15,460

ELEVATION, IN FEET, AT 2400, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,276.88	2,276.99	2,277.12	2,277.43	2,277.67	2,277.98	2,278.40	2,278.81	2,279.45	2,290.66	2,286.05	2,287.07
2	2,276.88	2,277.00	2,277.12	2,277.45	2,277.68	2,278.00	2,278.40	2,278.81	2,279.55	2,290.52	2,287.36	2,287.03
3	2,276.90	2,277.03	2,277.13	2,277.47	2,277.72	2,278.02	2,278.43	2,278.82	2,279.62	2,290.33	2,288.27	2,286.98
4	2,276.87	2,277.04	2,277.15	2,277.47	2,277.73	2,278.03	2,278.43	2,278.80	2,279.62	2,290.21	2,288.45	2,287.00
5	2,276.84	2,277.04	2,277.15	2,277.47	2,277.73	2,278.05	2,278.43	2,278.82	2,279.62	2,289.85	2,288.49	2,286.99
6	2,276.83	2,277.06	2,277.15	2,277.50	2,277.72	2,278.08	2,278.45	2,278.78	2,279.61	2,289.67	2,288.44	2,286.97
7	2,276.84	2,277.06	2,277.16	2,277.50	2,277.72	2,278.10	2,278.54	2,278.74	2,279.62	2,289.40	2,288.35	2,286.94
8	2,276.82	2,277.06	2,277.16	2,277.52	2,277.74	2,278.13	2,278.60	2,278.71	2,280.82	2,289.16	2,288.22	2,286.94
9	2,276.82	2,277.07	2,277.17	2,277.55	2,277.74	2,278.15	2,278.53	2,278.71	2,282.59	2,288.92	2,288.07	2,286.92
10	2,276.82	2,277.07	2,277.17	2,277.55	2,277.75	2,278.17	2,278.52	2,278.70	2,283.70	2,288.65	2,287.89	2,286.89
11	2,276.78	2,277.08	2,277.20	2,277.55	2,277.77	2,278.18	2,278.55	2,278.70	2,284.07	2,288.45	2,287.65	2,286.87
12	2,276.78	2,277.10	2,277.20	2,277.55	2,277.78	2,278.20	2,278.59	2,278.70	2,284.16	2,288.27	2,287.42	2,286.87
13	2,276.81	2,277.08	2,277.21	2,277.55	2,277.80	2,278.22	2,278.62	2,278.70	2,284.23	2,288.08	2,287.45	2,286.85
14	2,276.78	2,277.08	2,277.27	2,277.55	2,277.82	2,278.23	2,278.62	2,278.70	2,284.25	2,287.89	2,287.60	2,286.82
15	2,276.80	2,277.08	2,277.30	2,277.55	2,277.82	2,278.25	2,278.63	2,278.71	2,284.29	2,287.67	2,287.85	2,286.82
16	2,276.78	2,277.08	2,277.31	2,277.56	2,277.83	2,278.27	2,278.64	2,278.72	2,284.28	2,287.46	2,287.95	2,286.81
17	2,276.78	2,277.08	2,277.31	2,277.57	2,277.83	2,278.26	2,278.67	2,278.70	2,284.28	2,287.24	2,288.05	2,286.86
18	2,276.77	2,277.10	2,277.31	2,277.58	2,277.85	2,278.30	2,278.72	2,278.70	2,284.43	2,287.03	2,288.10	2,286.86
19	2,276.78	2,277.12	2,277.33	2,277.61	2,277.87	2,278.32	2,278.75	2,278.67	2,285.29	2,286.78	2,288.14	2,286.85
20	2,276.75	2,277.12	2,277.33	2,277.61	2,277.87	2,278.33	2,278.75	2,278.62	2,286.00	2,286.54	2,288.16	2,286.83
21	2,276.77	2,277.13	2,277.33	2,277.61	2,277.87	2,278.36	2,278.76	2,278.62	2,287.62	2,286.34	2,288.16	2,286.81
22	2,276.75	2,277.13	2,277.36	2,277.62	2,277.87	2,278.38	2,278.77	2,278.61	2,289.14	2,286.23	2,288.17	2,286.80
23	2,276.75	2,277.12	2,277.36	2,277.63	2,277.90	2,278.38	2,278.79	2,278.58	2,290.15	2,286.10	2,288.17	2,286.76
24	2,276.75	2,277.12	2,277.35	2,277.65	2,277.90	2,278.38	2,278.80	2,278.55	2,290.57	2,285.97	2,287.97	2,286.76
25	2,276.75	2,277.14	2,277.35	2,277.65	2,277.92	2,278.38	2,278.82	2,278.53	2,290.73	2,285.81	2,287.87	2,286.75
26	2,276.75	2,277.13	2,277.39	2,277.65	2,277.92	2,278.37	2,278.82	2,278.53	2,290.79	2,285.62	2,287.61	2,286.72
27	2,276.79	2,277.13	2,277.39	2,277.65	2,277.95	2,278.49	2,278.82	2,278.55	2,290.82	2,285.43	2,287.42	2,286.70
28	2,276.79	2,277.12	2,277.42	2,277.67	2,277.97	2,278.47	2,278.82	2,278.57	2,290.84	2,285.24	2,287.18	2,286.70
29	2,276.79	2,277.12	2,277.42	2,277.67	-----	2,278.45	2,278.81	2,278.82	2,290.83	2,285.06	2,287.10	2,286.68
30	2,276.97	2,277.12	2,277.42	2,277.67	-----	2,278.43	2,278.81	2,278.93	2,290.75	2,284.84	2,287.10	2,286.68
31	2,276.98	-----	2,277.43	2,277.67	-----	2,278.42	-----	2,279.27	-----	2,285.35	2,287.08	-----
MEAN	2,276.81	2,277.09	2,277.27	2,277.57	2,277.81	2,278.25	2,278.64	2,278.72	2,285.06	2,287.57	2,287.80	2,286.85
MAX	2,276.98	2,277.14	2,277.43	2,277.67	2,277.97	2,278.49	2,278.82	2,279.27	2,290.84	2,290.66	2,288.49	2,287.07
MIN	2,276.75	2,276.99	2,277.12	2,277.43	2,277.67	2,277.98	2,278.40	2,278.53	2,279.45	2,284.84	2,286.05	2,286.68
(+)	3,550	3,610	3,750	3,860	4,000	4,220	4,410	4,650	14,000	8,780	10,270	9,910
(#)	+20	+60	+140	+110	+140	+220	+190	+240	+9,350	-5,220	+1,490	-360

CAL YR 1974 (#) -1,270

WTR YR 1975 (#) +6,380

+ CONTENTS, IN ACRE-FEET, AT END OF MONTH.

* CHANGE IN CONTENTS, IN ACRE-FEET.

KANSAS RIVER BASIN

35

06848000 PRAIRIE DOG CREEK AT NORTON, KS

LOCATION.--Lat 39°48'36", long 99°55'18", in NW¼NW¼ sec.9, T.3 S., R.23 W., Norton County, 0.9 mi (1.4 km) downstream from Norton Dam, 2 mi (3.2 km) southwest of Norton, and at mile 74.0 (119.1 km).

DRAINAGE AREA.--684 mi² (1,772 km²).

PERIOD OF RECORD.--October 1943 to current year. Monthly discharge only for some periods, published in WSP 1310.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 2,237.38 ft (681.953 m) above mean sea level, levels by Bureau of Reclamation. Apr. 13 to May 7, 1944, nonrecording gage and May 8, 1944, to Sept. 30, 1961, water-stage recorder at site 3.2 mi (5.1 km) downstream at datum 19.47 ft (5.934 m) lower. Oct. 1, 1961, to Apr. 19, 1965, water-stage recorder at site 0.5 mi (0.8 km) upstream at datum 3.82 ft (1.164 m) lower. Apr. 20, 1965, to Sept. 30, 1974, water-stage recorder at same site at datum 2.00 ft (0.610 m) higher.

AVERAGE DISCHARGE.--32 years, 29.1 ft³/s (0.824 m³/yr), 21,080 acre-ft/yr (26.0 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 140 ft³/s (3.96 m³/s) July 8, gage height, 5.72 ft (1.743 m); no flow at times. Period of record: Maximum discharge, 37,500 ft³/s (1,060 m³/s) May 28, 1953, gage height, 25.6 ft (7.80 m); site and datum then in use, from rating curve extended above 14,000 ft³/s (396 m³/s) on basis of main channel velocity-area study and computation of peak flow over road; no flow at times in 1946, 1954-57, 1959-61, 1964-67, 1969-75.

REMARKS.--Records good. Flow completely regulated since 1964 by Norton Dam (see sta 06847950). Records of chemical analyses for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1310: 1944(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.30	.08	.02	.04	.07	.04	.01	.07	50	47	.30
2	0	.16	.03	.02	.03	.06	.04	.01	.06	75	14	.25
3	0	.19	.03	.03	.03	.05	.04	.01	.03	95	12	.19
4	0	.16	.03	.03	.03	.05	.04	0	0	109	12	.16
5	0	.11	.03	.03	.03	.05	.04	0	0	111	23	.19
6	0	.09	.04	.03	.02	.05	.04	0	0	119	35	.16
7	0	.09	.04	.03	.03	.04	.07	0	0	129	50	.16
8	0	.09	.04	.03	.03	.04	.10	0	1.3	140	69	.16
9	0	.09	.03	.04	.03	.03	.04	0	.36	141	77	.16
10	0	.07	.10	.04	.05	.04	.04	0	.18	132	92	.11
11	0	.07	.09	.02	.02	.05	.04	0	.13	102	97	.11
12	0	.05	.10	0	.03	.05	.04	0	.06	94	97	.11
13	0	.05	.05	0	.04	.06	.07	.11	.04	93	86	.11
14	0	.05	.03	.04	.04	.05	.08	.06	.02	94	3.3	.16
15	0	.05	.05	.03	.04	.05	.05	.03	0	94	.96	.16
16	0	.04	.08	.03	.04	.07	.05	.02	0	95	.58	.16
17	0	.04	.07	.02	.04	.09	.05	.02	0	97	.43	.44
18	0	.04	.05	.05	.04	.08	.06	0	.11	101	15	.16
19	0	.04	.05	.11	.04	.05	.07	0	.09	102	.69	.10
20	0	.04	.05	.10	.06	.05	.05	0	.04	100	.29	.08
21	0	.05	.05	.09	.07	.05	.04	0	.09	93	.19	.07
22	0	.08	.05	.08	.07	.05	.04	0	.11	72	.18	.07
23	0	.09	.05	.06	.05	.05	.04	0	.32	63	19	.05
24	0	.09	.05	.06	.06	.02	.05	0	.19	61	60	.05
25	0	.09	.03	.07	.07	.02	.05	0	.07	61	86	.05
26	.01	.09	.02	.07	.07	.04	.05	0	.03	61	97	.05
27	.01	.09	.02	.06	.08	.10	.04	0	0	60	97	.05
28	.02	.09	.02	.05	.07	.04	.03	.03	0	66	98	.05
29	.03	.09	.02	.04	---	.04	.01	.06	15	76	57	.05
30	1.0	.09	.02	.04	---	.04	.01	.34	40	86	1.5	.13
31	.67	---	.02	.04	---	.04	---	.14	---	79	.50	---
TOTAL	1.74	2.67	1.42	1.36	1.25	1.57	1.41	.84	58.30	2851	1248.62	4.05
MEAN	.056	.089	.046	.044	.045	.051	.047	.027	1.94	92.0	40.3	.14
MAX	1.0	.30	.10	.11	.08	.10	.10	.34	40	141	98	.44
MIN	0	.04	.02	0	.02	.02	.01	0	0	50	.18	.05
AC-FT	3.5	5.3	2.8	2.7	2.5	3.1	2.8	1.7	116	5650	2480	8.0
CAL YR 1974	TOTAL	1911.60	MEAN	5.24	MAX	79	MIN	0	AC-FT	3790		
WTR YR 1975	TOTAL	4174.23	MEAN	11.4	MAX	141	MIN	0	AC-FT	8280		

KANSAS RIVER BASIN

06848500 PRAIRIE DOG CREEK NEAR WOODRUFF, KS

LOCATION.--Lat 39°59'09", long 99°28'39", in NW¼NW¼ sec.9, T.19 S., R.19 W., Phillips County, on left bank at downstream side of bridge on U.S. Highway 383, 1 mi (1.6 km) south of Kansas-Nebraska state line, 2.5 mi (4.0 km) west of Woodruff, and at mile 26.5 (42.6 km).

DRAINAGE AREA.--1,007 mi² (2,608 km²).

PERIOD OF RECORD.--October 1928 to September 1932, October 1944 to current year. Monthly discharge only for some periods, published in WSP 1310.

GAGE.--Water-stage recorder. Datum of gage is 2,016.20 ft (614.537 m) above mean sea level. See WSP 1919 for history of changes prior to Oct. 7, 1955.

AVERAGE DISCHARGE.--35 years, 41.2 ft³/s (1.167 m³/s), 29,850 acre-ft/yr (36.8 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,240 ft³/s (35.1 m³/s) Aug. 14, gage height, 14.20 ft (4.328 m); minimum, 0.12 ft³/s (0.003 m³/s) Apr. 5.

Period of record: Maximum discharge, 15,000 ft³/s (425 m³/s) June 23, 1947, gage height, 21.04 ft (6.413 m), site and datum then in use, from rating curve extended above 6,500 ft³/s (184 m³/s) on basis of contracted-opening measurement of 11,300 ft³/s (320 m³/s); no flow at times in 1945, 1948, 1950, 1954-61, 1963-66, 1971, 1972.

REMARKS.--Records fair except those for winter periods, which are poor. Flow regulated to some extent since 1964 by Norton Reservoir 48.4 mi (77.9 km) upstream (see sta 06847950) and by irrigation development above station. Records of chemical analyses for the current year are published in Part 2 of this report.

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.62	.19	1.3	1.5	2.0	40	1.3	2.4	4.6	1.5	32	3.2
2	.54	.23	1.3	1.5	2.0	30	1.3	2.3	3.3	1.1	53	2.1
3	.67	28	1.3	1.5	2.0	20	1.0	2.2	2.6	.42	120	1.3
4	.56	11	1.4	1.5	2.0	20	.27	2.1	2.2	8.4	36	.94
5	.49	5.9	1.5	1.5	1.5	20	.15	2.2	1.8	2.3	14	1.3
6	.42	3.9	1.5	1.5	1.0	20	.25	2.2	1.5	2.4	4.6	1.3
7	.52	3.3	1.0	1.5	1.0	18	.31	2.1	1.3	1.6	1.4	1.6
8	.53	2.5	1.7	1.5	1.0	19	.20	2.1	105	1.4	1.7	1.1
9	.54	1.9	1.8	1.5	1.0	15	.16	2.0	112	7.4	.66	.89
10	.42	1.9	1.7	1.5	1.0	15	1.6	1.9	281	17	1.4	.75
11	.33	1.7	1.5	1.0	1.5	14	2.0	1.6	130	29	2.8	.96
12	.33	1.4	1.7	1.0	1.5	14	.98	1.8	32	32	4.0	.67
13	.58	1.3	1.5	1.0	1.5	14	.31	2.2	11	29	99	.73
14	.51	1.1	1.5	1.0	1.5	14	2.0	2.3	4.9	17	959	1.2
15	.51	1.2	1.5	1.0	1.5	14	2.7	2.4	2.8	5.6	416	11
16	.53	1.3	1.5	1.0	1.5	15	2.8	2.3	1.9	5.8	78	4.5
17	.56	1.5	1.5	1.5	1.5	18	3.1	2.3	1.5	4.0	20	2.2
18	.52	1.6	1.5	1.5	1.5	19	3.3	2.0	59	1.9	11	1.8
19	.54	1.7	1.5	1.5	1.5	16	3.1	1.7	10	4.0	6.4	1.6
20	.61	1.6	1.5	1.5	2.0	6.7	3.0	1.6	32	3.4	4.5	.90
21	.63	1.6	1.5	1.5	2.5	5.4	2.9	1.5	21	11	4.1	.64
22	.64	1.8	1.5	1.5	3.0	5.6	2.8	1.6	8.9	60	2.9	.91
23	.64	1.9	1.5	2.0	4.0	5.9	2.8	1.6	31	31	2.4	1.1
24	.64	2.4	1.5	3.0	5.0	4.2	2.7	1.7	21	5.9	2.2	1.1
25	.60	2.0	1.5	3.0	7.0	3.2	2.7	1.6	6.7	4.0	1.6	1.3
26	.59	1.8	1.5	3.0	10	2.6	2.7	1.7	2.2	4.3	5.6	1.2
27	.64	1.7	1.5	2.0	20	1.6	2.8	1.8	1.3	3.5	3.4	1.0
28	.77	1.6	1.5	2.0	50	1.5	2.7	2.2	1.5	.82	4.3	.94
29	.61	1.4	1.5	2.0	---	1.3	2.6	2.0	1.1	1.1	19	1.0
30	.82	1.2	1.5	2.0	---	1.1	2.5	3.2	1.5	4.2	19	1.2
31	.38	---	1.5	2.0	---	1.0	---	4.0	---	9.4	4.7	---
TOTAL	17.29	90.62	46.2	51.0	131.5	395.1	57.03	64.6	896.6	310.44	1934.66	50.43
MEAN	.56	3.02	1.49	1.65	4.70	12.7	1.90	2.08	29.9	10.0	62.4	1.68
MAX	.82	28	1.8	3.0	50	40	3.3	4.0	281	60	959	11
MIN	.33	.19	1.0	1.0	1.0	1.0	.15	1.5	1.1	.42	.66	.64
AC-FT	34	180	92	101	261	784	113	128	1780	616	3840	100

CAL YR 1974 TOTAL 1831.99 MEAN 5.02 MAX 56 MIN .10 AC-FT 3630
WTR YR 1975 TOTAL 4045.47 MEAN 11.1 MAX 959 MIN .15 AC-FT 8020

PEAK DISCHARGE (REGULATED) ABOVE 400 CFS

DATE TIME G.H. DISCHARGE

08-14 0900 14.20 1,240

KANSAS RIVER BASIN

37

06853500 REPUBLICAN RIVER NEAR HARDY, NE

LOCATION.--Lat 40°00'01", long 97°54'55", in NE¼ sec. 6, T.1 S., R.5 W., in Kansas, Republic County, at downstream side of highway bridge, 1.2 mi (1.9 km) southwest of Hardy and at mile 141.2 (227.2 km).

DRAINAGE AREA.--22,401 mi² (58,019 km²), of which about 7,500 mi² (19,000 km²) does not contribute directly to surface runoff.

PERIOD OF RECORD.--June 1904 to September 1915 (no winter records), April 1931 to current year. Prior to May 1932, published as "at Bostwick". Records for June 1896 to November 1903 published as "near Superior" in 18th to 22nd Ann. Repts., inclusive, Pt. 4, and WSP 75, 84, and 99, have been found to be unreliable and should not be used.

GAGE.--Water-stage recorder. Datum of gage is 1,501.46 ft (457.645 m) above mean sea level. Prior to May 19, 1932, nonrecording gage at site at Bostwick, 20 mi (32 km) upstream at different datum.

AVERAGE DISCHARGE.--44 years (1913-14, 1932-75), 626 ft³/s (17.73 m³/s), 453,500 acre-ft/yr (559 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 5,360 ft³/s (152 m³/s) June 24, gage height, 10.22 ft (3.115 m); minimum, 38 ft³/s (1.08 m³/s) May 27.

Period of record: Maximum discharge, about 225,000 ft³/s (6,370 m³/s) June 2, 1935, gage height, 19.4 ft (5.9 m), based on records for stations upstream; no flow Aug. 9-19, 1934.

Maximum stages since at least 1895, that of June 2, 1935, and 17.00 ft (5.18 m) June 24, 1947, discharge, 100,000 ft³/s (2,800 m³/s), based on records for upstream stations.

REMARKS.--Records good except those for winter periods, which are poor. Natural flow affected by irrigation development above station and by storage in six reservoirs in Colorado and Nebraska. Considerable regulation since 1952 by Harlan County Reservoir (see sta 06849000).

REVISIONS (WATER YEARS).--WSP 806: Drainage area. WSP 1006: 1941. WSP 1340: 1905(M), 1907-9, 1912, 1914-15, 1931. See also PERIOD OF RECORD.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	89	161	140	160	180	616	171	122	345	1,170	116	113
2	93	164	138	161	180	377	168	106	310	1,090	131	109
3	96	183	139	162	180	283	163	103	1,560	1,070	275	103
4	99	185	140	138	192	237	170	99	690	1,040	358	87
5	100	182	154	133	150	213	174	98	1,300	942	241	115
6	102	171	161	140	100	206	173	103	539	864	201	140
7	105	159	162	166	110	202	175	88	358	735	179	133
8	107	153	147	184	120	191	184	75	500	630	149	97
9	110	153	143	180	130	188	190	69	3,130	508	111	85
10	111	160	136	150	140	189	182	66	1,780	445	89	87
11	111	153	153	120	150	189	173	67	859	387	79	123
12	111	149	161	100	150	189	169	65	518	297	71	111
13	111	148	162	100	150	191	162	70	376	241	115	80
14	114	146	175	110	150	175	187	68	313	177	222	67
15	119	147	183	110	150	173	204	69	275	151	334	64
16	121	149	170	120	150	257	205	61	241	137	428	62
17	123	151	155	130	150	770	198	56	428	126	312	67
18	127	151	156	140	150	372	185	55	1,600	112	239	65
19	126	152	158	160	130	295	184	53	1,590	96	220	60
20	126	147	164	180	140	268	174	50	1,100	104	226	56
21	130	144	155	180	150	248	175	47	618	130	192	52
22	134	145	177	180	160	217	166	45	3,700	167	153	48
23	134	146	171	200	170	200	164	44	2,590	431	119	51
24	135	146	157	210	180	189	158	44	3,750	582	104	96
25	135	144	110	220	200	172	153	42	1,150	383	84	99
26	135	146	101	235	386	169	132	48	699	190	75	100
27	134	147	114	225	537	184	89	39	524	140	76	102
28	142	147	152	210	799	199	174	65	444	171	81	106
29	156	145	166	174	-----	190	169	504	939	160	98	105
30	156	146	153	178	-----	175	171	1,200	1,150	139	93	107
31	163	-----	149	180	-----	178	-----	581	-----	118	106	-----
TOTAL	3,755	4,620	4,702	5,036	5,534	7,702	5,142	4,202	33,376	12,933	5,277	2,690
MEAN	121	154	152	162	198	248	171	136	1,113	417	170	89.7
MAX	163	185	183	235	799	770	205	1,200	3,750	1,170	428	140
MIN	89	144	101	100	100	169	89	39	241	96	71	48
AC-FT	7,450	9,160	9,330	9,990	10,980	15,280	10,200	8,330	66,200	25,650	10,470	5,340

CAL YR 1974 TOTAL 120,690 MEAN 331 MAX 950 MIN 41 AC-FT 239,400
WTR YR 1975 TOTAL 94,969 MEAN 260 MAX 3,750 MIN 39 AC-FT 188,400

PEAK DISCHARGE (REGULATED) ABOVE 2,500 CFS

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
06-09	0900	9.35	4,320	06-22	1600	10.08	5,200
06-18	2000	7.78	2,700	06-24	0600	10.22	5,360

KANSAS RIVER BASIN

06853800 WHITE ROCK CREEK NEAR BURR OAK, KS

LOCATION.--Lat 39°53'55", Long 98°15'05", in NE¼ sec.7, T.2 S., R.8 W., Jewell County, on right bank 500 ft (152 m) upstream from highway bridge, 3.5 mi (5.6 km) northeast of Burr Oak, and at mile 35.4 (57.0 km).

DRAINAGE AREA.--227 mi² (588 km²).

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1955-57, October 1957 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,601.5 ft (488.14 m) above mean sea level (levels by Bureau of Reclamation).

AVERAGE DISCHARGE.--18 years, 27.1 ft³/s (0.767 m³/s), 19,630 acre-ft/yr (24.2 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,010 ft³/s (85.2 m³/s) June 22, gage height, 17.82 ft (5.43 m); minimum, 1.7 ft³/s (0.048 m³/s) Sept. 13, 14, 27.

Period of record: Maximum discharge, 15,800 ft³/s (447 m³/s) Sept. 3, 1973, gage height, 25.06 ft (7.638 m), from floodmark; no flow at times in 1957-59, 1964, 1966, 1968.

Maximum stage known since at least 1869, 32.6 ft (9.94 m) July 9, 1950, from floodmark 300 ft (91 m) downstream and information by local resident.

REMARKS.--Records good.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.0	5.3	5.6	5.6	6.6	666	15	17	28	22	5.8	2.2
2	3.3	5.1	5.4	6.1	6.5	255	14	14	19	21	6.8	2.0
3	3.2	6.7	5.3	6.1	6.5	67	14	14	37	20	11	1.9
4	2.7	6.5	5.6	5.7	7.0	34	15	13	30	18	19	1.9
5	3.0	6.0	5.8	6.3	6.6	25	14	12	33	18	11	2.1
6	2.8	5.9	5.9	6.0	6.4	21	15	11	14	16	7.9	2.2
7	3.2	5.6	5.7	6.4	6.2	19	15	8.8	9.0	16	6.1	2.2
8	2.7	5.6	5.6	6.3	6.0	17	18	7.9	356	16	4.9	2.0
9	3.0	6.1	5.7	6.6	5.9	15	17	6.7	1020	15	4.0	1.9
10	2.9	6.1	6.2	6.5	6.9	12	17	6.3	214	15	3.4	1.8
11	2.7	6.1	6.2	6.1	6.7	11	15	6.3	55	14	3.1	1.8
12	2.9	6.0	6.2	5.8	6.6	11	14	6.3	32	14	2.9	1.8
13	3.2	6.0	6.4	6.3	6.4	11	14	7.5	22	13	3.0	1.8
14	3.4	5.8	7.0	6.7	6.6	11	16	8.6	19	13	7.5	1.8
15	3.4	5.6	7.2	7.2	7.0	13	17	8.0	17	12	49	1.9
16	3.4	5.6	6.5	7.1	7.5	28	18	7.2	24	11	28	2.0
17	3.4	5.7	6.5	7.0	7.8	388	17	5.8	121	9.7	12	2.1
18	3.4	5.8	6.6	7.2	7.7	435	16	5.1	524	9.4	7.7	2.3
19	3.5	6.1	6.6	7.6	7.0	132	16	4.9	282	9.2	5.3	2.3
20	3.6	6.0	6.5	7.8	7.8	56	14	4.2	75	11	4.3	2.0
21	3.5	6.0	6.1	7.6	9.0	31	16	4.2	137	15	3.7	1.9
22	3.5	6.3	6.4	7.4	8.8	26	15	4.2	2550	100	3.3	2.0
23	3.7	6.2	6.4	8.3	7.7	23	15	4.8	1010	84	2.9	1.9
24	3.8	5.9	5.5	8.4	8.1	21	16	5.1	370	27	2.6	1.8
25	3.8	5.8	5.3	8.5	15	18	15	5.2	159	14	2.4	1.8
26	4.1	6.0	5.7	8.5	37	16	16	4.9	58	9.5	2.3	1.8
27	3.7	5.9	5.7	7.2	135	19	17	3.9	42	8.1	2.2	1.7
28	4.6	5.9	5.8	7.2	387	19	27	8.3	35	7.0	2.2	1.8
29	4.8	5.7	5.9	6.6	---	19	28	33	29	6.2	2.3	1.9
30	5.0	5.7	5.7	6.4	---	17	21	36	25	5.7	2.3	2.0
31	6.4	---	6.0	6.2	---	16	---	33	---	5.5	2.3	---
TOTAL	109.6	177.0	187.0	212.7	743.3	2452	497	317.2	7346.0	575.3	231.2	58.6
MEAN	3.54	5.90	6.03	6.86	26.5	79.1	16.6	10.2	245	18.6	7.46	1.95
MAX	6.4	6.7	7.2	8.5	387	666	28	36	2550	100	49	2.3
MIN	2.7	5.1	5.3	5.6	5.9	11	14	3.9	9.0	5.5	2.2	1.7
AC-FT	217	351	371	422	1470	4860	986	629	14570	1140	459	116
CAL YR 1974 TOTAL	7111.8											
WTR YR 1975 TOTAL	12906.9											
MEAN	19.5											
MAX	223											
MIN	2.7											
AC-FT	14110											
MIN	1.7											
AC-FT	25600											

PEAK DISCHARGE (BASE, 1,000 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
06-09	0500	13.95	1,340	06-22	1600	17.82	3,010

KANSAS RIVER BASIN

39

06853900 LOVEWELL RESERVOIR NEAR LOVEWELL, KS

LOCATION.--Lat 39°53'04", long 98°01'41", in NW¼NE¼NE¼ sec.18, T.2 S., R.6 W., Jewell County, at south end of Lovewell Dam on White Rock Creek, 3 mi (5 km) northwest of Lovewell, and 19.3 mi (31.1 km) upstream from mouth.

DRAINAGE AREA.--345 mi² (894 km²).

PERIOD OF RECORD.--May 1957 to current year. Monthly records only, May to September 1957.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Bureau of Reclamation). From June 15, 1960 to May 6, 1975 water-stage recorder at north end of dam at same datum.

EXTREMES.--Current year: Maximum elevation, 1,585.96 ft (483.401 m) June 26, contents, 52,580 acre-ft (64.8 hm³); minimum, 1,578.40 ft (481.096 m) many days in October, contents, 30,440 acre-ft (37.5 hm³).

Period of record: Maximum elevation, 1,595.01 ft (486.159 m) Oct. 13, 1973, contents, 90,700 acre-ft (112 hm³); minimum since irrigation pool was first filled, 1,563.70 ft (476.616 m) Oct. 1, 2, 1957, contents, 6,350 acre-ft (7.83 hm³).

REMARKS.--Reservoir is formed by earthfill dam. Closure was made May 29, 1957. Total capacity of 186,290 acre-ft (230 hm³) consists of the following: Dead storage, 5,050 acre-ft (6.23 hm³) below elevation 1,562.07 ft (476.119 m); irrigation pool, 36,640 acre-ft (45.2 hm³) between elevations 1,562.07 ft (476.119 m) and 1,582.6 ft (482.38 m); flood control pool, 50,460 acre-ft (62.2 hm³) (486.25 m) and 1,610.3 ft (490.82 m). Storage in reservoir is derived from White Rock Creek and diversion from the Republican River through upper Courtland Canal. Releases are made into White Rock Creek and for irrigation of 30,000 acres (12,000 hm²), through lower Courtland Canal. Figures given herein represent total contents.

Capacity table (elevation, in feet, and contents, in acre-feet)

1,575	22,910	1,585	49,290
1,580	34,440	1,590	67,940

ELEVATION, IN FEET, AT 2400, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,578.40	1,578.55	1,578.61	1,578.84	1,579.14	1,580.17	1,581.99	1,582.44	1,582.68	1,585.30	1,580.44	1,579.47
2	1,578.40	1,578.54	1,578.61	1,578.89	1,579.15	1,580.47	1,582.04	1,582.45	1,582.93	1,585.12	1,580.36	1,579.52
3	1,578.45	1,578.62	1,578.62	1,578.88	1,579.19	1,580.58	1,582.03	1,582.45	1,583.10	1,584.94	1,580.27	1,579.63
4	1,578.40	1,578.62	1,578.63	1,578.88	1,579.25	1,580.61	1,582.04	1,582.45	1,583.15	1,584.71	1,580.22	1,579.82
5	1,578.40	1,578.60	1,578.64	1,578.89	1,579.25	1,580.67	1,582.05	1,582.43	1,583.12	1,584.45	1,580.15	1,579.95
6	1,578.40	1,578.60	1,578.65	1,578.90	1,579.24	1,580.72	1,582.05	1,582.38	1,583.01	1,584.20	1,580.07	1,580.08
7	1,578.40	1,578.61	1,578.65	1,578.91	1,579.27	1,580.74	1,582.06	1,582.31	1,582.90	1,583.94	1,579.99	1,580.22
8	1,578.45	1,578.60	1,578.65	1,578.91	1,579.25	1,580.75	1,582.13	1,582.27	1,582.96	1,583.57	1,579.90	1,580.34
9	1,578.45	1,578.65	1,578.65	1,578.95	1,579.26	1,580.82	1,582.15	1,582.24	1,583.28	1,583.19	1,579.78	1,580.44
10	1,578.49	1,578.65	1,578.65	1,579.00	1,579.27	1,580.84	1,582.14	1,582.22	1,583.43	1,582.89	1,579.73	1,580.52
11	1,578.47	1,578.67	1,578.66	1,578.97	1,579.29	1,580.87	1,582.15	1,582.19	1,583.32	1,582.64	A	1,580.49
12	1,578.45	1,578.63	1,578.68	1,578.97	1,579.30	1,580.89	1,582.17	1,582.16	1,583.19	1,582.44		1,580.52
13	1,578.48	1,578.64	1,578.66	1,578.97	1,579.30	1,580.89	1,582.22	1,582.18	1,583.06	1,582.30		1,580.53
14	1,578.47	1,578.62	1,578.78	1,578.98	1,579.32	1,580.89	1,582.25	1,582.18	1,582.92	1,582.15		1,580.53
15	1,578.45	1,578.62	1,578.74	1,578.98	1,579.34	1,580.93	1,582.28	1,582.17	1,582.75	1,582.03	A	1,580.57
16	1,578.45	1,578.63	1,578.73	1,578.98	1,579.38	1,581.08	1,582.31	1,582.16	1,582.70	1,581.92	1,579.79	1,580.61
17	1,578.45	1,578.64	1,578.74	1,579.00	1,579.40	1,581.32	1,582.33	1,582.15	1,582.80	1,581.80	1,579.96	1,580.65
18	1,578.42	1,578.64	1,578.75	1,579.04	1,579.40	1,581.61	1,582.37	1,582.15	1,583.31	1,581.67	1,580.01	1,580.70
19	1,578.42	1,578.64	1,578.76	1,579.02	1,579.41	1,581.75	1,582.33	1,582.13	1,583.57	1,581.55	1,580.09	1,580.76
20	1,578.40	1,578.63	1,578.76	1,579.04	1,579.47	1,581.83	1,582.35	1,582.11	1,583.57	1,581.45	1,580.16	1,580.77
21	1,578.40	1,578.64	1,578.76	1,579.05	1,579.46	1,581.88	1,582.37	1,582.10	1,583.87	1,581.33	1,580.20	1,580.79
22	1,578.40	1,578.65	1,578.77	1,579.05	1,579.47	1,581.89	1,582.40	1,582.09	1,584.66	1,581.23	1,580.22	1,580.81
23	1,578.40	1,578.64	1,578.78	1,579.06	1,579.48	1,582.03	1,582.41	1,582.06	1,585.63	1,581.20	1,580.17	1,580.81
24	1,578.40	1,578.63	1,578.78	1,579.10	1,579.49	1,581.93	1,582.41	1,582.04	1,585.81	1,581.13	1,580.12	1,580.81
25	1,578.40	1,578.63	1,578.78	1,579.09	1,579.50	1,581.89	1,582.39	1,582.06	1,585.92	1,581.05	1,579.97	1,580.81
26	1,578.40	1,578.63	1,578.80	1,579.10	1,579.55	1,581.88	1,582.43	1,582.05	1,585.95	1,581.00	1,579.77	1,580.79
27	1,578.42	1,578.62	1,578.81	1,579.11	1,579.64	1,582.03	1,582.57	1,582.05	1,585.87	1,580.95	1,579.58	1,580.79
28	1,578.47	1,578.62	1,578.82	1,579.12	1,579.87	1,582.00	1,582.54	1,582.23	1,585.75	1,580.88	1,579.43	1,580.79
29	1,578.48	1,578.63	1,578.82	1,579.13	-----	1,581.99	1,582.53	1,582.47	1,585.62	1,580.79	1,579.39	1,580.78
30	1,578.53	1,578.62	1,578.83	1,579.13	-----	1,582.02	1,582.48	1,582.60	1,585.47	1,580.70	1,579.40	1,580.80
31	1,578.55	-----	1,578.84	1,579.13	-----	1,582.00	-----	1,582.65	-----	1,580.56	1,579.44	-----
MEAN	1,578.44	1,578.62	1,578.72	1,579.00	1,579.37	1,581.29	1,582.27	1,582.25	1,583.88	1,582.36		1,580.47
MAX	1,578.55	1,578.67	1,578.84	1,579.13	1,579.87	1,582.03	1,582.57	1,582.65	1,585.95	1,585.30	1,580.44	1,580.81
MIN	1,578.40	1,578.54	1,578.61	1,578.84	1,579.14	1,580.17	1,581.99	1,582.04	1,582.68	1,580.56	1,579.39	1,579.47
(+)	30,800	30,970	31,510	32,220	34,100	39,920	41,330	41,840	50,900	35,910	33,000	36,560
(#)	+240	+170	+540	+710	+1,880	+5,820	+1,410	+510	+9,060	-14,990	-2,910	+3,560
CAL YR 1974	..... (#) -12,710											
WTR YR 1975	..... (#) +6,000											

+ CONTENTS, IN ACRE-FEET, AT END OF MONTH.

CHANGE IN CONTENTS, IN ACRE-FEET.

A NO GAGE-HEIGHT RECORD.

KANSAS RIVER BASIN

06854000 WHITE ROCK CREEK AT LOVELL, KS

LOCATION.--Lat 39°53'10", long 98°01'20". in NW¼ sec.17, T.2 S., R.6 W., Jewell County, on right bank, 1,400 ft (427 m) east of Lovewell Dam, 2.5 mi (4.0 km) northwest of Lovewell, and at mile 18.8 (30.2 km).

DRAINAGE AREA.--345 mi² (894 km²).

PERIOD OF RECORD.--October 1945 to current year. Monthly discharge only for some periods, published in WSP 1310.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,531.52 ft (466.807 m) above mean sea level (Bureau of Reclamation bench mark). May 21, 1946, to Sept. 13, 1947, nonrecording gage, and Sept. 14, 1947, to Apr. 23, 1951, water-stage recorder, at site 3.0 mi (4.8 km) downstream at datum 1,513.95 ft (461.452 m) above mean sea level (Corps of Engineers bench mark). Apr. 24, 1951, to Nov. 8, 1952, nonrecording gage, and Nov. 9, 1952, to June 14, 1960, water-stage recorder, at site 2.0 mi (3.2 km) downstream at datum 1,519.53 ft (463.153 m) above mean sea level.

EXTREMES.--Current year: Maximum discharge, 282 ft³/s (7.99 m³/s) June 10, 11, gage height, 5.38 ft (1.640 m); minimum, 0.05 ft³/s (0.001 m³/s) Oct. 10, 11, 12, 21.

Period of record: Maximum discharge, 23,300 ft³/s (660 m³/s) July 10, 1950, gage height, 21.62 ft (6.590 m), site and datum then in use, from rating curve extended above 5,200 ft³/s (147 m³/s) on basis of a discharge measurement of 20,800 ft³/s (589 m³/s) made at site about 6.0 mi (9.7 km) upstream; no flow at times in 1948, 1953-60, 1966, 1967, 1971. Maximum discharge since construction of Lovewell Dam in 1957, 2,650 ft³/s (75.0 m³/s) Sept. 4, 1958.

Maximum stage known since 1870, that of July 10, 1950, from information by local residents.

REMARKS.--Records good. Flow completely regulated by Lovewell Reservoir beginning May 29, 1957 (see sta 06853900). Large flows from Republican River enter Lovewell Reservoir from upper Courtland Canal. Figures of flow do not include diversion immediately above station into Lower Courtland Canal.

REVISIONS (WATER YEARS).--WSP 1340: 1946-47, 1949-50(P).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.22	.09	.10	.10	.08	.15	.15	2.7	.12	237	2.2	1.8
2	.19	.08	.10	.11	.08	.15	.15	.51	.31	232	2.2	1.6
3	.17	.23	.10	.12	.09	.15	.12	.31	.40	226	2.3	1.5
4	.09	.15	.10	.10	.23	.18	.12	.24	.16	220	2.3	1.5
5	.08	.12	.10	.10	.13	.18	.14	.23	65	212	2.3	1.6
6	.32	.12	.14	.10	.11	.19	.13	.36	161	204	1.8	.82
7	.16	.14	.15	.10	.10	.20	.13	.27	160	197	1.7	.41
8	.10	.15	.12	.10	.10	.18	.13	.22	159	190	1.5	.31
9	.09	.19	.11	.10	.09	.21	.11	.22	162	108	1.6	.30
10	.08	.18	.10	.14	.08	.23	.13	.19	207	4.6	1.8	.41
11	.05	.12	.10	.12	.11	.22	.15	.19	281	2.3	1.9	1.4
12	.07	.09	.11	.10	.10	.18	.12	.16	276	1.6	1.6	1.6
13	.08	.13	.15	.09	.10	.15	.18	.18	270	1.3	1.9	1.9
14	.09	.12	.18	.10	.10	.15	.25	.21	265	1.5	1.8	1.9
15	.08	.12	.16	.10	.10	.15	.15	.29	256	1.6	1.9	1.9
16	.08	.14	.12	.09	.11	.28	.13	.27	133	1.4	1.7	.87
17	.06	.15	.10	.08	.12	.37	.17	.19	.43	1.6	1.9	.29
18	.06	.15	.10	.09	.12	.26	.31	.16	.82	2.2	1.8	.22
19	.06	.11	.10	.12	.12	.26	.26	.15	.24	2.0	1.8	.22
20	.06	.12	.10	.10	.12	.21	.11	.15	84	1.9	1.8	.26
21	.06	.21	.10	.10	.12	.19	.10	.13	158	1.9	1.8	.40
22	.06	.18	.10	.09	.12	.19	.10	.12	178	2.0	1.9	.49
23	.06	.12	.09	.08	.12	.18	.10	.12	75	1.9	1.9	.20
24	.06	.10	.08	.09	.13	.22	.14	.11	1.2	1.5	1.8	.38
25	.06	.10	.08	.10	.16	.11	.20	.10	2.0	1.7	1.5	.41
26	.06	.11	.08	.10	.16	.11	.11	.11	2.6	1.8	1.4	.28
27	.07	.10	.08	.09	.13	.21	.30	.13	134	1.9	1.5	.16
28	.10	.10	.08	.08	.13	.14	.27	.22	235	1.8	1.8	.12
29	.14	.10	.08	.08	---	.12	.13	.36	233	1.8	1.8	.14
30	.12	.10	.09	.08	---	.12	.20	.47	234	1.6	1.6	.26
31	.12	---	.10	.08	---	.15	---	.15	---	1.9	1.7	---
TOTAL	3.10	3.92	3.30	3.03	3.26	5.79	4.79	9.22	3734.28	1867.8	56.5	23.65
MEAN	.10	.13	.11	.098	.12	.19	.16	.30	124	60.3	1.82	.79
MAX	.32	.23	.18	.14	.23	.37	.31	2.7	281	237	2.3	1.9
MIN	.05	.08	.08	.08	.08	.11	.10	.10	.12	1.3	1.4	.12
AC-FT	6.1	7.8	6.5	6.0	6.5	11	9.5	18	7410	3700	112	47
CAL YR 1974	TOTAL	14174.07	MEAN	38.8	MAX	459	MIN	.05	AC-FT	28110		
WTR YR 1975	TOTAL	5718.64	MEAN	15.7	MAX	281	MIN	.05	AC-FT	11340		

KANSAS RIVER BASIN

41

06855800 BUFFALO CREEK NEAR JAMESTOWN, KS

LOCATION.--Lat 39°36'55", long 97°51'20", in SW¼NW¼SW¼ sec.14, T.5 S., R.5 W., Cloud County, at downstream side of highway bridge, 1.1 mi (1.8 km) north of Jamestown, and 21 mi (34 km) upstream from mouth.

DRAINAGE AREA.--330 mi² (850 km²), approximately.

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1954-59. July 1959 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,373.66 ft (418.692 m) above mean sea level. Prior to June 7, 1966, water-stage recorder at present site and datum. June 7, 1966, to Feb. 3, 1967, nonrecording gage at site 5.4 mi (8.7 km) downstream at different datum. Feb. 4, 1967, to May 3, 1967, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--16 years, 77.6 ft³/s (2.198 m³/s), 56,220 acre-ft/yr (69.3 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,540 ft³/s (43.6 m³/s) June 24, gage height, 16.09 ft (4.904 m); minimum, 2.1 ft³/s (0.059 m³/s) Sept. 10, 11.

Period of record: Maximum discharge, 27,800 ft³/s (787 m³/s) Oct. 12, 1973, gage height, 19.65 ft (5.989 m); no flow at times in 1959, 1964-67.

Maximum stages known since at least 1898, 18.5 ft (5.64 m) in 1948, from information by local resident, and that of Oct. 12, 1973.

REMARKS.--Records good except those for period of indefinite stage-discharge relation and winter periods, which are poor. Waste water from the Courtland West Irrigation Canal is occasionally diverted into the salt marsh above gage and may cause a considerable increase in low flow during irrigation periods. Some diversions above station for irrigation.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.6	5.0	5.0	4.8	11	77	8.5	50	54	24	28	6.1
2	2.7	5.0	4.8	4.9	10	62	8.0	20	34	16	56	4.6
3	2.7	5.0	4.7	5.1	11	49	7.5	21	160	15	36	3.9
4	2.7	5.0	4.7	5.2	10	39	6.8	14	308	13	19	6.4
5	2.7	5.0	5.0	5.3	9.0	30	6.2	8.3	103	10	21	34
6	3.0	5.0	5.0	5.4	9.0	26	6.0	6.6	47	9.9	18	19
7	3.0	5.0	4.7	5.5	9.0	25	6.2	6.6	21	10	5.0	5.4
8	3.0	5.0	4.5	5.6	8.0	18	6.7	6.0	31	9.0	3.9	3.4
9	3.0	5.0	4.7	5.0	8.0	14	8.4	5.5	260	8.9	6.9	2.5
10	3.0	5.0	4.7	4.7	10	13	9.8	5.3	153	11	10	2.2
11	3.0	5.0	4.5	4.5	10	12	10	11	83	17	17	10
12	3.0	5.0	4.5	4.5	9.5	12	9.0	8.9	43	18	6.4	14
13	3.0	5.0	4.6	10	9.0	11	6.9	5.6	25	11	6.5	4.8
14	3.5	5.0	4.9	11	9.0	11	13	9.3	22	7.5	139	3.3
15	3.5	5.0	4.5	11	9.0	11	16	9.8	24	5.4	108	3.7
16	3.5	5.0	4.5	12	9.0	12	19	6.5	6.4	4.6	59	4.2
17	3.5	5.0	4.7	12	10	14	24	5.7	6.6	4.2	27	4.3
18	3.5	5.0	4.7	12	12	31	53	5.4	73	4.4	11	5.3
19	4.0	5.0	4.6	11	14	75	70	4.6	207	6.2	6.2	8.0
20	4.0	5.0	4.6	11	14	61	29	4.6	145	16	4.0	10
21	4.0	5.0	4.6	11	14	54	16	4.4	123	22	3.2	5.6
22	4.0	5.0	4.5	11	12	45	9.6	4.4	868	13	2.8	4.0
23	4.5	5.0	4.5	13	11	38	8.0	4.3	1240	21	2.5	3.1
24	4.5	5.0	4.5	15	15	94	15	4.1	1510	26	2.6	3.7
25	4.5	5.0	4.5	18	20	24	11	4.0	1040	22	3.2	2.5
26	4.5	5.0	4.4	16	28	7.6	6.7	5.1	567	12	3.7	2.4
27	4.5	5.0	4.8	15	45	9.0	9.4	4.1	430	11	2.7	2.2
28	5.0	5.0	4.8	12	76	9.0	68	5.8	236	15	2.6	2.2
29	5.0	5.0	4.8	11	---	8.0	165	7.9	62	12	3.4	2.5
30	5.0	5.0	4.8	10	---	9.1	103	121	36	8.6	7.6	2.8
31	5.0	---	4.8	9.3	---	9.0	---	139	---	7.6	8.6	---
TOTAL	113.4	150.0	144.9	291.8	421.5	909.7	735.7	518.8	7918.0	391.3	630.8	186.1
MEAN	3.66	5.00	4.67	9.41	15.1	29.3	24.5	16.7	264	12.6	20.3	6.20
MAX	5.0	5.0	5.0	18	76	94	165	139	1510	26	139	34
MIN	2.6	5.0	4.4	4.5	8.0	7.6	6.0	4.0	6.4	4.2	2.5	2.2
AC-FT	225	298	287	579	836	1800	1460	1030	15710	776	1250	369
CAL YR 1974	TOTAL	23407.6	MEAN	64.1	MAX	802	MIN	1.9	AC-FT	46430		
WTR YR 1975	TOTAL	12412.0	MEAN	34.0	MAX	1510	MIN	2.2	AC-FT	24620		

PEAK DISCHARGE (BASE, 800 CFS)

DATE TIME G.H. DISCHARGE

06-24 1600 16.09 1,540

NOTE.--STAGE-DISCHARGE RELATION INDEFINITE, DISCHARGE ESTIMATED, OCT. 3 TO NOV. 30.

KANSAS RIVER BASIN

06855900 WOLF CREEK NEAR CONCORDIA, KS

LOCATION.--Lat 39°32'35", long 97°43'20", in SW 1/4 SW 1/4 sec.12, T.6 S., R.4 W., Cloud County, at downstream side of bridge on State Highway 9, 3.8 mi (6.1 km) southwest of Concordia, and at mile 7.3 (11.7 km).

DRAINAGE AREA.--56 mi² (145 km²), approximately.

PERIOD OF RECORD.--April 1962 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,375.43 ft (419.231 m) above mean sea level.

AVERAGE DISCHARGE.--13 years, 11.9 ft³/s (0.337 m³/s), 8,620 acre-ft/yr (10.6 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 588 ft³/s (16.7 m³/s) June 22, gage height, 12.57 ft (3.831 m); no flow Sept. 6-13, 27-30.
Period of record: Maximum discharge, 4,180 ft³/s (118 m³/s) Oct. 11, 1973, gage height, 17.95 ft (5.471 m); no flow at times in most years.

REMARKS.--Records good except those for winter periods, which are poor.

REVISIONS (WATER YEARS).--WRD Kansas, Part I: 1974. Revised figures of discharge, in cubic feet per second, for the water year 1974, superseding those published in WRD Kansas, Part I, 1974 are given herewith:

Date	Discharge	Date	Discharge	Date	Discharge	Date	Discharge
1974		1974		1974		1974	
Sept. 12	0.52	Sept. 17	0.32	Sept. 22	0.24	Sept. 27	0.24
13	.46	18	.32	23	.28	28	.32
14	.38	19	.28	24	.24	29	.24
15	.38	20	.28	25	.28	30	.18
16	.32	21	.28	26	.24		

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.10	.59	1.2	1.4	1.1	2.2	1.7	1.2	.85	1.6	.23	.30
2	.10	.47	1.3	1.5	1.2	1.9	1.8	1.1	1.5	1.4	.23	.14
3	.07	.63	1.3	1.7	1.4	1.6	1.7	1.3	6.3	1.3	.23	.07
4	.10	.87	1.3	1.7	2.9	1.5	1.7	1.4	2.0	1.2	.23	.02
5	.14	.65	1.5	1.8	1.5	1.5	1.8	1.4	1.3	1.0	.20	.03
6	.18	.57	1.6	1.8	1.0	1.6	1.7	1.5	.98	1.0	.17	0
7	.18	.56	1.5	1.8	1.1	1.6	1.8	1.5	.66	.90	.18	0
8	.18	.62	1.3	1.8	1.2	1.7	2.1	1.4	.84	.75	.19	0
9	.21	.83	1.1	1.9	1.1	1.7	2.0	1.3	2.0	.74	.17	0
10	.21	1.1	1.2	2.1	1.4	1.6	1.7	1.3	1.6	.71	.14	0
11	.24	1.2	1.3	1.7	1.3	1.6	1.5	1.3	1.7	.63	.13	0
12	.24	.80	1.4	1.5	1.3	1.5	1.5	1.2	1.2	.59	.12	0
13	.28	.91	1.3	1.5	1.3	1.4	1.7	1.3	.83	.51	2.6	0
14	.28	1.0	1.3	1.6	1.4	1.3	2.5	1.3	.62	.50	62	.01
15	.28	1.0	1.8	1.7	1.5	1.4	2.4	1.3	.54	.50	6.1	.01
16	.28	.90	1.6	1.8	1.6	1.5	2.0	1.1	.49	.44	1.2	.01
17	.32	.95	1.4	1.9	1.7	2.0	1.9	.94	.48	.44	.52	.01
18	.24	.95	1.4	1.9	1.8	2.4	2.0	.96	48	.42	.85	.01
19	.28	.98	1.4	1.8	1.9	2.8	2.0	1.0	21	.35	.43	.01
20	.28	1.1	1.4	1.7	1.9	1.9	1.7	1.0	1.9	.35	.27	.01
21	.28	.94	1.3	1.5	1.8	1.6	1.6	.89	12	.33	.18	.01
22	.39	1.0	1.4	1.4	1.8	1.6	1.8	1.1	372	.32	.15	.01
23	.41	.90	1.5	1.6	1.7	1.5	2.0	1.1	232	.71	.13	.01
24	.42	.90	1.4	1.8	1.7	1.5	2.0	.88	50	1.6	.12	.01
25	.49	.87	1.1	1.9	1.8	1.4	1.9	.95	10	1.0	.09	.01
26	.64	.93	1.3	1.8	2.5	1.3	1.8	.97	4.9	.86	.10	.01
27	.68	1.0	1.5	1.7	2.8	2.0	2.0	.75	3.3	.52	.08	.01
28	.63	.99	1.6	1.7	2.4	2.2	2.1	2.4	2.7	.39	.05	0
29	.85	1.4	1.6	1.3	---	1.8	1.7	1.9	2.3	.29	.38	0
30	.66	1.2	1.5	1.3	---	1.6	1.4	3.6	1.9	.24	2.9	0
31	.62	---	1.4	1.2	---	1.6	---	1.7	---	.23	.90	---
TOTAL	10.26	26.81	43.2	51.8	46.1	52.8	55.5	41.04	785.89	21.82	81.27	.70
MEAN	.33	.89	1.39	1.67	1.65	1.70	1.85	1.32	26.2	.70	2.62	.023
MAX	.85	1.4	1.8	2.1	2.9	2.8	2.5	3.6	372	1.6	62	.30
MIN	.07	.47	1.1	1.2	1.0	1.3	1.4	.75	.48	.23	.05	0
AC-FT	20	53	86	103	91	105	110	81	1560	43	161	1.4

CAL YR 1974 TOTAL 4098.73 MEAN 11.2 MAX 296 MIN .07 AC-FT 8130
WTR YR 1975 TOTAL 1217.19 MEAN 3.33 MAX 372 MIN 0 AC-FT 2410
PEAK DISCHARGE (BASE, 250 CFS)
DATE TIME G.H. DISCHARGE
06-22 1400 12.57 588

06856000 REPUBLICAN RIVER AT CONCORDIA, KS

LOCATION.--Lat 39°35'25", long 97°39'32", in SW¼SW¼NE¼ sec.28, T.5 S., R.3 W., Cloud County, at right downstream side of bridge on U.S. Highway 81, 1 mi (1.6 km) north of Concordia, 4.9 mi (7.9 km) downstream from Buffalo Creek, and at mile 98.5 (158.5 km).

DRAINAGE AREA.--23,560 mi² (61,020 km²), of which about 7,500 mi² (19,400 km²) is probably noncontributing.

PERIOD OF RECORD.--October 1945 to current year. Monthly discharge only for some periods, published in WSP 1310. Gage-height records collected at nearby sites since 1931 are contained in reports of U.S. Weather Bureau.

GAGE.--Water-stage recorder. Datum of gage is 1,333.62 ft (406.487 m) above mean sea level. Prior to Oct. 8, 1947, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--30 years, 777 ft³/s (22.00 m³/s), 562,900 acre-ft/yr (694 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 6,910 ft³/s (196 m³/s) June 23, gage height, 7.36 ft (2.243 m); minimum, 81 ft³/s (2.29 m³/s) Sept. 25.

Period of record: Maximum discharge, 75,000 ft³/s (2,124 m³/s) June 25, 1947, gage height, 14.90 ft (4.542 m); minimum, 8.0 ft³/s (0.23 m³/s) Sept. 2, 3, 1953.

Maximum stage known since at least 1895, about 18 ft (5.5 m) June 2, 1935, present site and datum, from information by U.S. Weather Bureau, discharge, about 207,000 ft³/s (5,862 m³/s), on basis of records for stations upstream. Flood of June 21, 1915, reached a stage of 14.1 ft (4.30 m), present site and datum, from information by U.S. Weather Bureau, discharge, about 60,000 ft³/s (1,699 m³/s).

REMARKS.--Records fair except those for winter periods, which are poor. Natural flow affected by irrigation development above station and by storage in seven reservoirs in Colorado, Nebraska, and Kansas. Considerable regulation since 1952 by Harlan County Reservoir (see sta 06849000). Records of chemical analyses for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1340: 1946-47.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	122	178	160	170	200	1,180	240	347	871	1,270	322	215
2	119	178	158	170	200	1,210	236	273	549	1,290	365	208
3	119	193	169	170	250	654	238	215	779	1,240	436	208
4	119	202	178	150	250	483	227	197	2,060	1,220	433	204
5	119	208	190	150	200	404	221	183	1,040	1,220	531	226
6	134	199	199	170	150	363	217	166	1,370	1,150	467	233
7	129	196	199	200	120	335	219	155	767	1,090	419	215
8	129	187	181	200	140	314	228	154	613	994	390	200
9	129	184	138	200	150	305	237	144	1,370	927	361	169
10	126	190	193	150	170	310	234	133	3,350	897	330	147
11	126	181	208	130	170	325	234	125	2,000	770	308	134
12	129	178	205	110	170	285	228	122	1,250	670	300	142
13	134	175	205	110	170	260	233	135	904	606	272	165
14	136	172	208	120	170	252	259	134	725	562	922	148
15	129	175	196	130	170	252	259	133	632	507	1,140	139
16	131	172	187	140	170	244	279	129	597	421	581	128
17	131	169	196	150	170	497	280	121	543	393	551	122
18	131	169	196	170	170	1,180	286	112	774	377	470	121
19	129	172	187	190	160	603	322	105	3,200	364	390	120
20	129	175	196	200	150	479	321	97	1,890	348	332	112
21	129	175	196	200	160	420	280	94	1,410	373	316	110
22	131	175	199	210	180	385	250	90	3,040	409	291	105
23	136	172	202	220	190	355	241	88	6,150	451	253	99
24	136	169	196	230	200	316	233	88	4,620	555	218	94
25	138	172	150	250	260	337	220	86	4,650	802	201	97
26	141	172	120	250	333	290	223	88	2,080	679	194	118
27	143	172	140	250	393	284	230	88	1,440	508	199	122
28	150	175	170	230	802	275	281	117	1,120	417	230	127
29	166	169	170	210	-----	278	361	157	911	396	226	130
30	175	163	170	200	-----	275	410	761	1,120	385	238	143
31	175	-----	170	200	-----	253	-----	1,640	-----	355	235	-----
TOTAL	4,170	5,367	5,632	5,630	6,018	13,403	7,727	6,477	51,825	21,646	11,921	4,501
MEAN	135	179	182	182	215	432	258	209	1,728	698	385	150
MAX	175	208	208	250	802	1,210	410	1,640	6,150	1,290	1,140	233
MIN	119	163	120	110	120	244	217	86	543	348	194	94
AC-FT	8,270	10,650	11,170	11,170	11,940	26,580	15,330	12,850	102,800	42,930	23,650	8,930

CAL YR 1974 TOTAL 205,936 MEAN 564 MAX 2,960 MIN 82 AC-FT 408,500
WTR YR 1975 TOTAL 144,317 MEAN 395 MAX 6,150 MIN 86 AC-FT 286,300

PEAK DISCHARGE (REGULATED) ABOVE 4,000 CFS

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
06-10	0800	5.46	4,100	06-25	0700	7.12	6,500
06-23	1800	7.36	6,910				

KANSAS RIVER BASIN

06856600 REPUBLICAN RIVER AT CLAY CENTER, KS

LOCATION.--Lat 39°21'20", long 97°07'34", in SW $\frac{1}{4}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.17, T.8 S., R.3 E., Clay County, at downstream side of bridge on State Highway 15, 1 mi (1.6 km) south of Clay Center, 4 mi (6.4 km) downstream from Five Creeks, and at mile 38.2 (61.5 km).

DRAINAGE AREA.--24,542 mi² (63,564 km²), of which about 7,500 mi² (19,400 km²) is noncontributing.

PERIOD OF RECORD.--June 1917 to current year. Monthly discharge only for some periods, published in WSP 1310. Prior to February 1934, published as "at Wakefield". Gage-height records collected in this vicinity August 1904 to October 1917 are contained in reports of U.S. Weather Bureau.

GAGE.--Water-stage recorder. Datum of gage is 1,159.21 ft (353.327 m) above mean sea level. See WSP 1919 for history of changes prior to Sept. 23, 1949.

AVERAGE DISCHARGE.--58 years, 1,034 ft³/s (29.28 m³/s), 749,100 acre-ft/yr (924 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 8,790 ft³/s (249 m³/s) June 22, gage height, 14.68 ft (4.474 m); minimum, 116 ft³/s (3.29 m³/s) May 26, 27, Sept. 27, 28.

Period of record: Maximum discharge, 195,000 ft³/s (5,522 m³/s) June 3, 1935, gage height, 25.74 ft (7.846 m), from floodmarks, from rating curve extended above 61,000 ft³/s (1,728 m³/s) on basis of velocity-area studies; no flow for part of Aug. 10, 1934; minimum daily, 1 ft³/s (0.028 m³/s) Aug. 9-11, 1934.

Maximum stage known since at least 1895, 26.2 ft (7.99 m) June 21, 1915, site and datum then in use, from information by U.S. Weather Bureau. Flood of May 29, 1903, reached a stage of 24.8 ft (7.56 m), site and datum then in use, from information by U.S. Weather Bureau.

REMARKS.--Records good except those for winter periods, which are poor. Natural flow affected by irrigation development above station and by reservoirs in Colorado, Nebraska, and Kansas. Flow moderately regulated since 1952 by Harlan County Reservoir (see sta 06849000). Records of chemical and biological analyses, water temperatures and specific conductance for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 806: Drainage area. WSP 1006: 1941. WSP 1340: 1929, 1933-34. WSP 1310: 1922.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	129	227	220	196	219	850	360	413	1,550	1,240	390	205
2	128	216	214	191	197	1,200	342	431	1,260	1,480	385	204
3	130	222	213	179	229	1,370	337	378	1,350	1,510	365	194
4	128	219	209	165	289	957	334	321	1,550	1,480	365	197
5	130	216	210	171	255	701	332	286	2,180	1,400	402	238
6	131	216	221	171	170	561	332	267	1,440	1,370	414	269
7	129	225	229	168	150	471	349	255	1,440	1,320	485	238
8	132	225	236	198	160	416	394	237	1,260	1,270	432	221
9	133	232	235	225	180	399	461	225	2,490	1,180	390	209
10	135	242	225	245	200	393	375	222	1,990	1,130	370	200
11	131	232	206	223	200	348	342	211	3,230	1,070	340	194
12	142	225	221	180	200	359	331	200	2,380	987	316	173
13	177	228	238	150	200	374	337	197	1,650	849	324	159
14	152	225	239	150	200	347	484	193	1,230	769	420	153
15	158	222	243	160	200	332	621	195	986	672	471	167
16	155	222	243	170	200	333	451	189	833	610	1,200	170
17	158	222	235	190	200	345	383	180	761	537	780	161
18	155	225	227	210	200	444	679	177	3,010	466	552	154
19	155	222	229	220	180	1,210	903	167	5,170	434	517	150
20	155	222	234	230	170	1,050	524	158	3,440	420	413	146
21	155	222	233	240	190	722	461	151	2,300	412	348	140
22	158	222	230	250	200	602	413	144	6,580	384	305	136
23	160	222	234	270	210	536	365	140	7,000	390	282	132
24	160	221	242	282	220	479	351	136	7,820	408	257	127
25	167	218	245	303	250	418	333	130	5,090	828	240	124
26	176	216	150	287	310	412	332	128	4,400	740	218	120
27	177	216	170	294	369	456	329	123	2,480	764	207	117
28	185	218	180	266	570	562	312	162	1,880	639	201	123
29	194	219	196	243	-----	465	304	171	1,540	506	205	128
30	207	228	180	240	-----	401	325	554	1,270	432	219	150
31	214	-----	187	240	-----	379	-----	981	-----	408	209	-----
TOTAL	4,796	6,687	6,774	6,707	6,318	17,892	12,196	7,722	79,560	26,105	12,022	5,099
MEAN	155	223	219	216	226	577	407	249	2,652	842	388	170
MAX	214	242	245	303	570	1,370	903	981	7,820	1,510	1,200	269
MIN	128	216	150	150	150	332	304	123	761	384	201	117
AC-FT	9,510	13,260	13,440	13,300	12,530	35,490	24,190	15,320	157,800	51,780	23,850	10,110
CAL YR 1974	TOTAL 272,898											
WTR YR 1975	TOTAL 191,878											
	MEAN 748											
	MAX 3,870											
	MIN 120											
	AC-FT 541,300											
	AC-FT 380,600											

PEAK DISCHARGE (REGULATED) ABOVE 4,700 CFS

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
06-19	0100	13.86	7,260	06-24	0500	14.38	8,220
06-22	1700	14.68	8,790				

KANSAS RIVER BASIN

45

06857050 MILFORD LAKE NEAR JUNCTION CITY, KS

LOCATION.--Lat 39°04'40", long 96°53'30", in SE 1/4 sec.20, T.11 S., R.5 E., Geary County, in control tower of dam on Republican River, 5 mi (8 km) northwest of Junction City and 7.7 mi (12.4 km) above mouth.

DRAINAGE AREA.--24,880 mi² (64,440 km²), of which a large area is noncontributing.

PERIOD OF RECORD.--December 1966 to current year. Prior to October 1971, published as "Milford Reservoir".

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Corps of Engineers).

EXTREMES.--Current year: Maximum elevation, 1,148.63 ft (350.102 m) June 27, contents, 487,700 acre-ft (601 hm³); minimum, 1,141.50 ft (347.929 m) Oct. 21, contents, 370,200 acre-ft (456 hm³).

Period of record: Maximum elevation, 1,170.03 ft (356.625 m) Oct. 17, 1973, contents, 982,300 acre-ft (1,210 hm³); minimum since conservation pool first filled, 1,141.47 ft (347.920 m) Dec. 3, 1969, contents, 369,700 acre-ft (456 hm³).

REMARKS.--Reservoir is formed by compacted earthfill dam. Storage began Jan. 16, 1967. Total capacity 1,380,000 acre-ft (1,700 hm³) below elevation 1,182.0 ft (360.27 m). Crest of uncontrolled spillway is at elevation 1,173.6 ft (357.71 m). Storage capacity of 673,600 acre-ft (831 hm³) above elevation 1,144.4 ft (348.81 m) is provided for flood control. Storage capacity of 415,400 acre-ft (512 hm³) below elevation 1,144.4 ft (348.81 m) is provided for conservation and recreation. Figures given herein represent total contents.

Capacity table (elevation, in feet, and contents, in acre-feet)
(Computed by Corps of Engineers in 1967 from topographic maps)

1,140	348,100
1,145	425,100
1,150	512,800

ELEVATION, IN FEET, AT 2400, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,142.08	1,142.03	1,142.56	1,143.26	1,144.04	1,144.75	1,144.88	1,145.43	1,146.07	1,148.27	1,143.53	1,143.33
2	1,141.97	1,142.08	1,142.56	1,143.34	1,144.06	1,144.85	1,144.84	1,145.52	1,146.24	1,148.02	1,143.54	1,143.31
3	1,141.83	1,142.11	1,142.56	1,143.34	1,144.13	1,144.97	1,144.80	1,145.51	1,146.39	1,147.68	1,143.53	1,143.35
4	1,141.85	1,142.10	1,142.57	1,143.36	1,144.28	1,145.03	1,144.78	1,145.50	1,146.53	1,147.34	1,143.51	1,143.40
5	1,141.85	1,142.12	1,142.62	1,143.38	1,144.30	1,145.11	1,144.81	1,145.50	1,146.64	1,147.02	1,143.52	1,143.49
6	1,141.83	1,142.12	1,142.72	1,143.39	1,144.23	1,145.12	1,144.79	1,145.51	1,146.75	1,146.70	1,143.47	1,143.47
7	1,141.76	1,142.12	1,142.80	1,143.42	1,144.27	1,145.05	1,144.84	1,145.51	1,146.70	1,146.35	1,143.45	1,143.50
8	1,141.72	1,142.15	1,142.68	1,143.40	1,144.31	1,144.98	1,144.90	1,145.49	1,146.81	1,146.00	1,143.45	1,143.50
9	1,141.67	1,142.23	1,142.72	1,143.50	1,144.30	1,145.00	1,144.95	1,145.49	1,146.94	1,145.66	1,143.45	1,143.50
10	1,141.60	1,142.28	1,142.75	1,143.60	1,144.35	1,144.92	1,144.98	1,145.47	1,146.94	1,145.26	1,143.47	1,143.55
11	1,141.59	1,142.34	1,142.78	1,143.55	1,144.39	1,144.86	1,144.97	1,145.45	1,146.74	1,144.84	1,143.45	1,143.70
12	1,141.58	1,142.28	1,142.82	1,143.53	1,144.42	1,144.80	1,144.95	1,145.45	1,146.55	1,144.59	1,143.43	1,143.67
13	1,141.55	1,142.31	1,142.83	1,143.55	1,144.44	1,144.72	1,145.02	1,145.51	1,146.38	1,144.54	1,143.58	1,143.65
14	1,141.56	1,142.30	1,143.00	1,143.55	1,144.46	1,144.64	1,145.08	1,145.52	1,146.20	1,144.05	1,143.63	1,143.65
15	1,141.54	1,142.31	1,142.93	1,143.60	1,144.47	1,144.56	1,145.13	1,145.52	1,145.89	1,143.52	1,143.64	1,143.67
16	1,141.55	1,142.33	1,142.91	1,143.60	1,144.52	1,144.48	1,145.15	1,145.53	1,145.70	1,143.32	1,143.73	1,143.67
17	1,141.57	1,142.35	1,142.93	1,143.60	1,144.52	1,144.47	1,145.19	1,145.53	1,145.42	1,143.32	1,143.85	1,143.67
18	1,141.58	1,142.38	1,142.95	1,143.65	1,144.53	1,144.49	1,145.24	1,145.53	1,145.22	1,143.31	1,143.85	1,143.70
19	1,141.58	1,142.43	1,143.00	1,143.66	1,144.53	1,144.56	1,145.30	1,145.52	1,145.58	1,143.30	1,143.78	1,143.70
20	1,141.56	1,142.43	1,143.02	1,143.67	1,144.54	1,144.65	1,145.34	1,145.55	1,145.64	1,143.30	1,143.70	1,143.70
21	1,141.52	1,142.45	1,143.00	1,143.72	1,144.55	1,144.73	1,145.36	1,145.55	1,145.71	1,143.27	1,143.63	1,143.68
22	1,141.57	1,142.47	1,143.07	1,143.72	1,144.56	1,144.70	1,145.35	1,145.58	1,146.29	1,143.22	1,143.54	1,143.68
23	1,141.60	1,142.54	1,143.14	1,143.74	1,144.58	1,144.87	1,145.41	1,145.60	1,146.95	1,143.25	1,143.43	1,143.68
24	1,141.62	1,142.49	1,143.10	1,143.82	1,144.57	1,144.83	1,145.42	1,145.59	1,147.80	1,143.29	1,143.38	1,143.66
25	1,141.66	1,142.42	1,143.09	1,143.84	1,144.58	1,144.73	1,145.40	1,145.61	1,148.24	1,143.33	1,143.34	1,143.66
26	1,141.67	1,142.52	1,143.10	1,143.87	1,144.58	1,144.70	1,145.40	1,145.62	1,148.57	1,143.39	1,143.29	1,143.62
27	1,141.67	1,142.53	1,143.13	1,143.92	1,144.62	1,144.85	1,145.44	1,145.62	1,148.63	1,143.46	1,143.29	1,143.66
28	1,141.76	1,142.58	1,143.16	1,143.95	1,144.67	1,144.87	1,145.44	1,145.71	1,148.61	1,143.52	1,143.29	1,143.67
29	1,141.84	1,142.58	1,143.19	1,143.95	-----	1,144.83	1,145.45	1,145.80	1,148.55	1,143.52	1,143.35	1,143.67
30	1,141.95	1,142.62	1,143.22	1,144.03	-----	1,144.77	1,145.42	1,145.83	1,148.42	1,143.51	1,143.35	1,143.74
31	1,141.99	-----	1,143.25	1,144.02	-----	1,144.86	-----	1,145.92	-----	1,143.52	1,143.33	-----
MEAN	1,141.70	1,142.33	1,142.91	1,143.63	1,144.42	1,144.80	1,145.13	1,145.56	1,146.77	1,144.63	1,143.51	1,143.60
MAX	1,142.08	1,142.62	1,143.25	1,144.03	1,144.67	1,145.12	1,145.45	1,145.92	1,148.63	1,148.27	1,143.85	1,143.74
MIN	1,141.52	1,142.03	1,142.56	1,143.26	1,144.04	1,144.47	1,144.78	1,145.43	1,145.22	1,143.22	1,143.29	1,143.31
(+)	377,600	387,200	397,000	409,200	419,700	422,800	432,100	440,500	483,900	401,300	398,300	404,800
(#)	-2,500	+9,600	+9,800	+12,200	+10,500	+3,100	+9,300	+8,400	+43,400	-82,600	-3,000	+6,500

CAL YR 1974 (#) -31,100

WTR YR 1975 (#) +24,700

+ CONTENTS, IN ACRE-FEET, AT END OF MONTH.

CHANGE IN CONTENTS, IN ACRE-FEET.

06857100 REPUBLICAN RIVER BELOW MILFORD DAM, KS

LOCATION.--Lat 39°04'15", long 96°52'00", Geary County, at downstream side of bridge on U.S. Highway 77, 1.7 mi (2.7 km) below Milford Dam, 2.5 mi (4.0 km) northwest of Junction City, and at mile 6.0 (9.7 km).

DRAINAGE AREA.--24,890 mi² (64,470 km²), of which a large area is noncontributing.

PERIOD OF RECORD.--October 1963 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,052.50 ft (320,802 m) above mean sea level (Corps of Engineers bench mark).

AVERAGE DISCHARGE.--12 years, 906 ft³/s (25.66 m³/s), 656,400 acre-ft/yr (809 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 5,080 ft³/s (144 m³/s) June 11, 12, gage height, 13.38 ft (4.078 m); minimum, 26 ft³/s (0.74 m³/s) Jan. 10, 11, result of freeze-up.

Period of record: Maximum discharge, 17,200 ft³/s (487 m³/s) June 22, 1964, gage height, 22.10 ft (6.736 m); minimum daily, 9.0 ft³/s (0.25 m³/s) Oct. 9, 1966.

REMARKS.--Records good. Flow completely regulated since 1967 by Milford Lake 1.7 mi (2.7 km) upstream (see sta 06857050). Records of chemical analyses for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	725	77	71	45	47	295	390	300	53	2,430	292	120
2	520	76	71	46	47	295	390	300	55	3,500	292	119
3	520	75	65	46	49	295	390	305	55	4,280	293	119
4	520	75	49	45	52	295	363	305	210	4,210	292	101
5	525	76	49	45	49	295	305	305	505	4,140	293	79
6	526	75	50	44	53	563	305	305	916	4,090	292	73
7	525	74	50	44	47	943	306	310	1,470	4,050	293	73
8	478	73	49	43	47	942	305	310	1,480	4,020	255	73
9	450	74	49	44	47	947	239	310	1,480	3,970	208	73
10	450	75	49	44	47	954	305	315	2,410	3,920	208	73
11	450	74	49	44	47	954	303	325	4,330	4,230	208	75
12	450	71	49	42	47	954	300	182	4,510	2,920	208	72
13	450	70	50	42	104	954	300	71	3,130	1,100	173	70
14	226	71	49	42	189	966	300	69	3,100	4,400	201	70
15	77	70	49	49	189	978	300	69	3,080	4,340	201	72
16	77	71	48	49	189	978	305	65	3,080	2,270	201	73
17	75	71	47	49	189	664	305	63	3,060	445	201	72
18	76	71	47	49	189	389	300	59	3,040	440	374	73
19	77	71	48	49	189	390	300	57	3,030	440	715	73
20	77	71	50	49	189	392	300	55	3,020	440	718	73
21	77	71	50	49	189	395	300	55	3,010	445	713	73
22	78	70	50	49	189	386	300	52	3,040	436	712	73
23	79	71	51	49	189	393	300	53	1,890	325	712	73
24	79	71	51	49	189	384	300	53	536	131	708	73
25	79	71	49	47	226	385	300	53	1,150	131	567	73
26	77	71	49	47	288	388	300	52	1,970	131	276	73
27	76	72	50	47	293	390	300	52	1,960	129	209	73
28	77	73	50	49	295	388	295	57	1,960	194	119	75
29	77	72	50	49	-----	390	300	55	1,950	292	122	77
30	78	71	49	49	-----	390	300	55	2,200	293	122	85
31	78	-----	45	47	-----	390	-----	55	-----	292	122	-----
TOTAL	8,129	2,174	1,582	1,441	3,864	17,722	9,306	4,672	61,680	62,434	10,300	2,374
MEAN	262	72.5	51.0	46.5	138	572	310	151	2,056	2,014	332	79.1
MAX	725	77	71	49	295	978	390	325	4,510	4,400	718	120
MIN	75	70	45	42	47	295	239	52	53	129	119	70
AC-FT	16,120	4,310	3,140	2,860	7,660	35,150	18,460	9,270	122,300	123,800	20,430	4,710

CAL YR 1974 TOTAL 311,620 MEAN 854 MAX 4,850 MIN 24 AC-FT 618,100
WTR YR 1975 TOTAL 185,678 MEAN 509 MAX 4,510 MIN 42 AC-FT 368,300

KANSAS RIVER BASIN

47

06858500 NORTH FORK SMOKY HILL RIVER NEAR MCALLASTER, KS

LOCATION.--Lat 39°01'01", long 101°20'51", in NW 1/4 sec. 17, T. 12 S., R. 36 W., Logan County, on left bank at downstream side of bridge on U.S. Highway 40, 3 mi (5 km) east of McAllaster.

DRAINAGE AREA.--670 mi² (1,740 km²), approximately, of which about 20 mi² (52 km²) is noncontributing.

PERIOD OF RECORD.--October 1946 to September 1953. Occasional low-flow measurements 1954-59 water years. July 1959 to current year. Monthly discharge only for some periods, published in WSP 1310.

GAGE.--Water-stage recorder. Datum of gage is 3,070.27 ft (935.818 m) above mean sea level. Jan. 12 to July 17, 1947, nonrecording gage and July 18, 1947, to Sept. 30, 1953, water-stage recorder, at site 2 mi (3 km) upstream at datum 15.75 ft (4.801 m) higher.

AVERAGE DISCHARGE.--23 years, 4.51 ft³/s (0.128 m³/s), 3,270 acre-ft/yr (4.03 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 82 ft³/s (2.32 m³/s) June 8, gage height, 6.15 ft (1.875 m); no flow for many days. Period of record: Maximum discharge, 21,700 ft³/s (615 m³/s) June 8, 1962, gage height, 10.40 ft (3.170 m) inside; 11.7 ft (3.57 m) from floodmarks, from rating curve extended above 350 ft³/s (9.91 m³/s) on basis of contracted-opening measurement of peak flow; no flow at times in most years. Maximum stage known, about 16 ft (4.9 m) former site and datum, date unknown, from information by local resident. Flood in 1930 reached a stage of 14.4 ft (4.39 m) datum at former site at railroad bridge 2 mi (3 km) upstream, from information by Union Pacific Railroad Company (discharge not determined).

REMARKS.--Records poor.

REVISIONS (WATER YEARS).--WSP 1440: 1947(M), 1948.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0							0	.57	.14	19	
2	0							0	.46	.11	1.2	
3	0							0	.23	.09	.29	
4	0							0	.16	.06	.13	
5	0							0	.09	.05	.04	
6	0							0	.08	.02	0	
7	0							0	3.2	0	0	
8	0							0	31	0	0	
9	0							0	13	0	0	
10	0							0	4.8	0	0	
11	0							0	2.8	0	0	
12	0							0	1.4	0	0	
13	0							0	.94	0	0	
14	0							0	.66	0	0	
15	0							0	.54	0	0	
16	0							0	.43	0	0	
17	0							0	.34	0	0	
18	0							0	.25	0	0	
19	0							0	3.1	0	0	
20	0							0	1.6	0	0	
21	0							0	3.3	0	0	
22	0							0	10	0	0	
23	0							0	9.2	0	0	
24	0							0	2.0	0	0	
25	0							0	1.0	0	0	
26	0							0	.54	0	0	
27	0							0	.43	0	0	
28	5.9							0	.61	0	0	
29	2.5							0	.25	0	0	
30	.15							0	.19	0	0	
31	.04	---			---		---	.44	---	0	0	---
TOTAL	8.59	0	0	0	0	0	0	.44	93.17	.47	20.66	0
MEAN	.28	0	0	0	0	0	0	.014	3.11	.015	.67	0
MAX	5.9	0	0	0	0	0	0	.44	31	.14	19	0
MIN	0	0	0	0	0	0	0	0	.08	0	0	0
AC-FT	17	0	0	0	0	0	0	.9	185	.9	41	0

CAL YR 1974 TOTAL 162.22 MEAN .44 MAX 30 MIN 0 AC-FT 322
WTR YR 1975 TOTAL 123.33 MEAN .34 MAX 31 MIN 0 AC-FT 245

PEAK DISCHARGE (BASE, 300 CFS).--NO PEAK ABOVE BASE.

06859500 LADDER CREEK BELOW CHALK CREEK NEAR SCOTT CITY, KS

LOCATION.--Lat 38°47'20", long 100°52'10", in SW¼Sec.34, T.14 S., R.32 W., Logan County, at downstream side of county highway bridge, 1.3 mi (2.1 km) upstream from mouth, 5.0 mi (8.0 km) downstream from Chalk Creek, and 23 mi (37 km) northeast of Scott City.

DRAINAGE AREA.--1,460 mi² (3,780 km²), approximately.

PERIOD OF RECORD.--April 1951 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,639.73 ft (804.590 m) above mean sea level. Prior to Oct. 17, 1951, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--24 years, 8.84 ft³/s (0.250 m³/s), 6,400 acre-ft/yr (7.89 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,000 ft³/s (28.3 m³/s) May 29, gage height, 6.60 ft (2.012 m); no flow for many days.
Period of record: Maximum discharge, 28,000 ft³/s (793 m³/s) Aug. 23, 1969, gage height, 16.00 ft (4.877 m), from rating curve extended above 5,700 ft³/s (161 m³/s) on basis of slope-area measurement of peak flow; no flow at times in most years.
Maximum stage known since at least 1900, 16.1 ft (4.91 m) Aug. 6, 1933, discharge, 30,000 ft³/s (850 m³/s), from rating curve extended above 5,700 ft³/s (161 m³/s) on basis of slope-area measurement at gage height 16.00 ft (4.877 m), augmented by failure of dam at Lake McBride, from information by local residents.

REMARKS.--Records good except those for winter periods, which are poor.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.18	.01	2.4	.50	1.5	.30	1.0	17	2.7	1.7	
2	0	.14	.01	2.7	.63	1.5	.40	1.0	9.8	2.5	1.1	
3	0	.65	.01	2.1	.79	1.8	.30	2.0	6.9	2.4	.79	
4	0	.24	.01	2.3	.60	2.5	.30	1.0	19	2.3	.58	
5	0	.18	.01	3.0	.50	2.5	2.0	.57	14	2.1	.44	
6	0	.10	.02	2.3	.40	2.9	3.0	.95	12	1.9	.25	
7	0	.08	.03	3.6	.40	1.6	15	2.1	9.9	1.8	.11	
8	0	.06	.02	3.0	.40	1.1	10	1.3	9.3	1.8	.11	
9	0	.05	.02	3.4	.80	.90	3.0	.74	13	2.0	.11	
10	0	.04	.06	1.5	1.7	.80	1.0	.88	5.5	1.9	.04	
11	0	.04	.19	.60	2.8	.80	.30	.54	5.5	2.3	.02	
12	.04	.02	.30	.60	3.5	.80	.30	.43	4.5	2.1	.02	
13	.02	.02	.36	.70	2.0	1.0	.50	2.2	4.0	1.9	.04	
14	.01	.01	.57	.90	1.9	2.0	2.0	2.2	3.8	1.7	.04	
15	0	.01	.60	2.0	1.3	2.9	2.0	1.9	3.3	1.6	.02	
16	0	.01	.92	4.0	1.0	4.3	3.6	1.4	3.0	1.4	.07	
17	0	.01	.96	2.5	1.0	2.7	2.4	1.7	3.0	1.5	1.3	
18	0	.01	3.0	3.0	1.3	7.4	2.4	2.4	2.6	1.5	.20	
19	0	.01	3.0	3.5	1.9	2.4	2.4	1.3	3.1	1.5	.08	
20	0	.01	2.9	2.5	2.2	1.4	2.2	.21	3.8	1.3	.02	
21	0	.01	3.1	2.0	2.6	1.4	2.8	.08	7.6	1.2	.01	
22	0	.01	1.5	1.7	1.9	1.4	2.5	.16	23	.93	.02	
23	0	.01	3.2	1.8	1.0	1.0	6.2	.11	139	.93	.02	
24	0	.02	2.1	2.0	1.4	1.0	4.8	1.2	52	1.0	.01	
25	0	.01	1.3	1.7	1.5	1.0	2.1	.58	14	.93	.01	
26	0	.01	1.3	.95	1.2	1.5	2.5	.11	7.7	.86	.02	
27	0	.01	1.8	.70	1.8	5.0	3.9	4.4	4.4	.79	.01	
28	.90	.01	2.5	.70	2.3	12	5.0	9.7	3.8	.72	.01	
29	14	.01	3.9	.60	---	3.0	4.0	222	3.8	.65	.01	
30	3.7	.01	2.7	.60	---	1.0	2.0	58	3.0	1.8	.01	
31	.45	---	3.3	.50	---	.70	---	29	---	1.4	0	---
TOTAL	19.12	1.98	39.70	59.85	39.32	71.80	89.20	351.16	411.3	49.41	7.17	0
MEAN	.62	.066	1.28	1.93	1.40	2.32	2.97	11.3	13.7	1.59	.23	0
MAX	14	.65	3.9	4.0	3.5	12	15	222	139	2.7	1.7	0
MIN	0	.01	.01	.50	.40	.70	.30	.08	2.6	.65	0	0
AC-FT	38	3.9	79	119	78	142	177	697	816	98	14	0

CAL YR 1974 TOTAL 572.94 MEAN 1.57 MAX 34 MIN 0 AC-FT 1140
WTR YR 1975 TOTAL 1140.01 MEAN 3.12 MAX 222 MIN 0 AC-FT 2260

PEAK DISCHARGE (BASE, 250 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
05-29	0700	6.60	1,000	06-23	0100	4.71	388

KANSAS RIVER BASIN

49

06860000 SMOKY HILL RIVER AT ELKADER, KS

LOCATION.--Lat 38°47'33", long 100°51'19", in NE¼SE¼ sec.34, T.14 S., R.32 W., Logan County, at downstream side of bridge on U.S. Highway 83 at Elkader, 0.1 mi (0.2 km) downstream from Ladder Creek, and at mile 409.9 (659.5 km).

DRAINAGE AREA.--3,555 mi² (9,207 km²).

PERIOD OF RECORD.--October 1939 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,624.62 ft (799.984 m) above mean sea level. Prior to Oct. 1, 1964, water-stage recorder at same site and datum.

AVERAGE DISCHARGE.--36 years, 36.0 ft³/s (1.020 m³/s), 26,080 acre-ft/yr (32.2 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,690 ft³/s (76.2 m³/s) May 29, gage height, 4.84 ft (1.475 m); no flow for many days.
Period of record: Maximum discharge, 22,300 ft³/s (632 m³/s) Aug. 23, 1969, gage height, 8.85 ft (2.698 m); maximum gage height, 9.02 ft (2.794 m) June 17, 1955; no flow at times in most years.
Maximum stage known, 13.2 ft (4.02 m) May 30, 1938, from floodmark, discharge, 71,000 ft³/s (2,010 m³/s), on basis of slope-area measurement of peak flow.

REMARKS.--Records good except those for winter periods, which are poor.

REVISIONS (WATER YEARS).--WSP 1310: 1941(M), 1947(M), 1949(M). WSP 1510: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.07	.02	1.2	.50	1.9	.31	1.3	26	4.3	2.3	.15
2	0	.02	.03	1.5	.94	1.4	.35	.94	12	3.5	32	.15
3	0	.36	.03	1.1	1.2	1.4	.31	1.5	7.1	3.0	6.5	.37
4	0	.12	.04	1.4	1.4	2.2	.31	2.0	19	2.8	1.7	.27
5	0	.04	.04	1.5	.80	2.5	1.3	.94	28	2.5	.51	.18
6	0	.02	.05	2.0	.30	2.5	1.9	.66	23	2.3	.37	.21
7	0	.02	.05	2.5	.30	2.2	16	1.0	22	2.0	.30	.51
8	0	.01	.08	2.5	.40	1.5	16	1.4	11	1.9	.27	.51
9	0	0	.08	2.0	.70	1.4	42	.86	155	2.3	.21	.18
10	0	0	.08	1.0	1.0	1.0	.94	.72	50	2.0	.24	.12
11	0	0	.08	.50	1.5	.70	.45	1.4	31	2.6	.18	.12
12	0	0	.20	.50	2.0	.70	.35	.90	18	2.4	.05	.24
13	0	0	.27	.60	3.0	1.0	.68	3.6	12	2.2	.06	.15
14	0	0	.40	.80	2.8	2.0	2.1	1.4	8.8	1.8	.03	.24
15	0	0	.50	1.0	1.7	2.5	2.0	1.5	6.5	1.6	.03	.18
16	0	0	.60	1.8	1.0	3.8	3.1	1.2	5.5	1.4	.03	.15
17	0	0	.55	1.7	1.0	3.8	2.2	1.0	4.5	1.7	16	.15
18	0	0	.81	2.2	1.0	6.0	1.8	1.8	4.0	1.6	.81	.18
19	0	0	.86	2.4	1.3	4.0	1.8	1.5	4.0	1.4	.30	.18
20	0	0	.86	1.7	2.0	1.6	1.3	.80	5.5	1.1	.30	.12
21	0	0	1.2	1.3	2.3	1.5	1.3	.40	101	.86	.24	.06
22	0	0	1.0	1.1	1.5	1.4	2.8	.23	66	.72	.24	.03
23	0	0	.98	1.1	1.2	1.2	2.9	.23	190	.65	.30	.03
24	0	0	1.1	1.3	1.1	1.0	10	.63	121	.65	.30	.03
25	0	.01	.94	1.4	1.5	.90	3.8	.72	34	.51	.30	.03
26	0	.02	.78	1.3	1.4	1.2	2.0	.31	32	.37	.37	.03
27	0	.01	.94	1.1	1.6	5.6	7.4	.12	16	.30	.30	.06
28	.01	.02	1.0	.90	1.8	10	6.6	17	10	.27	.24	.06
29	12	.02	1.4	.80	---	1.0	4.8	627	7.8	.24	.18	.06
30	2.6	.02	1.2	.60	---	.60	2.6	150	5.6	1.7	.27	.06
31	.47	---	1.4	.50	---	.45	---	55	---	1.7	.27	---
TOTAL	15.08	.76	17.57	41.30	37.24	68.95	139.40	878.06	1036.3	52.37	65.20	4.81
MEAN	.49	.025	.57	1.33	1.33	2.22	4.65	28.3	34.5	1.69	2.10	.16
MAX	12	.36	1.4	2.5	3.0	10	42	627	190	4.3	32	.51
MIN	0	0	.02	.50	.30	.45	.31	.12	4.0	.24	.03	.03
AC=FT	30	1.5	35	82	74	137	276	1740	2060	104	129	9.5

CAL YR 1974 TOTAL 633.61 MEAN 1.74 MAX 103 MIN 0 AC=FT 1260
WTR YR 1975 TOTAL 2357.04 MEAN 6.46 MAX 627 MIN 0 AC=FT 4680

PEAK DISCHARGE (BASE, 700 CFS)

DATE TIME G.H. DISCHARGE
05-29 0800 4.84 2,690

KANSAS RIVER BASIN

06861000 SMOKY HILL RIVER NEAR ARNOLD, KS

LOCATION.--Lat 38°48'31", long 100°01'13", in SW 1/4 sec. 29, T.14 S., R.24 W., Trego County, on right bank near downstream side of highway bridge, 7.0 mi (11.3 km) upstream from headwaters of Cedar Bluff Reservoir, 12 mi (19.3 km) north of Arnold, and at mile 356.2 (573.1 km).

DRAINAGE AREA.--5,220 mi² (13,520 km²), approximately.

PERIOD OF RECORD.--February 1950 to current year. Prior to October 1950, published as "near Ransom".

GAGE.--Water-stage recorder. Datum of gage is 2,196.13 ft (669.380 m) above mean sea level. See WSP 1919 for history of changes prior to Sept. 30, 1961.

AVERAGE DISCHARGE.--25 years, 72.1 ft³/s (2.042 m³/s), 52,240 acre-ft/yr (64.4 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 5,250 ft³/s (149 m³/s) June 8, gage height, 7.95 ft (2.423 m); minimum, 0.06 ft³/s (0.002 m³/s) Oct. 7-12.

Period of record: Maximum discharge, 23,800 ft³/s (674 m³/s) June 11, 1951, gage height, 12.57 ft (3.831 m), site and datum then in use; no flow at times in most years.

Flood of May 30, 1938 reached a stage of about 19 ft (5.8 m), present site and datum, from information by local resident.

REMARKS.--Records good.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.30	4.0	.36	.53	.49	1.1	1.1	.75	469	37	485	1.5
2	.23	2.1	.37	.56	.61	.94	.88	2.2	189	34	71	1.2
3	.15	34	.37	.53	.71	.94	.92	9.3	77	31	34	1.2
4	.12	18	.44	.58	.60	.94	1.1	5.6	48	30	71	1.3
5	.11	5.9	.44	.72	.80	.94	.87	2.8	46	28	101	.84
6	.09	3.4	.54	.69	.92	1.1	.67	1.8	52	26	45	.61
7	.06	2.4	.60	.81	.95	1.3	1.1	1.4	252	23	34	.66
8	.06	1.9	.38	.68	.90	1.0	1.8	1.1	2160	21	28	.64
9	.06	1.6	.50	.79	.94	1.1	1.3	1.1	830	19	25	.52
10	.06	1.3	.42	.56	1.1	2.0	.99	1.2	223	18	22	.60
11	.06	1.1	.47	.43	1.3	2.3	.79	1.8	152	15	19	.74
12	.12	.82	.50	.45	1.3	2.3	.75	1.2	95	14	18	.82
13	5.2	.86	.46	.38	1.5	2.0	3.7	12	70	12	30	.79
14	1.3	.79	.55	.58	1.0	2.1	4.4	10	56	11	70	.80
15	.28	.79	.39	.83	.67	3.3	2.8	5.0	47	9.5	23	1.0
16	.21	.73	.48	.67	.47	3.5	2.0	3.3	40	8.2	17	1.4
17	.18	.60	.47	.95	.75	3.3	1.4	2.3	36	7.3	24	1.5
18	.16	.57	.68	1.1	.93	3.1	1.1	1.5	32	6.7	18	1.2
19	.13	.58	.60	1.1	1.4	2.7	1.1	1.0	29	6.3	285	.94
20	.13	.57	.48	.72	1.9	2.2	.76	.71	26	6.0	38	.94
21	.12	.50	.51	.88	2.6	2.1	.67	.57	35	6.0	13	.90
22	.11	.51	.56	.51	1.6	1.9	.67	.52	71	4.9	8.7	.79
23	.11	.55	.39	.66	1.4	2.0	.71	.45	600	29	6.6	.78
24	.11	.42	.34	.96	1.5	1.7	.67	1.1	128	13	5.2	.67
25	.12	.40	.34	.91	1.7	1.5	.59	2.1	114	8.7	4.5	.67
26	.14	.47	.35	.68	1.6	1.2	.46	.68	87	7.1	3.9	.71
27	.13	.45	.44	.54	1.2	1.3	1.8	.79	61	6.0	3.1	.79
28	.13	.41	.45	.49	1.1	.93	1.9	1.9	51	5.3	2.7	.79
29	.19	.33	.47	.56	---	.91	.97	187	45	4.5	2.6	.85
30	4.3	.34	.39	.74	---	.89	.69	697	41	4.1	2.3	.94
31	31	---	.56	.40	---	.94	---	616	---	616	1.9	---
TOTAL	45.47	86.39	14.30	20.99	31.94	53.53	38.66	1574.17	6162	1067.6	1512.5	27.09
MEAN	1.47	2.88	.46	.68	1.14	1.73	1.29	50.8	205	34.4	48.8	.90
MAX	31	34	.68	1.1	2.6	3.5	4.4	697	2160	616	485	1.5
MIN	.06	.33	.34	.38	.47	.89	.46	.45	26	4.1	1.9	.52
AC-FT	90	171	28	42	63	106	77	3120	12220	2120	3000	54

CAL YR 1974 TOTAL 2270.28 MEAN 6.22 MAX 281 MIN 0 AC-FT 4500
WTR YR 1975 TOTAL 10634.64 MEAN 29.1 MAX 2160 MIN .06 AC-FT 21090

PEAK DISCHARGE (BASE, 1,800 CFS)

DATE	TIME	G.H.	DISCHARGE
06-08	1600	7.95	5,250

KANSAS RIVER BASIN

51

06861500 CEDAR BLUFF RESERVOIR NEAR ELLIS, KS

LOCATION.--Lat 38°47'24", long 99°43'13", in NE¼SW¼ sec.36, T.14 S., R.22 W., Trego County, in control house structure of outlet works conduit at dam on Smoky Hill River, 18 mi (29 km) southwest of Ellis, and at mile 333.7 (536.9 km).

DRAINAGE AREA.--5,530 mi² (14,300 km²), approximately.

PERIOD OF RECORD.--November 1950 to current year (monthly records only prior to August 1960).

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Bureau of Reclamation). Prior to Aug. 20, 1960, non-recording mercury-column gage at same site and datum.

EXTREMES.--Current year: Maximum elevation, 2,134.44 ft (650.577 m) June 27, contents, 127,000 acre-ft (157 hm³); minimum, 2,130.40 ft (649.346 m) May 27, contents, 107,200 acre-ft (132 hm³).

Period of record: Maximum elevation, 2,154.90 ft (656.814 m) July 2, 1951, July 4, 5, 1957, contents, 269,400 acre-ft (332 hm³); minimum elevation since irrigation pool was first filled, 2,127.35 ft (648.416 m) Mar. 26-30, 1955, contents, 93,960 acre-ft (116 hm³).

REMARKS.--Reservoir is formed by compacted earthfill dam; storage began Nov. 13, 1950; dam was completed in 1951. Total capacity, 870,400 acre-ft (1,070 hm³), consisting of the following: Dead storage, 8,260 acre-ft (10.2 hm³) below elevation 2,090 ft (637.0 m), sill of trashrack structure; irrigation pool, 176,800 acre-ft (218 hm³) between elevations 2,090 ft (637.0 m) and 2,144 ft (653.5 m); spillway; and uncontrolled storage, 493,400 acre-ft (608 hm³) between elevations 2,166 ft (660.2 m) and 2,200 ft (670.6 m). Reservoir is used to store water for flood control, irrigation of 6,600 acres (26.7 km²), and recreation. Figures given herein represent total contents.

Capacity table (elevation, in feet, and contents, in acre-feet)

2,129	101,000	2,133	119,600
2,131	110,000	2,135	129,900

ELEVATION, IN FEET, AT 2400, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,131.29	2,131.20	2,130.94	2,130.86	2,130.73	2,130.80	2,130.72	2,130.82	2,131.21	2,134.42	2,132.97	2,131.78
2	2,131.27	2,131.17	2,130.94	2,130.88	2,130.74	2,130.78	2,130.73	2,130.85	2,131.39	2,134.41	2,133.08	2,131.71
3	2,131.28	2,131.20	2,130.93	2,130.86	2,130.75	2,130.77	2,130.73	2,130.85	2,131.45	2,134.37	2,133.08	2,131.64
4	2,131.28	2,131.21	2,130.94	2,130.85	2,130.79	2,130.77	2,130.75	2,130.87	2,131.48	2,134.34	2,133.07	2,131.62
5	2,131.25	2,131.20	2,130.93	2,130.86	2,130.79	2,130.80	2,130.75	2,130.85	2,131.50	2,134.31	2,133.04	2,131.55
6	2,131.21	2,131.19	2,130.93	2,130.84	2,130.78	2,130.79	2,130.75	2,130.83	2,131.65	2,134.27	2,133.03	2,131.50
7	2,131.19	2,131.20	2,130.92	2,130.86	2,130.78	2,130.76	2,130.79	2,130.81	2,131.76	2,134.22	2,132.98	2,131.47
8	2,131.18	2,131.20	2,130.90	2,130.83	2,130.76	2,130.75	2,130.82	2,130.78	2,132.46	2,134.16	2,132.91	2,131.41
9	2,131.17	2,131.20	2,130.92	2,130.84	2,130.76	2,130.82	2,130.79	2,130.77	2,133.47	2,134.07	2,132.86	2,131.36
10	2,131.18	2,131.20	2,130.92	2,130.84	2,130.79	2,130.82	2,130.77	2,130.77	2,133.65	2,134.00	2,132.83	2,131.35
11	2,131.18	2,131.20	2,130.93	2,130.80	2,130.77	2,130.82	2,130.77	2,130.76	2,133.75	2,133.91	2,132.75	2,131.25
12	2,131.22	2,131.17	2,130.93	2,130.78	2,130.79	2,130.82	2,130.77	2,130.73	2,133.82	2,133.82	2,132.66	2,131.22
13	2,131.22	2,131.14	2,130.88	2,130.78	2,130.77	2,130.82	2,130.82	2,130.78	2,133.88	2,133.75	2,132.60	2,131.18
14	2,131.18	2,131.11	2,130.92	2,130.80	2,130.76	2,130.81	2,130.83	2,130.77	2,133.90	2,133.68	2,132.54	2,131.14
15	2,131.18	2,131.11	2,130.89	2,130.81	2,130.76	2,130.82	2,130.84	2,130.77	2,133.90	2,133.59	2,132.46	2,131.12
16	2,131.18	2,131.12	2,130.89	2,130.79	2,130.77	2,130.84	2,130.87	2,130.75	2,133.92	2,133.50	2,132.45	2,131.11
17	2,131.18	2,131.12	2,130.88	2,130.79	2,130.79	2,130.86	2,130.87	2,130.73	2,133.89	2,133.40	2,132.39	2,131.10
18	2,131.15	2,131.13	2,130.88	2,130.80	2,130.79	2,130.88	2,130.85	2,130.72	2,133.89	2,133.34	2,132.37	2,131.07
19	2,131.15	2,131.12	2,130.89	2,130.79	2,130.79	2,130.90	2,130.84	2,130.67	2,133.88	2,133.27	2,132.34	2,131.06
20	2,131.12	2,131.11	2,130.89	2,130.80	2,130.81	2,130.90	2,130.85	2,130.65	2,133.86	2,133.20	2,132.35	2,131.02
21	2,131.13	2,131.11	2,130.90	2,130.79	2,130.80	2,130.90	2,130.84	2,130.62	2,133.93	2,133.15	2,132.33	2,130.99
22	2,131.13	2,131.11	2,130.90	2,130.79	2,130.77	2,130.88	2,130.88	2,130.58	2,133.97	2,133.08	2,132.30	2,130.98
23	2,131.11	2,131.08	2,130.88	2,130.79	2,130.77	2,130.89	2,130.87	2,130.57	2,134.18	2,133.00	2,132.24	2,130.95
24	2,131.11	2,131.06	2,130.88	2,130.80	2,130.79	2,130.83	2,130.87	2,130.54	2,134.36	2,132.91	2,132.20	2,130.92
25	2,131.11	2,131.07	2,130.86	2,130.79	2,130.79	2,130.80	2,130.87	2,130.49	2,134.40	2,132.85	2,132.10	2,130.92
26	2,131.10	2,131.06	2,130.86	2,130.79	2,130.79	2,130.78	2,130.90	2,130.46	2,134.42	2,132.78	2,132.03	2,130.90
27	2,131.10	2,131.05	2,130.87	2,130.76	2,130.80	2,130.85	2,130.91	2,130.41	2,134.42	2,132.69	2,131.99	2,130.87
28	2,131.11	2,130.99	2,130.88	2,130.79	2,130.80	2,130.81	2,130.88	2,130.42	2,134.43	2,132.60	2,131.91	2,130.85
29	2,131.12	2,130.97	2,130.87	2,130.75	-----	2,130.78	2,130.86	2,130.60	2,134.43	2,132.51	2,131.89	2,130.85
30	2,131.22	2,130.95	2,130.86	2,130.75	-----	2,130.79	2,130.83	2,130.69	2,134.43	2,132.41	2,131.87	2,130.82
31	2,131.20	-----	2,130.86	2,130.75	-----	2,130.76	-----	2,130.94	-----	2,132.48	2,131.83	-----
MEAN	2,131.18	2,131.13	2,130.90	2,130.81	2,130.78	2,130.82	2,130.82	2,130.70	2,133.39	2,133.50	2,132.50	2,131.19
MAX	2,131.29	2,131.21	2,130.94	2,130.88	2,130.81	2,130.90	2,130.91	2,130.94	2,134.43	2,134.42	2,133.08	2,131.78
MIN	2,131.10	2,130.95	2,130.86	2,130.75	2,130.73	2,130.75	2,130.72	2,130.41	2,131.21	2,132.41	2,131.83	2,130.82
(+)	110,900	109,700	109,300	108,800	109,000	108,900	109,200	109,700	126,900	117,000	113,900	109,100
(*)	-600	-1,200	-400	-500	+200	-100	+300	+500	+17,200	-9,900	-3,100	-4,800
CAL YR 1974	..... (*) -25,100											
WTR YR 1975	..... (*) -2,400											

+ CONTENTS, IN ACRE-FEET, AT END OF MONTH.

* CHANGE IN CONTENTS, IN ACRE-FEET.

LOCATION.--Lat 38°47'30", long 99°43'20", in NW¼ sec.1, T.15 S., R.22 W., Trego County, on right bank 0.2 mi (0.3 km) downstream from Cedar Bluff Dam, 14 mi (23 km) southwest of Ellis, and at mile 333.4 (536.4 km).

PERIOD OF RECORD.--February 1952 to current year.

AVERAGE DISCHARGE.--23 years, 34.5 ft³/s (0.977 m³/s), 25,000 acre-ft/yr (30.8 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 5.4 ft³/s (0.15 m³/s) June 8, gage height, 1.33 ft (0.405 m); minimum, 0.01 ft³/s (<0.001 m³/s) May 20-22.

Period of record: Maximum discharge, 2,010 ft³/s (56.9 m³/s) July 5, 1957, gage height, 4.89 ft (1.490 m); no flow at times in most years.

REMARKS.--Records poor. Flow completely regulated by Cedar Bluff Reservoir (see sta 06861500). Prior to Nov. 21, 1962, fish hatchery effluent was included in gauged flow. Records of chemical analyses for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1510: Drainage area.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.25	.45	.95	1.0	.99	.83	.37	.25	.45	.63	.72	.41
2	.24	.37	.95	1.0	.99	.83	.37	.25	.43	.63	.57	.33
3	.24	.51	.99	.99	.99	.79	.35	.27	.37	.63	.48	.29
4	.22	.48	.99	1.1	1.1	.79	.31	.27	.37	.60	.43	.29
5	.20	.41	.99	1.1	1.0	.72	.27	.22	.35	.57	.39	.41
6	.20	.41	.99	1.1	1.0	.66	.27	.20	.43	.57	.37	.41
7	.20	.41	.99	1.1	1.0	.63	.33	.20	.79	.54	.35	.39
8	.20	.37	.99	1.1	1.0	.60	.45	.20	2.1	.54	.31	.37
9	.22	.35	.99	1.2	1.0	.66	.37	.22	1.1	.51	.33	.37
10	.20	.35	.99	1.1	1.0	.63	.33	.24	.79	.48	.35	.39
11	.20	.35	.99	.91	1.0	.54	.33	.27	.75	.48	.33	.41
12	.31	.37	.99	.95	1.0	.51	.31	.25	.69	.43	.33	.43
13	.66	.35	.99	.95	1.0	.51	.45	.33	.63	.43	.35	.45
14	.45	.35	1.0	.95	1.0	.51	.54	.24	.60	.43	.43	.54
15	.33	.33	1.2	.95	1.0	.57	.43	.14	.60	.41	.48	.60
16	.25	.33	1.1	.95	1.0	.60	.41	.09	.79	.43	.51	.57
17	.22	.33	1.1	.95	1.0	.60	.39	.08	.99	.33	.48	.48
18	.20	.33	1.1	.95	1.0	.57	.37	.06	1.1	.29	.43	.48
19	.19	.35	1.1	.99	.99	.51	.37	.04	1.1	.31	.43	.54
20	.18	.35	1.0	.99	.95	.48	.35	.02	1.0	.37	.41	.57
21	.16	.35	1.0	.99	.95	.45	.33	.01	1.2	.45	.39	.54
22	.16	.35	1.0	.99	.95	.45	.33	.04	1.4	.45	.35	.51
23	.18	1.0	1.0	.99	.95	.45	.33	.07	1.2	.39	.31	.45
24	.18	1.3	1.0	.99	.95	.39	.33	.08	.95	.39	.33	.43
25	.18	.95	1.0	.99	.91	.35	.31	.08	.87	.39	.35	.43
26	.18	.99	1.0	.99	.87	.31	.29	.09	.79	.39	.41	.43
27	.19	.95	1.0	.99	.83	.37	.31	.10	.75	.37	.57	.41
28	.19	.95	1.0	.99	.83	.35	.29	.22	.72	.33	.60	.41
29	.19	.95	1.0	1.1	-----	.33	.25	.57	.69	.29	.57	.41
30	.51	.95	1.0	1.0	-----	.33	.25	.87	.66	.31	.57	.41
31	.63	-----	1.0	1.0	-----	.39	-----	.57	-----	.48	.51	-----
TOTAL	7.91	16.29	31.39	31.35	27.25	16.71	10.39	6.54	24.66	13.85	13.44	13.16
MEAN	.26	.54	1.01	1.01	.97	.54	.35	.21	.82	.45	.43	.44
MAX	.66	1.3	1.2	1.2	1.1	.83	.54	.87	2.1	.63	.72	.60
MIN	.16	.33	.95	.91	.83	.31	.25	.01	.35	.29	.31	.29
AC-FT	16	32	62	62	54	33	21	13	49	27	27	26
CAL YR 1974	TOTAL 258.73		MEAN .71	MAX 12	MIN 0	AC-FT 513						
WTR YR 1975	TOTAL 212.94		MEAN .58	MAX 2.1	MIN .01	AC-FT 422						

06862700 SMOKY HILL RIVER NEAR SCHOENCHEN, KS

LOCATION.--Lat 38°43'30", long 99°23'30", in NW¼NW¼ sec.25, T.15 S., R.19 W., Ellis County, on left bank, 3.0 mi (4.8 km) northwest of Schoenchen, and at mile 312.3 (502.5 km).

DRAINAGE AREA.--5,750 mi² (14,890 km²).

PERIOD OF RECORD.--July 1964 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,940 ft (591.3 m), from topographic map.

AVERAGE DISCHARGE.--11 years, 34.5 ft³/s (0.977 m³/s), 25,000 acre-ft/yr (30.8 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,600 ft³/s (102 m³/s) June 22, gage height, 9.50 ft (2.896 m); minimum, 14 ft³/s (0.40 m³/s) Mar. 9.

Period of record: Maximum discharge, 20,400 ft³/s (578 m³/s) June 14, 1970, gage height, 16.17 ft (4.929 m); minimum daily, 1.5 ft³/s (0.042 m³/s) Jan. 16-20, 1971.

REMARKS.--Records fair. Flow mostly regulated by Cedar Bluff Reservoir 21.4 mi (34.4 km) upstream (see sta 06861500). Records of chemical analyses for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	24	23	21	22	22	18	20	23	31	23	16
2	16	23	23	22	21	22	18	21	22	29	21	15
3	16	27	23	22	21	22	18	24	20	27	19	15
4	16	27	23	22	24	22	18	22	20	27	18	16
5	16	26	23	22	24	22	18	21	19	26	18	17
6	16	25	23	22	22	22	17	21	63	24	17	18
7	16	25	23	22	22	22	18	21	71	23	17	17
8	16	24	22	22	22	22	21	20	778	23	16	16
9	16	24	23	22	22	18	19	20	290	23	16	18
10	16	24	22	22	23	23	19	19	71	25	16	18
11	16	24	21	22	24	24	19	20	47	24	16	18
12	19	23	22	21	25	23	19	19	37	23	15	18
13	23	23	22	21	25	23	22	22	34	22	15	19
14	22	22	22	21	24	22	24	21	30	21	20	20
15	21	22	23	22	24	23	22	21	28	21	19	21
16	20	22	23	23	25	25	21	21	26	21	19	21
17	20	23	23	23	25	24	21	21	26	19	17	21
18	20	23	23	23	25	25	21	19	26	19	18	20
19	20	23	22	22	25	23	20	19	25	19	17	19
20	19	22	22	22	25	22	20	18	27	20	17	19
21	19	22	22	22	25	21	20	17	40	20	17	19
22	20	22	22	22	24	22	19	18	1,760	18	16	19
23	20	22	22	22	24	22	19	18	1,020	18	16	18
24	21	22	22	22	24	21	19	17	244	18	15	18
25	21	22	22	21	23	21	19	17	77	17	15	18
26	21	22	23	21	23	21	19	16	50	17	16	18
27	21	22	23	21	23	20	32	17	41	16	17	18
28	20	22	22	21	23	19	24	20	38	16	17	18
29	20	22	22	21	-----	19	22	25	35	17	16	18
30	23	23	22	21	-----	19	21	29	33	17	17	17
31	25	-----	21	21	-----	18	-----	25	-----	22	17	-----
TOTAL	591	697	694	674	659	674	607	629	5,021	663	533	543
MEAN	19.1	23.2	22.4	21.7	23.5	21.7	20.2	20.3	167	21.4	17.2	18.1
MAX	25	27	23	23	25	25	32	29	1,760	31	23	21
MIN	16	22	21	21	21	18	17	16	19	16	15	15
AC-FT	1,170	1,380	1,380	1,340	1,310	1,340	1,200	1,250	9,960	1,320	1,060	1,080

CAL YR 1974 TOTAL 10,684 MEAN 29.3 MAX 285 MIN 16 AC-FT 21,190
WTR YR 1975 TOTAL 11,985 MEAN 32.8 MAX 1,760 MIN 15 AC-FT 23,770

PEAK DISCHARGE (REGULATED) ABOVE 400 CFS

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
06-06	2300	5.60	450	06-22	0900	9.50	3,600
06-08	1800	8.27	2,170	06-23	1300	7.76	1,710

KANSAS RIVER BASIN

06863500 BIG CREEK NEAR HAYS, KS

LOCATION.--Lat 38°48'45", long 99°15'14", in NW¼NW¼NE¼ sec.30, T.14 S., R.17 W., Ellis County, at downstream side of county highway bridge, 0.6 mi (1.0 km) east of Munjor, 6.0 mi (9.7 km) southeast of Hays, and at mile 31.7 (51.0 km).

DRAINAGE AREA.--542 mi² (1,400 km²).

PERIOD OF RECORD.--April 1946 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,915 ft (583.7 m), from topographic map. Prior to November 20, 1947, nonrecording gage, and Nov. 20, 1947, to Aug. 22, 1965, water-stage recorder and concrete control at site 12.5 mi (20.1 km) upstream at datum 1,955.13 ft (595.924 m) above mean sea level.

AVERAGE DISCHARGE.--29 years, 42.0 ft³/s (1.189 m³/s), 30,430 acre-ft/yr (37.5 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,640 ft³/s (74.8 m³/s) Aug. 2, gage height, 18.54 ft (5.651 m); minimum, 5.5 ft³/s (0.16 m³/s) July 25.

Period of record: Maximum discharge, 22,400 ft³/s (634 m³/s) June 17, 1957, gage height, 22.07 ft (6.727 m), site and datum then in use; no flow at times in some years.

Maximum stage known since at least 1908, that of June 17, 1957, from engineering report by Servis, Van Doren and Hazard Engineers.

REMARKS.--Records good except those for winter periods, which are poor.

REVISIONS (WATER YEARS).--WSP 1340: 1947-48(P).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.3	13	11	12	11	13	13	12	13	36	11	17
2	6.5	14	11	12	10	13	12	12	91	32	1210	15
3	6.8	18	12	12	10	13	12	28	293	30	1930	14
4	6.8	15	11	12	15	13	12	12	141	29	871	13
5	7.0	10	11	13	14	13	12	10	83	25	348	13
6	6.1	10	11	13	13	13	12	11	63	25	178	11
7	6.1	9.5	11	13	12	12	12	11	208	24	79	12
8	6.3	9.0	11	13	12	12	20	10	602	22	80	11
9	6.8	9.4	11	12	11	12	13	9.9	788	21	64	11
10	6.5	11	11	17	12	11	11	9.9	1450	20	55	12
11	6.8	10	11	12	12	11	11	9.9	321	19	48	13
12	7.5	10	11	12	12	11	11	9.6	166	18	40	12
13	25	10	11	13	12	11	15	14	99	17	36	12
14	9.9	10	11	14	12	11	37	12	79	16	110	13
15	8.0	9.5	14	15	11	12	15	10	59	16	50	15
16	7.8	9.9	11	14	11	14	14	9.7	50	15	86	12
17	7.3	10	11	13	11	14	14	9.5	43	12	112	12
18	7.1	11	11	13	12	14	13	8.8	39	12	59	12
19	6.9	11	11	11	13	14	13	8.0	35	9.9	46	11
20	6.6	10	11	10	14	14	12	7.9	33	9.9	38	10
21	6.4	10	11	11	14	14	12	7.9	49	9.0	32	10
22	6.8	10	11	10	13	14	12	8.3	626	8.2	32	9.7
23	7.1	11	10	10	13	13	11	10	1090	7.0	57	9.6
24	8.2	11	12	12	13	13	12	7.6	215	6.1	40	9.2
25	7.3	11	12	11	13	13	12	7.1	193	5.6	31	8.8
26	9.2	11	12	11	13	13	11	7.2	130	6.9	27	9.0
27	7.3	11	13	10	13	13	42	7.9	76	26	24	8.9
28	7.4	11	13	11	12	14	58	16	55	20	22	8.9
29	8.6	10	12	11	---	12	16	12	50	14	21	8.6
30	8.9	10	12	10	---	12	13	35	41	12	21	8.6
31	29	---	12	11	---	13	---	16	---	11	19	---
TOTAL	264.3	326.3	354	374	344	395	483	360.2	7181	534.6	5777	342.3
MEAN	8.53	10.9	11.4	12.1	12.3	12.7	16.1	11.6	239	17.2	186	11.4
MAX	29	18	14	17	15	14	58	35	1450	36	1930	17
MIN	6.1	9.0	10	10	10	11	11	7.1	13	5.6	11	8.6
AC-FT	524	647	702	742	682	783	958	714	14240	1060	11460	679
CAL YR 1974 TOTAL	8672.6			23.8		458		3.7	AC-FT	17200		
WTR YR 1975 TOTAL	16735.7			45.9		1930		5.6	AC-FT	33200		

PEAK DISCHARGE (BASE, 700 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
06-10	0800	16.54	1,910	08-02	2300	18.54	2,640
06-23	0600	15.93	1,730				

KANSAS RIVER BASIN

55

06863900 NORTH FORK BIG CREEK NEAR VICTORIA, KS

LOCATION.--Lat 38°53'12", long 99°12'21", in SW¼SW¼SW¼ sec.27, T.13 S., R.17 W., Ellis County, at downstream side of highway bridge, 3.5 mi (5.6 km) northwest of Victoria, and about 18 mi (29 km) upstream from mouth.

DRAINAGE AREA.--54 mi² (140 km²), approximately.

PERIOD OF RECORD.--April 1962 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,940 ft (591 m), from topographic map.

AVERAGE DISCHARGE.--13 years, 5.20 ft³/s (0.147 m³/s), 3,770 acre-ft/yr (4.65 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 286 ft³/s (8.10 m³/s) June 23, gage height, 6.67 ft (2.033 m); no flow many days.

Period of record: Maximum discharge, 26,400 ft³/s (748 m³/s) Aug. 9, 1974, gage height, 21.34 ft (6.504 m); no flow at times in most years.

REMARKS.--Records fair except those for winter periods, which are poor.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.02	0	.04	.02	.70	0	3.9	3.3	1.7	0	
2	0	.02	0	.04	.02	.30	0	3.0	3.1	1.5	0	
3	0	.09	.01	.06	.01	.16	0	2.8	2.2	1.2	0	
4	0	.02	.01	.06	.01	.13	0	1.8	1.6	.94	0	
5	0	.02	.02	.07	.01	.13	0	1.6	1.2	.76	0	
6	0	.02	.06	.08	.01	.09	0	1.2	1.2	.55	0	
7	0	.02	.06	.13	0	0	.01	1.1	1.2	.45	0	
8	.01	.02	.06	.13	0	0	.02	.82	.80	.40	0	
9	.01	.02	.06	.16	0	0	.01	.55	121	.35	0	
10	.01	.65	.06	.12	.02	0	.01	.40	18	.35	0	
11	.01	.55	.06	.06	.10	0	.01	.35	7.4	.30	0	
12	.09	.25	.02	.04	.10	0	.02	.35	4.9	.20	0	
13	.16	.06	.02	.01	.15	0	.94	.45	3.6	.20	.01	
14	.02	.16	.06	.08	.10	0	2.0	.40	2.6	.16	.13	
15	.01	.16	.09	.15	.08	0	.45	.40	2.1	.02	.01	
16	.01	.06	.09	.25	.06	.10	.20	.35	1.8	.01	.02	
17	.02	.02	.06	.16	.06	.20	.09	.30	1.4	.01	.01	
18	.02	.02	.02	.20	.04	.40	1.2	.25	1.2	0	0	
19	.02	.02	.02	.30	.04	.16	1.2	.16	1.0	0	0	
20	.02	.02	.02	.20	.06	.06	.94	.13	.76	0	0	
21	.02	.02	.02	.13	.20	.06	.70	.02	5.0	0	0	
22	.02	.02	.02	.06	.30	.06	.70	.02	34	0	0	
23	.02	.02	.02	.06	.50	.02	1.6	.02	225	0	0	
24	.06	.02	.02	.16	.60	.02	3.0	.01	93	0	0	
25	.06	.02	.02	.20	.82	.01	1.6	0	20	0	0	
26	.09	.01	.02	.16	.76	.01	1.1	0	7.6	0	0	
27	.09	0	.02	.06	.82	.01	34	0	4.9	0	0	
28	.13	0	.02	.02	.76	.01	38	.01	3.6	0	0	
29	.13	0	.03	.02	---	0	11	.23	2.8	0	0	
30	.16	0	.03	.02	---	0	5.6	.88	2.1	0	0	
31	.09	---	.03	.02	---	0	---	2.0	---	0	0	---
TOTAL	1.28	2.33	1.05	3.25	5.65	2.63	104.40	23.50	657.56	9.10	.18	0
MEAN	.041	.078	.034	.10	.20	.085	3.48	.76	21.9	.29	.006	0
MAX	.16	.65	.09	.30	.82	.70	38	3.9	225	1.7	.13	0
MIN	0	0	0	.01	0	0	0	0	.76	0	0	0
AC-FT	2.5	4.6	2.1	6.4	11	5.2	207	47	1300	18	.4	0
CAL YR 1974	TOTAL	6240.34	MEAN	17.1	MAX	4380	MIN	0	AC-FT	12380		
WTR YR 1975	TOTAL	810.93	MEAN	2.22	MAX	225	MIN	0	AC-FT	1610		

PEAK DISCHARGE (BASE, 100 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
04-27	1300	4.22	108	06-22	0100	4.35	116
06-08	1300	6.12	242	06-23	0500	6.67	286

KANSAS RIVER BASIN

06864050 SMOKY HILL RIVER NEAR BUNKER HILL, KS
(Formerly published as 06864000 Smoky Hill River near Russell)

LOCATION.--Lat 38°47'38", long 98°46'50", in NW¼SW¼NW¼ sec.33, T.14 S., R.13 W., Russell County, at downstream side of county highway bridge, 0.5 mi (0.8 km) upstream from Sellens Creek, 6.5 mi (10.5 km) southwest of Bunker Hill, and at mile 261.6 (420.9 km).

DRAINAGE AREA.--7,075 mi² (18,320 km²).

PERIOD OF RECORD.--October 1939 to current year. Prior to October 1974, published as "near Russell".

GAGE.--Water-stage recorder. Altitude of gage is 1,690 ft (515 m), from topographic map. Prior to Sept. 11, 1940, nonrecording gage and Sept. 11, 1940, to Sept. 30, 1974, water-stage recorder at site 4.7 mi (7.6 km) upstream at datum 1,689.05 ft (514.822 m) above mean sea level.

AVERAGE DISCHARGE.--36 years, 205 ft³/s (5.806 m³/s), 148,500 acre-ft/yr (183 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,510 ft³/s (128 m³/s) June 24, gage height, 11.41 ft (3.478 m); minimum, 22 ft³/s (0.62 m³/s) Oct. 1-3.

Period of record: Maximum discharge, 39,500 ft³/s (1,120 m³/s) May 23, 1951, gage height, 23.86 ft (7.273 m), site and datum then in use; no flow at times in 1940, 1943, 1955-57.

Flood of May 30, 1938, reached a stage of about 29.0 ft (8.84 m), from floodmarks, discharge, about 70,000 ft³/s (2,000 m³/s), from rating curve extended above 37,500 ft³/s (1,060 m³/s), site and datum of 1939-74.

REMARKS.--Records fair except those for winter periods, which are poor. Flow moderately regulated since 1950 by Cedar Bluff Reservoir 72.1 mi (116 km) upstream (see sta 06861500). Records of chemical analyses for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1340: 1941-42(M), 1944-45(M), 1950(P).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	47	42	52	45	52	44	82	83	212	36	44
2	23	55	41	52	52	50	44	71	73	190	109	39
3	24	65	50	52	54	49	45	69	59	166	330	39
4	24	64	59	52	61	49	45	76	146	148	992	351
5	25	53	58	54	41	49	43	74	159	139	565	85
6	27	52	57	57	35	49	41	65	124	123	285	54
7	27	49	57	66	35	48	42	56	943	119	202	44
8	27	47	46	66	35	47	43	52	527	105	128	40
9	28	46	45	62	35	46	42	48	1090	100	110	38
10	28	47	52	49	35	48	43	46	1110	93	96	40
11	29	45	57	45	35	50	49	45	1070	86	80	43
12	48	43	56	45	36	55	45	44	461	82	69	41
13	55	43	54	45	37	53	57	54	292	80	69	38
14	46	43	54	50	38	50	84	53	215	76	100	38
15	45	43	52	60	40	50	68	46	178	70	83	39
16	47	43	46	62	42	56	76	47	155	69	100	40
17	39	43	46	67	44	59	71	43	157	66	82	44
18	36	43	59	70	46	59	59	41	130	62	474	42
19	35	45	61	65	48	58	58	40	119	60	728	40
20	35	45	58	58	50	55	54	37	109	55	123	39
21	34	46	55	54	51	54	51	36	106	50	93	36
22	34	47	55	50	52	52	50	35	1140	46	76	36
23	35	47	56	49	54	49	51	42	3080	44	65	34
24	36	46	43	51	55	45	48	39	3860	41	66	33
25	37	46	37	54	62	45	46	36	1420	39	70	32
26	39	48	44	51	60	47	46	35	768	36	58	32
27	41	48	48	49	35	54	80	33	537	33	51	31
28	43	48	57	47	53	53	158	42	506	31	48	30
29	46	47	57	47	---	48	148	43	305	33	314	32
30	45	41	57	51	---	47	114	121	242	36	72	31
31	46	---	54	46	---	46	---	102	---	34	51	---
TOTAL	1106	1425	1613	1678	1286	1572	1845	1653	19164	2524	5725	1505
MEAN	35.7	47.5	52.0	54.1	45.9	50.7	61.5	53.3	639	81.4	185	50.2
MAX	55	65	61	70	62	59	158	121	3860	212	992	351
MIN	22	41	37	45	35	45	41	33	59	31	36	30
AC-FT	2190	2830	3200	3330	2550	3120	3660	3280	38010	5010	11360	2990

CAL YR 1974 TOTAL 45322 MEAN 124 MAX 2510 MIN 21 AC-FT 89900
WTR YR 1975 TOTAL 41096 MEAN 113 MAX 3860 MIN 22 AC-FT 81510

PEAK DISCHARGE (REGULATED) ABOVE 2,400 CFS

DATE	TIME	G.H.	DISCHARGE
06-24	1400	11.41	4,510

KANSAS RIVER BASIN

57

06864500 SMOKY HILL RIVER AT ELLSWORTH, KS

LOCATION.--Lat 38°43'36", long 98°14'00", in SW¼SW¼SE¼ sec.20, T.15 S., R.8 W., Ellsworth County, at downstream side of bridge on State Highway 14 in Ellsworth, 2.0 mi (3.2 km) downstream from Turkey Creek, and at mile 213.7 (343.8 km).

DRAINAGE AREA.--7,580 mi² (19,600 km²), approximately.

PERIOD OF RECORD.--April 1895 to October 1905, July 1918 to July 1925, August 1928 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,509.02 ft (459.949 m) above mean sea level. Prior to Oct. 31, 1905, nonrecording gage at present site at datum 1.61 ft (0.491 m) higher. July 23, 1918, to July 4, 1925, and Aug. 1, 1928, to Nov. 29, 1939, non-recording gage at present site and datum.

AVERAGE DISCHARGE.--63 years (1895-1905, 1918-24, 1928-75), 262 ft³/s (7.420 m³/s), 189,800 acre-ft/yr (234 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 10,100 ft³/s (286 m³/s) Aug. 29, gage height, 16.38 ft (4.993 m); minimum daily, 46 ft³/s (1.30 m³/s) Jan. 12, 13.

Period of record: Maximum discharge, 61,000 ft³/s (17,300 m³/s) June 1, 1938, gage height, 27.2 ft (8.29 m), from floodmarks; no flow for part of day Sept. 28, 1956.

Flood in August 1927 reached a stage of 25.7 ft (7.83 m), from floodmarks, discharge, 44,800 ft³/s (1,270 m³/s).

REMARKS.--Records good except those for winter periods, which are poor. Flow moderately regulated since 1950 by Cedar Bluff Reservoir 120.0 mi (193 km) upstream (see sta 06861500). Records of chemical analyses for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 796-B: 1903. WSP 806: Drainage area. WSP 1176: 1923. WSP 1440: 1895-1905, 1919, 1921, 1929-30(M), 1936-37(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	53	76	62	65	72	94	78	164	392	424	63	285
2	54	76	61	60	75	88	75	132	213	350	66	207
3	57	89	63	60	77	85	79	340	171	300	93	169
4	55	98	73	60	102	84	77	207	151	257	334	1,130
5	56	98	91	60	70	84	74	133	135	221	1,110	759
6	62	94	88	60	50	84	74	118	218	196	701	286
7	61	88	88	60	50	83	74	111	232	178	419	181
8	61	89	80	65	50	82	75	101	1,370	163	297	144
9	61	87	70	65	50	83	74	93	1,260	151	201	125
10	62	88	65	60	55	84	73	89	1,690	141	153	121
11	62	86	65	50	55	80	72	84	1,290	131	135	115
12	65	84	70	46	60	80	73	81	1,280	122	119	107
13	98	83	70	46	60	80	88	87	665	115	203	104
14	89	80	70	50	60	80	114	90	481	109	1,760	100
15	88	79	65	60	60	82	122	86	374	105	548	97
16	75	79	60	65	65	84	120	80	311	99	232	95
17	72	79	60	70	65	89	107	75	257	94	191	194
18	69	79	60	72	70	94	106	73	230	88	190	182
19	67	79	65	74	70	97	101	69	194	85	980	117
20	66	79	70	76	75	94	93	66	168	82	1,030	95
21	65	79	75	78	80	93	89	65	156	81	295	84
22	63	79	82	80	85	90	86	63	280	79	191	79
23	63	79	81	80	90	87	87	67	1,750	76	149	76
24	64	79	77	82	95	85	88	67	3,790	75	131	73
25	67	79	61	82	104	85	82	80	3,050	72	120	70
26	70	79	55	82	102	82	80	107	1,530	70	117	67
27	69	79	58	82	100	100	78	70	1,040	67	109	66
28	69	79	70	81	99	106	77	82	1,510	65	103	65
29	76	77	82	79	-----	97	170	93	1,030	62	4,690	65
30	81	68	72	76	-----	92	148	1,370	545	59	1,850	64
31	80	-----	68	72	-----	86	-----	811	-----	60	450	-----
TOTAL	2,100	2,467	2,177	2,098	2,046	2,714	2,734	5,154	25,763	4,177	17,030	5,322
MEAN	67.7	82.2	70.2	67.7	73.1	87.5	91.1	166	859	135	549	177
MAX	98	98	91	82	104	106	170	1,370	3,790	424	4,690	1,130
MIN	53	68	55	46	50	80	72	63	135	59	63	64
AC-FT	4,170	4,890	4,320	4,160	4,060	5,380	5,420	10,220	51,100	8,290	33,780	10,560

CAL YR 1974 TOTAL 113,241 MEAN 310 MAX 7,010 MIN 53 AC-FT 224,600
WTR YR 1975 TOTAL 73,782 MEAN 202 MAX 4,690 MIN 46 AC-FT 146,300

PEAK DISCHARGE (REGULATED) ABOVE 3,200 CFS

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
06-24	0800	10.10	4,020	08-29	2000	16.38	10,100

KANSAS RIVER BASIN

06865000 KANOPOLIS LAKE NEAR KANOPOLIS, KS

LOCATION.--Lat 38°36'25", long 97°58'02", in SE¼NW¼ sec. 3, T.17 S., R.6 W., Ellsworth County, in control tower at dam on Smoky Hill River, 12 mi (19 km) southeast of Kanopolis, 25 mi (40 km) southwest of Salina, and 183.7 mi (295.6 km) upstream from mouth.

DRAINAGE AREA.--7,857 mi² (20,350 km²).

PERIOD OF RECORD.--February 1948 to current year (monthly records only prior to October 1956). Prior to October 1971, published as "Kanopolis Reservoir".

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Corps of Engineers).

EXTREMES.--Current year: Maximum elevation, 1,471.05 ft (448.376 m) June 26, 27, contents, 90,910 acre-ft (112 hm³); minimum, 1,454.55 ft (443.347 m) Dec. 3, contents, 31,710 acre-ft (39.1 hm³).

Period of record: Maximum elevation, 1,506.98 ft (459.328 m) July 14, 1951, contents, 435,100 acre-ft (536 hm³); minimum elevation since conservation pool was first filled, 1,454.44 ft (443.313 m) Feb. 5, 1950; minimum contents, 31,710 acre-ft (39.1 hm³) Dec. 3, 1974.

REMARKS.--Reservoir is formed by earthfill dam; storage began Feb. 17, 1948, and dam was completed in same year. Capacity, 425,700 acre-ft (525 hm³) between elevations 1,415 ft (431.3 m), sill of outlet gate and 1,508 ft (459.6 m). Crest of uncontrolled spillway is at elevation 1,507 ft (459.3 m). Storage capacity of 356,700 acre-ft (440 hm³) above elevation 1,463 ft (445.9 m) is provided for flood control. Storage capacity of 55,200 acre-ft (68.1 hm³) below elevation 1,463 ft (445.9 m) is provided for conservation and recreation. Inflow partly regulated by Cedar Bluff Reservoir (see sta 06861500). Figures given herein represent total contents.

Capacity table (elevation, in feet, and contents, in acre-feet)

1,450	22,370	1,465	62,850
1,455	32,650	1,470	85,460
1,460	45,410	1,475	112,600

ELEVATION, IN FEET, AT 2400, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,454.83	1,455.44	1,454.87	1,455.08	1,456.61	1,458.30	1,459.94	1,462.08	1,465.40	1,470.23	1,463.93	1,467.53
2	1,454.80	1,455.48	1,454.60	1,455.17	1,456.64	1,458.36	1,459.98	1,462.16	1,465.58	1,469.85	1,463.94	1,467.43
3	1,454.79	1,455.49	1,454.56	1,455.17	1,456.77	1,458.44	1,459.98	1,462.28	1,465.92	1,469.45	1,463.95	1,467.42
4	1,454.83	1,455.46	1,454.64	1,455.20	1,456.93	1,458.47	1,460.00	1,462.46	1,466.01	1,469.06	1,463.96	1,467.62
5	1,454.96	1,455.29	1,454.77	1,455.27	1,456.99	1,458.53	1,460.05	1,462.47	1,466.02	1,468.64	1,464.00	1,467.89
6	1,455.18	1,455.10	1,454.89	1,455.27	1,457.01	1,458.62	1,460.06	1,462.58	1,466.04	1,468.24	1,464.00	1,467.81
7	1,455.28	1,454.96	1,454.88	1,455.35	1,457.02	1,458.65	1,460.11	1,462.60	1,466.60	1,467.76	1,463.95	1,467.66
8	1,455.30	1,454.81	1,454.87	1,455.38	1,457.06	1,458.65	1,460.19	1,462.61	1,467.52	1,467.19	1,464.50	1,467.51
9	1,455.30	1,454.86	1,454.89	1,455.52	1,457.07	1,458.77	1,460.22	1,462.63	1,468.38	1,466.61	1,465.07	1,467.38
10	1,455.33	1,454.85	1,454.94	1,455.62	1,457.10	1,458.82	1,460.25	1,462.66	1,468.84	1,466.02	1,465.08	1,467.32
11	1,455.37	1,454.94	1,455.04	1,455.58	1,457.12	1,458.90	1,460.27	1,462.68	1,469.05	1,465.49	1,465.04	1,467.25
12	1,455.51	1,455.03	1,455.12	1,455.58	1,457.15	1,458.95	1,460.28	1,462.70	1,469.22	1,465.06	1,465.02	1,467.07
13	1,455.62	1,455.13	1,455.19	1,455.54	1,457.23	1,458.97	1,460.38	1,462.75	1,469.22	1,464.66	1,465.00	1,466.90
14	1,455.74	1,455.08	1,455.31	1,455.60	1,457.28	1,459.02	1,460.49	1,462.78	1,469.09	1,464.25	1,465.96	1,466.73
15	1,455.68	1,454.97	1,455.38	1,455.65	1,457.30	1,459.08	1,460.62	1,462.78	1,468.86	1,464.04	1,466.23	1,466.59
16	1,455.37	1,454.96	1,455.47	1,455.68	1,457.39	1,459.15	1,460.70	1,462.79	1,468.63	1,464.03	1,466.22	1,466.38
17	1,455.06	1,454.89	1,455.46	1,455.74	1,457.39	1,459.23	1,460.78	1,462.83	1,468.40	1,464.02	1,466.10	1,466.25
18	1,454.82	1,455.01	1,455.37	1,455.83	1,457.42	1,459.31	1,460.85	1,462.83	1,468.15	1,464.00	1,465.96	1,466.14
19	1,454.75	1,455.07	1,455.29	1,455.88	1,457.45	1,459.37	1,460.88	1,462.82	1,467.93	1,464.00	1,465.94	1,465.93
20	1,454.67	1,454.88	1,455.19	1,455.98	1,457.51	1,459.43	1,460.90	1,462.80	1,467.69	1,463.97	1,466.49	1,465.74
21	1,454.63	1,454.73	1,455.08	1,456.09	1,457.57	1,459.48	1,460.94	1,462.82	1,467.55	1,463.96	1,466.29	1,465.54
22	1,454.65	1,454.85	1,455.02	1,456.13	1,457.64	1,459.50	1,460.95	1,462.84	1,467.76	1,463.96	1,465.96	1,465.35
23	1,454.65	1,454.95	1,454.98	1,456.20	1,457.70	1,459.58	1,461.24	1,462.86	1,468.75	1,463.92	1,465.62	1,465.15
24	1,454.65	1,454.97	1,454.95	1,456.27	1,457.78	1,459.61	1,461.75	1,462.85	1,469.96	1,463.92	1,465.30	1,465.03
25	1,454.78	1,455.00	1,454.92	1,456.33	1,457.86	1,459.61	1,461.80	1,462.88	1,470.88	1,463.92	1,464.99	1,465.00
26	1,454.83	1,455.05	1,454.88	1,456.35	1,457.96	1,459.64	1,461.85	1,462.94	1,471.05	1,463.92	1,464.68	1,464.95
27	1,454.85	1,455.08	1,454.87	1,456.42	1,458.09	1,459.73	1,461.91	1,463.01	1,470.97	1,463.92	1,464.33	1,464.97
28	1,454.96	1,454.97	1,454.90	1,456.47	1,458.22	1,459.81	1,461.95	1,463.05	1,470.86	1,463.90	1,464.24	1,464.95
29	1,455.03	1,454.98	1,454.93	1,456.47	-----	1,459.85	1,461.96	1,463.13	1,470.88	1,463.90	1,466.27	1,464.95
30	1,455.17	1,455.01	1,455.00	1,456.57	-----	1,459.88	1,462.03	1,464.07	1,470.59	1,463.88	1,467.71	1,464.97
31	1,455.35	-----	1,455.05	1,456.59	-----	1,459.92	-----	1,465.01	-----	1,463.87	1,467.69	-----
MEAN	1,455.06	1,455.04	1,455.01	1,455.81	1,457.33	1,459.15	1,460.78	1,462.83	1,468.39	1,465.47	1,465.27	1,466.38
MAX	1,455.74	1,455.49	1,455.47	1,456.59	1,458.22	1,459.92	1,462.03	1,465.01	1,471.05	1,470.23	1,467.71	1,467.89
MIN	1,454.63	1,454.73	1,454.56	1,455.08	1,456.61	1,458.30	1,459.94	1,462.08	1,465.40	1,463.87	1,463.93	1,464.95
(+)	33,380	32,670	32,760	36,120	40,190	45,160	51,960	62,890	88,510	58,410	74,420	62,720
(*)	+1,020	-710	+90	+3,120	+4,070	+4,970	+6,800	+10,930	+25,620	-30,100	+16,010	-11,700

CAL YR 1974 (*) -23,120

WTR YR 1975 (*) +30,360

+ CONTENTS, IN ACRE-FEET, AT END OF MONTH.

* CHANGE IN CONTENTS, IN ACRE-FEET.

KANSAS RIVER BASIN

59

06865500 SMOKY HILL RIVER NEAR LANGLEY, KS

LOCATION.--Lat 38°36'38", long 97°57'04", in SW¼SW¼SE¼ sec.35, T.16 S., R.6 W., Ellsworth County, at downstream side of county highway bridge, 0.8 mi (1.3 km) downstream from Kanopolis Dam, 5.0 mi (8.0 km) north of Langley, and at mile 182.9 (294.3 km).

DRAINAGE AREA.--7,857 mi² (20,350 km²).

PERIOD OF RECORD.--October 1940 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,395.66 ft (425.397 m) above mean sea level (Corps of Engineers bench mark). Prior to Apr. 1, 1952, water-stage recorder at datum 2.00 ft (0.610 m) higher. Apr. 1, 1952, to Oct. 1, 1973, water-stage recorder at datum 5.00 ft (1.524 m) higher.

AVERAGE DISCHARGE.--35 years, 353 ft³/s (9.997 m³/s), 255,700 acre-ft/yr (315 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,590 ft³/s (45.0 m³/s) June 27, gage height, 9.62 ft (2.932 m); minimum, 14 ft³/s (0.40 m³/s) Dec. 14-17.

Period of record: Maximum discharge observed, 21,800 ft³/s (617 m³/s) Oct. 20, 1941, gage height, 32.2 ft (9.81 m), present datum; minimum daily, 0.40 ft³/s (0.011 m³/s) Jan. 23, 1948. Maximum discharge since closure of Kanopolis Dam in 1948, 5,570 ft³/s (158 m³/s) July 15, 1951.

Flood in June 1938 reached a stage of 33.9 ft (10.33 m), present datum, from information by Corps of Engineers, discharge, about 45,000 ft³/s (1,300 m³/s) by extension of subsequent rating curve above 16,000 ft³/s (450 m³/s) and correlation of peak flow at adjacent stations.

REMARKS.--Records good. Flow completely regulated by Kanopolis Lake since 1948 (see sta 06865000). Records of chemical analyses for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1310: 1942(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	53	82	120	53	49	56	51	48	123	1,410	35	574
2	53	80	96	53	50	56	50	49	101	1,380	37	336
3	53	79	47	53	49	56	51	50	95	1,330	38	175
4	53	175	47	53	53	54	51	50	102	1,300	40	173
5	54	342	47	53	53	55	52	52	100	1,260	43	271
6	56	340	47	53	53	55	54	53	101	1,220	58	460
7	54	342	47	53	53	54	54	53	126	1,370	67	458
8	54	216	47	53	53	55	54	53	190	1,490	86	447
9	54	119	47	55	55	56	54	53	279	1,480	99	435
10	53	118	33	50	55	56	54	53	555	1,490	101	432
11	51	118	16	50	53	58	54	53	871	1,290	104	443
12	52	118	15	50	53	58	52	54	893	892	104	433
13	54	117	15	52	53	59	52	54	906	872	104	425
14	52	116	15	54	53	61	57	54	900	853	117	411
15	211	116	14	52	53	60	58	53	881	435	229	446
16	524	116	14	50	51	61	58	52	861	91	312	519
17	523	116	104	50	53	62	56	51	842	90	312	509
18	333	116	200	50	54	64	55	51	818	90	305	502
19	161	117	200	50	55	63	54	51	797	90	301	490
20	160	118	200	50	57	63	54	51	775	88	458	477
21	110	95	200	51	56	64	53	51	754	88	746	471
22	79	77	200	50	54	60	53	51	486	87	737	462
23	80	76	147	50	53	58	56	50	312	86	719	452
24	80	75	104	50	54	56	104	50	342	68	702	254
25	81	75	104	50	57	53	57	50	813	35	718	132
26	82	75	104	48	57	53	54	50	1,470	35	715	105
27	81	96	85	48	56	55	53	50	1,500	35	698	66
28	80	122	53	49	56	54	51	53	1,480	35	346	66
29	81	122	53	50	-----	51	50	54	1,470	35	230	66
30	82	121	53	48	-----	51	48	59	1,450	34	546	66
31	82	-----	53	48	-----	51	-----	93	-----	34	576	-----
TOTAL	3,576	3,995	2,527	1,579	1,501	1,768	1,654	1,649	20,393	19,093	9,683	10,556
MEAN	115	133	81.5	50.9	53.6	57.0	55.1	53.2	680	616	312	352
MAX	524	342	200	55	57	64	104	93	1,500	1,490	746	574
MIN	51	75	14	48	49	51	48	48	95	34	35	66
AC-FT	7,090	7,920	5,010	3,130	2,980	3,510	3,280	3,270	40,450	37,870	19,210	20,940

CAL YR 1974 TOTAL 163,724 MEAN 449 MAX 3,960 MIN 14 AC-FT 324,700
WTR YR 1975 TOTAL 77,974 MEAN 214 MAX 1,500 MIN 14 AC-FT 154,700

KANSAS RIVER BASIN

06866500 SMOKY HILL RIVER NEAR MENTOR, KS

LOCATION.--Lat 38°47'54", long 97°34'28", in SW $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.29, T.14 S., R.2 W., Saline County, at downstream side of highway bridge, 4.0 mi (6.4 km) north of Mentor, and at mile 101.7 (163.6 km).

DRAINAGE AREA.--8,358 mi² (21,650 km²).

PERIOD OF RECORD.--December 1923 to October 1930, May 1931 to June 1932, October 1947 to current year. Published as "near Salina" 1948-49.

GAGE.--Water-stage recorder. Datum of gage is 1,211.40 ft (369.235 m) above mean sea level, levels by Corps of Engineers. Prior to June 30, 1932, nonrecording gage at site 10 mi (16 km) upstream at datum 20.9 ft (6.37 m) higher. Oct. 1, 1947, to Sept. 18, 1948, nonrecording gage, and Sept. 19, 1948, to June 26, 1959, water-stage recorder at site 0.3 mi (0.5 km) west on former channel, at present datum. June 27, 1959, to Sept. 8, 1959, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--34 years (1924-30, 1947-75), 437 ft³/s (12.38 m³/s), 316,600 acre-ft/yr (390 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 5,350 ft³/s (152 m³/s) June 24, gage height, 15.57 ft (4.746 m); minimum, 75 ft³/s (2.12 m³/s) Dec. 18, 19.

Period of record: Maximum discharge, 25,500 ft³/s (722 m³/s) Aug. 17, 1927, gage height, 26.2 ft (7.986 m), from floodmark, site and datum then in use, from rating curve extended above 5,700 ft³/s (161 m³/s) on basis of flood-routing study and slope-area measurement at gage height 25.8 ft (7.86 m); minimum, 1.8 ft³/s (0.051 m³/s) July 10, 1963.

Greatest flood known at Salina, 7.5 mi (12.1 km) downstream, occurred in 1844; second greatest flood known, May 29, 1903, reached a stage of 26.5 ft (8.08 m) near Mentor, from floodmarks, site and datum of 1923-32.

REMARKS.--Records good. Considerable regulation since 1948 by Kanopolis Lake 82.0 mi (132 km) upstream, see sta 06865000. Diversions above station for irrigation. Records of chemical analyses for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1440: 1924, 1927-28, 1929(M), 1932(M). WSP 1919: 1960.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	550	334	182	117	104	215	114	149	235	1,460	89	564
2	342	228	179	116	104	199	114	143	426	1,410	92	576
3	198	190	180	116	105	155	108	143	779	1,370	95	567
4	172	259	174	113	131	130	107	137	537	1,330	100	349
5	162	221	132	113	150	123	105	132	385	1,290	94	236
6	202	209	124	109	100	122	108	128	229	1,250	83	222
7	507	352	126	116	100	123	110	124	444	1,220	80	294
8	345	366	122	115	100	113	110	120	366	1,200	81	456
9	194	376	113	113	100	113	111	117	1,250	1,370	85	453
10	162	310	111	123	110	117	108	114	1,240	1,390	87	455
11	148	215	116	100	120	119	107	115	1,000	1,390	103	468
12	149	203	115	100	130	122	103	112	950	1,360	107	461
13	357	203	98	120	130	119	102	115	924	1,050	107	447
14	1,020	191	91	140	126	115	111	119	886	922	121	433
15	472	187	88	143	121	112	121	117	882	903	127	429
16	210	183	84	132	202	116	157	113	872	862	127	425
17	230	180	80	127	240	137	142	108	988	442	183	468
18	520	177	78	138	155	168	121	104	935	261	310	522
19	532	179	78	129	150	164	110	101	882	223	306	511
20	376	176	209	115	148	142	98	98	812	209	296	502
21	226	174	229	115	145	126	93	97	809	199	288	493
22	211	173	235	110	146	113	91	95	1,730	179	465	485
23	195	176	235	109	122	115	88	98	4,140	170	668	477
24	158	149	241	109	115	123	1,040	98	4,630	165	674	467
25	151	140	209	114	113	107	950	96	1,820	158	661	455
26	148	141	166	108	120	101	462	103	837	155	664	312
27	194	138	172	108	175	106	245	99	1,270	130	692	204
28	200	139	177	105	276	118	192	119	1,980	116	687	186
29	177	142	172	105	-----	120	170	169	2,140	105	706	156
30	360	180	132	105	-----	120	160	258	1,510	93	375	150
31	490	-----	121	107	-----	115	-----	302	-----	86	308	-----
TOTAL	9,358	6,291	4,569	3,590	3,838	3,988	5,758	3,943	35,888	22,468	8,861	12,223
MEAN	302	210	147	116	137	129	192	127	1,196	725	286	407
MAX	1,020	376	241	143	276	215	1,040	302	4,630	1,460	706	576
MIN	148	138	78	100	100	101	88	95	229	86	80	150
AC-FT	18,560	12,480	9,060	7,120	7,610	7,910	11,420	7,820	71,180	44,570	17,580	24,240

CAL YR 1974 TOTAL 234,244 MEAN 642 MAX 5,410 MIN 78 AC-FT 464,600
WTR YR 1975 TOTAL 120,775 MEAN 331 MAX 4,630 MIN 78 AC-FT 239,600

PEAK DISCHARGE (REGULATED) ABOVE 1,000 CFS

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
10-14	1100	8.17	1,090	06-10	1200	9.00	1,400
04-24	1500	10.00	1,800	06-24	0100	15.57	5,350
06-03	1300	8.10	1,010	06-29	0100	11.72	2,730
06-09	0500	9.63	1,620				

KANSAS RIVER BASIN

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06867000 SALINE RIVER NEAR RUSSELL, KS

LOCATION.--Lat 38°58'00", long 98°51'20", in SW¼SW¼NW¼ sec.35, T.12 S., R.14 W., Russell County, at downstream side of bridge on U.S. Highway 281, 2.0 mi (3.2 km) downstream from Salt Creek, 5.0 mi (8.0 km) north of Russell, and at mile 190.6 (306.7 km).

DRAINAGE AREA.--1,502 mi² (3,890 km²).

PERIOD OF RECORD.--October 1945 to September 1953, June 1959 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,551.59 ft (472.925 m) above mean sea level. Prior to Jan. 22, 1946, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--24 years, 119 ft³/s (3.370 m³/s), 86,220 acre-ft/yr (106 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,980 ft³/s (56.1 m³/s) Aug. 3, gage height, 11.37 ft (3.466 m); minimum, 11 ft³/s (0.31 m³/s) Oct. 5.

Period of record: Maximum discharge, 19,400 ft³/s (549 m³/s) Sept. 1, 1964, gage height, 19.70 ft (6.005 m); no flow Aug. 11, 12, 1964.

REMARKS.--Records fair except those for winter periods, which are poor. Low flow partially regulated at times by irrigation. Records of chemical analyses for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1919: 1960.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	47	26	35	34	42	35	44	640	104	24	41
2	14	45	24	35	33	41	36	41	578	92	24	37
3	13	55	28	35	34	41	36	39	327	83	1170	55
4	13	49	34	35	43	41	35	39	227	76	757	75
5	13	47	37	35	40	40	35	37	191	70	376	38
6	13	48	44	40	30	40	35	36	175	65	266	34
7	13	48	45	45	30	40	35	35	156	59	207	32
8	14	45	30	50	30	40	36	34	160	55	167	30
9	14	42	28	45	30	34	36	33	224	52	141	29
10	15	42	33	40	35	32	37	32	486	49	120	29
11	15	41	41	35	35	31	38	32	281	46	103	30
12	20	39	43	35	35	31	38	31	211	43	89	28
13	27	39	39	40	35	32	44	33	196	41	80	27
14	24	37	38	45	35	34	51	33	176	38	502	27
15	24	36	36	48	35	40	50	33	152	36	552	29
16	23	36	34	50	35	47	52	33	133	33	352	29
17	22	35	30	52	35	48	50	31	119	31	290	30
18	21	34	33	54	35	49	47	30	105	29	204	29
19	21	34	34	57	35	50	44	28	94	26	167	27
20	20	34	39	47	38	50	41	26	85	25	134	26
21	20	34	40	43	40	48	41	24	88	23	110	25
22	20	35	42	41	41	45	41	25	198	22	93	24
23	21	35	42	41	42	42	41	27	483	22	84	23
24	22	35	39	40	41	39	42	26	447	24	78	21
25	23	35	30	40	46	39	41	25	372	29	69	21
26	23	35	32	39	52	36	39	24	233	25	63	21
27	23	35	34	37	45	40	43	24	186	22	59	20
28	25	35	36	36	42	39	149	29	162	21	55	20
29	27	30	38	35	---	36	92	40	138	20	49	20
30	31	26	40	34	---	36	57	135	120	20	50	20
31	43	---	35	34	---	35	---	194	---	21	46	---
TOTAL	631	1168	1104	1278	1041	1238	1397	1253	7143	1302	6481	897
MEAN	20.4	38.9	35.6	41.2	37.2	39.9	46.6	40.4	238	42.0	209	29.9
MAX	43	55	45	57	52	50	149	194	640	104	1170	75
MIN	13	26	24	34	30	31	35	24	85	20	24	20
AC-FT	1250	2320	2190	2530	2060	2460	2770	2490	14170	2580	12860	1780

CAL YR 1974 TOTAL 36166 MEAN 99.1 MAX 854 MIN 13 AC-FT 71740
WTR YR 1975 TOTAL 24933 MEAN 68.3 MAX 1170 MIN 13 AC-FT 49450

PEAK DISCHARGE (BASE, 2,000 CFS).--NO PEAK ABOVE BASE.

KANSAS RIVER BASIN

06868100 WILSON LAKE NEAR WILSON, KS

LOCATION.--Lat 38°58'00", long 98°29'35", in NE¼NW¼SE¼ sec.36, T.12 S., R.11 W., Russell County, in the control tower near right end of Wilson Dam on the Saline River, 10 mi (16 km) north of Wilson, and at mile 153.9 (247.6 km).

DRAINAGE AREA.--1,917 mi² (4,965 km²).

PERIOD OF RECORD.--December 1964 to current year. Prior to October 1971, published as "Wilson Reservoir".

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Corps of Engineers).

EXTREMES.--Current year: Maximum elevation, 1,517.52 ft (462.540 m) June 26, contents, 261,900 acre-ft (323 hm³); minimum, 1,513.84 ft (461.418 m) July 30, contents, 228,800 acre-ft (282 hm³).

Period of record: Maximum elevation, 1,521.92 ft (463.881 m) Nov. 7, 1973, contents, 305,600 acre-ft (377 hm³); minimum since conservation pool first filled, 1,493.59 ft (455.246 m) Dec. 26, 1966, contents, 91,500 acre-ft (113 hm³).

REMARKS.--Reservoir is formed by earthfill dam; storage began Dec. 29, 1964. Total capacity, 1,711,000 acre-ft (2,110 hm³) below elevation 1,587.5 ft (483.87 m), consisting of 1,960 acre-ft (2.42 hm³) of dead storage below elevation 1,450 ft (442.0 m); conservation pool, 245,880 acre-ft (303 hm³) between elevation 1,450 ft (442.0 m) and 1,516 ft (462.1 m); flood control pool, 1,253,000 acre-ft (1,540 hm³) between 1,516 ft (462.1 m) and 1,582 ft (482.2 m), crest of spillway; and surcharge capacity of 210,200 acre-ft (259 hm³) between 1,582 ft (482.2 m) and 1,587.5 ft (483.87 m). Figures given herein represent total contents.

Capacity table (elevation, in feet, and contents, in acre-feet)

1,512	213,300	1,516	247,800
1,514	230,200	1,518	266,400

ELEVATION, IN FEET, AT 2400, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,515.33	1,515.27	1,515.26	1,515.36	1,515.65	1,516.20	1,516.02	1,516.27	1,516.78	1,517.19	1,513.90	1,514.19
2	1,515.29	1,515.28	1,515.25	1,515.43	1,515.66	1,516.15	1,516.01	1,516.34	1,516.94	1,517.12	1,513.93	1,514.18
3	1,515.31	1,515.34	1,515.25	1,515.41	1,515.72	1,516.15	1,515.99	1,516.34	1,516.99	1,517.04	1,514.02	1,514.70
4	1,515.23	1,515.36	1,515.25	1,515.40	1,515.76	1,516.10	1,515.99	1,516.34	1,517.02	1,516.96	1,514.25	1,514.82
5	1,515.23	1,515.33	1,515.26	1,515.43	1,515.77	1,516.05	1,515.98	1,516.34	1,517.04	1,516.87	1,514.32	1,514.82
6	1,515.23	1,515.34	1,515.25	1,515.42	1,515.75	1,516.00	1,515.96	1,516.33	1,517.05	1,516.78	1,514.33	1,514.81
7	1,515.24	1,515.32	1,515.25	1,515.46	1,515.75	1,516.00	1,515.97	1,516.32	1,517.05	1,516.70	1,514.33	1,514.80
8	1,515.22	1,515.31	1,515.26	1,515.46	1,515.80	1,516.00	1,515.99	1,516.30	1,517.15	1,516.61	1,514.33	1,514.75
9	1,515.21	1,515.34	1,515.24	1,515.47	1,515.80	1,516.00	1,515.98	1,516.30	1,517.16	1,516.53	1,514.29	1,514.72
10	1,515.20	1,515.35	1,515.25	1,515.56	1,515.80	1,516.15	1,515.98	1,516.30	1,517.22	1,516.43	1,514.29	1,514.74
11	1,515.19	1,515.35	1,515.26	1,515.50	1,515.85	1,516.25	1,515.96	1,516.30	1,517.18	1,516.35	1,514.24	1,514.73
12	1,515.28	1,515.34	1,515.27	1,515.50	1,515.90	1,516.25	1,515.97	1,516.30	1,517.14	1,516.21	1,514.20	1,514.71
13	1,515.30	1,515.32	1,515.24	1,515.49	1,515.95	1,516.20	1,516.07	1,516.34	1,517.09	1,516.09	1,514.58	1,514.66
14	1,515.28	1,515.30	1,515.32	1,515.50	1,516.00	1,516.20	1,516.08	1,516.34	1,517.03	1,515.93	1,514.61	1,514.66
15	1,515.28	1,515.30	1,515.30	1,515.51	1,516.05	1,516.20	1,516.10	1,516.34	1,516.97	1,515.75	1,514.76	1,514.65
16	1,515.26	1,515.31	1,515.30	1,515.51	1,516.10	1,516.15	1,516.11	1,516.34	1,516.94	1,515.55	1,514.82	1,514.65
17	1,515.25	1,515.32	1,515.28	1,515.53	1,516.15	1,516.15	1,516.15	1,516.33	1,516.85	1,515.36	1,514.87	1,514.76
18	1,515.24	1,515.33	1,515.29	1,515.53	1,516.20	1,516.15	1,516.16	1,516.35	1,516.84	1,515.17	1,514.87	1,514.77
19	1,515.23	1,515.33	1,515.31	1,515.55	1,516.20	1,516.10	1,516.15	1,516.34	1,516.73	1,514.98	1,514.80	1,514.76
20	1,515.22	1,515.32	1,515.30	1,515.57	1,516.25	1,516.10	1,516.16	1,516.29	1,516.66	1,514.79	1,514.73	1,514.72
21	1,515.24	1,515.32	1,515.34	1,515.57	1,516.30	1,516.10	1,516.15	1,516.28	1,516.84	1,514.63	1,514.65	1,514.72
22	1,515.21	1,515.34	1,515.32	1,515.59	1,516.35	1,516.05	1,516.22	1,516.29	1,517.02	1,514.47	1,514.57	1,514.71
23	1,515.19	1,515.33	1,515.32	1,515.60	1,516.40	1,516.05	1,516.18	1,516.30	1,517.25	1,514.29	1,514.48	1,514.68
24	1,515.21	1,515.32	1,515.32	1,515.62	1,516.40	1,516.05	1,516.20	1,516.29	1,517.36	1,514.09	1,514.39	1,514.67
25	1,515.21	1,515.32	1,515.32	1,515.61	1,516.35	1,516.00	1,516.16	1,516.30	1,517.47	1,513.99	1,514.26	1,514.65
26	1,515.22	1,515.31	1,515.34	1,515.60	1,516.35	1,516.00	1,516.23	1,516.28	1,517.51	1,513.96	1,514.16	1,514.63
27	1,515.22	1,515.30	1,515.34	1,515.62	1,516.30	1,516.13	1,516.30	1,516.28	1,517.46	1,513.93	1,514.08	1,514.63
28	1,515.24	1,515.29	1,515.34	1,515.62	1,516.25	1,516.10	1,516.28	1,516.31	1,517.40	1,513.89	1,514.10	1,514.63
29	1,515.26	1,515.29	1,515.35	1,515.63	-----	1,516.07	1,516.30	1,516.46	1,517.34	1,513.88	1,514.21	1,514.60
30	1,515.29	1,515.27	1,515.36	1,515.63	-----	1,516.08	1,516.29	1,516.54	1,517.26	1,513.85	1,514.20	1,514.61
31	1,515.28	-----	1,515.37	1,515.65	-----	1,516.01	-----	1,516.66	-----	1,513.86	1,514.21	-----
MEAN	1,515.24	1,515.32	1,515.29	1,515.53	1,516.03	1,516.10	1,516.10	1,516.34	1,517.09	1,515.46	1,514.38	1,514.67
MAX	1,515.33	1,515.36	1,515.37	1,515.65	1,516.40	1,516.25	1,516.30	1,516.66	1,517.51	1,517.19	1,514.87	1,514.82
MIN	1,515.19	1,515.27	1,515.24	1,515.36	1,515.65	1,516.00	1,515.96	1,516.27	1,516.66	1,513.85	1,513.90	1,514.18
(+)	241,400	241,300	242,200	244,700	250,100	247,900	250,500	253,900	259,400	229,000	232,000	235,500
(+)	-600	-100	+900	+2,500	+5,400	-2,200	+2,600	+3,400	+5,500	-30,400	+3,000	+3,500

CAL YR 1974 (+) -48,300

WTR YR 1975 (+) -6,500

+ CONTENTS, IN ACRE-FEET, AT END OF MONTH.

* CHANGE IN CONTENTS, IN ACRE-FEET.

KANSAS RIVER BASIN

63

06868200 SALINE RIVER AT WILSON DAM, KS

LOCATION.--Lat 38°58'35", long 98°29'20", in NE¼SW¼SE¼ sec.25, T.12 S., R.11 W., Russell County, 0.5 mi (0.8 km) downstream from outlet of Wilson Dam, 9.0 mi (14.5 km) upstream from Wolf Creek, 10.0 mi (16 km) north of Wilson, and at mile 153.4 (246.8 km).

DRAINAGE AREA.--1,917 mi² (4,965 km²).

PERIOD OF RECORD.--March 1963 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,437 ft (438.0 m), from topographic map. Prior to May 12, 1965, water-stage recorder at site 1.5 mi (2.4 km) downstream at different datum.

AVERAGE DISCHARGE.--12 years, 56.5 ft³/s (1.600 m³/s), 40,930 acre-ft/yr (50.5 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 876 ft³/s (24.8 m³/s) July 14, gage height, 11.28 ft (3.438 m); minimum, 1.7 ft³/s (0.048 m³/s) Sept. 11.

Period of record: Maximum discharge, 3,320 ft³/s (94.0 m³/s) Apr. 6, 1973, gage height, 18.84 ft (5.74 m); minimum, 0.30 ft³/s (0.008 m³/s) Mar. 2, 1966.

REMARKS.--Records good. Flow completely regulated by Wilson Lake (see sta 06868100).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	9.9	9.9	7.7	7.7	183	19	20	19	448	20	19
2	28	9.9	9.9	7.7	7.7	183	20	20	19	446	19	19
3	24	10	10	7.7	7.8	182	19	21	20	445	19	27
4	12	9.9	8.8	7.7	7.9	182	19	21	52	443	20	22
5	12	9.9	7.9	7.8	7.9	182	19	21	105	442	20	19
6	12	9.9	7.7	7.9	7.8	181	19	21	105	440	54	18
7	12	9.9	7.7	7.9	7.7	115	19	21	106	439	124	18
8	12	9.9	7.7	7.9	7.8	22	19	21	106	438	122	18
9	12	9.9	7.7	7.8	7.7	22	19	21	106	436	119	19
10	12	10	7.7	8.0	7.7	22	19	21	234	435	118	8.8
11	12	10	7.7	7.7	7.5	22	20	21	446	434	119	8.1
12	12	10	7.7	7.5	7.5	22	20	21	446	432	117	19
13	12	11	7.5	7.2	7.5	22	21	26	445	431	125	19
14	12	11	7.7	7.1	7.5	21	21	21	444	690	120	19
15	12	11	7.9	7.1	7.5	21	21	21	444	870	118	18
16	12	11	7.9	7.1	7.5	21	21	21	444	863	116	17
17	12	10	7.9	7.1	7.5	21	21	20	444	859	110	18
18	12	10	7.8	7.3	7.5	21	21	20	443	855	110	18
19	12	10	7.7	7.4	7.5	21	21	20	443	851	300	18
20	12	9.9	7.7	7.3	7.3	21	21	20	441	847	400	18
21	12	9.6	7.7	7.3	7.3	21	21	19	419	843	400	18
22	12	9.6	7.8	7.3	7.3	21	21	20	38	838	400	18
23	12	9.8	7.7	7.3	7.4	21	21	19	18	832	403	18
24	12	9.8	7.7	7.3	7.3	22	21	19	17	827	403	17
25	9.2	9.6	7.7	7.5	7.0	12	21	19	17	439	401	17
26	9.9	9.9	7.7	7.5	182	9.9	21	19	151	141	400	17
27	9.9	9.9	7.7	7.5	184	19	21	19	449	134	399	17
28	8.9	9.6	7.8	7.5	183	19	21	19	450	68	207	17
29	9.9	9.6	7.9	7.5	-----	19	21	20	449	21	22	17
30	9.9	9.8	7.7	7.5	-----	19	21	20	449	21	20	15
31	9.9	-----	7.8	7.5	-----	19	-----	19	-----	21	20	-----
TOTAL	399.6	300.3	247.7	232.6	800.8	1,688.9	609	631	7,769	15,729	5,345	530.9
MEAN	12.9	10.0	7.99	7.50	28.6	54.5	20.3	20.4	259	507	172	17.7
MAX	28	11	10	8.0	184	183	21	26	450	870	403	27
MIN	8.9	9.6	7.5	7.1	7.3	9.9	19	19	17	21	19	8.1
AC-FT	793	596	491	461	1,590	3,350	1,210	1,250	15,410	31,200	10,600	1,050

CAL YR 1974 TOTAL 69,376.6 MEAN 190 MAX 1,260 MIN 7.5 AC-FT 137,600
WTR YR 1975 TOTAL 34,283.8 MEAN 93.9 MAX 870 MIN 7.1 AC-FT 68,000

KANSAS RIVER BASIN

06869500 SALINE RIVER AT TESCOTT, KS

LOCATION.--Lat 39°00'15", long 97°52'26", in NE¼SE¼SE¼ sec.16, T.12 S., R.5 W., Ottawa County, at downstream side of highway bridge, 0.5 mi (0.8 km) south of Tescott, 0.5 mi (0.8 km) upstream from Dry Creek, and at mile 68.5 (110.2 km).

DRAINAGE AREA.--2,820 mi² (7,300 km²).

PERIOD OF RECORD.--September 1919 to current year.

GAGE.--Water stage recorder. Datum of gage is 1,265.34 ft (385.676 m) above mean sea level. Prior to Nov. 23, 1934, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--56 years, 225 ft³/s (6.372 m³/s), 163,000 acre-ft/yr (201 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,710 ft³/s (48.4 m³/s) Aug. 15, gage height, 19.83 ft (6.044 m); minimum, 39 ft³/s (1.10 m³/s) Dec. 28.

Period of record: Maximum discharge, 61,400 ft³/s (1,740 m³/s) July 13, 1951, gage height, 30.06 ft (9.162 m), from rating curve extended above 7,000 ft³/s (200 m³/s) on basis of slope-area measurement of peak flow; no flow at times in 1935-36.

Flood of July 13, 1951 was greatest known since at least 1903 and exceeded the flood of May-June 1903 by about 1.0 ft (0.3 m), from information by local residents.

REMARKS.--Records good. Some diurnal fluctuation caused by power plants above station. Diversions above station for irrigation. Flow moderately regulated since 1964 by Wilson Lake (see sta 06868100). Records of chemical analyses, water temperatures, suspended sediment loads, and specific conductance for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 806: Drainage area. WSP 856: 1931. WSP 1310: 1926-28(M), 1935(M), 1945(M), 1947-48(M). WSP 1919: 1922, 1960.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	65	64	56	58	54	212	65	117	247	398	66	94
2	67	65	54	52	52	216	65	118	210	399	60	67
3	67	65	47	58	54	213	63	90	245	398	63	58
4	65	62	48	56	60	213	62	110	248	396	58	60
5	65	63	58	50	50	213	62	104	220	397	54	174
6	66	68	66	50	50	215	63	80	130	398	49	540
7	64	65	67	59	50	215	62	75	126	398	47	219
8	54	62	64	62	50	214	63	70	207	399	46	89
9	52	60	58	62	53	213	62	65	309	399	59	70
10	53	62	56	63	64	161	60	62	410	398	110	64
11	54	65	54	60	62	94	60	61	325	398	112	61
12	53	62	55	51	54	82	59	60	242	396	110	60
13	57	60	61	64	57	79	60	61	311	395	112	58
14	60	58	58	58	58	74	133	63	402	395	429	50
15	68	57	58	59	57	71	139	65	408	395	1,500	52
16	66	56	58	59	53	70	118	68	407	433	904	55
17	58	56	58	59	55	79	96	65	413	656	242	53
18	55	56	57	59	58	82	86	60	414	735	160	53
19	54	57	56	60	52	82	81	59	414	740	139	54
20	54	58	55	60	58	80	78	57	407	747	153	63
21	52	58	59	63	60	75	73	55	410	757	306	95
22	52	58	57	64	59	73	71	54	718	756	340	72
23	52	58	57	51	59	71	69	54	663	751	340	55
24	53	58	57	65	57	69	69	55	974	752	339	49
25	55	59	53	61	60	67	69	55	1,030	751	341	45
26	56	58	54	63	71	64	69	55	400	751	342	44
27	57	57	56	60	80	68	69	59	175	656	345	43
28	58	57	51	57	150	76	67	61	118	240	347	42
29	61	56	59	56	-----	88	67	81	267	148	349	42
30	59	56	61	54	-----	76	67	81	392	132	303	41
31	65	-----	56	54	-----	68	-----	150	-----	91	156	-----
TOTAL	1,817	1,796	1,764	1,807	1,697	3,673	2,227	2,270	11,242	15,055	7,981	2,522
MEAN	58.6	59.9	56.9	58.3	60.6	118	74.2	73.2	375	486	257	84.1
MAX	68	68	67	65	150	216	139	150	1,030	757	1,500	540
MIN	52	56	47	50	50	64	59	54	118	91	46	41
AC-FT	3,600	3,560	3,500	3,580	3,370	7,290	4,420	4,500	22,300	29,860	15,830	5,000

CAL YR 1974 TOTAL 117,440 MEAN 322 MAX 2,300 MIN 47 AC-FT 232,900
WTR YR 1975 TOTAL 53,851 MEAN 148 MAX 1,500 MIN 41 AC-FT 106,800

PEAK DISCHARGE (REGULATED) ABOVE 1,300 CFS

DATE	TIME	G.H.	DISCHARGE
08-15	1600	19.83	1,710

KANSAS RIVER BASIN

65

06870200 SMOKY HILL RIVER AT NEW CAMBRIA, KS

LOCATION.--Lat 38°51'13", long 97°27'52", in SW 1/4 NW 1/4 sec. 8, T. 14 S., R. 1 W., Saline County, at downstream side of county highway bridge, 3.0 mi (4.8 km) southeast of New Cambria, 7.4 mi (11.9 km) upstream from Gypsum Creek, about 15.4 mi (24.8 km) upstream from Solomon River, and at mile 83.9 (135.0 km).

DRAINAGE AREA.--11,730 mi² (30,380 km²), approximately.

PERIOD OF RECORD.--October 1962 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,157.96 ft (352.946 m) above mean sea level (levels by Corps of Engineers). Prior to Mar. 27, 1963, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--13 years, 684 ft³/s (19.37 m³/s), 495,600 acre-ft/yr (611 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 7,440 ft³/s (211 m³/s) June 24, gage height, 24.93 ft (7.599 m); minimum, 96 ft³/s (2.72 m³/s) Feb. 16 (result of freeze-up).

Period of record: Maximum discharge, 26,400 ft³/s (748 m³/s) Oct. 12, 1973, gage height, 30.91 ft (9.421 m); minimum, 18 ft³/s (0.51 m³/s) July 16, 17, 1966.

REMARKS.--Records good. Flow moderately regulated by Kanopolis Lake 99.8 mi (161 km) upstream (see sta 06865000) and slightly regulated by Wilson Lake (see sta 06868100). Records of chemical analyses, water temperatures and specific conductance for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	655	630	269	224	211	426	247	260	858	1,810	294	847
2	580	429	272	222	206	362	233	252	649	1,910	266	808
3	355	354	274	224	207	383	229	282	1,300	1,860	230	733
4	288	349	273	210	281	396	218	329	1,630	1,820	206	600
5	270	391	254	203	346	385	220	321	1,280	1,770	198	389
6	298	321	229	204	238	378	223	292	761	1,720	186	336
7	500	412	230	223	200	380	221	284	700	1,690	169	391
8	565	499	228	220	180	375	226	259	647	1,650	159	932
9	370	521	227	224	180	374	229	234	1,740	1,740	156	816
10	284	530	223	229	220	385	220	224	3,000	1,820	155	657
11	255	390	219	186	240	391	225	216	2,140	1,830	158	725
12	242	333	220	190	246	379	218	208	1,330	1,810	203	636
13	297	320	210	210	257	309	223	211	1,430	1,660	239	600
14	925	306	193	230	235	261	278	224	1,300	1,410	395	574
15	832	295	190	235	230	240	336	219	1,250	1,370	304	564
16	420	292	187	237	179	238	533	218	1,330	1,330	637	553
17	306	288	184	235	231	274	522	212	1,390	1,100	1,370	551
18	526	284	180	236	238	336	408	205	1,740	808	1,330	631
19	648	283	174	246	199	369	334	202	1,520	892	748	636
20	609	282	227	226	247	345	282	194	1,380	966	558	623
21	408	280	328	216	246	298	254	176	1,330	984	499	610
22	346	280	338	226	248	267	250	169	1,880	980	525	605
23	336	280	338	210	227	250	241	188	4,410	968	956	629
24	293	262	340	219	211	233	589	182	6,930	955	1,060	621
25	285	244	317	233	220	221	1,530	171	5,960	945	1,060	584
26	299	240	251	221	242	212	998	238	3,090	937	1,050	504
27	278	238	270	220	306	219	537	232	2,530	928	1,070	324
28	378	237	275	219	486	233	374	248	2,370	896	1,080	272
29	345	235	268	214	-----	261	321	321	2,660	791	1,170	248
30	404	247	251	215	-----	284	288	439	1,930	479	1,020	226
31	717	-----	228	216	-----	260	-----	680	-----	326	688	-----
TOTAL	13,314	10,052	7,667	6,823	6,757	9,724	11,007	7,890	60,465	40,155	18,139	17,225
MEAN	429	335	247	220	241	314	367	255	2,016	1,295	585	574
MAX	925	630	340	246	486	426	1,530	680	6,930	1,910	1,370	932
MIN	242	235	174	186	179	212	218	169	647	326	155	226
AC-FT	26,410	19,940	15,210	13,530	13,400	19,290	21,830	15,650	119,900	79,650	35,980	34,170

CAL YR 1974 TOTAL 433,943 MEAN 1,189 MAX 11,300 MIN 174 AC-FT 860,700
WTR YR 1975 TOTAL 209,218 MEAN 573 MAX 6,930 MIN 155 AC-FT 415,000

PEAK DISCHARGE (REGULATED) ABOVE 3,500 CFS

DATE TIME G.H. DISCHARGE

06-24 2300 24.93 7,440

KANSAS RIVER BASIN

06871000 NORTH FORK SOLOMON RIVER AT GLADE, KS

LOCATION.--Lat 39°40'40", long 99°18'30", in NW¼SW¼ sec.25, T.4 S., R.18 W., Phillips County, at downstream side of bridge on U.S. Highway 183, 0.5 mi (0.8 km) south of Glade.

DRAINAGE AREA.--849 mi² (2,200 km²).

PERIOD OF RECORD.--October 1952 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,754.04 ft (534.631 m) above mean sea level. Prior to Feb. 17, 1965, at datum 2.00 ft (0.610 m) higher.

AVERAGE DISCHARGE.--23 years, 33.8 ft³/s (0.957 m³/s), 24,490 acre-ft/yr (30.2 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,100 ft³/s (116 m³/s) Aug. 14, gage height, 11.58 ft (3.530 m); no flow for month of October.
Period of record: Maximum discharge, 23,300 ft³/s (660 m³/s) June 16, 1957, gage height, 18.55 (present datum) (5.044 m); no flow at times in each year.

REMARKS.--Records good except those for winter periods, which are poor. Records of chemical analyses for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		1.0	3.3	4.5	6.0	19	8.5	7.9	42	121	7.3	14
2		11	3.7	5.2	6.5	17	7.5	8.0	30	105	8.8	11
3		12	4.1	6.2	7.0	16	16	8.1	21	94	75	9.2
4		10	4.7	5.8	8.0	17	11	7.9	16	83	218	9.2
5		6.7	5.1	6.2	7.0	16	10	7.4	12	73	103	9.3
6		5.4	7.3	6.8	7.0	15	10	7.2	9.7	65	55	7.6
7		4.8	6.0	9.0	7.0	15	11	6.5	8.5	57	35	6.4
8		4.2	5.0	10	7.5	13	14	6.0	18	51	22	5.5
9		3.7	4.5	13	7.5	12	12	5.9	524	47	16	4.8
10		3.5	4.2	14	7.5	12	11	5.8	424	46	13	3.6
11		3.1	4.0	9.0	8.0	12	9.9	5.4	231	48	9.4	2.2
12		3.2	3.8	6.2	8.0	12	9.7	5.2	126	43	5.9	2.8
13		3.2	3.2	6.0	8.0	12	13	7.2	92	35	73	2.3
14		3.1	2.4	6.0	8.5	12	16	8.4	72	31	1660	2.1
15		3.5	2.0	7.0	8.5	13	14	6.9	59	27	276	3.3
16		3.1	2.0	8.0	9.0	14	13	6.2	50	23	128	4.1
17		3.3	2.4	9.0	9.0	15	12	5.8	43	19	87	5.2
18		3.3	3.0	10	9.5	15	11	5.1	94	16	71	3.7
19		3.3	3.8	12	10	14	11	4.3	1050	15	59	2.9
20		2.9	4.0	13	10	14	11	3.6	1790	11	50	1.8
21		3.3	3.8	12	11	13	11	2.8	2100	9.0	50	1.1
22		3.2	5.5	12	13	12	10	3.1	918	7.8	41	.85
23		3.5	3.6	14	14	12	10	3.6	971	6.4	35	.66
24		3.2	1.9	16	15	9.2	9.8	4.2	1430	4.1	33	.45
25		3.7	2.4	15	18	9.2	9.8	4.0	534	2.8	28	.45
26		3.2	3.0	14	21	10	9.5	2.7	314	2.2	25	.53
27		3.8	3.6	12	23	11	10	2.6	241	1.7	25	.40
28		3.2	3.8	9.6	24	8.5	11	8.0	194	.97	22	.39
29		3.1	3.0	8.0	---	9.0	10	11	164	.64	21	.50
30		2.8	3.8	7.0	---	10	8.5	22	140	.52	19	.55
31		---	4.2	5.8	---	10	---	42	---	1.7	17	---
TOTAL	0	127.3	117.1	292.3	298.5	398.9	331.2	234.8	11718.2	1047.83	3288.4	116.88
MEAN	0	4.24	3.78	9.43	10.7	12.9	11.0	7.57	391	33.8	106	3.90
MAX	0	12	7.3	16	24	19	16	42	2100	121	1660	14
MIN	0	1.0	1.9	4.5	6.0	8.5	7.5	2.6	8.5	.52	5.9	.39
AC-FT	0	252	232	580	592	791	657	466	23240	2080	6520	232
CAL YR 1974	TOTAL	5033.80	MEAN 13.8	MAX 124	MIN 0	AC-FT 9980						
WTR YR 1975	TOTAL	17971.41	MEAN 49.2	MAX 2100	MIN 0	AC-FT 35650						

PEAK DISCHARGE (BASE, 2,000 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
06-20	2200	10.03	2,580	08-14	1200	11.58	4,100

KANSAS RIVER BASIN

67

06871500 BOW CREEK NEAR STOCKTON, KS

LOCATION.--Lat 39°33'46", long 99°17'04", in SW¼NW¼ sec.1, T.6 S., R.18 W., Rooks County, at downstream side of bridge on U.S. Highway 183, 8.5 mi (13.7 km) north of Stockton.

DRAINAGE AREA.--341 mi² (883 km²).

PERIOD OF RECORD.--November 1950 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,801.80 ft (549.189 m) above mean sea level. Prior to June 28, 1951, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--24 years, 15.4 ft³/s (0.436 m³/s), 11,160 acre-ft/yr (13.8 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,850 ft³/s (80.7 m³/s) June 20, gage height 11.25 ft (3.429 m); minimum, 2.5 ft³/s (0.071 m³/s) Oct. 1, 4-6, 10.

Period of record: Maximum discharge, 12,900 ft³/s (365 m³/s) July 12, 1951, gage height, 13.6 ft (4.15 m), from rating curve extended above 5,900 ft³/s (167 m³/s) on basis of contracted-opening measurement of peak flow; no flow at times.

REMARKS.--Records good except those for winter periods, which are poor.

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.6	6.6	5.0	6.5	7.0	10	8.3	12	76	67	13	5.9
2	2.7	4.9	5.0	7.0	7.0	9.1	7.5	12	36	59	12	5.7
3	2.7	6.3	5.0	7.0	7.0	8.9	6.8	12	20	54	10	5.5
4	2.5	9.6	6.0	7.0	7.0	8.8	5.4	10	13	49	67	5.7
5	2.5	6.7	7.0	7.0	6.5	8.8	5.6	9.5	9.2	44	60	5.6
6	2.6	4.6	6.5	7.0	6.5	8.6	5.4	9.2	7.2	41	31	5.3
7	2.7	4.4	6.2	7.5	6.5	8.5	5.5	9.7	6.3	37	21	5.0
8	2.7	4.3	6.0	7.5	6.5	8.3	6.2	9.2	7.9	35	19	4.7
9	2.7	4.3	6.6	7.6	6.5	8.0	5.9	8.9	46	32	17	4.4
10	2.6	4.2	7.8	7.0	7.0	8.0	5.4	8.5	55	31	15	4.4
11	2.7	4.1	6.6	7.0	7.0	8.5	5.3	8.3	182	29	14	4.5
12	2.7	4.1	6.1	7.0	7.0	8.5	5.3	8.4	162	27	12	4.6
13	3.2	5.1	5.8	7.0	7.0	8.5	6.3	9.4	94	24	13	4.3
14	3.1	5.7	4.5	7.5	7.5	9.0	6.9	9.4	38	23	66	4.2
15	3.0	5.5	4.5	7.5	7.5	9.3	6.4	8.6	16	21	22	4.5
16	3.0	5.2	4.5	7.5	7.5	9.4	6.3	8.2	11	19	14	4.5
17	3.1	5.4	5.0	7.5	7.5	9.0	6.0	7.5	9.5	17	12	5.1
18	3.1	5.4	5.0	8.0	7.5	9.1	5.9	7.2	182	16	11	4.5
19	3.1	5.5	5.5	8.0	7.5	8.6	5.9	6.8	134	15	11	4.5
20	3.1	5.5	6.0	8.0	8.0	8.4	5.4	6.6	2020	15	10	4.3
21	3.1	5.4	6.0	8.2	8.0	8.1	5.5	6.6	1870	14	9.4	4.2
22	3.1	5.5	6.0	8.0	8.0	7.9	6.0	6.4	720	13	8.8	4.2
23	3.2	5.6	6.3	8.0	8.5	7.8	7.9	6.6	301	12	17	4.1
24	3.4	5.4	6.7	7.8	8.5	8.1	8.3	16	488	12	16	4.0
25	3.6	5.5	6.5	7.8	8.5	8.7	8.2	6.5	759	11	12	3.9
26	3.7	5.7	6.5	7.5	9.0	8.6	8.2	5.8	187	11	10	3.8
27	4.0	5.7	6.5	7.4	10	8.3	9.5	6.4	120	10	8.9	3.6
28	4.5	5.7	6.5	7.0	10	7.9	10	32	105	9.3	7.7	3.8
29	4.8	5.7	6.5	7.0	---	7.8	12	42	90	8.9	7.3	3.7
30	5.0	5.5	6.5	7.0	---	7.5	12	253	76	8.5	6.6	3.8
31	5.2	---	6.5	7.0	---	7.8	---	155	---	10	6.4	---
TOTAL	100.0	163.1	185.1	228.8	212.0	263.8	209.3	717.7	7912.2	774.7	560.1	136.3
MEAN	3.23	5.44	5.97	7.38	7.57	8.51	6.98	23.2	264	25.0	18.1	4.54
MAX	5.2	9.6	7.8	8.2	10	10	12	253	2020	67	67	5.9
MIN	2.5	4.1	4.5	6.5	6.5	7.5	5.3	5.8	6.3	8.5	6.4	3.6
AC-FT	198	324	367	454	421	523	415	1420	15690	1540	1110	270
CAL YR 1974	TOTAL	3583.4	MEAN	9.82	MAX	58	MIN	2.2	AC-FT	7110		
WTR YR 1975	TOTAL	11463.1	MEAN	31.4	MAX	2020	MIN	2.5	AC-FT	22740		

PEAK DISCHARGE (BASE, 600 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
06-20	1200	11.25	2,850	06-25	1000	8.48	1,090

KANSAS RIVER BASIN

06871700 KIRWIN RESERVOIR AT KIRWIN, KS

LOCATION.--Lat 39°39'49", long 99°07'29", in SE¼NE¼ sec.33, T.4 S., R.16 W., Phillips County, in control-house structure at outlet works of Kirwin dam on North Fork Solomon River, 0.5 mi (0.8 km) south of Kirwin, 1.6 mi (2.6 km) upstream from Deer Creek, and at mile 67.8 (109.1 km).

DRAINAGE AREA.--1,367 mi² (3,541 km²).

PERIOD OF RECORD.--September 1955 to current year. Monthly records only prior to October 1956.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Bureau of Reclamation). Prior to Aug. 7, 1957, nonrecording gages at same site and datum.

EXTREMES.--Current year: Maximum elevation, 1,722.38 ft (524.981 m) July 1-3, contents, 68,240 acre-ft (84.1 hm³); minimum, 1,709.87 ft (521.168 m) Oct. 25, 26, contents, 29,230 acre-ft (36.0 hm³).

Period of record: Maximum elevation, 1,732.15 ft (527.959 m) June 10, 1961, contents, 114,900 acre-ft (142 hm³); minimum elevation since first filling of irrigation pool, 1,709.87 ft (521.168 m) Oct. 25, 26, 1974, contents, 29,230 acre-ft (36.0 hm³).

REMARKS.--Reservoir is formed by compacted earthfill dam. Storage began Sept. 19, 1955. Total capacity, 512,000 acre-ft (633 hm³), consisting of the following: Dead storage, 6,400 acre-ft (7.89 hm³) below elevation 1,693.0 ft (516.03 m), sill of trashrack structure; irrigation pool, 93,300 acre-ft (115 hm³) between elevations 1,693.0 ft (516.03 m) and 1,729.3 ft (527.09 m); flood control pool, 214,900 acre-ft (265 hm³) between elevations 1,729.3 ft (527.09 m) and 1,757.3 ft (535.63 m), crest of uncontrolled spillway; and uncontrolled storage, 198,400 acre-ft (245 hm³) between elevations 1,757.3 ft (535.63 m) and 1,773.0 ft (540.41 m). Reservoir is used to store water for flood control and irrigation in Kirwin Unit of 11,500 acres (4,650 hm³), Missouri River Basin project. Figures given herein represent total contents.

Capacity table (elevation, in feet, and contents, in acre-feet)

1,708	25,540	1,718	51,730
1,710	29,490	1,720	58,930
1,712	34,000	1,722	66,700
1,714	39,220	1,724	74,980
1,716	45,160		

ELEVATION, IN FEET, AT 2400, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,710.05	1,710.04	1,710.21	1,710.48	1,710.80	1,711.23	1,711.81	1,712.30	1,712.92	1,722.38	1,719.88	1,718.61
2	1,710.03	1,710.05	1,710.21	1,710.51	1,710.81	1,711.25	1,711.83	1,712.31	1,712.99	1,722.38	1,719.79	1,718.56
3	1,710.05	1,710.15	1,710.22	1,710.53	1,710.84	1,711.27	1,711.85	1,712.31	1,713.02	1,722.37	1,719.69	1,718.47
4	1,710.03	1,710.18	1,710.22	1,710.53	1,710.87	1,711.30	1,711.85	1,712.33	1,713.05	1,722.33	1,719.68	1,718.48
5	1,710.00	1,710.18	1,710.22	1,710.55	1,710.88	1,711.32	1,711.87	1,712.32	1,713.08	1,722.28	1,719.68	1,718.44
6	1,709.98	1,710.18	1,710.25	1,710.55	1,710.88	1,711.36	1,711.88	1,712.33	1,713.10	1,722.21	1,719.59	1,718.44
7	1,709.98	1,710.21	1,710.26	1,710.57	1,710.89	1,711.37	1,711.95	1,712.32	1,713.10	1,722.14	1,719.52	1,718.40
8	1,709.97	1,710.20	1,710.26	1,710.58	1,710.89	1,711.37	1,712.00	1,712.27	1,713.22	1,722.07	1,719.41	1,718.39
9	1,709.97	1,710.23	1,710.26	1,710.60	1,710.89	1,711.44	1,712.00	1,712.29	1,713.32	1,721.98	1,719.33	1,718.38
10	1,709.98	1,710.23	1,710.27	1,710.62	1,710.90	1,711.45	1,712.00	1,712.30	1,713.77	1,721.88	1,719.25	1,718.38
11	1,709.97	1,710.24	1,710.27	1,710.61	1,710.93	1,711.48	1,712.00	1,712.28	1,714.02	1,721.78	1,719.15	1,718.35
12	1,709.95	1,710.24	1,710.29	1,710.61	1,710.93	1,711.50	1,712.03	1,712.28	1,714.22	1,721.69	1,719.02	1,718.35
13	1,709.95	1,710.21	1,710.28	1,710.61	1,710.94	1,711.51	1,712.08	1,712.31	1,714.33	1,721.61	1,718.97	1,718.33
14	1,709.94	1,710.22	1,710.37	1,710.62	1,710.97	1,711.54	1,712.10	1,712.32	1,714.40	1,721.51	1,719.44	1,718.32
15	1,709.94	1,710.22	1,710.37	1,710.62	1,710.98	1,711.57	1,712.13	1,712.33	1,714.45	1,721.42	1,719.59	1,718.32
16	1,709.93	1,710.22	1,710.37	1,710.62	1,711.02	1,711.58	1,712.14	1,712.33	1,714.48	1,721.32	1,719.60	1,718.32
17	1,709.91	1,710.22	1,710.36	1,710.63	1,711.03	1,711.62	1,712.18	1,712.33	1,714.48	1,721.20	1,719.56	1,718.41
18	1,709.90	1,710.22	1,710.37	1,710.65	1,711.05	1,711.65	1,712.20	1,712.32	1,714.70	1,721.11	1,719.51	1,718.40
19	1,709.90	1,710.25	1,710.37	1,710.65	1,711.05	1,711.68	1,712.20	1,712.31	1,715.13	1,721.00	1,719.46	1,718.38
20	1,709.88	1,710.25	1,710.39	1,710.68	1,711.08	1,711.70	1,712.20	1,712.28	1,716.40	1,720.90	1,719.40	1,718.36
21	1,709.93	1,710.25	1,710.40	1,710.69	1,711.08	1,711.74	1,712.22	1,712.27	1,718.81	1,720.78	1,719.32	1,718.34
22	1,709.90	1,710.25	1,710.42	1,710.69	1,711.08	1,711.76	1,712.25	1,712.28	1,719.86	1,720.70	1,719.23	1,718.33
23	1,709.90	1,710.25	1,710.40	1,710.70	1,711.09	1,711.77	1,712.26	1,712.28	1,720.49	1,720.60	1,719.16	1,718.30
24	1,709.90	1,710.25	1,710.41	1,710.75	1,711.10	1,711.77	1,712.28	1,712.37	1,721.28	1,720.49	1,719.08	1,718.28
25	1,709.87	1,710.25	1,710.41	1,710.77	1,711.12	1,711.74	1,712.28	1,712.35	1,721.88	1,720.39	1,718.98	1,718.28
26	1,709.88	1,710.25	1,710.43	1,710.76	1,711.15	1,711.75	1,712.32	1,712.34	1,722.11	1,720.28	1,718.91	1,718.26
27	1,709.89	1,710.25	1,710.44	1,710.77	1,711.18	1,711.82	1,712.33	1,712.39	1,722.22	1,720.18	1,718.84	1,718.24
28	1,709.92	1,710.22	1,710.45	1,710.79	1,711.20	1,711.83	1,712.32	1,712.41	1,722.29	1,720.07	1,718.80	1,718.24
29	1,709.96	1,710.23	1,710.45	1,710.79	-----	1,711.81	1,712.31	1,712.61	1,722.33	1,719.98	1,718.76	1,718.23
30	1,710.05	1,710.21	1,710.46	1,710.79	-----	1,711.83	1,712.31	1,712.70	1,722.37	1,719.86	1,718.71	1,718.23
31	1,710.04	-----	1,710.48	1,710.80	-----	1,711.80	-----	1,712.83	-----	1,719.85	1,718.67	-----
MEAN	1,709.95	1,710.21	1,710.34	1,710.65	1,710.99	1,711.57	1,712.11	1,712.35	1,716.39	1,721.25	1,719.29	1,718.36
MAX	1,710.05	1,710.25	1,710.48	1,710.80	1,711.20	1,711.83	1,712.33	1,712.83	1,722.37	1,722.38	1,719.88	1,718.61
MIN	1,709.87	1,710.04	1,710.21	1,710.48	1,710.80	1,711.23	1,711.81	1,712.27	1,712.92	1,719.85	1,718.67	1,718.23
(+)	29,570	29,930	30,510	31,210	32,110	33,510	34,760	36,080	68,200	58,370	54,080	52,520
(#)	-90	+360	+580	+700	+900	+1,400	+1,250	+1,320	+32,120	-9,830	-4,290	-1,560

CAL YR 1974 (#) -10,070
WTR YR 1975 (#) +22,860

+ CONTENTS, IN ACRE-FEET, AT END OF MONTH.
CHANGE IN CONTENTS, IN ACRE-FEET.

KANSAS RIVER BASIN

69

06871800 NORTH FORK SOLOMON RIVER AT KIRWIN, KS

LOCATION.--Lat 39°39'36", long 99°06'55", in two channels, in SE¼ sec.33 (river outlet gage) and SW¼ sec.34 (spillway gage), T.4 S., R.16 W., Phillips County, 200 ft (61 m) and 600 ft (183 m), respectively, downstream from toe of Kirwin Dam, 0.5 mi (0.8 km) and 0.8 mi (1.3 km), respectively, south of Kirwin, 1.3 mi (2.1 km) upstream from Deer Creek, and at mile 67.2 (108.1 km).

DRAINAGE AREA.--1,367 mi² (3,541 km²).

PERIOD OF RECORD.--August 1919 to June 1925, August 1928 to June 1932, December 1941 to current year.

GAGE.--Water-stage recorder and concrete control on river outlet channel. Datum of gage is 1,659.50 ft (505.816 m) above mean sea level (Bureau of Reclamation bench mark). Water-stage recorder on spillway channel. Datum of spillway channel gage is 1,650.81 ft (503.167 m) above mean sea level (Bureau of Reclamation bench mark). See WSP 1919 for history of changes prior to Jan. 30, 1957.

AVERAGE DISCHARGE (since construction of Kirwin Dam).--20 years (1955-75), 10.4 ft³/s (0.295 m³/s), 7,530 acre-ft/yr (9.28 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 7.8 ft³/s (0.22 m³/s) Sept. 6; no flow for May 1-24.

Period of record: Maximum discharge, 24,000 ft³/s (680 m³/s) Sept. 18, 1919, gage height, 22.5 ft (6.86 m), site and datum then in use, from rating curve extended above 10,000 ft³/s (283 m³/s) on basis of slope-area and contracted-opening measurements at gage height 22.3 ft (6.80 m); maximum discharge since construction of Kirwin Dam in 1955, 1,200 ft³/s (34.0 m³/s) Nov. 16, 1966; no flow at times in 1943, 1948, 1955-67, 1972-75.

Flood in June 1915 reached a stage of about 27 ft (8.2 m), site and datum in use prior to July 1955, from information by local residents.

REMARKS.--Records poor. Flow completely regulated by Kirwin Reservoir since 1955 (see sta 06871700). Figures of flow do not include diversion immediately above station into Kirwin Main Canal. Separate records are collected and computed for a river outlet channel and for spillway channel. Figures given herein represent combined discharge. Records of chemical analyses for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1210: 1919(M). WSP 1440: 1919, 1929, 1931(M), 1942(P), 1944-47, 1948(M), drainage area (present and former sites).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.02	.05	.05	.31	.30	.30	.04	0	.21	.15	.10	.10
2	.02	.04	.07	.30	.30	.30	.03	0	.08	.12	.14	.10
3	.02	.23	.07	.30	.30	.30	.04	0	.06	.11	.12	.10
4	.02	.09	.07	.30	.31	.30	.04	0	.04	.10	.12	.10
5	.02	.06	.07	.30	.31	.30	.04	0	.03	.09	.12	.10
6	.02	.05	.07	.30	.31	.30	.04	0	.03	.08	.12	1.5
7	.02	.03	.07	.30	.30	.30	.05	0	.02	.07	.12	.06
8	.02	.03	.08	.30	.30	.30	.10	0	.10	.06	.12	.05
9	.02	.03	.21	.30	.30	.30	.06	0	1.2	.05	.12	.05
10	.01	.03	.21	.30	.30	.30	.04	0	.70	.06	.12	.05
11	.01	.03	.21	.30	.30	.30	.04	0	.20	.05	.10	.05
12	.02	.03	.31	.30	.30	.30	.04	0	.10	.05	.10	.05
13	.02	.03	.31	.30	.30	.30	.07	0	.07	.05	.12	.04
14	.02	.03	.21	.30	.30	.30	.40	0	.06	.06	.14	.04
15	.02	.03	.31	.30	.30	.30	.20	0	.05	.06	.14	.04
16	.02	.03	.31	.30	.30	.30	.07	0	.04	.06	.12	.04
17	.01	.03	.31	.30	.30	.30	.06	0	.03	.06	.12	.07
18	.01	.03	.31	.30	.30	.30	.05	0	.02	.06	.12	.04
19	.01	.03	.31	.30	.30	.30	.06	0	.02	.06	.12	.04
20	.01	.03	.31	.30	.30	.30	.05	0	.02	.06	.12	.03
21	.01	.03	.31	.30	.30	.30	.04	0	.02	.06	.12	.04
22	.01	.04	.31	.30	.30	.30	.04	0	1.0	.06	.12	.04
23	.01	.03	.31	.30	.30	.30	.04	0	4.1	.06	.10	.04
24	.01	.03	.31	.30	.30	.30	.04	0	2.6	.06	.10	.04
25	.01	.03	.31	.30	.30	.30	.03	.07	1.1	.06	.10	.04
26	.01	.03	.31	.31	.30	.30	.03	.04	.76	.06	.10	.04
27	.02	.03	.31	.31	.30	.30	.02	.02	.56	.06	.10	.04
28	.02	.03	.31	.31	.30	.20	.02	.10	.46	.05	.10	.03
29	.03	.03	.31	.31	---	.06	.01	.50	.36	.05	.12	.03
30	.05	.04	.31	.31	---	.06	.01	1.7	.26	.05	.12	.03
31	.06	---	.31	.30	---	.05	---	.71	---	.06	.10	---
TOTAL	.58	1.26	7.28	9.36	8.43	8.47	1.80	3.14	14.30	2.09	3.58	3.02
MEAN	.019	.042	.23	.30	.30	.27	.060	.10	.48	.067	.12	.10
MAX	.06	.23	.31	.31	.31	.30	.40	1.7	4.1	.15	.14	1.5
MIN	.01	.03	.05	.30	.30	.05	.01	0	.02	.05	.10	.03
AC-FT	1.2	2.5	14	19	17	17	3.6	6.2	28	4.1	7.1	6.0
CAL YR 1974	TOTAL	137.32	MEAN .38	MAX 2.8	MIN .01	AC-FT 272						
WTR YR 1975	TOTAL	63.31	MEAN .17	MAX 4.1	MIN 0	AC-FT 126						

KANSAS RIVER BASIN

06871900 DEER CREEK NEAR PHILLIPSBURG, KS

LOCATION.--Lat 39°46'50", long 99°25'20", in NW¼NW¼ sec.24, T.3 S., R.19 W., Phillips County, at highway bridge 5.0 mi (8.0 km) west of Phillipsburg.

DRAINAGE AREA.--65.0 mi² (168.4 km²).

PERIOD OF RECORD.--October 1966 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,950 ft (594 m), from topographic map.

AVERAGE DISCHARGE.--9 years, 3.81 ft³/s (0.108 m³/s), 2,760 acre-ft/yr (3.40 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,570 ft³/s (101 m³/s) Aug. 13, gage height, 20.39 ft (6.215 m), from rating curve extended as explained below; no flow many days.

Period of record: Maximum discharge, 3,580 ft³/s (101 m³/s) July 19, 1969, gage height, 20.43 ft (6.227 m), from rating curve extended above 650 ft³/s (18.4 m³/s) on basis of contracted-opening measurement of 3,570 ft³/s (101 m³/s); no flow at times in most years

REMARKS.--Records good except those for winter periods, which are poor.

REVISIONS.--The figures of peak discharge for some water years have been revised, as shown in the following table. They supersede figures published in the Water Supply Papers and WRD Kansas, as indicated.

	Water year	Date	Discharge (cfs)	Gage height (feet)
WRD Kansas, Part I (WSP 2120)	1967	July 28, 1967	3,420	19.81
WRD Kansas, Part I (WSP 2120)	1968	Aug. 10, 1968	1,870	13.67
WRD Kansas, Part I (WSP 2120)	1969	July 6, 1969	2,430	15.93
		July 19, 1969	3,580	20.43

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.27	.30	1.0	.90	10	1.1	.45	6.0	.89	.40	.08
2	0	.07	.40	1.1	.95	3.5	1.5	.47	5.3	.81	.20	.06
3	0	.83	.50	1.2	1.0	2.5	1.4	.46	4.9	.65	2.3	.05
4	0	1.8	.60	1.3	1.1	2.0	1.3	.44	4.5	.63	.44	.04
5	0	.33	.80	1.3	1.0	1.5	1.2	.37	4.1	.61	0	.03
6	0	.08	.90	1.4	.70	1.2	1.2	.37	3.9	.48	0	.02
7	0	.05	.60	1.4	.70	1.1	1.6	.30	3.9	.45	0	.02
8	0	.04	.30	1.4	.70	1.0	2.0	.24	366	.56	0	.01
9	0	.05	.37	1.5	.70	1.0	1.7	.23	35	.49	0	.01
10	0	.06	.43	1.3	1.0	1.0	1.2	.23	11	.55	0	0
11	0	.05	.55	.80	1.2	.95	1.2	.27	4.7	.38	0	0
12	0	.06	.50	.50	1.4	.90	1.4	.27	3.5	.22	0	0
13	0	.06	.41	.60	1.5	.80	3.0	.71	3.0	.09	844	0
14	0	.06	.60	1.0	1.5	.85	3.3	.70	2.7	.06	268	0
15	0	.07	.70	1.3	1.6	.90	2.4	.52	2.5	0	9.8	0
16	0	.12	.80	1.8	1.8	1.5	2.0	.39	2.2	.02	4.8	0
17	0	.19	.80	3.0	2.0	2.7	1.9	.33	1.9	0	3.7	.02
18	0	.23	.90	5.0	2.3	3.1	2.0	.29	191	0	3.0	0
19	0	.20	1.0	5.0	3.0	2.4	1.9	.25	10	0	2.3	0
20	0	.15	1.0	5.0	4.0	2.4	1.8	.18	3.3	0	1.8	0
21	0	.20	1.0	5.0	5.0	2.1	1.6	.17	7.4	.03	1.4	0
22	0	.25	1.0	3.0	5.0	2.2	1.7	.20	5.0	.05	1.1	0
23	0	.28	.90	3.5	5.0	2.0	1.8	.30	3.0	0	.80	0
24	0	.23	.80	4.0	7.0	1.5	1.7	.81	2.2	0	.64	0
25	0	.25	.70	3.0	15	1.4	1.6	.52	2.3	0	.50	0
26	0	.29	.85	2.5	50	1.4	1.6	.23	1.8	0	.37	0
27	0	.30	.90	1.5	30	1.7	1.4	9.5	1.5	0	.30	0
28	.01	.31	.80	1.3	25	1.8	2.3	42	1.3	0	.22	0
29	0	.27	.70	1.2	---	1.5	.78	20	1.1	0	.18	0
30	.14	.22	.80	1.1	---	1.4	.53	25	.90	0	.14	4.5
31	1.7	---	.90	1.0	---	1.3	---	11	---	.19	.11	---
TOTAL	1.85	7.37	21.81	64.00	171.05	59.60	50.11	117.20	695.90	7.16	1146.50	4.84
MEAN	.060	.25	.70	2.06	6.11	1.92	1.67	3.78	23.2	.23	37.0	.16
MAX	1.7	1.8	1.0	5.0	50	10	3.3	42	366	.89	844	4.5
MIN	0	.04	.30	.50	.70	.80	.53	.17	.90	0	0	0
AC-FT	3.7	15	43	127	339	118	99	232	1380	14	2270	9.6
CAL YR 1974	TOTAL	839.52	MEAN 2.30	MAX 136	MIN 0	AC-FT 1670						
WTR YR 1975	TOTAL	2347.39	MEAN 6.43	MAX 844	MIN 0	AC-FT 4660						

PEAK DISCHARGE (BASE, 200 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
06-08	1415	11.43	1,340	08-13	2300	20.39	3,570
06-18	0845	7.49	533				

KANSAS RIVER BASIN

71

06872500 NORTH FORK SOLOMON RIVER AT PORTIS, KS

LOCATION.--Lat 39°33'15", long 98°41'31", in SW¼SW¼SW¼ sec.5, T.6 S., R.12 W., Osborne County, at downstream side of bridge on U.S. Highway 281, 0.5 mi (0.8 km) south of Portis, and at mile 27.0 (43.4 km).

DRAINAGE AREA.--2,315 mi² (5,996 km²), approximately.

PERIOD OF RECORD.--September 1945 to current year. Prior to Oct. 1, 1964, published as "near Downs".

GAGE.--Water-stage recorder. Datum of gage is 1,490.71 ft (454.368 m) above mean sea level. Prior to Dec. 5, 1946, nonrecording gage and Dec. 5, 1946, to Sept. 30, 1964, water-stage recorder at site 9.0 mi (14.5 km) downstream at datum 30.39 ft (9.263 m) lower.

AVERAGE DISCHARGE.--30 years, 145 ft³/s (4.106 m³/s), 105,100 acre-ft/yr (130 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,400 ft³/s (125 m³/s) June 22, gage height, 17.78 ft (5.419 m); minimum, 26 ft³/s (0.74 m³/s) Sept. 9, 12-14.

Period of record: Maximum discharge, 35,700 ft³/s (1,010 m³/s) July 12, 1951, gage height, 30.41 ft (9.269 m), site and datum then in use, from rating curve extended above 21,000 ft³/s (595 m³/s); no flow at times in 1955-56.

Flood of June 15, 1915, reached a stage about 1 ft (0.3 m) higher than that of July 12, 1951, from information by Kansas Highway Commission.

REMARKS.--Records good except those for winter periods, which are poor. Flow partially regulated by Kirwin Reservoir 40.8 mi (65.6 km) upstream beginning Mar. 7, 1955 (see sta 06871700). Records of chemical analyses for the current water year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33	47	40	41	38	137	44	50	127	87	53	44
2	33	46	40	42	41	182	43	44	218	84	59	45
3	32	52	42	41	41	145	42	44	137	83	89	47
4	33	51	44	36	43	104	41	44	568	77	88	44
5	32	50	44	36	36	86	44	42	163	74	77	48
6	33	48	42	38	35	77	44	41	94	69	63	39
7	33	47	42	40	35	68	46	39	73	70	54	37
8	33	45	41	40	40	61	46	37	84	65	52	33
9	34	43	41	40	40	56	45	36	411	60	50	31
10	35	44	42	40	45	61	45	37	659	58	49	27
11	34	42	42	35	45	57	43	36	231	57	47	27
12	34	41	42	35	45	57	42	35	134	55	45	27
13	36	42	42	40	45	52	47	40	101	54	46	27
14	35	41	42	45	42	48	50	41	84	53	73	28
15	33	41	43	50	40	51	50	43	72	53	1290	28
16	34	41	41	50	36	53	51	41	65	54	353	28
17	35	41	41	43	36	56	51	38	60	54	154	30
18	35	42	44	42	38	60	51	36	293	54	101	48
19	36	43	43	42	44	102	48	35	554	52	79	72
20	36	42	41	41	48	95	46	33	501	53	69	44
21	38	42	41	43	47	75	47	32	335	53	61	39
22	38	43	42	41	44	72	45	32	2940	57	56	33
23	36	43	41	42	45	64	44	33	1120	76	51	31
24	37	43	40	43	46	57	43	31	1520	71	50	29
25	38	42	34	43	56	50	44	32	413	56	47	28
26	38	43	35	42	68	48	44	36	224	52	45	28
27	40	41	40	42	95	52	55	44	155	50	44	28
28	42	41	40	40	112	50	85	67	124	47	42	28
29	45	42	41	40	---	50	128	60	108	44	44	28
30	46	40	41	42	---	49	62	154	96	47	45	28
31	50	---	41	39	---	47	---	153	---	52	47	---
TOTAL	1127	1309	1275	1274	1326	2222	1516	1466	11664	1871	3423	1054
MEAN	36.4	43.6	41.1	41.1	47.4	71.7	50.5	47.3	389	60.4	110	35.1
MAX	50	52	44	50	112	182	128	154	2940	87	1290	72
MIN	32	40	34	35	35	47	41	31	60	44	42	27
AC-FT	2240	2600	2530	2530	2630	4410	3010	2910	23140	3710	6790	2090
CAL YR 1974	TOTAL	30798	MEAN 84.4	MAX 513	MIN 30	AC-FT 61090						
WTR YR 1975	TOTAL	29527	MEAN 80.9	MAX 2940	MIN 27	AC-FT 58570						

PEAK DISCHARGE (REGULATED) ABOVE 1,400 CFS

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
06-22	1100	17.78	4,400	08-15	1300	12.40	2,280
06-24	0700	12.44	2,260				

KANSAS RIVER BASIN

06873000 SOUTH FORK SOLOMON RIVER ABOVE WEBSTER RESERVOIR, KS

LOCATION.--Lat 39°22'26", long 99°34'54", in SW¼NW¼ sec.8, T.8 S., R.20 W., Rooks County, at downstream side of highway bridge, 4.0 mi (6.4 km) north of Damar, 7.0 mi (11 km) downstream from Wild Horse Creek, and 11 mi (18 km) upstream from Webster Dam.

DRAINAGE AREA.--1,040 mi² (2,690 km²), approximately.

PERIOD OF RECORD.--January 1945 to current year. Prior to October 1953, published as "at Webster".

GAGE.--Water-stage recorder. Datum of gage is 1,936.51 ft (590.248 m) above mean sea level (levels by Bureau of Reclamation). Prior to May 17, 1946, nonrecording gage, May 17, 1946, to May 20, 1951, water-stage recorder, and May 21 to Sept. 30, 1951, nonrecording gage, all at site 8.0 mi (13 km) downstream at datum 94.52 ft (28.810 m) lower. Oct. 1, 1951, to May 22, 1952, nonrecording gage at bridge near Stockton, 23 mi (37 km) downstream, at different datum. May 23, 1952, to May 23, 1954, water-stage recorder at site 8.0 mi (13 km) downstream at datum 94.52 ft (28.810 m) lower.

AVERAGE DISCHARGE.--30 years, 72.2 ft³/s (2.045 m³/s), 52,310 acre-ft/yr (64.5 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 8,910 ft³/s (252 m³/s) June 19, gage height, 11.80 ft (3.597 m); minimum, 0.30 ft³/s (0.008 m³/s) Oct. 1.

Period of record: Maximum discharge, 55,200 ft³/s (1,560 m³/s) July 12, 1951, gage height, 14.9 ft (4.54 m), from floodmarks, site and datum then in use, from rating curve extended above 11,000 ft³/s (312 m³/s) on basis of slope-area measurement of peak flow; no flow at times in most years.

Maximum flood known, that of July 12, 1951; second highest known, that of June 1908, 13.4 ft (4.08 m), present site and datum, from information obtained from Kansas State Highway Commission.

REMARKS.--Records fair. Records of chemical analyses for the current water year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1440: 1945-48, 1950.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.35	1.1	2.5	2.6	4.0	15	15	16	110	161	48	5.5
2	.45	1.1	2.5	2.9	4.8	15	15	16	73	143	573	4.2
3	.50	1.1	2.5	3.2	5.2	14	14	18	55	126	206	3.7
4	.50	1.1	2.5	3.2	6.0	14	15	18	45	112	108	3.6
5	.50	1.1	2.5	3.2	5.6	14	16	17	38	101	72	4.2
6	.55	1.1	2.5	3.2	7.2	16	16	16	33	90	57	4.0
7	.60	1.1	2.5	3.5	6.0	16	16	14	30	82	46	3.5
8	.72	1.1	2.5	3.7	4.8	14	19	14	36	76	36	3.0
9	.72	1.1	2.5	3.7	3.8	15	19	13	760	72	31	3.0
10	.66	1.1	2.5	3.7	4.8	12	17	13	446	72	26	2.7
11	.72	1.1	2.4	3.4	5.2	14	16	12	178	67	23	2.4
12	.78	1.1	2.3	3.5	4.8	16	15	11	109	61	19	3.1
13	.90	1.5	2.3	3.5	5.6	15	18	16	71	57	18	2.7
14	.96	2.5	2.3	3.5	5.6	16	22	17	55	52	169	2.3
15	1.0	2.5	2.3	3.5	5.6	18	23	18	45	47	39	3.4
16	1.0	2.5	2.3	3.8	4.4	20	21	15	36	42	25	3.3
17	1.0	2.5	2.3	4.0	5.2	22	20	14	30	37	21	3.7
18	1.1	2.5	2.3	4.4	5.6	22	20	12	1760	34	17	2.7
19	1.1	2.5	2.3	5.2	6.0	22	19	9.5	7190	31	15	2.3
20	1.1	2.6	2.3	4.8	8.0	20	18	7.4	2070	28	33	2.3
21	1.1	2.7	2.3	5.2	11	18	17	5.2	1260	25	80	2.1
22	1.1	2.7	2.3	4.0	12	18	16	5.2	1090	24	47	2.1
23	1.1	2.6	2.3	3.8	11	18	16	5.2	1930	22	31	2.1
24	1.1	2.6	2.3	4.8	11	17	15	7.6	1090	20	24	2.0
25	1.1	2.5	2.3	5.6	13	15	15	8.0	555	19	18	2.0
26	1.1	2.5	2.5	5.2	14	14	15	4.4	361	17	15	2.0
27	1.1	2.5	2.5	5.2	14	16	16	4.0	274	16	13	2.0
28	1.1	2.5	2.5	4.8	14	15	19	55	227	14	11	2.0
29	1.1	2.5	2.5	4.8	---	14	22	200	198	12	9.7	2.0
30	1.1	2.5	2.5	4.8	---	14	18	209	175	11	8.4	1.8
31	1.1	---	2.5	4.0	---	15	---	198	---	17	7.6	---
TOTAL	27.31	57.9	74.6	124.7	208.2	504	523	988.5	20330	1688	1846.7	85.7
MEAN	.88	1.93	2.41	4.02	7.44	16.3	17.4	31.9	678	54.5	59.6	2.86
MAX	1.1	2.7	2.5	5.6	14	22	23	209	7190	161	573	5.5
MIN	.35	1.1	2.3	2.6	3.8	12	14	4.0	30	11	7.6	1.8
AC-FT	54	115	148	247	413	1000	1040	1960	40320	3350	3660	170

CAL YR 1974 TOTAL 7248.32 MEAN 19.9 MAX 179 MIN .19 AC-FT 14380
WTR YR 1975 TOTAL 26458.61 MEAN 72.5 MAX 7190 MIN .35 AC-FT 52480

PEAK DISCHARGE (BASE, 3,200 CFS)

DATE TIME G.H. DISCHARGE
06-19 1500 11.80 8,910

D6873100 WEBSTER RESERVOIR NEAR STOCKTON, KS

LOCATION.--Lat 39°23'29", long 99°25'33", in SW 1/4 NE 1/4 sec. 3, T.8 S., R.19 W., Rooks County, on southeast shore near Webster Dam on South Fork Solomon River, 8 mi (12.9 km) west of Stockton, and at mile 92.4 (148.7 km).

DRAINAGE AREA.--1,150 mi² (2,980 km²).

PERIOD OF RECORD.--June 1956 to current year. (Prior to October 1956, monthly records only.)

GAGE.--Water-stage recorder. Prior to July 31, 1968, elevations below 1,873 ft (570.9 m) from mercury-column gage near south end of dam read once daily. Datum of gage is at mean sea level (levels by Bureau of Reclamation).

EXTREMES.--Current year: Maximum elevation, 1,886.37 ft (574.966 m) July 1, contents, 56,530 acre-ft (69.7 hm³); minimum, 1,868.52 ft (569.525 m) Dec. 7, 8, 10, 14, contents, 15,710 acre-ft (19.4 hm³).

Period of record: Maximum elevation, 1,899.66 ft (579.016 m) June 10, 1961, contents, 107,600 acre-ft (133 hm³); minimum since first filling of irrigation pool, 1,857.33 ft (566.114 m) Oct. 23, 24, 1971, contents, 3,210 acre-ft (3.96 hm³).

REMARKS.--Reservoir is formed by compacted earthfill dam. Storage began May 3, 1956. Total capacity, 401,600 acre-ft (495 hm³), consisting of the following: Dead storage, 2,184 acre-ft (2.96 hm³) below elevation 1,855.5 ft (565.56 m), sill of trashrack; irrigation pool, 74,250 acre-ft (91.6 hm³) between elevations 1,855.5 (565.56 m) and 1,892.2 ft (576.75 m); flood control pool, 184,300 acre-ft (227 hm³) between elevations 1,892.2 ft (576.74 m) and 1,923.7 ft (586.34 m); and uncontrolled storage, 140,900 acre-ft (174 hm³) between elevations 1,923.7 ft (586.34 m) and 1,938.0 ft (590.72 m). Reservoir is used to store water for flood control and irrigation in Webster Unit of approximately 8,500 acres (3,440 hm³), Missouri River Basin project. Figures given herein represent total contents.

Capacity table (elevation, in feet, and contents, in acre-feet)

1,868	14,900	1,876	29,530	1,884	49,470
1,870	18,100	1,878	33,990	1,886	55,390
1,872	21,610	1,880	38,790	1,888	61,720
1,874	25,410	1,882	43,940		

ELEVATION, IN FEET, AT 2400, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,868.75	1,868.63	1,868.55	1,868.63	1,868.74	1,869.06	1,869.54	1,870.12	1,871.27	1,886.35	1,883.28	1,880.79
2	1,868.73	1,868.63	1,868.55	1,868.64	1,868.74	1,869.05	1,869.56	1,870.15	1,871.39	1,886.32	1,883.36	1,880.76
3	1,868.75	1,868.69	1,868.55	1,868.64	1,868.75	1,869.06	1,869.60	1,870.18	1,871.51	1,886.31	1,883.39	1,880.71
4	1,868.72	1,868.72	1,868.56	1,868.65	1,868.79	1,869.11	1,869.62	1,870.19	1,871.56	1,886.27	1,883.35	1,880.71
5	1,868.68	1,868.70	1,868.55	1,868.65	1,868.78	1,869.13	1,869.62	1,870.19	1,871.62	1,886.24	1,883.28	1,880.70
6	1,868.65	1,868.70	1,868.55	1,868.67	1,868.80	1,869.14	1,869.63	1,870.18	1,871.63	1,886.15	1,883.19	1,880.69
7	1,868.65	1,868.71	1,868.52	1,868.67	1,868.81	1,869.15	1,869.66	1,870.17	1,871.69	1,886.08	1,883.09	1,880.66
8	1,868.65	1,868.70	1,868.53	1,868.68	1,868.79	1,869.14	1,869.72	1,870.16	1,871.92	1,885.95	1,882.97	1,880.65
9	1,868.65	1,868.70	1,868.54	1,868.69	1,868.80	1,869.20	1,869.73	1,870.17	1,872.01	1,885.88	1,882.88	1,880.63
10	1,868.65	1,868.69	1,868.55	1,868.70	1,868.82	1,869.24	1,869.74	1,870.18	1,872.74	1,885.79	1,882.78	1,880.62
11	1,868.63	1,868.69	1,868.56	1,868.67	1,868.82	1,869.24	1,869.74	1,870.17	1,873.09	1,885.68	1,882.65	1,880.56
12	1,868.61	1,868.68	1,868.56	1,868.66	1,868.83	1,869.27	1,869.75	1,870.15	1,873.33	1,885.57	1,882.52	1,880.55
13	1,868.63	1,868.65	1,868.54	1,868.68	1,868.83	1,869.28	1,869.82	1,870.18	1,873.46	1,885.49	1,882.44	1,880.53
14	1,868.61	1,868.66	1,868.62	1,868.68	1,868.84	1,869.30	1,869.88	1,870.19	1,873.56	1,885.38	1,882.41	1,880.50
15	1,868.62	1,868.66	1,868.61	1,868.70	1,868.84	1,869.31	1,869.91	1,870.19	1,873.65	1,885.27	1,882.37	1,880.50
16	1,868.61	1,868.67	1,868.60	1,868.69	1,868.87	1,869.35	1,869.94	1,870.18	1,873.69	1,885.15	1,882.28	1,880.50
17	1,868.60	1,868.67	1,868.61	1,868.70	1,868.90	1,869.37	1,869.94	1,870.18	1,873.72	1,885.00	1,882.20	1,880.52
18	1,868.60	1,868.67	1,868.60	1,868.70	1,868.90	1,869.41	1,869.95	1,870.18	1,874.69	1,884.90	1,882.10	1,880.48
19	1,868.60	1,868.66	1,868.61	1,868.70	1,868.93	1,869.44	1,869.99	1,870.15	1,879.82	1,884.78	1,882.03	1,880.45
20	1,868.58	1,868.65	1,868.61	1,868.73	1,868.93	1,869.48	1,870.00	1,870.12	1,881.95	1,884.65	1,881.93	1,880.42
21	1,868.58	1,868.66	1,868.62	1,868.72	1,868.93	1,869.49	1,870.00	1,870.12	1,882.79	1,884.53	1,881.89	1,880.40
22	1,868.57	1,868.65	1,868.62	1,868.74	1,868.93	1,869.50	1,870.06	1,870.12	1,883.52	1,884.41	1,881.80	1,880.39
23	1,868.55	1,868.62	1,868.60	1,868.74	1,868.95	1,869.53	1,870.07	1,870.12	1,884.55	1,884.30	1,881.74	1,880.36
24	1,868.55	1,868.63	1,868.60	1,868.75	1,868.98	1,869.52	1,870.08	1,870.18	1,885.36	1,884.15	1,881.64	1,880.33
25	1,868.53	1,868.63	1,868.60	1,868.76	1,868.99	1,869.50	1,870.09	1,870.15	1,885.77	1,884.04	1,881.49	1,880.32
26	1,868.53	1,868.61	1,868.60	1,868.75	1,869.00	1,869.50	1,870.12	1,870.14	1,885.99	1,883.93	1,881.40	1,880.33
27	1,868.53	1,868.60	1,868.62	1,868.73	1,869.02	1,869.55	1,870.15	1,870.24	1,886.12	1,883.81	1,881.28	1,880.28
28	1,868.55	1,868.58	1,868.62	1,868.75	1,869.05	1,869.55	1,870.13	1,870.27	1,886.23	1,883.65	1,881.16	1,880.27
29	1,868.59	1,868.58	1,868.62	1,868.75	-----	1,869.55	1,870.13	1,870.60	1,886.30	1,883.51	1,881.08	1,880.28
30	1,868.64	1,868.56	1,868.62	1,868.74	-----	1,869.58	1,870.12	1,870.85	1,886.35	1,883.38	1,880.97	1,880.25
31	1,868.63	-----	1,868.62	1,868.73	-----	1,869.54	-----	1,871.08	-----	1,883.33	1,880.88	-----
MEAN	1,868.62	1,868.66	1,868.58	1,868.70	1,868.87	1,869.34	1,869.88	1,870.23	1,877.38	1,885.04	1,882.25	1,880.50
MAX	1,868.75	1,868.72	1,868.62	1,868.76	1,869.05	1,869.58	1,870.15	1,871.08	1,886.35	1,886.35	1,883.39	1,880.79
MIN	1,868.53	1,868.56	1,868.52	1,868.63	1,868.74	1,869.05	1,869.54	1,870.12	1,871.27	1,883.33	1,880.88	1,880.25
(+)	15,880	15,770	15,860	16,040	16,550	17,340	18,300	19,960	56,460	47,570	41,020	39,420
(#)	-240	-110	+90	+180	+510	+790	+960	+1,660	+36,500	-8,890	-6,550	-1,600

CAL YR 1974 (#) -5,570

WTR YR 1975 (#) +23,300

+ CONTENTS, IN ACRE-FEET, AT END OF MONTH.

* CHANGE IN CONTENTS, IN ACRE-FEET.

KANSAS RIVER BASIN

06873200 SOUTH FORK SOLOMON RIVER BELOW WEBSTER RESERVOIR, KS

LOCATION.--Lat 39°24'34", long 99°24'53", in SW¼SW¼SW¼ sec.26, T.7 S., R.19 W., Rooks County, 0.4 mi (0.6 km) downstream from Webster Dam, 1.1 mi (1.8 km) upstream from Sand Creek, 8.0 mi (13 km) west of Stockton, and at mile 92.0 (148 km).

DRAINAGE AREA.--1,150 mi² (2,980 km²).

PERIOD OF RECORD.--October 1956 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,828.50 ft (557.327 m) above mean sea level (Bureau of Reclamation bench mark). Prior to Apr. 9, 1963, water-stage recorders in two channels 0.2 mi (0.3 km) upstream at different datums.

AVERAGE DISCHARGE.--19 years, 49.6 ft³/s (1.405 m³/s), 35,940 acre-ft/yr (44.3 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 219 ft³/s (6.20 m³/s) July 28-30; maximum gage height, 3.23 ft (0.984 m) July 28, 29; no flow at times.

Period of record: Maximum discharge, 2,070 ft³/s (58.6 m³/s) July 10, 1962; no flow at times in most years.

REMARKS.--Records fair. Flow completely regulated by Webster Reservoir (see sta 06873100). Records of chemical analyses for the current water year are published in Part 2 of this report.

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.03	.15	.03				0	0	.23	99	166	65
2	.02	.14	.03				0	0	.24	117	149	4.6
3	.02	.29	.03				0	0	.25	120	146	3.0
4	0	.17	.03				0	0	.16	130	151	1.7
5	0	.13	.03				0	0	.12	143	156	1.8
6	0	.11	.03				0	0	.12	168	148	.77
7	0	.17	.02				0	0	.09	180	142	.53
8	0	.32	.01				0	0	.37	191	141	.38
9	.04	.17	0				0	0	.17	184	140	.32
10	.06	.12	0				0	0	.14	169	146	.26
11	0	.08	0				0	0	.10	155	149	.28
12	0	.06	0				0	0	.08	154	154	.19
13	.10	.05	0				0	0	.07	154	153	.17
14	.06	.05	.02				.01	0	.09	161	139	.17
15	.04	.05	.04				0	0	.06	166	124	.16
16	.03	.04	.01				0	0	.04	168	115	.15
17	.02	.03	0				0	0	.03	168	114	.21
18	0	.03	0				0	0	1.1	168	115	.15
19	0	.01	0				0	0	.18	170	110	.14
20	0	.04	0				0	0	.20	173	105	.11
21	0	.06	0				0	0	.37	176	101	.10
22	0	.06	0				0	0	.32	179	98	.09
23	0	.06	0				0	0	.25	185	101	.07
24	0	.06	0				0	0	.21	190	114	.07
25	.01	.06	0				0	0	.16	189	120	.07
26	.01	.05	0				0	0	.13	189	129	.06
27	.04	.05	0				0	0	13	193	134	.04
28	.41	.06	0				0	0	42	210	134	.05
29	.29	.04	0		---		0	.12	45	217	128	.03
30	.23	.03	0		---		0	.24	63	204	122	.01
31	.17	---	0		---		---	.20	---	191	122	---
TOTAL	1.58	2.74	.28	0	0	0	.01	.56	168.28	5261	4066	80.68
MEAN	.051	.091	.009	0	0	0	0	.018	5.61	170	131	2.69
MAX	.41	.32	.04	0	0	0	.01	.24	.63	217	166	.65
MIN	0	.01	0	0	0	0	0	0	.03	99	98	.01
AC-FT	3.1	5.4	.6	0	0	0	.02	1.1	334	10440	8060	160
CAL YR 1974 TOTAL	9432.01			MEAN 25.8	MAX 190	MIN 0	AC-FT 18710					
WTR YR 1975 TOTAL	9581.13			MEAN 26.2	MAX 217	MIN 0	AC-FT 19000					

KANSAS RIVER BASIN

75

06873700 KILL CREEK NEAR BLOOMINGTON, KS

LOCATION.--Lat 39°22'45", long 98°51'33", in NW¼NW¼ sec.11, T.8 S., R.14 W., Osborne County, at downstream side county highway bridge, 9.0 mi (14.5 km) southwest of Bloomington, and 9.6 mi (15.4 km) upstream from mouth.

DRAINAGE AREA.--52 mi² (135 km²), approximately.

PERIOD OF RECORD.--April 1963 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,670 ft (509.0 m), from topographic map.

AVERAGE DISCHARGE.--12 years, 2.59 ft³/s (0.0734 m³/s), 1,880 acre-ft/yr (2.32 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 258 ft³/s (7.31 m³/s) May 30, gage height, 9.65 ft (2.941 m); no flow at times.

Period of record: Maximum discharge, 4,370 ft³/s (124 m³/s) June 9, 1968, gage height, 18.90 ft (5.761 m), from rating curve extended above 1,000 ft³/s (28 m³/s) on basis of slope-area measurement; no flow most days.

REMARKS.--Records poor.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.24	1.8	1.9	1.6	1.7	2.0	1.7	1.7	4.1	1.9	.10	.50
2	.27	1.6	1.8	1.9	2.0	2.0	1.6	1.7	3.0	1.9	.10	.20
3	.27	2.8	1.9	1.8	2.0	2.0	1.6	1.9	2.7	1.8	.10	.10
4	.30	2.4	2.0	1.8	2.2	1.9	1.9	1.8	2.5	1.6	.10	.10
5	.30	2.0	1.9	1.9	1.9	2.0	1.9	1.7	2.3	1.6	.10	.10
6	.42	1.7	1.9	1.9	1.8	2.0	1.7	1.6	2.2	1.7	.10	0
7	.42	1.6	1.9	2.0	1.7	2.0	1.7	1.5	2.2	1.5	0	0
8	.39	1.6	1.3	2.0	1.8	1.9	1.8	1.3	2.6	1.5	0	0
9	.39	1.6	1.6	2.1	1.7	1.5	1.6	1.2	2.6	1.0	0	0
10	.39	1.6	1.7	1.6	1.8	2.1	1.5	1.2	2.0	1.0	0	0
11	.42	1.6	1.8	1.9	1.9	2.2	1.2	1.2	1.9	1.0	0	0
12	.45	1.6	1.8	1.5	1.9	2.1	1.2	1.2	1.8	1.0	0	0
13	.48	1.6	1.8	1.5	2.0	1.6	1.7	1.3	1.8	.50	.50	0
14	.51	1.6	1.9	1.7	2.0	1.7	2.2	1.4	1.7	.50	5.0	.50
15	.54	1.6	2.0	1.9	1.8	2.0	2.0	1.3	1.6	.50	2.0	.50
16	.60	1.6	1.8	2.0	1.8	2.1	1.7	1.1	1.6	.50	1.0	.50
17	.72	1.7	1.7	2.0	1.8	2.3	1.7	1.0	1.6	.50	1.0	.50
18	.69	1.7	2.0	2.0	1.8	2.3	1.7	.84	22	.50	1.0	.50
19	.87	1.8	1.9	2.2	1.9	2.2	1.6	.78	8.6	.50	.50	.50
20	.90	1.8	1.8	2.0	1.9	2.0	1.4	.72	2.1	.50	.50	.20
21	1.1	1.8	1.8	2.1	2.1	1.9	1.4	.63	8.3	.20	.50	.20
22	1.3	1.8	2.0	1.7	2.0	1.8	1.4	.57	18	.20	.20	.20
23	1.2	1.8	1.8	1.9	1.8	1.7	1.4	.66	19	.20	.20	.20
24	1.3	1.8	1.3	2.0	2.1	1.5	1.4	.66	6.3	.20	.20	0
25	1.4	1.8	1.6	2.0	2.2	1.4	1.3	.66	4.3	.20	.20	0
26	1.5	1.9	1.7	2.0	2.0	1.4	1.3	.60	3.0	.20	.20	0
27	1.7	1.9	1.8	2.0	2.0	1.9	3.7	.54	2.6	.20	.20	0
28	1.9	1.9	1.8	1.7	2.0	1.8	4.8	2.3	2.5	.20	1.0	0
29	2.6	1.8	1.8	1.8	---	1.7	2.4	14	2.2	.10	2.0	0
30	3.2	1.8	1.6	2.0	---	1.7	1.8	132	2.0	.10	1.0	0
31	3.4	---	1.8	1.7	---	1.7	---	11	---	.10	1.0	---
TOTAL	30.17	53.6	55.4	58.2	53.6	58.4	54.3	190.06	139.1	23.40	18.80	4.80
MEAN	.97	1.79	1.79	1.88	1.91	1.88	1.81	6.13	4.64	.75	.61	.16
MAX	3.4	2.8	2.0	2.2	2.2	2.3	4.8	132	22	1.9	5.0	.50
MIN	.24	1.6	1.3	1.5	1.7	1.4	1.2	.54	1.6	.10	0	0
AC-FT	60	106	110	115	106	116	108	377	276	46	37	9.5

CAL YR 1974 TOTAL 2528.94 MEAN 6.93 MAX 71 MIN 0 AC-FT 5020
WTR YR 1975 TOTAL 739.83 MEAN 2.03 MAX 132 MIN 0 AC-FT 1470

PEAK DISCHARGE (BASE, 300 CFS).--NO PEAK ABOVE BASE.

KANSAS RIVER BASIN

06874000 SOUTH FORK SOLOMON RIVER AT OSBORNE, KS

LOCATION.--Lat 39°25'43", long 98°41'40", in SW¼NW¼SW¼ sec.20, T.7 S., R.12 W., Osborne County, at downstream side of bridge on U.S. Highway 281, 0.5 mi (0.8 km) south of Osborne, 0.6 mi (1.0 km) downstream from Covert Creek, and at mile 27.6 (44.4 km).

DRAINAGE AREA.--2,012 mi² (5,211 km²).

PERIOD OF RECORD.--March 1946 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,505.09 ft (458.751 m) above mean sea level. Prior to Dec. 12, 1946, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--29 years, 134 ft³/s (3.795 m³/s), 97,080 acre-ft/yr (120 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,360 ft³/s (66.8 m³/s) June 23, gage height, 15.43 ft (4.703 m); minimum, 8.8 ft³/s (0.25 m³/s) Aug. 13.

Period of record: Maximum discharge, 81,200 ft³/s (2,300 m³/s) July 13, 1951, gage height, 27.65 ft (8.428 m), from rating curve extended above 16,000 ft³/s (453 m³/s) on basis of slope-area and contracted-opening measurement of peak flow; no flow Aug. 21, 1946, Apr. 21, 1948, Aug. 8, 1968.

REMARKS.--Records good except those for winter periods, which are poor. Flow moderately regulated since 1956 by Webster Reservoir 64.8 mi (104 km) upstream (see sta 06873100). Diversions above station for irrigation. Occasional low water regulation by Osborne city reservoir 1.5 mi (2.4 km) upstream. Records of chemical analyses for the current water year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	29	25	25	26	31	27	29	138	68	27	34
2	20	26	26	27	28	30	28	28	90	62	36	39
3	20	35	26	26	28	29	33	28	76	58	39	55
4	20	34	27	26	32	29	30	27	55	59	28	40
5	20	30	28	26	28	29	30	27	45	55	22	39
6	21	28	27	29	25	29	31	26	45	48	20	34
7	20	26	27	28	25	29	30	26	67	46	23	31
8	20	26	26	27	25	28	31	25	115	48	29	29
9	20	26	26	26	25	25	31	24	110	42	19	27
10	21	27	27	26	29	28	31	24	78	42	16	25
11	21	26	27	23	30	33	29	23	80	38	13	24
12	21	26	27	23	28	31	29	23	70	37	12	24
13	21	26	27	23	30	30	30	24	60	34	13	24
14	22	25	28	24	27	28	37	25	51	32	27	24
15	22	25	28	25	27	30	35	24	45	31	93	24
16	22	25	26	26	21	31	34	23	42	31	84	24
17	22	25	27	28	21	33	33	23	42	30	62	31
18	23	25	26	28	23	39	31	22	481	30	52	40
19	22	26	28	29	25	34	31	21	343	30	47	29
20	22	26	28	28	30	33	30	20	329	27	45	25
21	22	26	27	29	32	33	30	20	145	29	42	23
22	22	26	27	27	31	32	29	20	1500	28	36	22
23	22	26	27	27	30	31	29	20	1980	23	34	25
24	22	26	26	28	29	30	29	20	916	24	31	31
25	22	26	27	28	35	28	28	20	406	24	26	25
26	22	26	25	28	34	28	27	20	222	29	21	23
27	22	26	30	28	32	30	31	19	138	29	18	22
28	23	26	28	27	31	30	60	26	112	24	22	22
29	27	26	27	27	---	31	44	37	95	22	28	23
30	29	25	28	32	---	30	33	742	77	22	28	22
31	31	---	27	28	---	28	---	350	---	25	33	---
TOTAL	683	801	836	832	787	940	961	1786	7953	1127	1026	860
MEAN	22.0	26.7	27.0	26.8	28.1	30.3	32.0	57.6	265	36.4	33.1	28.7
MAX	31	35	30	32	35	39	60	742	1980	68	93	55
MIN	19	25	25	23	21	25	27	19	42	22	12	22
AC-FT	1350	1590	1660	1650	1560	1860	1910	3540	15770	2240	2040	1710

CAL YR 1974 TOTAL 35800 MEAN 98.1 MAX 947 MIN 11 AC-FT 71010
WTR YR 1975 TOTAL 18592 MEAN 50.9 MAX 1980 MIN 12 AC-FT 36880

PEAK DISCHARGE (REGULATED) ABOVE 600 CFS

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
05-30	1200	11.11	1,020	06-23	0800	15.43	2,360
06-18	1600	10.19	838				

06874200 WACONDA LAKE AT GLEN ELDER, KS

LOCATION.--Lat 39°29'46", long 98°18'48", in SW $\frac{1}{4}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.27, T.6 S., R.9 W., Mitchell County, in outlet structure of Glen Elder Dam on Solomon River, southwest edge of Glen Elder, and at mile 172.4 (277.4 km).

DRAINAGE AREA.--5,076 mi² (13,150 km²).

PERIOD OF RECORD.--January 1969 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Bureau of Reclamation). Prior to June 4, 1969, nonrecording gage at same site and datum.

EXTREMES.--Current year: Maximum elevation, 1,459.43 ft (444.834 m) June 27, contents, 292,700 acre-ft (361 hm³); minimum, 1,454.34 ft (443.283 m) Oct. 20, contents, 225,900 acre-ft (279 hm³).

Period of record: Maximum elevation, 1,465.26 ft (446.611 m) Oct. 20, 1973, contents, 384,300 acre-ft (474 hm³); minimum since pool first filled, 1,434.89 ft (437.354 m) Oct. 4, 12, 1969, contents, 65,440 acre-ft (80.7 hm³).

REMARKS.--Reservoir is formed by compacted earthfill dam. Date of closure was Oct. 18, 1967. Regulated storage began Jan. 1, 1969. Total capacity, 1,128,700 acre-ft (1,390 hm³) consisting of the following: Dead storage, 1,236 acre-ft (1.52 hm³) below elevation 1,407.8 ft (429.10 m); conservation pool, 240,200 acre-ft (296 hm³) between elevations 1,407.8 ft (429.10 m) and 1,455.6 ft (443.67 m); flood control pool, 722,300 acre-ft (891 hm³) between elevations 1,455.6 ft (443.67 m) and 1,488.3 ft (453.63 m); and surcharge pool, 165,000 acre-ft (203 hm³) between elevations 1,488.3 ft (453.63 m) and 1,492.9 ft (455.04 m). Figures given herein represent total contents.

Inflow partially regulated by Webster Reservoir (see sta 06873100) and Kirwin Reservoir (see sta 06871700). Diversions for irrigation above station.

Capacity table (elevation, in feet, and contents, in acre-feet)
(Based on survey made in June 1970 by U.S. Bureau of Reclamation)

1,454	221,800	1,458	272,800
1,456	246,500	1,460	300,800

ELEVATION, IN FEET, AT 2400, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,454.38	1,454.49	1,454.70	1,454.93	1,455.32	1,455.53	1,455.49	1,455.52	1,456.09	1,458.55	1,455.21	1,455.25
2	1,454.37	1,454.48	1,454.70	1,455.00	1,455.32	1,455.54	1,455.49	1,455.52	1,456.21	1,458.19	1,455.19	1,455.23
3	1,454.38	1,454.57	1,454.71	1,454.99	1,455.37	1,455.57	1,455.47	1,455.50	1,456.27	1,457.83	1,455.19	1,455.20
4	1,454.38	1,454.58	1,454.73	1,454.97	1,455.43	1,455.57	1,455.43	1,455.49	1,456.34	1,457.47	1,455.17	1,455.23
5	1,454.38	1,454.56	1,454.75	1,455.00	1,455.43	1,455.58	1,455.43	1,455.47	1,456.35	1,457.11	1,455.15	1,455.20
6	1,454.38	1,454.57	1,454.78	1,455.02	1,455.42	1,455.59	1,455.42	1,455.45	1,456.30	1,456.73	1,455.09	1,455.20
7	1,454.37	1,454.60	1,454.78	1,455.03	1,455.43	1,455.58	1,455.42	1,455.45	1,456.22	1,456.36	1,455.10	1,455.17
8	1,454.37	1,454.58	1,454.78	1,455.02	1,455.42	1,455.57	1,455.45	1,455.40	1,456.28	1,455.95	1,455.08	1,455.18
9	1,454.37	1,454.63	1,454.79	1,455.05	1,455.42	1,455.65	1,455.42	1,455.40	1,456.34	1,455.65	1,455.04	1,455.15
10	1,454.38	1,454.64	1,454.80	1,455.15	1,455.45	1,455.65	1,455.40	1,455.40	1,456.40	1,455.52	1,455.02	1,455.15
11	1,454.38	1,454.67	1,454.78	1,455.10	1,455.46	1,455.65	1,455.39	1,455.38	1,456.40	1,455.50	1,454.98	1,455.10
12	1,454.38	1,454.64	1,454.77	1,455.10	1,455.47	1,455.65	1,455.38	1,455.36	1,456.37	1,455.48	1,454.94	1,455.10
13	1,454.39	1,454.63	1,454.73	1,455.10	1,455.49	1,455.62	1,455.42	1,455.43	1,456.33	1,455.47	1,454.99	1,455.07
14	1,454.37	1,454.63	1,454.82	1,455.12	1,455.50	1,455.62	1,455.44	1,455.45	1,456.27	1,455.44	1,455.01	1,455.07
15	1,454.37	1,454.63	1,454.79	1,455.12	1,455.53	1,455.61	1,455.44	1,455.45	1,456.19	1,455.44	1,455.13	1,455.07
16	1,454.38	1,454.64	1,454.79	1,455.12	1,455.58	1,455.60	1,455.43	1,455.44	1,456.12	1,455.42	1,455.29	1,455.07
17	1,454.38	1,454.65	1,454.78	1,455.14	1,455.59	1,455.60	1,455.45	1,455.44	1,456.05	1,455.40	1,455.34	1,455.11
18	1,454.37	1,454.67	1,454.80	1,455.16	1,455.60	1,455.61	1,455.47	1,455.45	1,456.27	1,455.38	1,455.37	1,455.11
19	1,454.38	1,454.68	1,454.82	1,455.16	1,455.58	1,455.60	1,455.43	1,455.44	1,456.45	1,455.36	1,455.38	1,455.11
20	1,454.35	1,454.68	1,454.81	1,455.18	1,455.57	1,455.62	1,455.41	1,455.42	1,456.53	1,455.39	1,455.40	1,455.09
21	1,454.37	1,454.66	1,454.82	1,455.19	1,455.56	1,455.64	1,455.42	1,455.43	1,456.69	1,455.37	1,455.38	1,455.06
22	1,454.37	1,454.67	1,454.84	1,455.20	1,455.55	1,455.64	1,455.44	1,455.44	1,457.57	1,455.38	1,455.36	1,455.06
23	1,454.37	1,454.68	1,454.83	1,455.22	1,455.54	1,455.67	1,455.44	1,455.46	1,458.62	1,455.38	1,455.34	1,455.04
24	1,454.37	1,454.68	1,454.85	1,455.25	1,455.54	1,455.61	1,455.44	1,455.44	1,459.14	1,455.36	1,455.34	1,455.03
25	1,454.37	1,454.67	1,454.85	1,455.25	1,455.52	1,455.54	1,455.43	1,455.44	1,459.32	1,455.35	1,455.25	1,455.02
26	1,454.37	1,454.68	1,454.88	1,455.25	1,455.52	1,455.53	1,455.42	1,455.45	1,459.40	1,455.34	1,455.25	1,455.00
27	1,454.38	1,454.68	1,454.88	1,455.27	1,455.51	1,455.60	1,455.53	1,455.50	1,459.41	1,455.34	1,455.25	1,455.00
28	1,454.40	1,454.67	1,454.90	1,455.31	1,455.53	1,455.58	1,455.56	1,455.51	1,459.31	1,455.30	1,455.24	1,454.99
29	1,454.42	1,454.71	1,454.90	1,455.29	-----	1,455.54	1,455.57	1,455.65	1,459.19	1,455.27	1,455.25	1,454.99
30	1,454.49	1,454.70	1,454.91	1,455.29	-----	1,455.54	1,455.56	1,455.78	1,458.88	1,455.24	1,455.26	1,455.01
31	1,454.49	-----	1,454.93	1,455.32	-----	1,455.49	-----	1,455.92	-----	1,455.24	1,455.27	-----
MEAN	1,454.38	1,454.63	1,454.81	1,455.14	1,455.49	1,455.59	1,455.45	1,455.48	1,457.11	1,455.88	1,455.20	1,455.10
MAX	1,454.49	1,454.71	1,454.93	1,455.32	1,455.60	1,455.67	1,455.57	1,455.92	1,459.41	1,458.55	1,455.40	1,455.25
MIN	1,454.35	1,454.48	1,454.70	1,454.93	1,455.32	1,455.49	1,455.38	1,455.36	1,456.05	1,455.24	1,454.94	1,454.99
(+)	227,700	230,300	233,100	237,900	240,600	240,100	241,000	245,500	285,000	236,900	237,300	234,000
(#)	+800	+2,600	+2,800	+4,800	+2,700	-500	+900	+4,500	+39,500	-48,100	+400	-3,300

CAL YR 1974 (#) -9,400

WTR YR 1975 (#) +7,100

+ CONTENTS, IN ACRE-FEET, AT END OF MONTH.

* CHANGE IN CONTENTS, IN ACRE-FEET.

LOCATION.--Lat 39°28'27", long 98°16'58", in SE¹/₄SE¹/₄NE¹/₄ sec.2, T.7 S., R.9 W., Mitchell County, near right bank, 3.6 mi (5.8 km) downstream from Glen Elder Dam, 2.0 mi (3.2 km) southeast of Glen Elder, and at mile 168.8 (271.6 km).

PERIOD OF RECORD.--October 1964 to current year.

AVERAGE DISCHARGE.--11 years, 156 ft³/s (4.418 m³/s), 113,000 acre-ft/yr (139 hm³/yr).

Period of record: Maximum discharge, 6,890 ft³/s (195 m³/s) July 30, 1967, gage height, 26.89 ft (8.196 m); minimum, 0.32 ft³/s (0.009 m³/s) Nov. 22, 23, 1971.

REMARKS.--Records good. Flow completely regulated by Waconda Lake (see sta 06874200) which in turn is moderately regulated by Kirwin Reservoir (see sta 06871700) and Webster Reservoir (see sta 06873100). Large diversions below Kirwin and Webster Reservoirs and many small diversions above Waconda Lake for irrigation. Records of chemical and biological analyses for the current year are published in Part 2 of this report.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	19	17	17	18	188	139	172	200	2,650	51	30
2	25	23	17	15	17	189	156	170	198	2,570	52	29
3	25	23	17	16	17	178	158	170	225	2,560	52	27
4	26	22	17	17	18	170	160	170	438	2,550	58	28
5	26	20	17	16	19	164	160	172	544	2,540	54	30
6	27	21	16	17	18	160	160	172	496	2,520	55	30
7	27	21	16	17	18	160	162	138	480	2,510	54	30
8	27	19	17	17	17	160	162	104	496	2,500	49	29
9	27	20	18	17	16	160	162	104	515	2,170	47	28
10	27	20	17	15	16	162	165	104	641	754	48	29
11	27	20	17	15	17	161	165	106	546	40	48	30
12	27	20	17	15	17	158	165	71	499	36	49	30
13	27	20	17	16	17	158	162	23	482	34	51	30
14	27	20	18	16	17	157	165	22	479	33	52	28
15	27	20	18	17	17	159	212	22	475	32	34	19
16	27	20	17	17	15	155	248	22	476	45	33	2.4
17	27	20	18	20	18	155	252	23	474	45	31	2.0
18	27	20	18	27	75	159	218	23	521	44	34	9.4
19	27	20	18	28	164	165	180	22	810	43	32	24
20	27	21	17	27	163	193	175	21	711	49	31	24
21	27	20	17	27	161	179	175	20	577	44	31	24
22	27	21	18	28	163	166	175	19	1,080	46	31	15
23	27	21	18	26	164	162	172	19	1,490	39	30	3.0
24	27	19	17	19	164	159	172	19	1,340	36	30	2.5
25	27	19	17	18	165	158	175	18	273	39	29	23
26	27	19	16	18	165	157	182	19	104	57	29	39
27	27	19	17	19	163	156	175	19	329	58	29	28
28	27	19	17	19	166	155	178	21	1,010	58	29	28
29	27	19	17	19	-----	154	172	22	1,000	55	31	18
30	27	17	16	18	-----	155	170	69	1,880	54	30	2.8
31	24	-----	16	17	-----	148	-----	188	-----	53	30	-----
TOTAL	826	602	530	590	2,005	5,060	5,272	2,264	18,789	24,264	1,244	672.1
MEAN	26.6	20.1	17.1	19.0	71.6	163	176	73.0	626	783	40.1	22.4
MAX	27	23	18	28	166	193	252	188	1,880	2,650	58	39
MIN	24	17	16	15	15	148	139	18	104	32	29	2.0
AC-FT	1,640	1,190	1,050	1,170	3,980	10,040	10,460	4,490	37,270	48,130	2,470	1,330
CAL YR 1974	TOTAL	84,761.0	MEAN	232	MAX	1,510	MIN	16	AC-FT	168,100		
WTR YR 1975	TOTAL	62,118.1	MEAN	170	MAX	2,650	MIN	2.0	AC-FT	123,200		

KANSAS RIVER BASIN

79

06876700 SALT CREEK NEAR ADA, KS

LOCATION.--Lat 39°08'30", long 97°50'10", in NW¼SW¼ sec.36, T.10 S., R.5 W., Ottawa County, at downstream side of highway bridge, 3.0 mi (4.8 km) southeast of Ada, and 19.4 mi (31.2 km) upstream from mouth.

DRAINAGE AREA.--384 mi² (995 km²), approximately.

PERIOD OF RECORD.--June 1959 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,247.18 ft (380.140 m) above mean sea level.

AVERAGE DISCHARGE.--16 years, 58.6 ft³/s (1.660 m³/s), 42,460 acre-ft/yr (52.4 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,010 ft³/s (28.6 m³/s) June 22, gage height, 17.71 ft (5.398 m); minimum, 2.1 ft³/s (0.059 m³/s) Aug. 13.

Period of record: Maximum discharge, 16,000 ft³/s (453 m³/s) May 23, 1961, gage height, 23.25 ft (7.087 m); no flow at times in 1964, 1966, 1968, and 1970.

Maximum stage known since at least 1897, that of May 23, 1961. Flood in 1942 reached a stage of about 21 ft (6.4 m), from information by local residents.

REMARKS.--Records good except those for winter periods, which are poor.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.5	12	11	12	12	19	16	14	38	33	3.6	6.0
2	5.5	9.5	12	12	13	19	15	14	32	29	3.8	5.8
3	5.6	11	11	12	13	21	14	14	46	25	3.4	5.4
4	5.3	11	12	11	12	18	15	14	48	23	4.1	5.0
5	4.9	14	12	12	10	17	14	14	74	21	4.4	18
6	4.9	14	12	12	10	16	15	14	38	19	3.7	13
7	4.6	11	13	13	10	16	15	13	20	17	3.7	8.3
8	5.2	9.6	12	13	10	15	15	12	32	16	3.2	6.0
9	5.7	9.3	12	13	11	17	14	12	66	14	2.7	5.4
10	6.5	10	12	10	12	18	14	12	298	13	2.7	4.8
11	5.7	11	12	9.0	13	18	13	11	194	12	2.5	5.6
12	5.5	11	14	9.0	13	16	13	11	44	11	2.4	5.5
13	7.6	11	13	9.5	13	13	15	12	27	10	3.0	7.4
14	7.6	11	12	11	12	12	62	13	18	9.2	428	6.7
15	7.4	10	13	12	12	15	67	14	15	8.8	621	6.3
16	7.0	10	12	13	12	18	43	13	13	8.2	688	5.5
17	6.7	10	12	13	11	26	36	12	13	7.4	370	6.1
18	6.5	11	12	14	10	33	31	11	13	6.8	178	6.0
19	6.3	12	12	14	10	34	26	11	85	6.0	148	6.7
20	5.9	11	12	14	12	31	22	10	209	5.6	40	6.8
21	6.1	11	12	14	14	28	21	9.8	78	5.0	22	6.2
22	6.1	11	12	14	16	22	19	9.6	973	4.6	14	6.0
23	6.4	12	12	15	15	18	18	9.2	904	9.7	10	5.7
24	6.9	11	12	15	15	16	18	8.9	578	7.9	8.5	5.3
25	8.2	11	12	15	18	14	17	9.0	310	25	7.6	4.6
26	8.0	11	13	15	20	13	17	9.6	150	51	6.5	4.3
27	7.2	11	13	14	21	20	17	9.5	75	15	6.4	4.1
28	7.9	11	13	14	20	23	16	11	57	8.3	6.2	4.2
29	9.2	10	13	14	-----	25	15	16	46	5.7	6.5	5.0
30	12	10	12	14	-----	24	15	51	39	4.3	6.6	4.9
31	14	-----	12	13	-----	19	-----	33	-----	3.7	6.5	-----
TOTAL	211.9	328.4	379	395.5	370	614	648	427.6	4,533	435.2	2,617.0	190.6
MEAN	6.84	10.9	12.2	12.8	13.2	19.8	21.6	13.8	151	14.0	84.4	6.35
MAX	14	14	14	15	21	34	67	51	973	51	688	18
MIN	4.6	9.3	11	9.0	10	12	13	8.9	13	3.7	2.4	4.1
AC-FT	420	651	752	784	734	1,220	1,290	848	8,990	863	5,190	378
CAL YR 1974	TOTAL 21,839.1	MEAN 59.8	MAX 1,020	MIN 2.1	AC-FT 43,320							
WTR YR 1975	TOTAL 11,150.2	MEAN 30.5	MAX 973	MIN 2.4	AC-FT 22,120							

PEAK DISCHARGE (BASE, 580 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
06-22	2000	17.71	1,010	08-16	1200	14.44	705

KANSAS RIVER BASIN

06876900 SOLOMON RIVER AT NILES, KS

LOCATION.--Lat 38°58'08", long 97°28'34", in NW¼SE¼NW¼ sec.31, T.12 S., R.1 W., Ottawa County, at downstream side of county highway bridge, 0.8 mi (1.3 km) west of Niles, and at mile 21.6 (34.8 km).

DRAINAGE AREA.--6,770 mi² (17,530 km²), approximately.

PERIOD OF RECORD.--May 1897 to November 1903, October 1917 to current year. Published as "near Bennington" October 1917 to May 1919. Monthly discharge only for some periods, published in WSP 1310.

GAGE.--Water-stage recorder. Datum of gage is 1,160.97 ft (353.864 m) above mean sea level. Prior to Nov. 30, 1903, nonrecording gage at present site and at different datum. Oct. 1, 1917, to May 31, 1919, nonrecording gage near Bennington, 27 mi (43 km) upstream at different datum. June 1, 1919, to Sept. 30, 1922, nonrecording gage at present site at datum 2.00 ft (0.610 m) higher. Oct. 1, 1922, to Apr. 25, 1934, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--64 years, 574 ft³/s (16.26 m³/s), 415,900 acre-ft/yr (513 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 6,170 ft³/s (175 m³/s) June 25, gage height, 26.60 ft (8.108 m); minimum, 58 ft³/s (1.64 m³/s) Aug. 13.

Period of record: Maximum discharge, 178,000 ft³/s (5,040 m³/s) July 14, 1951, gage height, 31.76 ft (9.680 m); minimum observed, 1 ft³/s (0.03 m³/s) Sept. 4, 1926.

REMARKS.--Records good except those for winter periods, which are poor. Flow moderately regulated since 1968 by Waconda Lake 150.8 mi (242.6 km) upstream (see sta 06874200). Slight regulation by Kirwin Reservoir since 1955 (see sta 06871700) and by Webster Reservoir since 1956 (see sta 06873100). Many small diversions above station for irrigation. Records of chemical analyses, water temperatures, suspended sediment loads, and specific conductance for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 806: Drainage area. WSP 926: 1935. WSP 1310: 1897-1903. WSP 1440: 1903, 1919, 1927.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	97	153	106	114	100	284	264	242	306	851	90	119
2	96	135	106	109	97	271	258	245	204	1,070	88	107
3	96	129	106	111	100	267	255	285	301	1,370	84	104
4	98	125	104	116	128	270	250	268	528	1,990	83	102
5	99	123	104	117	141	274	240	251	522	2,210	79	124
6	104	117	107	107	120	277	242	243	692	2,230	75	107
7	102	115	112	111	110	271	245	236	653	2,230	78	149
8	101	119	112	109	110	261	251	230	598	2,230	77	171
9	100	119	111	115	115	258	258	227	1,480	2,230	75	127
10	102	121	112	118	120	264	257	221	1,430	2,210	74	109
11	105	122	106	87	120	267	250	216	1,350	2,200	74	108
12	104	118	105	87	120	266	245	187	1,310	2,050	68	124
13	112	117	107	90	115	265	244	173	821	1,300	64	105
14	141	115	108	95	110	266	296	175	674	553	96	96
15	123	113	110	100	105	261	374	177	584	340	533	96
16	112	109	111	107	100	260	380	175	540	265	1,840	96
17	109	108	109	109	95	294	342	151	526	225	1,420	96
18	107	107	109	112	95	312	306	120	516	199	874	96
19	103	107	107	112	100	306	310	108	531	167	563	98
20	104	107	108	119	110	296	338	101	801	145	712	96
21	104	109	107	105	120	296	344	96	1,120	137	408	89
22	105	108	108	106	139	295	321	94	2,250	129	248	80
23	105	108	107	101	153	280	280	92	5,070	124	184	76
24	105	107	107	115	243	275	263	88	6,010	116	152	73
25	108	108	104	111	268	274	257	86	6,080	129	135	79
26	116	108	108	114	278	254	253	89	5,080	128	126	82
27	123	106	107	116	314	256	251	86	3,260	127	120	83
28	120	107	99	115	320	288	247	93	1,400	138	117	80
29	126	107	110	109	-----	297	247	121	680	106	118	74
30	136	106	107	104	-----	293	245	169	504	93	135	72
31	156	-----	112	102	-----	278	-----	314	-----	88	161	-----
TOTAL	3,419	3,453	3,336	3,343	4,046	8,576	8,313	5,359	45,821	27,380	8,951	3,018
MEAN	110	115	108	108	145	277	277	173	1,527	883	289	101
MAX	156	153	112	119	320	312	380	314	6,080	2,230	1,840	171
MIN	96	106	99	87	95	254	240	86	204	88	64	72
AC-FT	6,780	6,850	6,620	6,630	8,030	17,010	16,490	10,630	90,890	54,310	17,750	5,990

CAL YR 1974 TOTAL 182,688 MEAN 501 MAX 3,240 MIN 82 AC-FT 362,400
WTR YR 1975 TOTAL 125,015 MEAN 343 MAX 6,080 MIN 64 AC-FT 248,000

PEAK DISCHARGE (REGULATED) ABOVE 2,700 CFS

DATE	TIME	G.H.	DISCHARGE
06-25	0200	26.60	6,170

KANSAS RIVER BASIN

81

06877600 SMOKY HILL RIVER AT ENTERPRISE, KS

LOCATION.--Lat 38°54'24", Long 97°07'12", in NW¼NW¼SE¼ sec.20, T.13 S., R.3 E., Dickinson County, at upstream side of bridge on State Highway 43 in Enterprise, 18.6 mi (29.9 km) upstream from Chapman Creek and at mile 43.3 (69.7 km).

DRAINAGE AREA.--19,260 mi² (49,880 km²).

PERIOD OF RECORD.--October 1934 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,103.25 ft (336.271 m) above mean sea level, datum of 1929. Nov. 1, 1934, to Jan. 28, 1935, nonrecording gage and Jan. 29, 1935, to May 3, 1959, water-stage recorder at site 0.2 mi (0.3 km) downstream at datum 5.40 ft (1.646 m) lower.

AVERAGE DISCHARGE.--41 years, 1,653 ft³/s (46.81 m³/s), 1,198,000 acre-ft/yr (1.48 km³/yr).

EXTREMES.--Current year: Maximum discharge, 14,800 ft³/s (419 m³/s) June 25, gage height, 18.77 ft (5.721 m); minimum, 299 ft³/s (8.47 m³/s) Jan. 12, 13, result of freeze-up.

Period of record: Maximum discharge, 233,000 ft³/s (6,600 m³/s) July 14, 1951, gage height, 33.96 ft (10.351 m), site and datum then in use, or 29.0 ft (8.84 m), present site and datum, from rating curve extended above 55,000 ft³/s (1,560 m³/s) on basis of slope-area measurement of peak flow; minimum, about 10 ft³/s (0.28 m³/s) Apr. 23, 1935, regulated by powerplant then in operation. Flood in May 1903 reached a stage of about 27 ft (8.2 m), present site and datum, from information by Corps of Engineers, discharge, 90,000 ft³/s (2,500 m³/s).

REMARKS.--Records good. Natural flow of stream affected by six lakes and reservoirs, and by numerous diversions for irrigation above station. Records of chemical and biological analyses, water temperatures, suspended sediment loads, and specific conductance for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1390: 1935(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	825	1,500	470	470	458	1,260	644	784	1,180	2,490	524	926
2	820	1,170	480	472	455	1,000	614	724	1,120	2,900	490	1,010
3	745	870	485	475	455	851	587	730	1,360	3,130	462	935
4	569	1,140	488	455	530	822	572	780	2,400	3,540	430	857
5	512	984	490	455	966	816	578	817	2,210	4,180	405	764
6	515	805	495	438	675	801	573	782	1,650	4,380	391	572
7	642	670	482	460	521	797	582	707	1,970	4,350	370	516
8	810	715	478	472	638	777	675	669	2,020	4,310	356	648
9	770	800	475	478	536	770	739	626	3,790	4,270	349	1,090
10	572	855	472	500	590	778	664	590	5,460	4,420	339	932
11	498	845	465	462	606	772	625	573	5,690	4,450	336	840
12	554	710	462	355	536	790	599	556	3,790	4,430	337	855
13	2,380	626	460	382	530	771	593	537	2,870	4,090	372	750
14	1,890	587	455	462	521	699	671	527	2,300	2,790	452	695
15	1,700	569	445	485	490	645	977	532	1,960	1,920	597	667
16	1,230	554	438	475	485	622	1,050	521	1,840	1,680	978	653
17	825	542	440	490	367	675	1,090	521	1,850	1,560	2,510	647
18	646	536	435	506	472	1,180	1,000	495	1,970	1,270	2,560	649
19	785	536	428	506	455	1,080	854	462	2,220	1,090	1,800	717
20	900	533	425	495	478	933	778	438	1,950	1,130	1,270	715
21	830	533	448	495	533	843	756	423	2,100	1,160	1,230	685
22	658	530	524	478	522	773	723	402	4,230	1,150	944	680
23	590	530	533	475	519	734	695	398	8,080	1,140	858	662
24	572	518	533	470	504	665	2,000	399	12,100	1,120	1,130	666
25	542	503	518	480	557	625	4,200	389	14,100	1,110	1,170	666
26	536	490	498	492	684	594	2,920	387	13,200	1,110	1,160	636
27	542	480	480	485	884	605	1,630	430	9,000	1,110	1,160	573
28	545	475	482	475	1,130	604	1,160	503	6,300	1,090	1,180	459
29	840	472	488	472	-----	653	948	645	4,420	1,080	1,200	422
30	1,470	468	488	465	-----	691	851	980	3,480	930	1,280	405
31	1,640	-----	488	460	-----	693	-----	1,090	-----	646	1,110	-----
TOTAL	26,953	20,546	14,748	14,540	16,097	24,319	30,348	18,417	126,610	74,026	27,750	21,292
MEAN	869	685	476	469	575	784	1,012	594	4,220	2,388	895	710
MAX	2,380	1,500	533	506	1,130	1,260	4,200	1,090	14,100	4,450	2,560	1,090
MIN	498	468	425	355	367	594	572	387	1,120	646	336	405
AC-FT	53,460	40,750	29,250	28,840	31,930	48,240	60,200	36,530	251,100	146,800	55,040	42,230

CAL YR 1974 TOTAL 743,948 MEAN 2,038 MAX 11,800 MIN 380 AC-FT 1,476,000
WTR YR 1975 TOTAL 415,646 MEAN 1,139 MAX 14,100 MIN 336 AC-FT 824,400

PEAK DISCHARGE (REGULATED) ABOVE 4,000 CFS

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
04-25	0200	9.22	4,880	06-25	2200	18.77	14,800
06-11	1100	10.57	5,960	07-10	1500	8.77	4,470

KANSAS RIVER BASIN

06878000 CHAPMAN CREEK NEAR CHAPMAN, KS

LOCATION.--Lat 39°01'52", long 97°02'24", in SW¼SE¼SE¼ sec.1, T.12 S., R.3 E., Dickinson County, on right bank at downstream side of bridge on State Highway 18, 5.0 mi (8.0 km) northwest of Chapman, and at mile 10.0 (16.1 km).

DRAINAGE AREA.--300 mi² (777 km²).

PERIOD OF RECORD.--December 1953 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,102.41 ft (336.015 m) above mean sea level (levels by Corps of Engineers). Prior to May 5, 1959, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--21 years (1954-75), 82.2 ft³/s (2.328 m³/s), 59,550 acre-ft/yr (73.4 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,520 ft³/s (128 m³/s) June 24, gage height, 21.51 ft (6.556 m); minimum, 12 ft³/s (0.34 m³/s) Aug. 9, 10, Sept. 4.

Period of record: Maximum discharge, 15,800 ft³/s (447 m³/s) Oct. 12, 1973, gage height, 24.08 ft (7.340 m); minimum observed, 0.10 ft³/s (0.003 m³/s) Oct. 10, 1956.

Flood in July 1951 reached a stage of 25.5 ft (7.77 m), from floodmarks, discharge, 46,700 ft³/s (1,320 m³/s), from rating curve extended above 12,000 ft³/s (340 m³/s) on basis of contracted-opening measurement of peak flow.

REMARKS.--Records good.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	85	29	32	30	146	41	36	51	68	16	15
2	18	43	29	31	31	83	39	36	40	61	16	14
3	18	36	27	34	32	52	38	38	202	55	17	14
4	19	33	28	31	78	43	38	39	340	51	17	13
5	20	33	30	34	110	41	38	43	134	48	17	37
6	25	34	33	34	64	40	39	38	57	44	17	23
7	25	32	37	33	55	40	40	35	40	40	17	17
8	23	30	34	32	42	39	63	33	61	37	14	18
9	23	33	31	37	35	39	137	32	480	36	13	18
10	22	38	30	43	39	41	86	31	617	34	13	16
11	22	36	31	32	34	39	55	30	176	33	14	219
12	22	36	33	35	34	43	45	30	115	32	13	60
13	27	33	32	39	35	42	43	30	86	32	14	24
14	30	30	32	30	34	38	78	31	58	30	21	20
15	43	30	33	29	34	36	268	32	44	29	24	19
16	34	30	33	30	38	39	143	32	39	26	52	19
17	26	30	33	32	35	69	86	31	37	24	27	19
18	24	30	32	33	34	220	66	29	37	24	20	18
19	23	31	32	37	30	116	58	28	121	22	19	18
20	23	31	31	33	30	70	74	27	197	22	18	18
21	23	33	31	39	37	53	61	26	66	22	17	18
22	24	32	30	32	37	46	50	25	1130	21	16	17
23	25	32	32	33	37	43	47	25	3560	21	16	17
24	25	32	32	34	36	40	45	25	3190	22	14	16
25	26	30	26	34	42	38	44	25	482	19	13	16
26	28	30	28	36	70	37	42	24	265	19	15	16
27	28	30	31	36	135	40	41	25	135	19	15	15
28	31	29	31	34	251	45	40	27	108	19	14	15
29	67	29	31	32	---	86	40	37	94	17	15	16
30	66	29	32	31	---	64	38	58	80	16	15	16
31	79	---	32	34	---	46	---	55	---	16	15	---
TOTAL	907	1020	966	1046	1499	1814	1923	1013	12042	959	544	781
MEAN	29.3	34.0	31.2	33.7	53.5	58.5	64.1	32.7	401	30.9	17.5	26.0
MAX	79	85	37	43	251	220	268	58	3560	68	52	219
MIN	18	29	26	29	30	36	38	24	37	16	13	13
AC-FT	1800	2020	1920	2070	2970	3600	3810	2010	23890	1900	1080	1550

CAL YR 1974 TOTAL 27723 MEAN 76.0 MAX 957 MIN 18 AC-FT 54990
WTR YR 1975 TOTAL 24514 MEAN 67.2 MAX 3560 MIN 13 AC-FT 48620

PEAK DISCHARGE (BASE, 1,200 CFS)

DATE	TIME	G.H.	DISCHARGE
06-24	0100	21.51	4,520

KANSAS RIVER BASIN

83

06879100 KANSAS RIVER AT FORT RILEY, KS

LOCATION.--Lat 39°03'09", Long 96°46'33", in NE¼SW¼NW¼ sec.33, T.11 S., R.6 E., Geary County, at downstream side of military highway bridge 1.6 mi (2.6 km) below the confluence of Republican and Smoky Hill Rivers, and at mile 168.9 (271.8 km).

DRAINAGE AREA.--44,870 mi² (116,200 km²), of which a large area is noncontributing.

PERIOD OF RECORD.--December 1963 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,034.69 ft (315.374 m) above mean sea level.

AVERAGE DISCHARGE.--11 years, 2,878 ft³/s (81.50 m³/s), 2,085,000 acre-ft/yr (2.57 km³/yr).

EXTREMES.--Current year: Maximum discharge, 17,000 ft³/s (481 m³/s) June 26, gage height, 14.36 ft (4.377 m); minimum, 386 ft³/s (10.9 m³/s) Jan. 12, 13.

Period of record: Maximum discharge, 59,400 ft³/s (1,680 m³/s) Oct. 14, 1973, gage height, 23.74 ft (7.236 m); minimum, 100 ft³/s (2.83 m³/s) Dec. 24, 1966.

Flood in July 1951 reached a stage of 34.5 ft (10.52 m), from information by Corps of Engineers.

REMARKS.--Records fair. Natural flow of stream affected by reservoirs in Colorado, Nebraska, and Kansas, and by numerous diversions for irrigation above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,990	3,340	680	714	633	2,040	1,270	1,760	1,360	6,550	1,380	1,380
2	1,540	2,350	671	719	642	2,040	1,240	1,690	1,500	6,960	1,220	1,180
3	1,480	1,780	687	704	640	1,730	1,200	1,660	1,690	8,450	1,140	1,230
4	1,340	2,310	683	694	750	1,540	1,170	1,640	2,620	8,540	1,090	1,200
5	1,150	1,740	687	678	1,680	1,490	1,090	1,670	3,740	9,010	1,030	1,330
6	1,130	1,410	704	666	1,480	1,600	1,090	1,710	3,480	9,390	970	1,050
7	1,090	1,170	731	649	1,100	2,260	1,110	1,620	3,720	9,420	930	846
8	1,170	1,030	709	665	1,010	2,260	1,130	1,500	4,350	9,360	860	748
9	1,280	1,050	703	682	572	2,290	1,410	1,420	5,150	9,310	723	858
10	1,280	1,150	682	728	732	2,310	1,430	1,330	7,570	9,290	678	1,290
11	1,100	1,230	682	790	1,000	2,280	1,250	1,240	10,800	9,510	642	1,240
12	1,090	1,170	667	535	1,050	2,250	1,150	1,130	10,400	8,860	624	1,280
13	5,140	1,030	669	476	953	2,250	1,130	894	6,810	5,370	624	1,130
14	4,350	938	669	673	1,030	2,220	1,160	834	6,360	9,130	723	1,010
15	2,670	892	657	873	955	2,180	1,730	762	5,940	7,940	741	960
16	2,280	857	653	864	913	2,120	1,920	763	5,880	5,800	930	923
17	1,700	839	635	798	751	1,890	1,810	727	5,910	3,170	1,680	903
18	1,210	810	627	763	875	1,680	1,790	686	5,950	2,880	3,430	909
19	999	839	633	765	902	2,230	1,640	642	6,190	2,490	3,940	893
20	1,020	798	625	764	950	1,890	1,470	600	6,490	2,320	2,960	930
21	1,090	780	615	764	914	1,670	1,400	568	6,640	2,350	2,420	940
22	1,050	770	635	740	1,000	1,540	1,350	544	8,400	2,350	2,340	938
23	899	773	724	696	1,030	1,440	1,300	540	12,800	2,280	2,060	935
24	815	759	741	698	988	1,360	2,080	513	14,100	1,890	1,970	906
25	790	739	758	689	952	1,270	4,720	506	16,300	1,820	2,170	910
26	747	715	735	679	1,150	1,230	4,670	516	16,800	1,780	1,700	918
27	717	714	736	705	1,480	1,230	3,590	484	14,600	1,750	1,640	889
28	714	700	705	696	1,710	1,250	2,630	575	10,900	1,750	1,460	842
29	930	688	694	683	-----	1,230	2,150	756	8,260	1,900	1,470	703
30	3,040	682	705	669	-----	1,280	1,890	905	7,180	1,860	1,500	669
31	3,130	-----	717	656	-----	1,290	-----	1,240	-----	1,660	1,580	-----
TOTAL	48,931	34,053	21,219	21,875	27,842	55,340	52,970	31,425	221,890	165,140	46,625	29,940
MEAN	1,578	1,135	684	706	994	1,785	1,766	1,014	7,396	5,327	1,504	998
MAX	5,140	3,340	758	873	1,710	2,310	4,720	1,760	16,800	9,510	3,940	1,380
MIN	714	682	615	476	572	1,230	1,090	484	1,360	1,660	624	669
AC-FT	97,050	67,540	42,090	43,390	55,220	109,800	105,100	62,330	440,100	327,600	92,480	59,390

CAL YR 1974 TOTAL 1,350,163 MEAN 3,699 MAX 15,900 MIN 615 AC-FT 2,678,000
WTR YR 1975 TOTAL 757,250 MEAN 2,075 MAX 16,800 MIN 476 AC-FT 1,502,000

PEAK DISCHARGE (REGULATED) ABOVE 5,000 CFS

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
10-13	1000	9.60	6,500	06-26	1100	14.36	17,000
04-25	2000	9.01	5,240	07-11	1900	11.26	9,920
06-11	2100	12.69	12,500	07-14	0500	11.07	9,490
06-23	0900	13.40	14,200				

KANSAS RIVER BASIN

06884200 MILL CREEK AT WASHINGTON, KS

LOCATION.--Lat 39°48'50", long 97°02'20", in SW¼SW¼SE¼ sec.1, T.3 S., R.3 E., Washington County, at downstream side of bridge on U.S. Highway 36, 0.5 mi (0.8 km) east of Washington, and about 26 mi (41.8 km) upstream from mouth.

DRAINAGE AREA.--344 mi² (891 km²).

PERIOD OF RECORD.--October 1959 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,261.56 ft (384.523 m) above mean sea level.

AVERAGE DISCHARGE.--16 years, 99.5 ft³/s (2.818 m³/s), 72,090 acre-ft/yr (88.9 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,070 ft³/s (58.6 m³/s) June 24, gage height, 14.89 ft (4.538 m); minimum, 1.1 ft³/s (0.031 m³/s) Aug. 9.

Period of record: Maximum discharge, 10,700 ft³/s (303 m³/s) June 16, 1967, gage height, 26.34 ft (8.028 m); maximum gage height, 27.17 ft (8.281 m) Sept. 26, 1973; no flow at times in 1963-66.

Maximum stages known since at least 1903, about 36 ft (11.0 m) June 8, 1941, about 34 ft (10.4 m) in 1903 and 1908, from information by local residents and newspaper files.

REMARKS.--Records fair except those for winter periods, which are poor. Diversions above station for irrigation.

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.2	7.6	7.1	9.4	16	450	36	37	114	47	16	3.0
2	3.0	8.9	6.9	9.3	13	384	34	31	85	41	19	1.8
3	3.4	13	7.0	9.4	14	147	31	28	856	37	11	1.6
4	3.3	12	7.4	11	91	94	30	26	331	34	7.2	2.4
5	2.9	11	7.9	12	120	62	33	25	107	29	4.2	21
6	4.0	9.3	8.7	11	130	51	31	23	54	25	2.5	12
7	3.6	7.2	9.7	11	88	47	35	21	35	24	1.6	10
8	3.9	6.2	12	11	56	42	62	20	33	21	1.4	6.6
9	4.0	11	9.2	11	40	40	53	18	1180	19	1.6	5.1
10	3.4	11	8.8	20	27	40	38	17	208	17	1.6	3.8
11	3.1	8.9	8.6	19	26	36	32	17	177	17	1.6	3.2
12	3.7	8.9	8.5	15	25	34	27	16	89	16	1.4	2.8
13	5.6	7.9	8.9	15	23	31	28	19	56	16	6.1	2.6
14	3.6	6.2	10	16	22	29	83	17	42	15	8.6	2.4
15	2.8	5.9	11	17	21	27	69	17	35	14	7.0	2.8
16	2.7	6.1	11	19	21	33	49	17	33	12	6.8	2.8
17	2.6	6.0	11	19	20	194	37	16	31	11	12	2.6
18	2.7	6.5	11	19	20	604	74	14	1000	7.4	9.7	2.8
19	2.6	7.6	10	21	20	347	76	13	745	6.6	6.8	2.8
20	2.8	6.5	11	19	20	118	58	12	199	17	4.8	2.2
21	2.9	6.5	9.6	18	21	85	41	11	75	24	3.6	1.9
22	3.3	6.0	9.2	19	25	66	33	9.6	484	42	3.1	2.0
23	3.5	6.7	9.2	20	30	54	29	9.2	983	31	2.5	1.8
24	4.0	9.5	9.4	22	36	47	39	8.2	1680	24	2.6	1.7
25	4.6	6.5	10	23	36	41	55	7.8	370	15	2.6	1.9
26	4.5	7.0	8.0	23	46	37	51	13	122	12	2.4	1.8
27	4.5	6.2	8.5	25	111	71	34	12	88	9.6	2.2	1.8
28	7.2	6.2	9.6	22	345	87	35	93	73	7.6	3.2	2.9
29	11	6.1	9.2	18	---	69	147	167	64	7.7	3.0	3.0
30	12	7.8	9.4	16	---	49	58	461	55	7.9	3.2	3.6
31	11	---	9.5	19	---	39	---	567	---	7.8	3.2	---
TOTAL	135.4	236.2	287.3	519.1	1463	3455	1438	1762.8	9404	614.6	162.5	116.7
MEAN	4.37	7.87	9.27	16.7	52.3	111	47.9	56.9	313	19.8	5.24	3.89
MAX	12	13	12	25	345	604	147	567	1680	47	19	21
MIN	2.6	5.9	6.9	9.3	13	27	27	7.8	31	6.6	1.4	1.6
AC-FT	269	469	570	1030	2900	6850	2850	3500	18650	1220	322	231
CAL YR 1974	TOTAL	22393.3	MEAN	61.4	MAX	1000	MIN	1.3	AC-FT	44420		
WTR YR 1975	TOTAL	19594.6	MEAN	53.7	MAX	1680	MIN	1.4	AC-FT	38870		

PEAK DISCHARGE (BASE, 1,200 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
06-09	1200	13.70	1,730	06-24	0400	14.89	2,070
06-18	1200	14.80	2,040				

06884400 LITTLE BLUE RIVER NEAR BARNES, KS

LOCATION.--Lat 39°46'33", long 96°51'29", in NW¼NW¼SW¼ sec.22, T.3 S., R.5 E., Washington County, on right bank at downstream side of bridge on State Highway 15 E., 0.4 mi (0.6 km) downstream from Malone Creek, 4.5 mi (7.2 km) north of Barnes, and at mile 19.2 (30.9 km).

DRAINAGE AREA.--3,324 mi² (8,609 km²).

PERIOD OF RECORD.--April 1958 to current year. Published as "at Waterville" April 1958 to September 1960; those prior to April 1958 collected at site 11.5 mi (18.5 km) downstream and are considered not equivalent.

GAGE.--Water-stage recorder. Datum of gage is 1,140.06 ft (347.490 m) above mean sea level (levels by Corps of Engineers).

AVERAGE DISCHARGE.--17 years, 657 ft³/s (18.61 m³/s), 476,000 acre-ft/yr (587 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 10,900 ft³/s (309 m³/s) June 25, gage height, 15.53 ft (4.734 m); minimum, 62 ft³/s (1.76 m³/s) Oct. 22.

Period of record: Maximum discharge, 53,700 ft³/s (1,520 m³/s) Oct. 12, 1973, gage height, 27.7 ft (8.44 m), from floodmark; minimum, 22 ft³/s (0.62 m³/s) Aug. 6, 1964.

REMARKS.--Records good except those for winter periods, which are poor. Records of chemical analyses for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	103	188	150	210	180	1100	385	805	1980	930	714	232
2	103	184	140	206	172	3700	358	626	1370	825	666	211
3	103	178	130	155	191	2590	330	508	4450	750	703	194
4	104	182	140	160	273	1480	332	658	4140	690	652	188
5	106	188	165	155	150	1060	327	440	3890	645	602	224
6	113	188	187	185	160	803	320	370	2330	610	566	254
7	126	182	190	216	170	698	320	333	1370	575	505	253
8	124	178	166	205	180	607	393	312	948	551	456	205
9	124	183	143	225	150	534	410	290	2050	531	418	179
10	123	187	155	145	160	465	372	274	4240	504	400	166
11	121	185	188	120	170	432	330	279	3650	481	380	158
12	121	182	189	150	180	423	310	474	2400	456	362	149
13	127	177	187	169	190	375	301	538	1520	443	370	143
14	128	175	189	189	200	335	371	365	1060	428	464	134
15	130	169	185	198	200	320	429	308	786	432	736	135
16	130	169	171	193	200	335	400	274	638	419	822	135
17	130	166	176	186	200	840	355	254	534	397	632	133
18	130	166	176	181	200	3310	467	240	1060	385	503	135
19	130	167	175	180	200	3330	432	227	1930	373	386	136
20	130	169	180	195	200	2250	402	216	2400	439	318	131
21	130	166	170	187	206	1550	367	206	2210	478	273	126
22	94	168	172	190	197	1100	338	206	2270	1450	245	123
23	122	172	175	192	195	846	321	203	6250	6550	226	138
24	128	169	180	190	180	684	458	200	9140	7410	214	130
25	126	169	95	203	177	557	504	195	8280	6390	215	122
26	137	171	110	223	185	474	657	205	3560	3460	218	115
27	139	169	152	220	255	612	647	215	2190	2200	227	109
28	148	169	165	215	500	624	690	273	1660	1670	245	120
29	174	169	221	190	---	544	736	656	1320	1320	291	123
30	186	157	185	199	---	476	966	2580	1100	1030	271	132
31	186	---	212	185	---	427	---	2460	---	841	244	---
TOTAL	3976	5242	5219	5817	5621	32881	13028	15190	80726	43663	13324	4733
MEAN	128	175	168	188	201	1061	434	490	2691	1408	430	158
MAX	186	188	221	225	500	3700	966	2580	9140	7410	822	254
MIN	94	157	95	120	150	320	301	195	534	373	214	109
AC-FT	7890	10400	10350	11540	11150	65220	25840	30130	160100	86610	26430	9390

CAL YR 1974 TOTAL 154252 MEAN 423 MAX 2870 MIN 94 AC-FT 306000
WTR YR 1975 TOTAL 229420 MEAN 629 MAX 9140 MIN 94 AC-FT 455100

PEAK DISCHARGE (BASE, 4,500 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
06-03	1300	10.63	5,130	06-25	0200	15.53	10,900
06-10	1500	10.24	4,690	07-24	0400	12.91	7,600

06885500 BLACK VERMILLION RIVER NEAR FRANKFORT, KS

LOCATION.--Lat 39°41'03", long 96°26'15", in SE¼SW¼ sec.20, T.4 S., R.9 E., Marshall County, on right bank at downstream side of highway bridge, 0.2 mi (0.3 km) downstream from Robideau Creek, 2.2 mi (3.5 km) southwest of Frankfort, and at mile 19.9 (32.0 km).

DRAINAGE AREA.--410 mi² (1,060 km²).

PERIOD OF RECORD.--October 1953 to current year. Monthly discharge only for October to December 1953, published in WSP 1730.

GAGE.--Water-stage recorder. Datum of gage is 1,106.91 ft (337.386 m) above mean sea level. Prior to May 13, 1954, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--22 years, 137 ft³/s (3.880 m³/s), 99,260 acre-ft/yr (122 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 6,320 ft³/s (179 m³/s) June 19, gage height, 25.76 ft (7.852 m); minimum daily, 4.0 ft³/s (0.11 m³/s) Oct. 12.

Period of record: Maximum discharge, 38,300 ft³/s (1,080 m³/s) May 30, 1959, gage height, 29.40 ft (8.961 m); maximum gage height, 30.06 ft (9.162 m) Oct. 11, 1973; no flow at times in 1955-57.

Flood of Aug. 3, 1948, reached a stage of 30.2 ft (9.20 m), present site and datum, from floodmarks. Flood in June 1951 reached a stage of 28.6 ft (8.72 m), present site and datum, from floodmarks, discharge, 30,400 ft³/s (861 m³/s), based on contracted-opening measurement of peak flow.

REMARKS.--Records fair except those for October and winter periods, which are poor.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.8	152	16	21	40	1000	65	50	197	190	14	7.6
2	5.5	56	17	22	36	500	54	45	238	98	13	6.9
3	5.3	31	17	22	36	250	47	57	4060	80	13	6.3
4	5.2	30	18	20	306	150	67	55	1430	71	14	6.6
5	5.0	27	19	21	719	114	77	48	237	64	12	4.8
6	4.8	18	21	22	250	136	77	43	155	58	11	4.8
7	4.7	16	23	24	150	139	56	41	121	53	10	21
8	4.5	16	20	24	80	87	87	39	104	49	9.5	12
9	4.4	18	18	24	55	70	161	35	166	47	9.5	8.3
10	4.3	62	20	22	45	65	86	33	205	45	9.4	7.6
11	4.1	53	19	20	40	70	63	59	2380	43	8.3	9.8
12	4.0	34	21	18	35	55	47	90	647	39	8.0	17
13	5.0	25	21	20	35	45	47	47	210	37	8.8	10
14	5.5	21	21	21	35	40	128	39	140	36	36	9.4
15	5.4	18	22	22	35	45	184	37	113	35	78	7.5
16	5.3	17	25	23	35	60	99	31	101	32	28	7.4
17	5.2	17	22	24	35	607	68	28	98	29	16	7.6
18	5.2	17	20	25	36	531	649	25	2780	26	14	7.9
19	5.2	17	20	26	37	244	492	26	3860	24	13	8.1
20	5.2	17	22	26	38	135	186	23	352	23	11	8.5
21	5.2	17	20	26	40	101	113	22	223	39	9.8	7.3
22	5.2	16	22	25	45	76	90	21	1500	38	8.4	6.5
23	5.2	16	22	25	40	60	86	23	938	73	7.4	6.3
24	5.2	17	21	35	40	53	288	26	283	49	6.7	6.0
25	5.2	17	20	117	45	40	286	24	204	30	16	5.7
26	5.2	16	20	238	80	38	108	42	167	23	11	5.3
27	5.4	16	20	208	200	213	85	40	149	20	11	5.3
28	5.6	17	20	127	800	619	77	58	123	18	9.3	6.6
29	6.0	17	21	85	---	140	66	280	105	17	9.0	8.5
30	27	16	21	61	---	85	56	2130	94	16	10	11
31	886	---	22	44	---	74	---	1250	---	15	9.1	---
TOTAL	1060.8	827	631	1438	3368	5842	3995	4767	21380	1417	444.2	334.0
MEAN	34.2	27.6	20.4	46.4	120	188	133	154	713	45.7	14.3	11.1
MAX	886	152	25	238	800	1000	649	2130	4060	190	78	48
MIN	4.0	16	16	18	35	38	47	21	94	15	6.7	5.3
AC-FT	2100	1640	1250	2850	6680	11590	7920	9460	42410	2810	881	662
CAL YR 1974	TOTAL	34416.5	MEAN	94.3	MAX	2070	MIN	3.2	AC-FT	68270		
WTR YR 1975	TOTAL	45504.0	MEAN	125	MAX	4060	MIN	4.0	AC-FT	90260		

PEAK DISCHARGE (BASE, 1,800 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
05-30	2200	22.47	3,240	06-19	0400	25.76	6,320
06-03	2000	25.59	6,040	06-22	2100	19.92	2,380
06-11	1400	21.56	2,870				

KANSAS RIVER BASIN

87

06886900 TUTTLE CREEK LAKE NEAR MANHATTAN, KS

LOCATION.--Lat 39°15'16", long 96°36'08", in NW¼NE¼SW¼ sec.24, T.9 S., R.7 E., Pottawatomie County, on Big Blue River, near right end of dam, 5 mi (8 km) north of Manhattan and 10.0 mi (16.1 km) above mouth.

DRAINAGE AREA.--9,628 mi² (15,490 km²).

PERIOD OF RECORD.--March to April 1960, March 1962 to current year. Prior to October 1968, published as Tuttle Creek Reservoir near Randolph. October 1968 to September 1971 published as Tuttle Creek Reservoir near Manhattan.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Corps of Engineers). Prior to July 1, 1968, at site 19.8 mi (31.9 km) upstream at same datum.

EXTREMES.--Current year: Maximum elevation, 1,086.45 ft (331.150 m) June 28-30, contents, 629,600 acre-ft (776 hm³); minimum, 1,068.97 ft (325.822 m) Jan. 8, contents, 335,400 acre-ft (414 hm³).

Period of record: Maximum elevation, 1,127.90 ft (343.784 m) Oct. 18-20, 1973, contents, 1,958,000 acre-ft (2,410 hm³); minimum since conservation pool was first filled, 1,060.82 ft (323.338 m) Jan. 4, 1967, contents, 231,000 acre-ft (285 hm³).

REMARKS.--Reservoir is formed by compacted earthfill dam. Storage began Mar. 15, 1962. Total capacity, 3,227,000 acre-ft (3,980 hm³) consisting of the following: Sedimentation, 233,000 acre-ft (287 hm³) below elevation 1,061.0 ft (323.39 m); conservation pool, 192,300 acre-ft (237 hm³) between elevations 1,061.0 ft (323.39 m) and 1,075.0 ft (327.66 m); flood control pool, 1,942,000 acre-ft (2,390 hm³) between elevations 1,075.0 ft (327.66 m) and 1,136.0 ft (346.25 m); and surcharge pool, 860,300 acre-ft (1,060 hm³) between elevations 1,136.0 ft (346.25 m) and 1,150.0 ft (350.52 m). Reservoir is used to store water for flood control. Figures given herein represent total contents.

Capacity table (elevation, in feet, and contents, in acre-feet)
(Based on field survey by Corps of Engineers in 1962)

1,065	281,800	1,080	508,900
1,070	350,100	1,085	601,100
1,075	425,300	1,090	704,000

ELEVATION, IN FEET, AT 2400, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,072.50	1,072.13	1,068.98	1,069.15	1,070.97	1,074.62	1,083.69	1,076.30	1,079.62	1,085.71	1,075.72	1,075.02
2	1,072.40	1,072.17	1,068.98	1,069.18	1,071.07	1,075.36	1,083.55	1,076.42	1,079.72	1,085.01	1,075.56	1,074.98
3	1,072.31	1,072.11	1,069.00	1,069.16	1,071.17	1,076.04	1,083.46	1,076.57	1,080.73	1,084.14	1,075.37	1,074.97
4	1,072.29	1,071.99	1,068.98	1,069.14	1,071.38	1,076.48	1,083.39	1,076.62	1,081.32	1,083.25	1,075.27	1,075.01
5	1,072.24	1,071.94	1,068.99	1,069.15	1,071.60	1,076.80	1,083.31	1,076.56	1,081.21	1,082.37	1,075.28	1,075.22
6	1,072.20	1,071.83	1,069.13	1,069.12	1,071.75	1,077.05	1,083.18	1,076.46	1,080.73	1,081.39	1,075.17	1,075.29
7	1,072.10	1,071.77	1,069.25	1,069.12	1,071.90	1,077.21	1,082.96	1,076.27	1,079.99	1,080.40	1,075.15	1,075.39
8	1,072.10	1,071.72	1,069.17	1,069.00	1,072.00	1,077.37	1,082.88	1,076.07	1,079.24	1,079.42	1,075.15	1,075.41
9	1,072.11	1,071.67	1,069.17	1,069.15	1,072.05	1,077.59	1,082.68	1,075.95	1,078.54	1,078.38	1,075.12	1,075.47
10	1,072.09	1,071.60	1,069.26	1,069.28	1,072.20	1,077.72	1,082.14	1,075.85	1,078.27	1,077.30	1,075.13	1,075.50
11	1,072.12	1,071.53	1,069.27	1,069.26	1,072.30	1,077.89	1,081.32	1,075.77	1,078.67	1,076.59	1,075.08	1,075.62
12	1,072.20	1,071.42	1,069.33	1,069.28	1,072.40	1,078.04	1,080.53	1,075.77	1,079.24	1,076.38	1,075.05	1,075.62
13	1,072.20	1,071.29	1,069.33	1,069.35	1,072.55	1,078.15	1,079.76	1,075.88	1,079.39	1,076.17	1,075.12	1,075.62
14	1,072.20	1,071.22	1,069.40	1,069.42	1,072.60	1,078.24	1,079.03	1,075.98	1,079.27	1,075.88	1,075.21	1,075.60
15	1,072.20	1,071.13	1,069.36	1,069.47	1,072.70	1,078.36	1,078.26	1,076.01	1,078.98	1,075.65	1,075.24	1,075.63
16	1,072.18	1,071.05	1,069.32	1,069.53	1,072.75	1,078.45	1,077.47	1,076.04	1,078.76	1,075.42	1,075.33	1,075.66
17	1,072.27	1,070.93	1,069.29	1,069.62	1,072.85	1,078.72	1,076.70	1,076.05	1,078.40	1,075.23	1,075.40	1,075.67
18	1,072.30	1,070.87	1,069.31	1,069.69	1,073.00	1,079.42	1,076.10	1,076.05	1,079.85	1,075.30	1,075.46	1,075.71
19	1,072.29	1,070.82	1,069.30	1,069.77	1,073.14	1,080.32	1,075.97	1,076.05	1,080.72	1,075.33	1,075.45	1,075.73
20	1,072.27	1,070.75	A	1,069.87	1,073.09	1,080.96	1,075.95	1,076.07	1,080.84	1,075.38	1,075.42	1,075.73
21	1,072.26	1,070.54		1,069.90	1,073.18	1,081.43	1,075.90	1,076.09	1,080.97	1,075.37	1,075.40	1,075.71
22	1,072.28	1,070.32		1,069.97	1,073.25	1,081.78	1,075.90	1,076.12	1,082.00	1,075.44	1,075.33	1,075.70
23	1,072.27	1,070.07		1,070.09	1,073.30	1,082.15	1,075.88	1,076.20	1,082.87	1,076.04	1,075.24	1,075.70
24	1,072.27	1,069.82	A	1,070.18	1,073.42	1,082.37	1,075.90	1,076.25	1,084.35	1,076.89	1,075.09	1,075.66
25	1,072.23	1,069.45	1,069.22	1,070.27	1,073.50	1,082.48	1,076.10	1,076.33	1,085.66	1,077.37	1,075.12	1,075.64
26	1,072.11	1,069.27	1,069.20	1,070.38	1,073.58	1,082.57	1,076.20	1,076.42	1,086.16	1,077.51	1,075.06	1,075.60
27	1,072.00	1,069.15	1,069.17	1,070.52	1,073.77	1,082.93	1,076.28	1,076.49	1,086.38	1,077.36	1,075.00	1,075.64
28	1,071.98	1,069.12	1,069.16	1,070.61	1,074.07	1,083.36	1,076.31	1,076.66	1,086.45	1,077.29	1,075.01	1,075.65
29	1,071.91	1,069.09	1,069.14	1,070.72	-----	1,083.42	1,076.30	1,076.97	1,086.45	1,076.90	1,075.05	1,075.68
30	1,072.08	1,069.09	1,069.15	1,070.82	-----	1,083.51	1,076.30	1,078.19	1,086.25	1,076.53	1,075.04	1,075.77
31	1,072.07	-----	1,069.17	1,070.88	-----	1,083.74	-----	1,079.32	-----	1,076.11	1,075.00	-----
MEAN	1,072.19	1,070.86		1,069.71	1,072.56	1,079.50	1,079.11	1,076.38	1,081.37	1,077.98	1,075.23	1,075.52
MAX	1,072.50	1,072.17	1,069.40	1,070.88	1,074.07	1,083.74	1,083.69	1,079.32	1,086.45	1,085.71	1,075.72	1,075.77
MIN	1,071.91	1,069.09	1,068.98	1,069.00	1,070.97	1,074.62	1,075.88	1,075.77	1,078.27	1,075.23	1,075.00	1,074.97
(+)	380,300	337,100	338,200	362,800	410,700	577,100	446,200	497,000	625,700	443,100	425,300	437,600
(#)	-8,000	-43,200	+1,100	+24,600	+47,900	+166,400	-130,900	+50,800	+128,700	-182,600	-17,800	+12,300

CAL YR 1974 (#) -124,100

WTR YR 1975 (#) +49,300

+ CONTENTS, IN ACRE-FEET, AT END OF MONTH.

CHANGE IN CONTENTS, IN ACRE-FEET.

A NO GAGE-HEIGHT RECORD.

KANSAS RIVER BASIN

06887000 BIG BLUE RIVER NEAR MANHATTAN, KS

LOCATION.--Lat 39°14'14", long 96°34'16", in SW¼NW¼SE¼ sec.30, T.9 S., R.8 E., Riley County, at downstream side of highway bridge, 2.5 mi (4.0 km) downstream from Tuttle Creek Dam, 4.0 mi (6.4 km) north of Manhattan, and 7.5 mi (12.1 km) upstream from mouth.

DRAINAGE AREA.--9,640 mi² (25,000 km²).

PERIOD OF RECORD.--May to July 1951 (published in WSP 1139), October 1954 to current year. Records for April 1895 to October 1905, published in previous Annual Reports and Water-Supply Papers, have been found to be unreliable and should not be used.

GAGE.--Water-stage recorder. Datum of gage is 988.86 ft (301.405 m) above mean sea level. May 1 to July 31, 1951, nonrecording gage above power dam 1.1 mi (1.8 km) upstream at datum 8.34 ft (2.542 m) higher. Oct. 1 to Nov. 17, 1954, nonrecording gage and Nov. 18, 1954 to Sept. 30, 1974, recording gage at present site and datum 3.00 ft (0.914 m) higher.

AVERAGE DISCHARGE.--21 years (1954-75), 1,944 ft³/s (55.05 m³/s), 1,408,000 acre-ft/yr (1.74 km³/yr).

EXTREMES.--Current year: Maximum discharge, 11,000 ft³/s (312 m³/s) June 10, gage height, 13.96 ft (4.255 m); minimum, 6.0 ft³/s (0.17 m³/s) Jan. 28-Feb. 3.

Period of record: Maximum discharge, 93,400 ft³/s (2,650 m³/s) July 12, 1951, gage height, 36.04 ft (10.985 m), present site and datum, from floodmarks, from rating curve extended above 35,000 ft³/s (990 m³/s) on basis of slope-area measurement of peak flow; minimum, 6.0 ft³/s (0.17 m³/s) Jan. 28-Feb. 3, 1975. Maximum discharge since construction of Tuttle Creek Dam in 1962, 31,500 ft³/s (892 m³/s) June 19, 1967, gage height, 24.61 ft (7.501 m).

Flood of May 31, 1903, reached a stage of 38.85 ft (11.841 m), and flood in June 1941 reached a stage of about 37.1 ft (11.31 m), from floodmarks and information by local resident.

REMARKS.--Records good. Flow regulated since 1962 by Tuttle Creek Lake (see sta 06886900). Records of chemical and biological analyses, water temperatures, suspended sediment loads, and specific conductance for the current year are published in Part 2 of this report.

REVISIONS.--See PERIOD OF RECORD.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	470	993	612	580	6.0	23	1,120	1,940	2,880	8,070	4,090	495
2	678	979	475	580	6.0	19	1,850	1,960	3,650	9,070	2,320	495
3	684	972	213	580	6.2	16	1,850	1,950	6,100	10,300	2,310	497
4	684	965	210	580	21	14	1,850	1,940	10,400	10,200	1,770	401
5	690	965	210	580	17	12	1,850	2,320	10,400	10,200	931	233
6	690	958	216	580	17	12	1,850	2,840	10,400	10,100	936	203
7	678	958	213	582	20	11	2,550	2,840	10,400	10,000	919	203
8	600	958	207	1,480	18	9.0	3,250	2,830	10,400	9,940	849	201
9	296	972	207	403	16	12	3,240	2,190	10,400	9,870	735	200
10	292	979	208	104	16	19	5,820	1,420	10,500	9,780	734	205
11	292	965	210	44	15	16	8,370	1,410	9,310	7,420	734	209
12	292	965	210	30	14	16	8,330	1,110	5,540	2,580	730	198
13	300	965	280	24	14	12	8,320	776	5,210	2,490	742	200
14	198	958	540	23	14	11	8,330	773	5,130	2,470	740	200
15	60	944	535	21	14	10	8,270	769	5,080	2,450	723	200
16	51	951	535	21	15	10	8,220	768	5,110	2,380	722	200
17	51	951	535	20	22	11	8,180	769	5,070	1,870	722	201
18	51	944	540	21	28	15	8,160	770	5,050	525	767	203
19	47	944	535	28	26	14	5,130	704	5,110	515	932	220
20	49	944	535	29	26	13	2,010	502	5,130	511	920	304
21	150	1,450	535	29	34	14	2,000	500	5,130	510	916	307
22	375	2,060	535	30	58	15	1,780	503	5,130	510	916	307
23	380	2,050	540	31	42	13	1,470	394	3,000	512	911	311
24	440	2,040	540	28	36	11	1,460	84	1,000	2,150	911	306
25	755	2,050	535	14	35	8.5	1,470	77	3,000	4,850	923	308
26	965	2,040	540	8.9	31	20	1,500	81	5,870	4,880	907	308
27	965	1,590	540	7.4	23	37	1,480	74	5,770	4,890	814	388
28	972	618	540	6.3	22	14	1,590	84	5,370	3,180	498	108
29	972	618	540	6.0	-----	500	1,950	146	5,130	4,760	496	100
30	1,050	618	560	6.0	-----	564	1,950	1,030	5,990	4,780	494	114
31	1,040	-----	580	6.0	-----	567	-----	2,850	-----	4,770	494	-----
TOTAL	15,217	34,364	13,211	6,482.6	612.2	2,038.5	115,200	36,404	186,660	156,533	31,606	7,825
MEAN	491	1,145	426	209	21.9	65.8	3,840	1,174	6,222	5,049	1,020	261
MAX	1,050	2,060	612	1,480	58	567	8,370	2,850	10,500	10,300	4,090	497
MIN	47	618	207	6.0	6.0	8.5	1,120	74	1,000	510	494	100
AC-FT	30,180	68,160	26,200	12,860	1,210	4,040	228,500	72,210	370,200	310,500	62,690	15,520

CAL YR 1974 TOTAL 576,419.0 MEAN 1,579 MAX 7,270 MIN 47 AC-FT 1,143,000
WTR YR 1975 TOTAL 606,153.3 MEAN 1,661 MAX 10,500 MIN 6.0 AC-FT 1,202,000

06887500 KANSAS RIVER AT WAMEGO, KS

LOCATION.--Lat 39°11'52", long 96°18'16", in NW¼SW¼NE¼ sec.9, T.10 S., R.10 E., Pottawatomie County, at downstream side of bridge on State Highway 99 at Wamego, 3.0 mi (4.8 km) downstream from Antelope Creek, and at mile 126.9 (204.2 km).

DRAINAGE AREA.--55,280 mi² (143,200 km²), approximately, of which a large area is probably noncontributing.

PERIOD OF RECORD.--January 1919 to current year.

GAGE.--Water-stage recorder. Datum of gage is 950.82 ft (289.810 m) above mean sea level. Prior to Aug. 1, 1934, nonrecording gage and Aug. 1, 1934, to Sept. 30, 1955, water-stage recorder at present site at datum 3.00 ft (0.914 m) higher.

AVERAGE DISCHARGE.--56 years, 4,921 ft³/s (139.4 m³/s), 3,565,000 acre-ft/yr (4.40 km³/yr).

EXTREMES.--Current year: Maximum discharge, 23,900 ft³/s (677 m³/s) June 11, gage height, 11.47 ft (3.496 m); minimum daily, 720 ft³/s (20.4 m³/s) Jan. 13-15.

Period of record: Maximum discharge, 400,000 ft³/s (11,300 m³/s) July 13, 1951, gage height, 30.56 ft (9.315 m), present datum, from rating curve extended above 170,000 ft³/s (4,810 m³/s) on basis of slope-area measurement of peak flow and flood routing studies; minimum, 73 ft³/s (2.07 m³/s) Dec. 14, 1940.

Flood in May 1903 reached a stage of 29.3 ft (8.93 m), present datum, determined by U.S. Weather Bureau, from floodmarks.

REMARKS.--Records good. Natural flow of stream affected by reservoirs in Colorado, Nebraska, and Kansas, and by numerous small diversions for irrigation above station. Records of chemical analyses, water temperatures, suspended sediment loads, and specific conductance for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 806: Drainage area. WSP 1310: 1937(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,400	4,430	1,430	1,190	817	1,690	1,870	3,850	4,460	15,200	6,450	1,920
2	2,510	4,300	1,400	1,210	817	1,880	2,940	3,750	4,690	15,000	4,280	1,790
3	2,290	3,420	1,200	1,200	803	1,930	3,320	3,800	7,190	18,400	3,510	1,620
4	2,260	3,120	1,090	1,160	866	1,680	3,290	3,660	11,400	19,200	3,400	1,640
5	2,240	3,480	1,080	1,150	1,100	1,510	3,300	3,610	13,900	19,300	2,150	2,230
6	2,190	2,850	1,080	1,130	2,260	1,430	3,230	4,370	14,500	19,600	1,800	1,880
7	2,090	2,510	1,130	1,130	1,500	1,480	3,310	4,520	14,500	19,800	1,750	1,310
8	2,030	2,270	1,090	1,270	1,200	1,950	4,850	4,470	14,900	19,600	1,710	1,160
9	1,900	2,200	1,070	1,820	1,100	2,060	5,710	4,370	17,600	19,500	1,540	1,080
10	1,800	2,420	1,050	1,080	1,100	2,140	5,720	3,140	17,600	19,300	1,380	1,120
11	1,810	2,580	1,030	929	1,200	2,120	10,000	2,930	23,000	18,900	1,350	1,780
12	1,650	2,490	1,010	800	1,250	2,110	10,100	2,790	19,800	12,300	1,310	1,520
13	1,900	2,350	998	720	1,300	2,060	10,100	2,120	15,400	9,750	1,430	1,400
14	5,110	2,160	1,100	720	1,300	2,040	10,600	1,840	12,800	8,860	1,680	1,340
15	4,300	2,030	1,240	720	1,300	2,030	11,300	1,750	12,000	10,800	1,460	1,240
16	2,650	1,960	1,230	800	1,300	2,030	11,100	1,720	11,600	9,680	1,470	1,220
17	2,120	1,900	1,220	1,000	1,300	2,030	10,900	1,710	12,200	6,970	1,700	1,190
18	1,600	1,880	1,210	1,200	1,300	1,950	10,700	1,700	11,300	3,990	2,290	1,180
19	1,230	1,860	1,190	1,100	1,300	1,870	10,100	1,650	11,200	3,110	3,890	1,150
20	1,070	1,820	1,170	1,020	1,400	2,290	4,800	1,490	11,400	2,680	4,440	1,160
21	1,070	1,800	1,150	943	1,700	1,930	4,140	1,320	11,500	2,490	3,790	1,220
22	1,240	2,580	1,150	894	1,900	1,690	3,980	1,270	16,100	2,450	3,340	1,240
23	1,370	2,830	1,140	901	1,700	1,570	3,480	1,330	18,600	2,400	3,220	1,220
24	1,290	2,800	1,190	866	1,570	1,450	3,310	1,130	15,200	2,310	2,930	1,200
25	1,330	2,780	1,200	845	1,280	1,360	4,250	948	17,500	5,870	2,900	1,190
26	1,690	2,760	1,220	845	1,210	1,340	6,370	941	22,000	6,610	3,040	1,190
27	1,760	2,720	1,230	831	1,310	1,400	5,850	931	22,100	6,610	2,610	1,200
28	1,780	1,900	1,190	831	1,570	1,420	4,790	964	18,600	6,130	2,270	1,260
29	2,000	1,480	1,180	831	-----	1,460	4,330	1,070	15,400	5,320	1,910	1,040
30	2,540	1,450	1,170	831	-----	1,800	4,080	1,330	13,100	6,720	1,890	989
31	4,240	-----	1,190	831	-----	1,870	-----	3,180	-----	6,620	1,890	-----
TOTAL	65,460	75,130	36,028	30,798	36,753	55,570	181,820	73,654	431,540	325,470	78,780	40,679
MEAN	2,112	2,504	1,162	993	1,313	1,793	6,061	2,376	14,380	10,500	2,541	1,356
MAX	5,110	4,430	1,430	1,820	2,260	2,290	11,300	4,520	23,000	19,800	6,450	2,230
MIN	1,070	1,450	998	720	803	1,340	1,870	931	4,460	2,310	1,310	989
AC-FT	129,800	149,000	71,460	61,090	72,900	110,200	360,600	146,100	856,000	645,600	156,300	80,690

CAL YR 1974 TOTAL 1,968,038 MEAN 5,392 MAX 18,900 MIN 998 AC-FT 3,904,000
WTR YR 1975 TOTAL 1,431,682 MEAN 3,922 MAX 23,000 MIN 720 AC-FT 2,840,000

PEAK DISCHARGE (REGULATED) ABOVE 8,000 CFS

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
04-15	1400	8.21	11,400	06-26	2200	11.18	22,700
06-11	1800	11.47	23,900	07-06	1900	10.45	19,800
06-22	2300	10.40	19,600	07-14	2200	8.27	11,600

KANSAS RIVER BASIN

06888500 MILL CREEK NEAR PAXICO, KS

LOCATION.--Lat 39°03'44", long 96°10'52", in SW¼NE¼SW¼ sec.27, T.11 S., R.11 E., Wabaunsee County, at downstream side of bridge on Interstate Highway 70, 1.0 mi (1.6 km) southwest of Paxico, 2.0 mi (3.2 km) downstream from Kuenzli Creek, and 16.0 mi (25.7 km) upstream from mouth.

DRAINAGE AREA.--316 mi² (818 km²).

PERIOD OF RECORD.--December 1953 to current year.

GAGE.--Water-stage recorder. Datum of gage is 964.92 ft (294.108 m), above mean sea level. Prior to Apr. 15, 1958, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--21 years (1954-75), 175 ft³/s (4.956 m³/s), 126,800 acre-ft/yr (156 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 11,400 ft³/s (323 m³/s) June 22, gage height, 21.14 ft (6.443 m); minimum, 16 ft³/s (0.453 m³/s) Sept. 4.
Period of record: Maximum discharge, 42,200 ft³/s (1,200 m³/s) Sept. 26, 1973, gage height, 32.21 ft (9.818 m); no flow at times.
Maximum stage known, 34.7 ft (10.58 m) July 12, 1951, from floodmarks, discharge, 77,200 ft³/s (2,190 m³/s), from contracted-opening measurement of peak flow.

REMARKS.--Records good except those for August and September, which are fair.

REVISIONS (WATER YEARS).--WSP 1560: 1954, 1957.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	622	112	73	124	184	208	219	113	233	43	19
2	23	346	108	74	119	169	205	207	161	207	42	19
3	22	2,460	106	77	119	156	208	217	917	185	40	17
4	22	823	102	74	551	149	278	202	330	167	39	16
5	29	494	101	72	475	146	435	187	224	151	37	410
6	51	381	105	71	300	144	306	179	180	136	37	81
7	43	321	120	71	250	140	282	164	153	122	35	41
8	34	280	114	74	230	130	811	151	292	114	33	31
9	32	426	103	79	210	131	478	145	513	112	30	26
10	30	747	101	168	200	148	378	137	947	104	27	74
11	28	480	100	245	190	137	336	135	3,300	97	25	548
12	38	356	98	180	180	132	305	128	639	91	24	84
13	293	315	96	159	172	125	310	121	450	87	37	48
14	252	268	94	140	165	117	1,170	122	369	82	50	38
15	118	242	92	132	160	116	667	118	317	75	43	35
16	92	229	89	138	168	136	505	111	1,420	71	36	34
17	82	212	87	131	170	266	441	104	2,300	68	45	32
18	74	201	86	128	150	338	406	98	604	64	110	31
19	67	194	85	150	140	241	372	92	443	61	62	29
20	64	178	82	140	139	205	329	87	361	60	45	28
21	61	167	81	133	637	194	307	85	310	58	38	26
22	58	162	78	129	1,080	183	285	84	6,050	62	33	25
23	56	157	77	120	341	173	279	108	1,140	61	29	25
24	56	143	76	123	251	160	321	115	680	58	25	23
25	57	133	74	130	251	150	582	93	525	55	22	22
26	58	130	73	127	253	146	341	95	436	54	22	22
27	56	126	73	121	205	269	304	92	379	53	22	22
28	58	122	72	116	193	487	291	207	336	50	24	24
29	1,720	118	72	112	-----	276	263	241	291	47	27	25
30	417	114	70	113	-----	246	240	206	257	49	27	50
31	851	-----	72	124	-----	234	-----	132	-----	48	23	-----
TOTAL	4,865	10,947	2,799	3,724	7,423	5,828	11,643	4,382	24,437	2,882	1,132	1,905
MEAN	157	365	90.3	120	265	188	388	141	815	93.0	36.5	63.5
MAX	1,720	2,460	120	245	1,080	487	1,170	241	6,050	233	110	548
MIN	22	114	70	71	119	116	205	84	113	47	22	16
AC-FT	9,650	21,710	5,550	7,390	14,720	11,560	23,090	8,690	48,470	5,720	2,250	3,780

CAL YR 1974 TOTAL 89,479 MEAN 245 MAX 6,700 MIN 21 AC-FT 177,500
WTR YR 1975 TOTAL 81,967 MEAN 225 MAX 6,050 MIN 16 AC-FT 162,600

PEAK DISCHARGE (BASE, 2,500 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
10-29	1300	12.99	5,290	06-11	0500	16.05	7,440
11-03	1400	14.06	6,040	06-17	0100	15.17	6,820
02-22	0100	9.16	2,610	06-22	1500	21.14	11,400

06889000 KANSAS RIVER AT TOPEKA, KS

LOCATION.--Lat 39°04'00", long 95°38'58", in SW¼SW¼NW¼ sec.28, T.11 S., R.16 E., Shawnee County, near right bank at downstream side of Sardou Bridge in Topeka, 2.3 mi (3.7 km) upstream from Soldier Creek (diversion channel) and at mile 83.1 (133.7 km).

DRAINAGE AREA.--56,720 mi² (146,900 km²), approximately, of which a large area is probably noncontributing.

PERIOD OF RECORD.--April to August 1904 (gage heights only), June 1917 to current year. Gage-height records for this vicinity since August 1904 are contained in reports of U.S. Weather Bureau.

GAGE.--Water-stage recorder. Datum of gage is 851.66 ft (259.586 m) above mean sea level. Prior to Feb. 28, 1961, recording or non-recording gages at several sites within 8,000 ft (2,400 m) of present site at various datums.

AVERAGE DISCHARGE.--58 years, 5,468 ft³/s (154.9 m³/s), 3,962,000 acre-ft/yr (4.89 km³/yr).

EXTREMES.--Current year: Maximum discharge, 43,000 ft³/s (1,220 m³/s) June 11, gage height, 15.00 ft (4.572 m); minimum daily, 1,100 ft³/s (31.2 m³/s) Jan. 13.

Period of record: Maximum discharge, 469,000 ft³/s (13,300 m³/s) July 13, 1951, gage height, 35.8 ft (10.91 m), from floodmark, present site and datum; minimum, 112 ft³/s (3.17 m³/s) Dec. 16, 1940, result of freezeup. Maximum stage known since at least 1844, that of July 13, 1951.

Flood of May 30, 1903 (second highest since 1844) reached a stage of about 33 ft (10.1 m), present site and datum, from floodmarks at site 5,900 ft (1,800 m) upstream, discharge, about 300,000 ft³/s (8,500 m³/s). A flood in the spring of 1844 is known to have been higher than that of 1903 and on the basis of legendary marks or deductions is believed to be the greatest known.

REMARKS.--Records good except those for January and February, which are poor. Natural flow of stream affected by reservoirs in Colorado, Nebraska, and Kansas, and by numerous diversions for irrigation above station.

REVISIONS (WATER YEARS).--WSP 806: Drainage area. WSP 1310: 1920(M), 1922(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2500	5070	2080	1570	1360	2600	2760	4680	4950	14200	6730	2330
2	2500	4960	1990	1570	1320	2770	2870	4430	4970	15900	6460	2300
3	2570	5970	1920	1620	1280	2810	3510	4480	10500	16500	4670	2170
4	2370	6530	1720	1600	1640	2720	3970	4480	14500	19500	4180	2000
5	2530	4400	1560	1560	2910	2460	4350	4260	13300	19500	4040	2670
6	2660	4360	1570	1520	2010	2260	4260	4200	14500	19700	3040	3220
7	2450	3780	1670	1510	1760	2200	4040	4820	14400	20000	2720	2600
8	2320	3440	1640	1490	1700	2170	4360	4880	15400	19900	2620	1860
9	2260	3280	1570	1560	1600	2620	6190	4820	26300	19700	2520	1610
10	2180	4120	1480	2450	1700	2860	6320	4650	27900	19500	2330	1460
11	2090	4130	1440	1960	1800	2910	6770	3840	35500	19400	2110	2430
12	2180	3780	1410	1600	1800	2870	9990	3730	31300	16800	1980	3140
13	2640	3540	1400	1600	1800	2790	9890	3480	20700	12000	2060	2040
14	2970	3350	1360	1900	1800	2710	11200	2980	15800	9070	2300	1850
15	4550	3140	1430	1900	1800	2670	12900	2690	13800	10000	2360	1760
16	4070	3010	1620	1800	1800	2650	11900	2590	12800	10500	2120	1630
17	2940	2920	1620	1700	1800	2810	11300	2490	15800	9520	2110	1550
18	2550	2870	1600	1600	1800	3020	11000	2410	13600	6820	2250	1500
19	2110	2840	1570	1700	1800	2990	14500	2330	15900	4910	2670	1460
20	1740	2790	1590	1600	1900	2800	9840	2260	14900	4420	3960	1420
21	1490	2740	1560	1660	2000	3020	5640	2150	12300	3970	4470	1410
22	1450	2710	1560	1600	2500	2740	5050	2010	20400	3740	3960	1470
23	1620	3220	1520	1410	3400	2480	4850	2280	30200	3650	3550	1500
24	1770	3490	1540	1820	2780	2360	4620	2100	20300	3570	3410	1480
25	1700	3440	1600	1620	2490	2220	4830	1870	16900	3520	3190	1440
26	1720	3440	1760	1420	2790	2090	5470	1660	20600	6390	3190	1420
27	2030	3430	1680	1440	2510	2280	6830	1560	23500	6880	3270	1410
28	2150	3400	1590	1410	2370	2900	6200	2130	21600	6870	2970	1440
29	2500	2690	1560	1360	---	3010	5330	2550	18100	6140	2760	1480
30	4300	2180	1520	1380	---	2640	4950	5190	15200	6000	2460	1420
31	3470	---	1570	1370	---	2690	---	6230	---	6840	2390	---
TOTAL	76380	109020	49700	50300	56220	82120	205690	104230	535920	345410	98850	55470
MEAN	2464	3634	1603	1623	2008	2649	6856	3362	17860	11140	3189	1849
MAX	4550	6530	2080	2450	3400	3020	14500	6230	35500	20000	6730	3220
MIN	1450	2180	1360	1360	1280	2090	2760	1560	4950	3520	1980	1410
AC=FT	151500	216200	98580	99770	111500	162900	408000	206700	1063000	685100	196100	110000
CAL YR 1974 TOTAL	2295140			6288		34900		1360		4552000		
WTR YR 1975 TOTAL	1769310			4847		35500		1280		3509000		

PEAK DISCHARGE (REGULATED) ABOVE 12,000 CFS

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
04-19	1200	8.22	16,000	06-20	0100	8.97	18,100
06-04	0100	8.91	18,400	06-23	0500	13.35	35,600
06-09	2300	13.56	36,500	06-27	1300	10.54	23,900
06-11	2000	15.00	43,000	07-07	1800	9.54	20,100
06-17	1700	9.01	18,300				

KANSAS RIVER BASIN

06889100 SOLDIER CREEK NEAR GOFF, KS

LOCATION.--Lat 39°37'27", long 95°57'57", in NW 1/4 sec. 16, T.5 S., R.13 E., Nemaha County, 20 ft (6 m) downstream from highway bridge, 3.3 mi (5.3 km) southwest of Goff, and at mile 71.9 (115.7 km).

DRAINAGE AREA.--2.06 mi² (5.34 km²).

PERIOD OF RECORD.--March 1964 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,297.10 ft (395.356 m) above mean sea level.

AVERAGE DISCHARGE.--11 years, 1.21 ft³/s (0.0343 m³/s), 877 acre-ft/yr (1.08 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 980 ft³/s (27.8 m³/s) June 18, gage height, 11.70 ft (3.566 m); no flow at times. Period of record: Maximum discharge, 7,080 ft³/s (201 m³/s) May 10, 1970, gage height, 15.18 ft (4.627 m), from rating curve extended above 250 ft³/s (7.08 m³/s) on basis of slope-area measurement of peak flow; no flow at times in most years.

REMARKS.--Records good. Records of suspended sediment loads for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		.01	.03	.02	.05	2.0	.06	.07	.50	.13		
2		0	.04	.02	.05	.80	.06	.08	39	.08		
3		.03	.03	.02	.07	.44	.08	.08	11	.07		
4		.02	.06	.05	3.0	.34	.34	.06	1.1	.05		
5		0	.08	.05	2.5	.50	.66	.06	.90	.04		
6		0	.24	.05	.50	.44	.13	.07	.66	.02		
7		0	.29	.05	.20	.34	.06	.07	.50	.01		
8		0	.02	.05	.10	.13	.44	.06	7.0	.01		
9		.18	.02	.03	.05	.13	.13	.06	6.0	0		
10		.29	.06	.02	.10	.24	.06	.06	47	.01		
11		.07	.06	.01	.06	.13	.06	.21	13	0		
12		.03	.05	.01	.05	.13	.05	.06	1.2	0		
13		.02	.05	.01	.05	.08	.08	.05	.34	0		
14		.02	.08	.01	.05	.08	1.6	.05	.13	0		
15		.02	.18	.02	.05	.18	.29	.04	.08	0		
16		.02	.05	.03	.05	.90	.08	.04	.07	0		
17		.02	.03	.06	.05	.96	.06	.03	.08	0		
18		.03	.04	.06	.05	.72	30	.03	103	0		
19		.03	.04	.06	.05	.34	1.0	.02	2.6	0		
20		.02	.05	.06	.10	.18	.39	.02	1.9	0		
21		.02	.04	.06	.20	.13	.29	.02	1.7	0		
22		.03	.06	.06	.25	.07	.18	.04	4.2	.01		
23		.04	.05	.06	.20	.07	.24	.06	1.4	0		
24		.02	.03	.09	.20	.06	.34	.04	.97	0		
25		.02	.02	.20	.50	.06	.18	.04	.71	0		
26		.04	.02	.40	1.4	.13	.08	.18	.57	0		
27		.03	.02	.25	11	1.7	.13	.04	.47	0		
28		.03	.03	.10	12	.34	.13	.60	.39	0		
29		.02	.03	.06	---	.08	.07	14	.29	0		
30		.02	.03	.05	---	.07	.07	19	.23	0		
31		---	.03	.05	---	.06	---	1.1	---	0		---
TOTAL	0	1.08	1.86	2.07	32.93	11.83	37.34	36.34	246.99	.43	0	0
MEAN	0	.036	.060	.067	1.18	.38	1.24	1.17	8.23	.014	0	0
MAX	0	.29	.29	.40	12	2.0	30	19	103	.13	0	0
MIN	0	0	.02	.01	.05	.06	.05	.02	.07	0	0	0
AC-FT	0	2.1	3.7	4.1	65	23	74	72	490	.9	0	0
CAL YR 1974	TOTAL	396.85	MEAN	1.09	MAX	85	MIN	0	AC-FT	787		
WTR YR 1975	TOTAL	370.87	MEAN	1.02	MAX	103	MIN	0	AC-FT	736		

PEAK DISCHARGE (BASE, 100 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
04-18	0330	8.99	309	06-10	2200	9.31	341
05-29	2400	8.05	231	06-18	0900	11.70	980
06-02	2100	9.79	401				

KANSAS RIVER BASIN

93

06889120 SOLDIER CREEK NEAR BANCROFT, KS

LOCATION.--Lat 39°35'42", long 95°58'16", in NE¼NW¼ sec.28, T.5 S., R.13 E., Nemaha County, at downstream side of highway bridge, 4.0 mi (6.4 km) west of Bancroft, and at mile 68.7 (110.5 km).

DRAINAGE AREA.--10.5 mi² (27.2 km²).

PERIOD OF RECORD.--March 1964 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,239.50 ft (377.800 m) above mean sea level.

AVERAGE DISCHARGE.--11 years, 6.13 ft³/s (0.174 m³/s), 4,440 acre-ft/yr (5.47 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,420 ft³/s (40.2 m³/s) June 18, gage height, 13.05 ft (3.978 m); no flow at times.
Period of record: Maximum discharge, 13,100 ft³/s (371 m³/s) May 10, 1970, gage height, 16.09 ft (4.904 m) (revised), from rating curve extended above 1,500 ft³/s (42.5 m³/s) on basis of contracted-opening and flow-over-road measurement of peak flow; no flow at times in most years.

REMARKS.--Records good except those for winter periods, which are poor. Records of suspended sediment loads for current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.41	.09	.19	.16	3.0	.49	.59	3.6	.40	.01	0
2	0	.29	.13	.12	.13	1.3	.53	1.1	95	.36	.02	0
3	0	.33	.15	.13	.14	1.0	.67	1.2	82	.32	.01	0
4	0	.33	.16	.12	3.0	.90	1.6	.76	3.5	.28	0	0
5	0	.25	.17	.15	3.2	1.1	3.7	.55	2.3	.26	0	0
6	.13	.17	.29	.20	.90	1.0	1.5	.62	1.4	.23	0	0
7	.04	.17	.37	.25	.45	.95	.91	.66	.67	.20	.02	0
8	.05	.17	.15	.25	.25	.80	2.4	.39	23	.19	.02	0
9	.04	.37	.09	.30	.15	.75	1.0	.33	39	.17	0	0
10	.04	.79	.13	.20	.20	.80	.49	.35	119	.20	0	0
11	.05	.41	.21	.15	.20	.85	.39	1.1	114	.14	0	.02
12	.13	.25	.21	.13	.18	.75	.37	.51	9.6	.10	0	0
13	.37	.17	.21	.16	.17	.70	.37	.35	2.0	.10	0	0
14	.29	.17	.25	.19	.15	.45	7.3	.38	1.2	.10	.01	0
15	.13	.17	.33	.19	.15	.40	1.9	.31	.66	.05	0	0
16	.13	.56	.17	.15	.16	1.9	.79	.24	.33	.04	0	0
17	.17	.05	.20	.13	.20	5.6	.52	.17	.33	.04	.13	0
18	.13	.09	.21	.10	.16	3.7	137	.16	294	.03	.04	0
19	.13	.09	.20	.13	.15	1.8	6.9	.12	11	.02	.01	0
20	.13	.09	.17	.15	.15	1.3	3.5	.08	2.9	.22	0	0
21	.17	.04	.19	.17	.25	1.0	2.6	.05	1.8	.04	0	0
22	.25	.05	.21	.13	.50	.83	2.3	.06	18	.05	0	0
23	.25	.09	.16	.11	.35	.71	2.3	.57	2.4	.03	0	0
24	.25	.05	.12	.13	.30	.54	2.7	.27	1.5	.02	0	0
25	.29	.05	.12	.25	.60	.40	1.9	.16	1.1	0	0	0
26	.29	.09	.12	.65	1.6	.53	1.6	1.4	.92	0	0	0
27	.29	.09	.12	.35	10	11	1.5	.41	.73	0	0	0
28	.37	.09	.15	.24	30	3.3	1.3	1.7	.62	.01	.14	.05
29	.79	.05	.21	.20	---	1.3	.94	14	.54	.02	.04	.02
30	.45	.09	.16	.17	---	.91	.76	92	.47	.02	0	.05
31	.56	---	.17	.17	---	.85	---	7.4	---	.01	0	---
TOTAL	5.92	6.02	5.62	5.96	53.85	50.42	190.23	127.99	833.57	3.65	.45	.14
MEAN	.19	.20	.18	.19	1.92	1.63	6.34	4.13	27.8	.12	.015	.005
MAX	.79	.79	.37	.65	30	11	137	92	294	.40	.14	.05
MIN	0	.04	.09	.10	.13	.40	.37	.05	.33	0	0	0
AC-FT	12	12	11	12	107	100	377	254	1650	7.2	.9	.3

CAL YR 1974 TOTAL 1879.76 MEAN 5.15 MAX 273 MIN 0 AC-FT 3730
WTR YR 1975 TOTAL 1283.82 MEAN 3.52 MAX 294 MIN 0 AC-FT 2550

PEAK DISCHARGE (BASE, 400 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
04-18	0445	10.40	804	06-10	2345	11.56	1,010
06-02	2315	10.97	895	06-18	1000	13.05	1,420

KANSAS RIVER BASIN

06889140 SOLDIER CREEK NEAR SOLDIER, KS

LOCATION.--Lat 39°33'57", long 95°57'45", in NW¼NE¼ sec.4, T.6 S., R.13 E., Jackson County, at downstream side of highway bridge, 2.0 mi (3.2 km) north of Soldier, and at mile 65.7 (105.7 km).

DRAINAGE AREA.--16.9 mi² (43.8 km²).

PERIOD OF RECORD.--March 1964 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,206.02 ft (367.595 m) above mean sea level.

AVERAGE DISCHARGE.--11 years, 9.33 ft³/s (0.264 m³/s), 6,760 acre-ft/yr (8.34 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,640 ft³/s (46.4 m³/s) June 18, gage height, 9.79 ft (2.984 m); minimum daily, 0.08 ft³/s (0.002 m³/s) Aug. 21-24.

Period of record: Maximum discharge, 11,700 ft³/s (331 m³/s) May 10, 1970, gage height, 16.46 ft (5.017 m), from rating curve extended above 1,200 ft³/s (34.0 m³/s) on basis of contracted-opening measurement of peak flow; no flow at times in 1966-68, 1972.

REMARKS.--Records fair. Records of suspended sediment loads for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.65	.85	.33	.45	.55	20	1.8	1.2	2.5	1.3	.27	.23
2	.60	.85	.36	.50	.50	6.7	1.8	1.4	102	1.2	.27	.25
3	.58	.80	.36	.50	.55	2.1	2.2	1.6	147	1.1	.27	.27
4	.55	.75	.36	.45	3.9	1.6	4.1	1.3	5.9	1.1	.27	.27
5	.50	.65	.36	.36	5.1	2.4	7.9	1.2	3.3	.98	.30	.25
6	.48	.60	.40	.36	1.5	2.9	3.1	1.2	2.3	.96	.34	.15
7	.45	.55	.60	.40	1.0	1.7	1.5	1.2	1.7	.84	.32	.12
8	.45	.50	.50	.40	.96	1.2	4.1	1.1	32	.82	.28	.10
9	.43	.65	.45	.40	.72	1.1	2.6	.98	83	.77	.29	.10
10	.41	1.2	.36	.80	.79	1.2	1.8	.93	176	.77	.28	.12
11	.40	.90	.36	.40	.89	1.3	1.5	1.6	174	.69	.29	.25
12	.40	.75	.33	.50	.85	1.3	1.5	1.3	15	.66	.31	.20
13	.57	.65	.33	.60	.82	1.1	1.7	1.1	4.8	.65	.27	.18
14	.68	.55	.40	.60	.80	.94	13	1.1	3.3	.58	.27	.18
15	.53	.55	.60	.60	.80	2.3	2.6	1.0	2.7	.57	.20	.22
16	.38	.85	.55	.51	.83	8.2	1.2	.93	2.3	.54	.16	.22
17	.33	.36	.50	.42	.97	10	.95	.91	2.3	.45	.33	.23
18	.30	.33	.47	.42	.88	6.9	229	.91	407	.42	.14	.22
19	.26	.33	.47	.50	.78	3.1	11	.87	18	.42	.13	.19
20	.26	.36	.42	.51	.80	2.2	3.7	.82	6.3	.63	.13	.23
21	.30	.30	.39	.55	.88	2.2	2.8	.77	3.4	.61	.08	.23
22	.33	.33	.45	.43	1.1	2.1	2.3	.77	33	.61	.08	.25
23	.33	.30	.45	.35	.85	1.8	2.2	1.1	5.8	.56	.08	.25
24	.33	.33	.36	.43	.80	1.7	3.3	.99	2.9	.46	.08	.25
25	.45	.26	.36	.77	1.2	1.6	2.2	.86	2.2	.41	.17	.25
26	.55	.30	.40	1.1	2.7	4.4	1.9	1.4	1.9	.38	.12	.25
27	.50	.36	.36	.86	25	21	1.8	1.3	1.8	.34	.16	.26
28	.70	.30	.45	.70	68	5.9	1.6	1.6	1.6	.34	.20	.25
29	.99	.30	.45	.65	---	1.8	1.4	24	1.4	.33	.18	.25
30	.90	.33	.50	.60	---	1.6	1.3	91	1.3	.28	.19	.21
31	.90	---	.45	.60	---	1.8	---	6.2	---	.27	.21	---
TOTAL	15.49	16.14	13.13	16.72	124.52	124.14	317.85	152.64	1246.7	20.04	6.67	6.43
MEAN	.50	.54	.42	.54	4.45	4.00	10.6	4.92	41.6	.65	.22	.21
MAX	.99	1.2	.60	1.1	.68	.21	229	.91	407	1.3	.34	.27
MIN	.26	.26	.33	.35	.50	.94	.95	.77	1.3	.27	.08	.10
AC-FT	31	32	26	33	247	246	630	303	2470	40	13	13
CAL YR 1974 TOTAL	2693.79											
WTR YR 1975 TOTAL	2060.47											
MEAN 7.38												
MAX 319												
MIN .26												
AC-FT 5340												
AC-FT 4090												

PEAK DISCHARGE (BASE, 600 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
04-18	0300	6.25	990	06-10	2200	7.41	1,220
06-02	2400	6.33	1,010	06-18	0930	9.79	1,640

KANSAS RIVER BASIN

95

06889160 SOLDIER CREEK NEAR CIRCLEVILLE, KS

LOCATION.--Lat 39°27'47", long 95°57'00", in NW¼NW¼ sec.10, T.7 S., R.13 E., Jackson County, 160 ft (49 m) downstream from bridge on State Highway 16, 5.8 mi (9.3 km) southwest of Circleville, and at mile 55.2 (88.8 km).

DRAINAGE AREA.--49.3 mi² (127.7 km²).

PERIOD OF RECORD.--March 1964 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,094.58 ft (333.628 m) above mean sea level.

AVERAGE DISCHARGE.--11 years, 31.7 ft³/s (0.898 m³/s), 22,970 acre-ft/yr (28.3 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,730 ft³/s (134 m³/s) June 9, gage height, 17.18 ft (5.236 m); minimum, 0.68 ft³/s (0.019 m³/s) Aug. 19, 20.

Period of record: Maximum discharge, 5,570 ft³/s (158 m³/s) May 10, 1970, gage height, 19.95 ft (6.081 m); minimum, 0.14 ft³/s (0.004 m³/s) Mar. 7, 1967.

REMARKS.--Records good. Records of suspended sediment loads for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.85	2.5	1.8	1.9	2.3	53	4.1	6.3	9.0	11	2.0	.92
2	.85	2.3	1.9	2.3	2.1	20	5.5	6.7	234	10	3.1	1.3
3	.85	2.1	1.8	2.0	2.3	14	4.5	7.9	536	9.2	2.4	1.5
4	.90	2.0	1.7	2.3	12	7.0	6.5	6.6	42	8.6	1.9	13
5	1.1	1.8	2.3	2.0	15	6.5	13	5.9	22	7.7	1.8	80
6	1.6	1.8	2.3	2.1	6.5	8.6	8.6	5.5	16	7.1	1.7	4.2
7	1.7	1.7	2.8	1.9	4.0	6.3	6.0	5.2	13	6.0	1.8	2.2
8	.95	1.7	2.5	1.9	3.5	4.6	12	4.7	58	5.7	1.7	1.8
9	.90	2.1	1.9	2.0	3.0	4.8	8.8	4.4	1260	5.3	1.6	1.6
10	.90	2.9	1.9	3.0	3.5	4.8	5.7	4.3	583	5.0	1.6	1.7
11	.90	2.4	1.9	2.2	3.8	4.5	4.6	6.7	913	4.7	1.5	3.7
12	1.0	2.1	1.9	2.0	3.2	4.2	4.2	5.3	93	4.5	1.6	3.2
13	1.6	1.8	1.9	1.8	2.9	3.5	4.7	4.6	35	4.4	2.3	2.0
14	1.7	1.8	2.0	1.7	2.8	4.0	33	4.5	22	4.3	2.2	1.5
15	1.3	1.8	2.1	1.7	2.8	3.5	17	4.2	16	4.0	2.0	1.7
16	1.4	1.8	2.0	1.7	2.8	5.8	9.2	3.9	13	3.8	2.0	1.9
17	1.3	2.4	2.0	1.8	3.0	16	7.2	3.7	12	3.6	2.5	2.5
18	1.6	2.0	1.9	1.8	2.9	13	744	3.5	1260	3.3	1.5	2.8
19	1.1	2.0	1.9	1.9	2.9	9.1	45	3.3	112	3.2	.84	2.6
20	1.0	1.5	2.0	2.0	2.6	6.1	19	3.2	49	5.6	.84	2.3
21	1.0	1.7	1.9	2.0	2.6	5.0	14	3.1	31	3.9	.84	2.5
22	1.1	1.7	2.0	2.1	2.8	4.2	12	3.0	147	4.7	.84	2.0
23	1.3	1.8	1.9	2.1	3.4	3.7	14	4.2	39	3.7	.84	1.9
24	1.3	1.7	2.0	2.4	4.3	3.1	16	3.4	24	3.1	.84	2.2
25	1.5	1.7	1.7	3.0	8.9	3.3	12	3.3	28	2.9	.84	2.0
26	1.5	1.8	1.7	3.6	17	3.1	9.8	4.2	20	2.8	.92	1.8
27	2.3	1.6	1.8	4.0	40	31	9.3	3.6	16	2.6	1.1	2.3
28	1.6	1.9	1.8	3.3	82	22	8.7	5.9	14	2.6	1.3	2.3
29	3.6	1.8	2.0	3.2	---	7.6	7.5	407	13	2.4	1.8	2.1
30	2.5	1.7	1.9	2.6	---	5.4	6.8	345	12	2.3	1.8	2.2
31	2.5	---	2.0	2.4	---	5.0	---	23	---	2.1	1.4	---
TOTAL	43.70	57.9	61.2	70.7	244.9	292.7	1072.7	906.1	5642.0	150.1	49.40	153.72
MEAN	1.41	1.93	1.97	2.28	8.75	9.44	35.8	29.2	188	4.84	1.59	5.12
MAX	3.6	2.9	2.8	4.0	82	53	744	407	1260	11	3.1	80
MIN	.85	1.5	1.7	1.7	2.1	3.1	4.1	3.0	9.0	2.1	.84	.92
AC=FT	87	115	121	140	486	581	2130	1800	11190	298	98	305
CAL YR 1974 TOTAL	8964.56											
WTR YR 1975 TOTAL	8745.12											
MEAN	24.6											
MAX	1170											
MIN	.76											
AC=FT	17780											
WTR YR 1975 TOTAL	8745.12											
MEAN	24.0											
MAX	1260											
MIN	.84											
AC=FT	17350											

PEAK DISCHARGE (BASE, 1,200 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
04-18	0530	12.57	2,380	06-09	0545	17.18	4,730
05-29	2230	15.10	3,550	06-10	2330	16.67	4,400
06-02	2330	13.20	2,640	06-18	1300	16.09	4,050

KANSAS RIVER BASIN

06889180 SOLDIER CREEK NEAR ST. CLERE, KS

LOCATION.--Lat 39°22'33", long 95°55'05", in NW 1/4 sec. 12, T.8 S., R.13 E., Jackson County, at upstream side of highway bridge, 7.8 mi (12.6 km) east of St. Clere, and at mile 44.5 (71.6 km).

DRAINAGE AREA.--80 mi² (207 km²).

PERIOD OF RECORD.--March 1964 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,023.04 ft (311.823 m) above mean sea level.

AVERAGE DISCHARGE.--11 years, 53.4 ft³/s (1.512 m³/s), 38,690 acre-ft/yr (47.7 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,760 ft³/s (135 m³/s) June 9, gage height, 19.78 ft (6.029 m); minimum, 1.4 ft³/s (0.04 m³/s) Oct. 1-3.

Period of record: Maximum discharge, 8,430 ft³/s (239 m³/s) June 12, 1967, gage height, 21.41 ft (6.526 m); maximum gage height, 21.54 ft (6.565 m) Sept. 21, 1965; no flow for part of Apr. 9, 1964 (result of beaver activity upstream).

REMARKS.--Records good except those for winter periods, which are poor. Records of suspended sediment loads for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.5	6.7	3.8	4.5	7.1	89	11	22	57	33	7.0	3.1
2	1.4	5.5	4.5	4.8	6.5	29	12	21	86	29	7.3	2.8
3	1.5	6.4	4.5	5.0	6.9	22	13	24	917	25	7.3	2.7
4	1.6	5.8	4.2	5.0	51	16	14	21	95	23	5.5	3.0
5	2.2	4.8	3.8	4.7	40	12	26	19	60	22	5.4	105
6	4.0	4.5	5.2	5.0	20	13	21	17	46	20	5.5	15
7	4.2	4.2	6.2	5.0	13	14	16	17	37	18	5.5	8.0
8	3.5	4.2	5.5	4.6	10	10	23	15	57	16	5.3	6.2
9	3.0	5.8	5.8	4.5	9.0	9.5	22	14	2170	15	5.0	5.3
10	2.8	8.5	4.3	11	8.0	13	15	13	478	14	3.5	5.3
11	2.4	8.2	4.2	11	8.0	9.3	13	21	1620	13	3.4	11
12	2.6	6.1	4.3	7.0	9.0	8.7	12	16	225	12	3.0	7.7
13	4.5	5.0	4.2	5.5	9.0	8.5	13	14	115	11	12	5.8
14	4.8	4.5	4.1	5.0	8.6	8.5	55	13	85	11	12	5.2
15	3.8	4.6	4.6	5.0	8.6	7.4	44	12	68	10	7.8	5.9
16	3.5	4.7	4.5	5.0	8.4	9.4	26	11	59	8.9	6.5	5.8
17	3.2	4.3	5.0	5.5	8.4	26	21	10	56	7.7	6.3	5.9
18	3.0	5.5	4.9	5.8	8.4	24	802	9.8	1100	6.5	8.3	5.1
19	3.2	5.0	4.6	6.5	8.4	19	100	9.2	214	6.4	6.9	5.3
20	4.0	4.6	4.3	8.0	13	14	54	8.5	107	21	5.3	4.1
21	3.5	4.3	4.3	7.0	21	11	41	8.2	87	16	4.7	4.1
22	3.2	4.0	4.3	6.5	19	10	35	8.1	238	17	2.9	4.1
23	3.5	4.2	4.0	6.5	17	9.1	77	13	110	15	3.6	4.1
24	4.0	4.0	4.0	7.5	17	7.7	200	9.5	74	12	3.4	3.4
25	4.5	3.8	3.6	8.0	25	6.7	52	8.5	88	9.9	3.6	3.7
26	5.0	4.0	3.3	10	66	7.8	39	14	71	9.2	5.4	4.0
27	7.2	4.0	3.7	10	60	64	35	9.3	52	8.5	4.7	3.5
28	7.6	3.9	4.0	8.0	100	58	32	70	46	7.2	5.3	6.1
29	20	3.8	4.0	7.5	---	23	27	260	40	7.1	6.6	5.6
30	9.2	3.8	4.5	7.0	---	16	23	904	35	7.0	5.8	5.5
31	8.2	---	4.5	7.0	---	14	---	98	---	7.0	4.6	---
TOTAL	136.6	148.7	136.7	203.4	586.3	589.6	1874	1710.1	8493	438.4	179.4	262.3
MEAN	4.41	4.96	4.41	6.56	20.9	19.0	62.5	55.2	283	14.1	5.79	8.74
MAX	20	8.5	6.2	11	100	89	802	904	2170	33	12	105
MIN	1.4	3.8	3.3	4.5	6.5	6.7	11	8.1	35	6.4	2.9	2.7
AC-FT	271	295	271	403	1160	1170	3720	3390	16850	870	356	520
CAL YR 1974	TOTAL	14955.7	MEAN	41.0	MAX	1310	MIN	1.4	AC-FT	29660		
WTR YR 1975	TOTAL	14758.5	MEAN	40.4	MAX	2170	MIN	1.4	AC-FT	29270		

PEAK DISCHARGE (BASE, 1,300 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
04-18	0900	14.88	2,110	06-09	0600	19.78	4,760
05-30	0145	17.18	2,870	06-11	0500	19.21	3,970
06-03	0330	16.42	2,600	06-18	1730	17.84	3,140

KANSAS RIVER BASIN

97

06889200 SOLDIER CREEK NEAR DELIA, KS

LOCATION.--Lat 39°12'08", long 95°52'25", in NE 1/4 sec. 8 (corrected), T.10 S., R.14 E., Shawnee County, at upstream side of highway bridge, 5.1 mi (8.2 km) upstream from Walnut Creek, 5.5 mi (8.8 km) southeast of Delia, and at mile 21.9 (35.2 km).

DRAINAGE AREA.--157 mi² (407 km²).

PERIOD OF RECORD.--October 1958 to current year.

GAGE.--Water-stage recorder. Datum of gage is 931.34 ft (283.872 m) above mean sea level.

AVERAGE DISCHARGE.--17 years, 91.4 ft³/s (2.588 m³/s), 66,220 acre-ft/yr (81.6 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,940 ft³/s (140 m³/s) June 10, gage height, 20.63 ft (6.288 m); minimum, 3.2 ft³/s (0.091 m³/s) Oct. 10, 11.

Period of record: Maximum discharge, 7,580 ft³/s (215 m³/s) June 12, 1967, gage height, 21.45 ft (6.538 m); maximum gage height, 21.57 ft (6.575 m) Aug. 10, 1968; minimum discharge, 0.04 ft³/s (0.001 m³/s) Oct. 17, 1966.

Maximum stage known since at least 1909, about 24 ft (7.3 m) June 21, 1951, from floodmarks and information by local residents.

REMARKS.--Records fair. Records of chemical analysis and suspended sediment loads for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.9	15	5.2	7.2	11	109	32	42	138	49	8.0	7.1
2	3.9	11	5.8	7.5	9.8	84	29	41	126	45	7.8	6.2
3	3.4	16	5.2	7.8	10	33	30	46	1810	40	7.4	5.4
4	3.3	14	5.5	7.5	79	29	49	46	296	37	8.2	5.2
5	4.2	10	6.2	7.5	111	25	88	37	125	34	8.2	87
6	5.8	8.0	7.0	8.0	37	24	59	35	89	30	7.5	99
7	7.5	7.2	9.5	8.5	32	23	44	33	72	26	7.8	15
8	4.4	6.8	10	8.5	22	22	67	31	116	24	8.0	9.2
9	3.8	14	7.8	9.0	17	20	60	28	2230	22	8.0	7.5
10	3.4	39	7.5	13	13	19	44	26	2230	21	7.8	6.8
11	3.2	30	7.8	16	13	22	36	40	3060	20	7.2	12
12	4.0	15	7.5	14	15	20	32	39	871	17	6.4	15
13	8.2	11	7.2	8.5	15	19	32	29	265	16	6.0	9.8
14	13	8.2	7.5	6.5	15	15	202	27	172	16	13	7.8
15	14	6.5	7.2	6.8	14	17	129	26	127	15	15	6.7
16	10	6.2	7.2	8.2	14	26	74	22	96	13	10	6.6
17	7.0	6.2	7.2	8.5	14	56	57	20	93	12	9.1	6.5
18	6.6	6.5	7.0	9.0	14	57	717	19	165	11	8.8	6.6
19	6.0	7.0	6.8	13	15	42	415	18	1200	9.4	7.9	6.5
20	6.5	7.8	6.8	15	15	33	103	16	152	11	7.8	6.1
21	6.0	7.0	6.8	13	27	28	74	14	132	27	7.4	5.9
22	5.6	7.0	6.8	11	78	24	63	14	828	15	6.7	4.8
23	6.0	6.8	7.0	9.8	52	22	191	28	407	15	5.6	4.4
24	6.0	6.2	6.5	11	28	19	441	28	137	15	4.4	4.2
25	6.5	6.5	5.8	13	39	16	140	19	162	13	4.4	4.5
26	6.5	6.0	5.0	15	97	14	83	28	202	11	5.0	5.0
27	8.0	5.8	6.0	15	88	179	69	31	92	9.5	6.2	4.9
28	10	6.0	6.5	13	75	216	66	247	72	9.2	6.9	8.0
29	25	5.2	7.0	12	---	69	56	1060	62	8.6	7.2	7.8
30	35	5.2	6.8	12	---	43	48	2660	54	8.4	8.1	7.6
31	18	---	7.2	12	---	38	---	392	---	8.0	7.8	---
TOTAL	254.7	307.1	213.3	326.8	969.8	1363	3530	5142	15581	608.1	239.6	389.1
MEAN	8.22	10.2	6.88	10.5	34.6	44.0	118	166	519	19.6	7.73	13.0
MAX	35	39	10	16	111	216	717	2660	3060	49	15	99
MIN	3.2	5.2	5.0	6.5	9.8	14	29	14	54	8.0	4.4	4.2
AC=FT	505	609	423	648	1920	2700	7000	10200	30900	1210	475	772

CAL YR 1974 TOTAL 28698.8 MEAN 78.6 MAX 2750 MIN 3.0 AC=FT 56920
WTR YR 1975 TOTAL 28924.5 MEAN 79.2 MAX 3060 MIN 3.2 AC=FT 57370

PEAK DISCHARGE (BASE, 1,500 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
04-18	2100	14.83	1,810	06-10	0215	20.63	4,940
05-30	1415	19.00	3,200	06-11	2030	19.72	3,820
06-03	1545	17.00	2,400	06-19	0645	16.57	2,270

06889500 SOLDIER CREEK NEAR TOPEKA, KS

LOCATION.--Lat 39°06'00", long 95°43'27", in SW¼NW¼ sec.14, T.11 S., R.15 E., Shawnee County, at downstream side of highway bridge, 1.5 mi (2.4 km) upstream from Halfday Creek, 4.0 mi (6.4 km) northwest of Topeka, and at mile 6.0 (9.7 km).

DRAINAGE AREA.--290 mi² (751 km²).

PERIOD OF RECORD.--May 1929 to September 1932, August 1935 to current year. Prior to October 1935, published as "at Topeka". Records for October 1932 to July 1935, published in WSP 746, 761, and 786, have been found to be unreliable and should not be used.

GAGE.--Water-stage recorder. Datum of gage is 862.95 ft (263.027 m) above mean sea level. Prior to July 27, 1935, chain gage at site 2.0 mi (3.2 km) downstream at different datum. Aug. 1, 1935, to June 16, 1958, nonrecording gage and June 17, 1958, to May 24, 1960, water-stage recorder, at present site and datum 4.0 ft (1.22 m) higher. May 25, 1960, to June 8, 1961, nonrecording gage at site 1.1 mi (1.8 km) downstream at datum 1.79 ft (0.546 m) lower.

AVERAGE DISCHARGE.--43 years, 138 ft³/s (3.908 m³/s), 99,980 acre-ft/yr (123 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 5,370 ft³/s (152 m³/s) May 30, gage height, 12.06 ft (3.676 m); minimum, 6.2 ft³/s (0.18 m³/s) Oct. 2-4.

Period of record: Maximum discharge, 20,800 ft³/s (589 m³/s) Oct. 11, 1973, gage height, 23.91 ft (7.288 m), backwater from Kansas River; maximum gage height, 29.06 ft (8.857 m) July 12, 1951, datum then in use, from floodmark, backwater from Kansas River; no flow at times in 1931, 1935-40, 1953-57, 1966.

REMARKS.--Records good except those for winter periods, which are poor.

REVISIONS (WATER YEARS).--WSP 1440: 1929-30(M), 1941-42, 1948(P), 1950. See also PERIOD OF RECORD.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.8	46	15	18	27	148	71	71	306	77	18	9.5
2	6.2	32	11	18	25	121	66	65	197	74	17	8.6
3	6.2	117	10	18	25	78	65	71	2140	71	17	8.5
4	6.8	67	11	20	123	63	88	74	799	64	16	7.7
5	15	37	13	19	119	56	200	67	245	61	16	71
6	16	26	19	19	95	53	132	61	159	58	15	135
7	11	21	29	19	60	53	95	58	115	54	14	37
8	13	19	29	22	45	50	111	57	392	51	14	19
9	12	40	21	23	40	46	132	50	2480	48	13	13
10	9.8	131	20	25	35	41	96	45	3170	46	13	11
11	9.2	81	22	40	35	49	78	71	3820	43	12	36
12	15	46	20	32	40	49	69	78	1850	42	11	36
13	97	32	19	26	40	42	67	55	405	38	12	24
14	41	25	21	23	40	37	341	49	262	37	16	19
15	23	20	20	23	40	39	347	48	192	35	20	18
16	18	18	19	22	36	52	176	41	153	33	18	18
17	14	18	18	22	36	96	124	37	166	31	14	16
18	10	17	18	23	34	112	323	34	132	30	13	16
19	9.2	17	16	23	38	87	904	31	1220	28	12	16
20	8.6	17	16	50	37	67	198	28	237	31	11	15
21	8.6	17	16	30	85	57	127	26	143	38	11	14
22	8.6	16	18	25	228	52	103	27	1510	38	9.7	13
23	8.6	16	18	24	146	47	121	90	638	30	8.4	12
24	8.6	15	18	22	88	43	746	64	240	30	8.0	11
25	8.6	15	15	27	88	38	403	42	167	29	7.9	10
26	8.6	15	15	28	163	36	171	46	235	27	7.4	10
27	8.6	15	16	29	159	102	129	58	145	25	7.4	9.8
28	9.8	14	16	27	126	496	120	229	107	23	7.9	9.8
29	15	14	17	25	---	161	101	1270	94	22	9.6	9.8
30	45	15	19	27	---	95	82	4030	84	21	9.8	13
31	63	---	18	31	---	79	---	1100	---	20	9.8	---
TOTAL	540.8	979	553	780	2053	2545	5786	8073	21803	1255	388.9	646.7
MEAN	17.4	32.6	17.8	25.2	73.3	82.1	193	260	727	40.5	12.5	21.6
MAX	97	131	29	50	228	496	904	4030	3820	77	20	135
MIN	6.2	14	10	18	25	36	65	26	84	20	7.4	7.7
AC-FT	1070	1940	1100	1550	4070	5050	11480	16010	43250	2490	771	1280

CAL YR 1974 TOTAL 50479.7 MEAN 138 MAX 3200 MIN 6.2 AC-FT 100100
WTR YR 1975 TOTAL 45403.4 MEAN 124 MAX 4030 MIN 6.2 AC-FT 90060

PEAK DISCHARGE (BASE, 3,000 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
05-30	1245	12.06	5,370	06-10	1000	11.74	5,040
06-03	1330	9.34	3,000	06-11	1100	11.34	4,640

KANSAS RIVER BASIN

99

06890100 DELAWARE RIVER NEAR MUSCOTAH, KS

LOCATION.--Lat 39°31'17", Long 95°31'57", in SW¼SW¼SW¼ sec.16, T.6 S., R.17 E., Atchison County, 2.0 mi (3.2 km) south of Muscotah, and at mile 45.5 (73.2 km).

DRAINAGE AREA.--431 mi² (1,116 km²).

PERIOD OF RECORD.--Occasional low-flow measurements water years 1964-67. July 1969 to current year.

GAGE.--Water-stage recorder. Datum of gage is 920.88 ft (280.684 m) above mean sea level (Kansas Geological Survey bench mark).

AVERAGE DISCHARGE.--6 years, 284 ft³/s (8.043 m³/s), 205,800 acre-ft/yr (254 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 15,200 ft³/s (430 m³/s) June 9, gage height, 27.73 ft (8.452 m); minimum, 2.6 ft³/s (0.074 m³/s) Aug. 25.

Period of record: Maximum discharge, 26,400 ft³/s (748 m³/s) Oct. 11, 1973, gage height, 30.53 ft (9.306 m); minimum, 0.48 ft³/s (0.014 m³/s) Oct. 7, 8, 11, 12, 1971.

Flood in 1925 reached a stage of 36.5 ft (11.13 m), from information by local residents (discharge not determined). Floods in 1951 and 1967 were lower than the flood of 1925.

REMARKS.--Records good except those for winter periods, which are poor.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.0	47	13	14	29	442	36	59	292	68	8.5	6.7
2	4.0	33	11	18	27	210	30	52	168	63	8.0	4.3
3	4.0	25	11	20	27	124	31	67	264	57	8.0	3.2
4	4.0	21	15	16	175	105	61	54	166	53	7.0	3.1
5	5.1	19	14	15	227	84	150	47	86	48	7.0	32
6	8.0	18	20	16	170	74	107	42	62	43	6.6	50
7	9.3	16	32	17	120	80	66	72	48	40	5.7	24
8	7.5	14	22	17	85	50	56	78	46	36	5.4	9.6
9	6.5	16	19	17	70	44	54	42	8,480	35	5.0	5.7
10	5.8	30	19	20	55	47	42	34	1,730	31	4.9	8.6
11	5.8	35	18	40	45	61	33	130	5,340	28	4.3	242
12	7.5	30	15	25	39	58	27	178	840	27	3.6	82
13	8.9	22	17	18	35	37	26	62	322	24	15	30
14	11	19	17	19	32	30	54	44	206	22	18	14
15	11	15	21	21	33	33	76	35	159	21	15	10
16	13	14	19	19	33	63	58	28	126	20	14	9.1
17	9.3	14	14	18	36	182	43	24	128	18	12	8.5
18	8.0	14	16	20	37	148	2,530	22	2,810	16	8.5	8.2
19	6.8	14	15	23	37	109	478	20	3,010	13	6.6	7.4
20	6.5	14	18	29	36	76	186	18	445	26	5.6	6.6
21	6.5	14	15	28	104	62	128	15	238	32	4.8	6.0
22	6.8	14	17	30	350	51	100	14	1,130	33	4.1	5.1
23	6.8	13	17	25	137	41	436	30	518	32	3.0	4.3
24	6.8	13	13	27	95	31	450	46	205	23	2.9	3.8
25	7.5	13	12	50	86	22	346	71	151	18	2.6	3.5
26	8.0	13	13	66	186	22	147	201	134	13	3.0	3.4
27	8.0	12	14	71	212	146	112	86	107	12	7.7	3.8
28	9.8	13	13	70	301	195	135	99	95	12	8.6	7.4
29	30	14	13	56	-----	85	86	1,040	83	9.9	21	19
30	33	13	13	45	-----	51	71	5,610	75	9.7	26	26
31	66	-----	14	35	-----	43	-----	882	-----	9.3	11	-----
TOTAL	335.2	562	500	905	2,819	2,806	6,155	9,202	27,464	892.9	263.4	647.3
MEAN	10.8	18.7	16.1	29.2	101	90.5	205	297	915	28.8	8.50	21.6
MAX	66	47	32	71	350	442	2,530	5,610	8,480	68	26	242
MIN	4.0	12	11	14	27	22	26	14	46	9.3	2.6	3.1
AC-FT	665	1,110	992	1,800	5,590	5,570	12,210	18,250	54,470	1,770	522	1,280

CAL YR 1974 TOTAL 64,958.1 MEAN 178 MAX 8,360 MIN 4.0 AC-FT 128,800
WTR YR 1975 TOTAL 52,551.8 MEAN 144 MAX 8,480 MIN 2.6 AC-FT 104,200

PEAK DISCHARGE (BASE, 2,500 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
04-18	0900	17.37	4,480	06-11	0900	21.96	7,600
05-30	0400	25.30	11,300	06-18	2200	21.28	6,990
06-09	1200	27.73	15,200				

KANSAS RIVER BASIN

06890898 PERRY LAKE NEAR PERRY, KS

LOCATION.--Lat 39°06'52", long 95°25'33", in NE¼NW¼ sec.9, T.11 S., R.18 E., Jefferson County, in control tower near center of dam on Delaware River, 4.5 mi (7.2 km) northwest of Perry and 5.8 mi (9.3 km) above mouth.

DRAINAGE AREA.--1,117 mi² (2,893 km²).

PERIOD OF RECORD.--March 1969 to current year. Prior to October 1971, published as "Perry Reservoir".

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Corps of Engineers).

EXTREMES.--Current year: Maximum elevation, 898.27 ft (273.793 m) June 12, contents, 333,300 acre-ft (411 hm³); minimum, 888.92 ft (270.943 m) Aug. 25, contents, 212,800 acre-ft (262 hm³).

Period of record: Maximum elevation, 917.07 ft (279.523 m) Oct. 19, 1973, contents, 679,700 acre-ft (838 hm³); minimum since conservation pool was first filled, 880.01 ft (268.23 m) May 12, 13, 1969, contents, 126,000 acre-ft (155 hm³).

REMARKS.--Reservoir is formed by compacted earthfill dam. Some temporary storage occurred in Feb. 1969; dam was closed Mar. 21, 1969. Total capacity, 801,300 acre-ft (988 hm³), consisting of the following: Dead storage, 250 acre-ft (0.31 hm³) below elevation 833.0 ft (253.9 m) (invert of intake tube); conservation pool, 243,000 acre-ft (300 hm³) between elevations 833.0 (253.9 m) and 891.5 ft (271.73 m); flood control pool, 521,900 acre-ft (644 hm³) between elevations 891.5 (271.7 m) and 920.6 ft (280.6 m); and uncontrolled storage, 36,160 acre-ft (44.5 hm³) between elevations 920.6 (280.6 m) and 922.0 ft (281.0 m). Reservoir is used to store water for flood control, irrigation, and recreation. Figures given herein represent total contents.

Capacity table (elevation, in feet, and contents, in acre-feet)
(Computed by Corps of Engineers in 1960 from topographic maps)

885	171,200
890	225,300
895	287,900
900	358,700

ELEVATION, IN FEET, AT 2400, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	889.67	890.13	890.72	890.94	889.77	889.93	890.75	892.48	895.25	894.13	889.45	889.01
2	889.57	890.18	890.71	890.98	889.79	889.97	890.75	892.49	895.06	893.72	889.45	889.04
3	889.46	890.47	890.70	890.98	889.81	889.96	890.75	892.52	895.21	893.28	889.44	889.04
4	889.42	890.49	890.68	890.97	889.97	889.93	890.79	892.53	895.10	892.85	889.43	889.07
5	889.42	890.51	890.70	891.00	889.99	889.93	890.89	892.55	894.88	892.39	889.37	889.13
6	889.46	890.51	890.79	890.93	889.93	889.97	890.94	892.57	894.62	891.98	889.32	889.12
7	889.42	890.51	890.82	890.79	889.92	889.92	890.98	892.59	894.39	891.56	889.27	889.12
8	889.40	890.53	890.76	890.61	889.90	889.91	891.03	892.62	894.32	891.11	889.25	889.10
9	889.40	890.61	890.77	890.49	889.86	889.99	891.06	892.62	895.53	890.63	889.22	889.08
10	889.38	890.71	890.79	890.45	889.84	889.98	891.10	892.63	896.92	890.17	889.21	889.12
11	889.45	890.74	890.80	890.28	889.80	890.02	891.09	892.72	898.18	889.88	889.17	889.25
12	889.47	890.74	890.82	890.13	889.78	890.03	891.10	892.75	898.17	889.82	889.15	889.23
13	889.64	890.73	890.83	889.97	889.75	890.03	891.16	892.77	897.81	889.78	889.19	889.21
14	889.64	890.74	890.84	889.81	889.72	890.00	891.27	892.78	897.37	889.72	889.19	889.20
15	889.61	890.74	890.85	889.65	889.69	890.02	891.34	892.78	896.89	889.67	889.17	889.20
16	889.62	890.74	890.86	889.54	889.71	890.03	891.37	892.77	896.49	889.62	889.16	889.20
17	889.61	890.74	890.84	889.51	889.67	890.09	891.43	892.74	896.04	889.57	889.15	889.17
18	889.61	890.74	890.86	889.53	889.65	890.15	892.03	892.73	895.75	889.56	889.14	889.19
19	889.59	890.73	890.86	889.55	889.62	890.18	892.03	892.70	896.08	889.56	889.11	889.17
20	889.57	890.73	890.87	889.56	889.59	890.21	891.95	892.69	895.63	889.63	889.09	889.15
21	889.53	890.73	890.87	889.57	889.66	890.23	891.98	892.69	895.24	889.62	889.07	889.11
22	889.52	890.71	890.87	889.57	889.78	890.23	892.00	892.76	895.03	889.60	889.04	889.10
23	889.52	890.72	890.90	889.58	889.79	890.27	892.45	892.84	894.95	889.60	889.00	889.10
24	889.58	890.73	890.89	889.61	889.80	890.27	893.32	892.84	894.96	889.59	888.97	889.07
25	889.62	890.67	890.88	889.62	889.80	890.23	893.39	892.85	894.96	889.57	888.95	889.04
26	889.61	890.72	890.87	889.63	889.82	890.15	893.25	892.98	894.95	889.54	888.99	889.00
27	889.59	890.72	890.88	889.66	889.85	890.44	893.12	892.98	894.93	889.54	889.00	889.00
28	889.62	890.74	890.89	889.67	889.87	890.62	892.97	892.98	894.89	889.52	889.00	889.00
29	889.63	890.73	890.90	889.68	-----	890.63	892.81	893.63	894.87	889.51	889.00	889.00
30	889.85	890.77	890.93	889.75	-----	890.61	892.60	895.32	894.62	889.49	889.00	889.10
31	890.08	-----	890.95	889.75	-----	890.68	-----	895.41	-----	889.48	889.01	-----
MEAN	889.57	890.64	890.83	890.06	889.79	890.15	891.72	892.92	895.64	890.44	889.16	889.11
MAX	890.08	890.77	890.95	891.00	889.99	890.68	893.39	895.41	898.18	894.13	889.45	889.25
MIN	889.38	890.13	890.68	889.51	889.59	889.91	890.75	892.48	894.32	889.48	888.95	889.00
(+)	226,200	234,400	236,600	222,400	223,800	233,300	256,800	293,400	282,900	219,200	213,900	214,900
(#)	+4,100	+8,200	+2,200	-14,200	+1,400	+9,500	+23,500	+36,600	-10,500	-63,700	-5,300	+1,000

CAL YR 1974 (#) -13,500

WTR YR 1975 (#) -7,200

+ CONTENTS, IN ACRE-FEET, AT END OF MONTH.

+ CHANGE IN CONTENTS, IN ACRE-FEET.

101

LOCATION.--Lat 39°06'51", long 95°25'33", in NE1/4NW1/4 sec.9, T.11 S., R.18 E., Jefferson County, at outlet structure of Perry Dam, 4.5 mi (7.2 km) northwest of Perry and 5.8 mi (9.3 km) above mouth.

EXTREMES.--Current year: Maximum discharge, 3,960 ft³/s (112 m³/s) June 13; minimum, 24 ft³/s (0.68 m³/s) Oct. 23-30.
Period of record: Maximum discharge, 10,000 ft³/s (283 m³/s) Nov. 1, 1973; no flow for parts of many days in 1970-73.

COOPERATION.--Reservoir elevation-discharge ratings for reservoir outflow gates and gate operation logs furnished by Corps of Engineers.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	296	25	25	31	49	298	123	896	1,870	2,940	26	26
2	296	25	25	31	49	298	124	102	1,870	2,820	26	26
3	296	25	25	27	184	298	124	102	1,870	2,890	26	26
4	296	25	25	25	298	298	124	102	1,870	2,900	26	26
5	296	25	25	25	298	298	124	102	1,870	2,750	26	26
6	296	25	29	477	298	298	124	102	1,870	2,680	26	26
7	150	25	31	928	298	218	124	102	1,860	2,580	26	26
8	26	25	31	928	298	123	124	102	1,860	2,740	26	26
9	26	25	31	926	298	123	124	102	1,870	2,860	26	26
10	26	25	31	962	298	123	124	102	1,920	2,690	26	26
11	26	25	31	991	298	123	113	102	2,490	1,610	26	26
12	26	25	31	991	299	123	104	102	2,980	206	26	26
13	26	25	31	989	298	123	104	102	3,330	206	26	26
14	26	25	31	987	296	123	104	102	3,850	204	26	26
15	26	25	31	987	296	123	104	102	3,780	204	26	26
16	26	25	31	754	296	123	104	102	3,660	204	26	26
17	26	25	31	208	296	123	104	102	3,740	137	26	26
18	26	25	31	49	296	123	649	102	3,800	26	26	26
19	26	25	31	49	296	123	1,560	102	3,700	26	26	26
20	26	25	31	49	296	123	924	102	3,750	26	26	26
21	70	25	31	49	296	123	256	102	3,780	26	26	26
22	102	25	31	49	296	123	105	102	3,670	26	26	26
23	56	25	31	49	298	123	105	102	2,100	26	26	26
24	24	25	31	49	298	123	106	102	480	26	26	26
25	24	25	31	49	298	123	870	102	480	26	26	26
26	24	25	31	49	298	123	1,580	102	480	26	26	26
27	24	25	31	49	298	123	1,580	255	480	26	26	26
28	24	25	31	49	298	123	1,520	408	480	26	26	26
29	24	25	31	49	-----	123	1,520	410	480	26	26	26
30	24	25	31	49	-----	123	1,470	1,120	1,810	26	26	26
31	25	-----	31	49	-----	123	-----	1,930	-----	26	26	-----
TOTAL	2,685	750	929	10,953	7,715	4,958	14,221	7,569	68,050	30,985	806	780
MEAN	86.6	25.0	30.0	353	276	160	474	244	2,268	1,000	26.0	26.0
MAX	296	25	31	991	299	298	1,580	1,930	3,850	2,940	26	26
MIN	24	25	25	25	49	123	104	102	480	26	26	26
AC-FT	5,330	1,490	1,840	21,730	15,300	9,830	28,210	15,010	135,000	61,460	1,600	1,550
CAL YR 1974	TOTAL	182,163.0	MEAN	499	MAX	2,880	MIN	1.3	AC-FT	361,300		
WTR YR 1975	TOTAL	150,401.0	MEAN	412	MAX	3,850	MIN	24	AC-FT	298,300		

KANSAS RIVER BASIN

06891000 KANSAS RIVER AT LECOMPTON, KS

LOCATION.--Lat 39°03'07", long 95°23'15", in SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.35, T.11 S., R.18 E., Jefferson County, on left bank at upstream side of highway bridge at Lecompton, 0.8 mi (1.3 km) downstream from Delaware River, and at mile 63.8 (102.7 km).

DRAINAGE AREA.--58,460 mi² (151,410 km²), approximately, of which a large area is noncontributing.

PERIOD OF RECORD.--January to November 1896 and April to July 1906 (gage heights only), March 1936 to current year. Records for April 1899 to December 1905 published in WSP 37, 39, 50, 52, 66, 75, 84, 99, 131, 172, and 796-B have been found to be unreliable and should not be used.

GAGE.--Water-stage recorder. Datum of gage is 821.84 ft (250.497 m) above mean sea level. Prior to July 30, 1952, nonrecording gage, and July 30, 1952, to Apr. 29, 1970, recording gage, at site 0.15 mi (0.24 km) upstream at same datum.

AVERAGE DISCHARGE.--39 years (1936-75), 7,062 ft³/s (200.0 m³/s), 5,116,000 acre-ft/yr (6.31 km³/yr).

EXTREMES.--Current year: Maximum discharge, 48,900 ft³/s (1,380 m³/s) June 11, gage height, 13.70 ft (4.176 m); minimum daily, 1,600 ft³/s (45.3 m³/s) Jan. 16-18.

Period of record: Maximum discharge, 483,000 ft³/s (13,700 m³/s) July 13, 1951, gage height, 30.23 ft (9.214 m); from rating curve extended above 120,000 ft³/s (3,400 m³/s) on basis of slope-area measurement of peak flow; minimum daily, 185 ft³/s (5.24 m³/s) Oct. 13, 1956.

Maximum stage known since 1844, 30.23 ft (9.214 m) July 13, 1951.

Flood of May 31, 1903 (second highest since 1844), reached a stage of 27.9 ft (8.50 m), from floodmark.

REMARKS.--Records fair except those for winter periods, which are poor. Natural flow of stream affected by lakes and reservoirs in Colorado, Nebraska, and Kansas and by numerous diversions for irrigation above station. Records of chemical and bacteriological analyses for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 876: 1937. WSP 1176: 1903(M). WSP 1440: 1948-49(P). See also PERIOD OF RECORD.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3000	5530	2440	1940	1680	3280	3360	6050	8620	16700	7080	2850
2	3060	5930	2380	1920	1640	3500	3460	5120	7960	18300	6940	2770
3	3120	8140	2320	1940	1700	3520	3720	5100	11400	18100	5620	2730
4	3120	8680	2300	1900	2280	3440	4700	5150	18900	21000	4560	2570
5	3260	5630	2180	1920	3500	3280	5280	4950	15600	21200	4420	2930
6	3540	4880	2100	2280	2500	3060	5380	4800	16600	21200	3810	3790
7	3100	4330	2160	2880	1900	2840	4930	5080	16700	21400	3100	3690
8	2760	3820	2120	2860	1900	2600	4980	5350	17000	21600	3060	2650
9	2620	3600	2060	2860	1800	2840	6280	5150	29100	21600	2930	2270
10	2560	4380	2020	3600	1900	3200	6850	4920	36500	21400	2780	2110
11	2400	5100	1980	3380	1900	3300	6450	4480	37600	20200	2540	2530
12	2540	4300	2000	2620	1900	3280	9820	3940	40300	17900	2390	3970
13	3500	3860	1980	2280	1900	3220	10700	3660	25600	12700	2410	2930
14	3600	3580	1900	2000	1900	3160	11900	3280	21100	10800	2730	2370
15	4580	3300	1880	1800	1900	3200	14500	2940	18500	9640	2760	2330
16	5230	3160	1920	1600	1900	3220	13000	2800	17400	11400	2610	2110
17	3840	3080	1920	1600	1900	3420	12200	2660	18900	10400	2510	2020
18	3040	3040	1900	1600	1900	3660	12200	2560	19000	8140	2550	1940
19	2700	3080	1900	1800	1900	3740	16500	2480	19300	5620	2770	1840
20	2320	3060	1940	2000	2000	3480	13700	2400	20500	4710	3870	1770
21	2060	2940	1940	1880	2500	3600	7450	2300	17000	4230	4790	1700
22	1920	2900	1940	1920	3700	3520	5700	2160	21800	3890	4630	1700
23	1860	3100	1920	1860	5080	3260	5320	2740	35000	3750	4150	1720
24	2000	3600	1920	1920	3560	3120	6050	2480	22000	3640	3990	1720
25	2020	3600	1900	2000	3260	2980	6680	2260	17700	3690	3790	1700
26	2000	3560	1980	1780	3360	2900	7150	2060	19800	5500	3710	1680
27	2160	3600	1980	1720	3540	3300	8830	1960	23300	6970	3810	1680
28	2300	3580	1960	1700	3240	4080	8830	2740	22300	7020	3650	1690
29	2360	3360	1940	1680	---	4020	7480	3640	18800	6940	3490	1740
30	4380	2660	1900	1700	---	3520	6650	8110	17300	5680	3090	1750
31	5030	---	1940	1760	---	3380	---	11700	---	7080	2930	---
TOTAL	91980	123380	62720	64700	68140	102920	240050	125020	631580	372400	113470	69250
MEAN	2967	4113	2023	2087	2434	3320	8002	4033	21050	12010	3660	2308
MAX	5230	8680	2440	3600	5080	4080	16500	11700	40300	21600	7080	3970
MIN	1860	2660	1880	1600	1640	2600	3360	1960	7960	3640	2390	1680
AC-FT	182400	244700	124400	128300	135200	204100	476100	248000	1253000	738700	225100	137400

CAL YR 1974 TOTAL 2762400 MEAN 7568 MAX 39800 MIN 1860 AC-FT 5479000
WTR YR 1975 TOTAL 2065610 MEAN 5659 MAX 40300 MIN 1600 AC-FT 4097000

PEAK DISCHARGE (REGULATED) ABOVE 15,000 CFS

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
04-15	0800	7.60	15,000	06-11	2100	13.70	48,900
04-19	1900	8.38	18,200	06-19	2200	9.38	22,800
06-04	0600	9.13	21,600	06-23	1000	12.26	39,600
06-10	0400	12.55	41,300				

KANSAS RIVER BASIN

103

06891483 WAKARUSA RIVER BELOW CLINTON DAM, KS

LOCATION.--Lat 38°55'14", long 95°17'17", in NW¼NW¼SE¼ sec.15, T.13 S., R.19 E., Douglas County, on left bank at downstream side of county road bridge, 3.0 mi (4.8 km) south and 2.0 mi (3.2 km) west of Lawrence, and at mile 18.6 (29.9 km).

DRAINAGE AREA.--412 mi² (1,070 km²). Prior to Dec. 1, 1972, 425 mi² (1,100 km²).

PERIOD OF RECORD.--April 1929 to current year. Prior to December 1972, published as "near Lawrence", sta 06891500.

GAGE.--Water-stage recorder. Datum of gage is 805.26 ft (245.443 m) above mean sea level. Prior to May 7, 1959, nonrecording gage, and May 8, 1959 to Nov. 30, 1972, water-stage recorder at site 2.3 mi (3.7 km) downstream at datum 6.00 ft (1.829 m) lower.

AVERAGE DISCHARGE.--46 years, 198 ft³/s (5.607 m³/s), 143,500 acre-ft/yr (177 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 5,150 ft³/s (145 m³/s) Nov. 3, gage height, 26.10 ft (7.955 m); minimum, 0.53 ft³/s (0.015 m³/s) Sept. 10, 11.

Period of record: Maximum discharge, 24,200 ft³/s (685 m³/s) July 12, 1951, gage height, 31.59 ft (9.629 m), from floodmarks at site and datum then in use, from rating curve extended above 15,000 ft³/s (425 m³/s); no flow at times.

Maximum stage known since at least 1880, that of July 12, 1951, site and datum then in use.

REMARKS.--Records fair. Occasional regulation due to construction of Clinton Dam.

REVISIONS (WATER YEARS).--WSP 976: 1935. WSP 1310: 1929(M), 1933(M), 1938(M), 1945-47(M), 1949-50(M). WSP 1919: 1958, 1959.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.8	1,330	66	171	653	303	266	214	396	79	7.0	.76
2	4.0	593	64	157	339	264	301	185	250	67	6.5	.72
3	4.7	2,920	58	144	270	215	369	238	610	59	6.0	.66
4	3.8	3,630	51	129	390	189	702	279	1,010	53	5.6	.63
5	6.3	887	61	119	1,010	180	704	205	628	47	5.2	.62
6	222	598	62	160	636	180	659	167	297	41	4.7	.62
7	168	417	101	209	368	177	454	150	198	35	4.5	.62
8	79	317	131	243	413	167	380	138	157	32	4.0	.57
9	32	264	111	246	410	158	397	127	780	31	3.7	.56
10	17	356	88	282	350	171	338	117	1,190	30	3.5	.54
11	11	552	105	639	238	181	269	132	1,950	26	3.1	17
12	12	464	252	340	183	184	228	137	1,020	22	2.9	9.4
13	364	331	235	300	164	172	220	108	545	21	2.7	9.1
14	1,480	247	178	260	162	160	418	107	285	19	5.2	8.2
15	572	194	157	200	157	165	908	105	201	18	4.9	6.9
16	182	172	141	170	153	300	655	94	164	17	4.7	5.9
17	121	159	123	153	162	522	480	81	501	16	4.3	4.5
18	74	148	111	149	169	516	351	71	692	15	4.2	3.7
19	47	140	103	156	178	374	300	65	309	13	3.6	4.3
20	35	130	98	184	205	280	244	57	181	14	3.0	3.3
21	30	116	93	166	564	229	211	50	138	15	2.2	2.4
22	27	107	87	137	1,310	204	191	45	272	15	3.0	1.7
23	24	105	84	149	853	185	192	413	1,810	14	1.6	1.5
24	24	97	80	126	436	168	228	676	847	13	1.0	1.3
25	21	87	69	123	369	152	562	348	435	12	.76	1.1
26	19	79	68	122	410	142	502	253	454	11	.74	.99
27	21	75	75	115	397	339	318	225	231	10	.72	1.1
28	20	69	68	108	330	1,180	403	698	147	9.5	.81	1.1
29	22	67	69	103	-----	737	426	1,910	107	9.0	1.1	1.4
30	37	66	79	185	-----	444	290	864	97	8.4	1.2	12
31	1,380	-----	131	917	-----	330	-----	520	-----	7.6	.94	-----
TOTAL	5,063.6	14,717	3,199	6,662	11,279	8,968	11,966	8,779	15,902	779.5	103.37	103.19
MEAN	163	491	103	215	403	289	399	283	530	25.1	3.33	3.44
MAX	1,480	3,630	252	917	1,310	1,180	908	1,910	1,950	79	7.0	17
MIN	3.8	66	51	103	153	142	191	45	97	7.6	.72	.54
AC-FT	10,040	29,190	6,350	13,210	22,370	17,790	23,730	17,410	31,540	1,550	205	205
CAL YR 1974	TOTAL 84,231.20 MEAN 231 MAX 3,750 MIN 1.7 AC-FT 167,100											
WTR YR 1975	TOTAL 87,521.66 MEAN 240 MAX 3,630 MIN .54 AC-FT 173,600											

PEAK DISCHARGE (BASE, 2,500 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-03	2400	26.10	5,150	06-11	1000	19.32	2,500

KANSAS RIVER BASIN

06892000 STRANGER CREEK NEAR TONGANOXIE, KS

LOCATION.--Lat 39°06'59", long 95°00'39", in NE¼NE¼NW¼ sec.7, T.11 S., R.22 E., Leavenworth County, at downstream side of bridge on U.S. Highway 40, 2.0 mi (3.2 km) upstream from Tonganoxie Creek, 4.0 mi (6.4 km) east of Tonganoxie, and at mile 18.1 (29.1 km).

DRAINAGE AREA.--406 mi² (1,052 km²).

PERIOD OF RECORD.--April 1929 to current year.

GAGE.--Water-stage recorder. Datum of gage is 801.95 ft (244.434 m) above mean sea level (levels by Corps of Engineers). April 30, 1929, to June 1, 1939, nonrecording gage and June 2, 1939, to June 1, 1960, water-stage recorder, both at site 1.3 mi (2.1 km) downstream at datum 5.00 ft (1.524 m) lower.

AVERAGE DISCHARGE.--46 years, 218 ft³/s (6.174 m³/s), 157,900 acre-ft/yr (195 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,710 ft³/s (133 m³/s) Apr. 24, gage height, 21.02 ft (6.407 m); minimum, 1.1 ft³/s (0.031 m³/s) Aug. 13.

Period of record: Maximum discharge, 33,100 ft³/s (937 m³/s) July 12, 1951, gage height, 27.64 ft (8.425 m), present site and datum, from rating curve extended above 16,000 ft³/s (453 m³/s) on basis of contracted-opening measurement of peak flow; maximum stage, 28.70 ft (8.748 m) Oct. 13, 1961; no flow at times many years.

REMARKS.--Records good except those for winter periods, which are poor.

REVISIONS (WATER YEARS).--WSP 1440: 1929, 1936(M), 1940, 1942(M), 1949. WSP 1710: 1951.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.4	1,210	35	84	153	179	162	196	314	26	5.0	2.9
2	4.0	452	33	66	120	150	179	171	186	24	4.4	2.9
3	3.8	2,160	32	58	114	120	222	163	154	23	4.1	2.5
4	3.6	1,030	29	63	232	104	324	154	162	21	3.5	1.8
5	4.3	438	37	59	350	101	348	143	145	20	3.2	11
6	7.3	230	45	136	300	105	370	128	101	18	2.9	97
7	9.5	144	71	152	250	108	271	116	145	16	2.6	118
8	11	103	72	155	170	96	210	107	73	15	2.3	27
9	9.0	88	50	115	140	88	190	108	93	15	1.9	12
10	8.0	166	46	451	110	92	166	98	778	15	2.0	8.4
11	7.0	258	62	470	92	106	143	116	2,350	14	2.2	1,780
12	9.0	236	92	280	84	109	125	195	1,660	13	1.5	2,720
13	10	185	66	220	80	99	117	161	360	12	1.4	614
14	19	124	56	200	76	84	209	107	214	11	2.3	120
15	25	86	72	170	74	98	291	89	159	11	2.4	59
16	40	73	69	150	72	199	240	77	128	11	1.9	38
17	28	66	47	130	78	244	192	68	124	10	3.3	27
18	19	62	41	122	90	243	166	61	110	9.7	4.8	22
19	15	61	40	120	84	219	440	57	99	9.2	3.6	20
20	13	57	55	98	170	179	286	50	99	8.5	2.6	17
21	11	50	47	105	545	150	164	43	83	8.5	2.1	15
22	11	47	46	92	930	128	131	38	70	8.0	2.0	13
23	12	47	45	103	656	113	125	75	82	7.8	2.0	11
24	11	43	41	96	289	101	3,550	114	81	7.8	1.7	11
25	11	38	32	100	221	79	2,590	109	73	9.2	2.1	9.6
26	15	36	30	102	237	69	616	102	59	9.8	24	9.0
27	19	35	38	97	199	318	387	168	46	7.4	23	8.4
28	16	33	34	89	187	702	413	317	40	6.8	7.9	8.8
29	17	33	42	84	-----	482	333	859	34	7.0	7.1	9.6
30	33	33	40	131	-----	265	249	1,870	30	6.0	5.9	13
31	1,610	-----	85	246	-----	199	-----	1,220	-----	5.2	3.8	-----
TOTAL	2,015.9	7,624	1,530	4,544	6,103	5,329	13,209	7,280	8,052	385.9	139.5	5,808.9
MEAN	65.0	254	49.4	147	218	172	440	235	268	12.4	4.50	194
MAX	1,610	2,160	92	470	930	702	3,550	1,870	2,350	26	24	2,720
MIN	3.6	33	29	58	72	69	117	38	30	5.2	1.4	1.8
AC-FT	4,000	15,120	3,030	9,010	12,110	10,570	26,200	14,440	15,970	765	277	11,520
CAL YR 1974	TOTAL 85,728.1		MEAN 235	MAX 6,670	MIN 2.5	AC-FT 170,000						
WTR YR 1975	TOTAL 62,021.2		MEAN 170	MAX 3,550	MIN 1.4	AC-FT 123,000						

PEAK DISCHARGE (BASE, 2,600 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-03	1300	18.10	3,270	09-12	0400	17.18	2,900
04-24	2200	21.02	4,710				

06892350 KANSAS RIVER AT DESOTO, KS

LOCATION.--Lat 38°59'00", long 94°57'52", in SE¼NE¼ sec.27, T.12 S., R.22 E., Leavenworth County, on left bank at downstream side of bridge on county road, north edge of DeSoto, 0.4 mi (0.6 km) upstream from Kill Creek and at mile 31.0 (49.9 km).

DRAINAGE AREA.--59,756 mi² (154,768 km²), of which a large area is noncontributing.

PERIOD OF RECORD.--July 1917 to current year. Monthly discharge only for some periods published in WSP 1310. Prior to October 1973, published as "at Bonner Springs".

GAGE.--Water-stage recorder. Datum of gage is 758.87 ft (231.304 m) above mean sea level. July 9, 1917, to Apr. 23, 1934, nonrecording gage; Apr. 24, 1934, to Nov. 26, 1961, water-stage recorder at site 9.7 mi (15.6 km) downstream at datum 11.81 ft (3.600 m) lower; Nov. 26, 1961, to Sept. 30, 1971, water-stage recorder at site 10.2 mi (16.4 km) downstream at datum 17.81 ft (5.428 m) lower; and Oct. 1, 1971, to Sept. 30, 1973, at site 10.2 mi (16.4 km) downstream at datum 22.81 ft (6.992 m) lower.

AVERAGE DISCHARGE.--58 years, 6,935 ft³/s (196.4 m³/s) 5,024,000 acre-ft/yr (6.19 km³/yr).

EXTREMES.--Current year: Maximum discharge, 51,500 ft³/s (1,460 m³/s) June 12, gage height, 16.91 ft (5.154 m); minimum, 1,710 ft³/s (48.43 m³/s) Sept. 21.

Period of record: Maximum discharge, 510,000 ft³/s (14,400 m³/s) July 13, 1951, gage height, 37.3 ft (11.37 m), from floodmarks, present site and datum, from rating curve extended above 128,000 ft³/s (3,620 m³/s) on basis of slope-area measurement of peak flow at mile 19.52 (31.41 km) and at mile 18.60 (29.93 km); minimum observed, 160 ft³/s (4.53 m³/s) Oct. 11, 1956.

Maximum stage known since at least 1844, that of July 13, 1951.

REMARKS.--Records good except those for winter periods, which are poor. Natural flow of stream affected by lakes and reservoirs in Colorado, Nebraska, and Kansas, and by numerous diversions for irrigation above station. Records of chemical and biological analyses, water temperatures, suspended sediment loads, and specific conductance for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 806: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2730	9420	2550	2440	3480	4010	3910	7340	10800	17200	7010	2960
2	2880	7480	2430	2320	2710	4050	4200	6130	8290	17400	6980	2840
3	2890	14800	2370	2310	2430	4090	4340	5660	8570	18000	6720	2810
4	2970	16600	2340	2290	2640	4010	5930	5600	18500	20000	5160	2690
5	2980	10800	2240	2180	4070	3850	6400	5500	17200	21300	4620	2590
6	3270	6290	2160	2430	4270	3660	6680	5220	16700	21000	4450	3070
7	3530	5630	2290	3170	2830	3460	6270	5100	17200	21100	3720	3890
8	3010	4790	2350	3520	2520	3180	5750	5520	16800	21200	3320	3380
9	2710	4130	2250	3390	2560	3040	5990	5590	23400	21500	3220	2510
10	2560	4210	2150	3980	2460	3390	7770	5470	38900	21200	3040	2240
11	2490	5390	2180	5580	2890	3730	7840	5620	37800	20700	2920	2680
12	2460	5470	2520	3710	2950	3850	8440	4950	48100	18300	2730	5210
13	3240	4710	2380	2780	2700	3750	11800	4610	29900	14400	2660	5030
14	5010	4150	2210	2970	2760	3640	12600	4270	23600	11700	2860	2960
15	4530	3790	2140	3200	2830	3620	15800	3710	19500	8770	2970	2480
16	5090	3520	2100	3200	2780	3970	15800	3310	17900	10400	2990	2320
17	4790	3310	2150	2910	2780	4350	14300	3120	17700	10200	2830	2180
18	3530	3180	2150	2550	2720	4550	13300	2970	20900	8950	2780	2020
19	2910	3130	2110	2530	2920	4590	15100	2910	17900	6470	2850	1990
20	2550	3060	2100	2340	2890	4350	18000	2810	21700	5210	3150	1960
21	2180	3010	2090	2470	4270	3930	11200	2700	17800	4680	4280	1780
22	2060	3040	2050	2260	6070	4000	7210	2590	17300	4200	4910	1840
23	1980	3010	2050	2150	6750	3700	6480	3100	33700	3900	4550	1840
24	1950	3310	2040	2250	5670	3340	8490	3950	26100	3720	4140	1890
25	2030	3690	1990	2400	4470	3080	11900	3220	19000	3720	4000	1890
26	2040	3710	1940	2370	4310	2930	9160	2810	18200	3700	3850	1910
27	2090	3690	2040	2190	4470	3390	9140	2680	22100	6030	3780	1820
28	2250	3660	2140	2100	4330	6410	10300	3390	22900	6770	3930	1850
29	2500	3600	2100	2090	---	6200	9490	8570	20300	6910	3670	1900
30	2910	3080	2090	2340	---	5110	8070	9790	17200	6390	3430	1960
31	13700	---	2250	4270	---	4160	---	14000	---	6310	3060	---
TOTAL	101820	157660	67950	86690	98530	123390	281660	152210	645960	371330	120580	76490
MEAN	3285	5255	2192	2796	3519	3980	9389	4910	21530	11980	3890	2550
MAX	13700	16600	2550	5580	6750	6410	18000	14000	48100	21500	7010	5210
MIN	1950	3010	1940	2090	2430	2930	3910	2590	8290	3700	2660	1780
AC-FT	202000	312700	134800	171900	195400	244700	558700	301900	1281000	736500	239200	151700
CAL YR 1974	TOTAL	3005610	MEAN	8235	MAX	48800	MIN	1940	AC-FT	5962000		
WTR YR 1975	TOTAL	2284270	MEAN	6258	MAX	48100	MIN	1780	AC-FT	4531000		

PEAK DISCHARGE (REGULATED) ABOVE 17,000 CFS

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-03	1900	11.70	21,200	06-20	1000	12.02	22,600
04-15	2200	10.83	17,300	06-23	1800	14.93	39,600
04-20	0400	11.37	19,700	06-27	1700	12.17	23,400
06-04	1600	12.06	22,800	07-09	1100	11.81	21,600
06-12	0800	16.91	51,500				

MISSOURI RIVER MAIN STEM

06893000 MISSOURI RIVER AT KANSAS CITY, MO.

LOCATION.--Lat 39°06'43", long 94°35'16", in sec.32, T.50 N., R.33 W., Jackson County, on downstream side of right pier of Chicago, Burlington, & Quincy Railroad bridge at Kansas City, 1.4 mi (2.3 km) downstream from Kansas River. River mile, 366.1 (589.1 km).

DRAINAGE AREA.--489,200 mi² (1,267,000 km²), approximately.

PERIOD OF RECORD.--October 1897 to current year. Prior to August 1928 monthly discharge only, published in WSP 1310. Gage-height records collected at same site 1873-99 are contained in reports of Missouri River Commission; those since 1900 are contained in reports of National Weather Service.

GAGE.--Water-stage recorder. Datum of gage is 716.40 ft (218.359 m) above mean sea level. Prior to May 4, 1931, nonrecording gage, and May 4, 1931, to Aug. 23, 1934, water-stage recorder, at present site and datum. Aug. 24, 1934, to May 15, 1947, water-stage recorder at site 200 ft (61.0 m) upstream at same datum. May 16, 1947, to Feb. 28, 1948, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--78 years (1898-1975), 54,720 ft³/s (1,550 m³/s), 39,640,000 acre-ft/yr (48,900 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 109,000 ft³/s (3,090 m³/s) June 27, gage height, 14.40 ft (4.389 m); minimum, 14,800 ft³/s (419 m³/s) Jan. 13, gage height, -1.10 ft (-0.335 m).
Period of record: Maximum discharge, 573,000 ft³/s (16,230 m³/s) July 14, 1951; maximum gage height, 36.2 ft (11.03 m) July 14, 1951; minimum discharge, about 1,500 ft³/s (42.5 m³/s) Jan. 9, 10, 1937; minimum gage height, -2.91 ft (-0.887 m), Jan. 29, 1966.
Maximum stage known, 38.0 ft (11.58 m) June 16, 1844, discharge, about 625,000 ft³/s (17,000 m³/s), computed by Corps of Engineers.

REMARKS.--Records good. Discharge measurements made 3 or more times a month during winter and 6 or more times monthly during rest of year. Flow partly regulated by many reservoirs above station.

REVISIONS (WATER YEARS).--WSP 761: Drainage area. WSP 1310: 1905.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	41400	65100	32700	31300	31300	35700	52200	75900	72200	79200	67600	73600
2	42000	58700	31000	29600	29600	38000	50600	67000	66900	78700	67400	71500
3	42300	62300	29100	29100	28800	36800	50200	63000	64200	78900	68300	70200
4	41700	62300	27100	28300	28800	35200	48600	61000	62900	77400	68200	69700
5	41400	56000	26800	27800	30500	34300	47100	59000	68400	77800	68200	82800
6	42300	50600	27800	27300	31800	34900	48300	57300	63600	76600	67300	79000
7	43500	48300	28100	28300	29900	35400	50200	54900	62800	76300	65900	74500
8	44700	46500	28300	29100	29100	36000	50600	56700	63600	77000	65200	72500
9	43800	45300	28600	28800	26300	35400	52500	59400	67500	77800	65400	70900
10	43500	45000	28800	29400	24500	35700	55100	55000	87400	77400	65400	69800
11	42300	45900	28800	32700	25000	35400	58000	55300	99400	76300	65400	85100
12	42600	46200	27600	32000	26600	35400	60000	54000	107000	75200	64800	78000
13	43800	45600	27100	20600	27300	35400	61100	52500	98000	71100	65800	77800
14	44700	45300	27600	22500	26600	34900	61500	50400	97500	68600	69000	75300
15	45600	45000	27600	22000	26600	34000	61500	49100	87500	66300	68500	73400
16	45300	44700	28100	18700	27000	34600	63900	48500	83500	63300	67900	70800
17	45300	44700	28800	16800	27600	36000	62700	48000	77900	63300	67000	69800
18	42600	43800	28400	18400	27800	41700	64700	47400	78700	61200	66900	69900
19	41100	42600	27600	26300	27600	54400	65500	47500	92000	59100	67300	70200
20	41100	42900	27100	29100	28800	58000	68700	48100	99500	57800	70600	69800
21	40500	42900	26800	28800	31800	63500	65100	48700	96100	58400	70000	70300
22	40500	43200	27100	27600	35700	60000	59700	48800	91200	58400	68300	70800
23	40500	43200	27800	26800	37400	54100	59000	48200	96600	60000	66200	70600
24	41100	42300	28800	26600	37000	49200	71500	48700	103000	60600	65500	70300
25	41400	42300	29100	26800	33200	48600	74700	50200	102000	61500	72300	68800
26	40800	42000	29100	27800	32700	51200	72300	51300	103000	62000	72500	68700
27	41400	41400	29100	28800	33500	52500	63900	52300	108000	64600	71400	68900
28	42000	40200	29400	29600	34600	50600	61100	52500	98500	68300	70200	69700
29	42600	38200	29600	29900	---	57700	69100	58600	90700	69300	72000	69500
30	45300	35400	30800	29600	---	63500	87100	71700	82300	68600	73600	69700
31	65100	---	31600	31800	---	57400	---	73400	---	66500	77200	---
TOTAL	1342200	1397900	886200	833200	836100	1365500	1816500	1714400	2571900	2137500	2121300	2171900
MEAN	43300	46600	28590	26880	29860	44050	60550	55300	85730	68950	68430	72400
MAX	65100	65100	32700	32700	37400	63500	87100	75900	108000	79200	77200	85100
MIN	40500	35400	26800	16800	24500	34000	47100	47400	62800	57800	64800	68700
AC-FT	2662000	2773000	1758000	1653000	1658000	2708000	3603000	3401000	5101000	4240000	4208000	4308000
CAL YR 1974	TOTAL	19056700	MEAN	52210	MAX	177000	MIN	26600	AC-FT	37800000		
WTR YR 1975	TOTAL	19194600	MEAN	52590	MAX	108000	MIN	16800	AC-FT	38070000		

BLUE RIVER BASIN

107

06893080 BLUE RIVER NEAR STANLEY, KS

LOCATION.--Lat 38°48'45", long 94°40'31", in SW¼SW¼SE¼ sec.19, T.14 S., R.25 E., Johnson County, on left bank at downstream side of northbound bridge on U.S. Highway 69, 0.5 mi (0.8 km) downstream from confluence of Wolf and Coffee Creeks, and 3.0 mi (4.8 km) south of Stanley.

DRAINAGE AREA.--46 mi² (119 km²) approximately.

PERIOD OF RECORD.--Annual maximum, water years 1970-74. October 1974 to current year.

GAGE.--Water-stage recorder. Datum of gage is 886.05 ft (270.068 m) above mean sea level (levels by Corps of Engineers). Prior to Oct. 1, 1974, crest-stage gage at same site and datum.

EXTREMES.--Current year: Maximum discharge 2,020 ft³/s (57.2 m³/s) May 28, gage height, 10.64 ft (3.243 m), from floodmarks; minimum, 0.08 ft³/s (0.002 m³/s) Sept. 9, 10.
Period of record: Maximum discharge, 7,500 ft³/s (212 m³/s) June 9, 1974, gage height, 16.83 ft (5.130 m). October 1974 to current year: Minimum discharge, 0.08 ft³/s (0.002 m³/s) Sept. 9, 10, 1975.

REMARKS.--Records fair.

DISCHARGE, IN CUBIC FEET PER SECOND , WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.7	27	6.7	39	85	44	26	14	20	.57	.30	.14
2	5.0	17	6.7	28	62	29	70	13	15	.55	.30	.13
3	4.5	606	6.0	27	60	23	61	20	20	.51	.30	.13
4	4.3	114	5.6	22	94	21	65	15	10	.40	.30	.12
5	3.9	50	6.2	22	68	22	36	13	6.0	.36	.28	.10
6	5.2	32	9.7	113	34	21	29	11	4.0	.30	.26	.10
7	5.2	25	21	65	31	30	25	10	3.0	.29	.23	.09
8	5.6	22	12	41	29	19	26	9.2	20	.28	.22	.08
9	4.7	19	7.6	30	25	18	25	8.2	50	.27	.20	.08
10	4.3	29	7.0	115	22	20	21	7.4	40	.24	.20	.20
11	4.3	38	67	45	24	22	18	8.9	60	1.1	.18	4.0
12	5.6	21	50	24	21	29	17	8.7	20	.27	.16	1.1
13	6.0	18	24	19	21	26	16	6.9	13	.24	.18	.43
14	8.4	15	21	18	20	23	35	6.7	10	.25	.30	.28
15	5.2	14	24	18	20	47	27	5.8	7.8	.26	.36	.24
16	2.6	13	17	17	61	96	21	4.6	6.1	.24	.33	.21
17	2.9	12	14	15	86	69	18	3.9	13	.24	.26	.18
18	2.0	12	13	16	60	40	18	3.4	9.1	.24	.22	.57
19	1.8	12	13	15	31	30	16	2.5	6.4	.22	.20	13
20	2.0	11	12	13	158	25	14	1.8	4.1	.24	.18	2.4
21	2.2	9.7	12	13	126	23	13	1.6	2.4	.26	.18	.70
22	3.0	9.1	12	15	69	19	12	1.4	1.6	.26	.16	.45
23	3.5	9.2	12	14	38	18	13	1.7	1.6	.25	.16	.35
24	4.0	8.2	13	16	33	16	133	1.8	1.4	.28	.12	.26
25	5.0	6.9	11	21	44	14	95	1.7	1.2	2.1	.30	.22
26	6.0	6.6	9.1	17	71	13	36	5.0	1.3	.60	.25	.20
27	6.0	7.0	9.2	15	56	78	27	4.0	1.3	.51	.20	.20
28	7.0	6.5	9.8	14	50	61	26	600	1.2	.50	.40	.20
29	8.0	6.0	11	15	---	51	20	700	.86	.44	.20	.23
30	10	6.1	12	337	---	43	16	300	.72	.38	.17	.28
31	287	---	112	322	---	34	---	30	---	.35	.15	---
TOTAL	430.9	1182.3	566.6	1501	1499	1024	975	1821.2	351.08	40.72	7.25	26.67
MEAN	13.9	39.4	18.3	48.4	53.5	33.0	32.5	58.7	11.7	1.31	.23	.89
MAX	287	606	112	337	158	96	133	700	60	28	.40	13
MIN	1.8	6.0	5.6	13	20	13	12	1.4	.72	.22	.12	.08
AC=FT	855	2350	1120	2980	2970	2030	1930	3610	696	81	14	53

WTR YR 1975 TOTAL 9425.72 MEAN 25.8 MAX 700 MIN .08 AC=FT 18700

PEAK DISCHARGE (BASE, 1,300 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-03	0745	9.88	1,720	05-29	UNKNOWN	UNKNOWN	1,500
05-28	UNKNOWN	10.64	2,020				

BLUE RIVER BASIN

06893300 INDIAN CREEK AT OVERLAND PARK, KS

LOCATION.--Lat 38°56'30", long 94°40'10", in SE $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.6, T.13 S., R.25 E., Johnson County, at downstream side of highway bridge on 103rd Street in Overland Park.

DRAINAGE AREA.--26.6 mi² (68.9 km²).

PERIOD OF RECORD.--March 1963 to current year.

GAGE.--Water-stage recorder. Datum of gage is 856.88 ft (261.177 m) above mean sea level (levels by Corps of Engineers).

AVERAGE DISCHARGE.--12 years, 26.6 ft³/s (0.753 m³/s), 19,270 acre-ft/yr (23.8 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,180 ft³/s (61.7 m³/s) May 28, gage height, 6.61 ft (2.015 m); no flow Aug. 8-12.

Period of record: Maximum discharge, 5,250 ft³/s (149 m³/s) June 5, 1965, gage height, 11.00 ft (3.353 m); no flow at times in most years.

REMARKS.--Records good.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.3	32	7.4	19	38	24	14	8.6	16	1.3	.29	1.8
2	.96	17	7.4	11	30	19	70	7.5	11	1.3	.31	.86
3	.79	588	6.5	15	29	16	46	28	24	1.2	.28	.47
4	.88	56	6.2	13	50	17	43	8.4	10	1.0	.39	.46
5	15	28	6.2	18	35	17	24	7.3	7.9	1.0	.39	.41
6	9.0	19	16	56	18	17	18	6.7	7.3	1.0	.29	.69
7	2.7	15	22	37	17	18	16	7.1	11	.94	.06	.78
8	1.6	13	8.8	24	16	13	21	7.3	23	.80	0	.68
9	1.3	13	6.5	17	14	14	18	6.9	52	.75	0	.47
10	1.2	27	6.5	77	13	20	15	6.9	26	.76	0	3.7
11	1.1	27	59	29	13	21	14	19	87	1.1	0	170
12	3.0	13	33	20	11	23	13	6.2	12	.79	0	14
13	108	13	17	14	11	17	16	5.5	7.7	.70	2.2	3.9
14	15	11	18	13	11	15	49	5.5	6.8	.62	17	2.9
15	4.8	9.6	19	11	12	24	23	5.4	5.4	.45	3.2	3.3
16	3.0	8.8	13	11	47	40	17	4.3	5.1	.26	1.9	2.0
17	2.7	8.3	11	9.6	42	33	15	4.1	9.2	.26	2.4	1.8
18	2.7	8.3	11	9.6	30	21	22	3.6	6.0	.26	2.7	1.8
19	2.3	8.8	11	9.0	22	18	16	3.0	5.1	.38	1.2	11
20	2.3	8.3	10	8.0	64	16	13	3.1	3.6	4.1	.77	4.2
21	2.3	7.8	10	8.0	52	14	12	2.8	3.0	1.5	.61	2.1
22	2.3	7.4	9.6	9.0	35	12	11	2.9	3.4	.85	.32	1.7
23	2.3	7.4	11	9.5	23	12	12	23	3.7	.73	.38	1.3
24	2.5	7.4	13	10	20	11	132	6.5	2.6	.58	.24	.83
25	3.0	6.5	8.8	13	29	9.4	50	7.8	2.4	.47	55	.84
26	2.8	6.5	7.8	9.2	36	13	18	22	2.5	.63	21	.89
27	2.5	6.5	8.3	8.8	27	73	15	7.4	2.2	.76	6.7	.86
28	3.7	6.5	8.3	8.8	25	37	19	359	1.9	.62	15	8.6
29	5.4	6.5	8.3	9.2	---	25	11	426	1.5	1.4	8.6	6.8
30	170	6.5	12	208	---	18	9.4	87	1.3	1.3	4.5	28
31	418	---	66	148	---	16	---	24	---	.45	2.7	---
TOTAL	794.43	993.1	458.6	862.7	770	643.4	772.4	1122.8	360.6	28.26	148.43	277.14
MEAN	25.6	33.1	14.8	27.8	27.5	20.8	25.7	36.2	12.0	.91	4.79	9.24
MAX	418	588	66	208	64	73	132	426	87	4.1	55	170
MIN	.79	6.5	6.2	8.0	11	9.4	9.4	2.8	1.3	.26	0	.41
AC-FT	1580	1970	910	1710	1530	1280	1530	2230	715	56	294	550

CAL YR 1974 TOTAL 9954.13 MEAN 27.3 MAX 910 MIN 0 AC-FT 19740
WTR YR 1975 TOTAL 7231.86 MEAN 19.8 MAX 588 MIN 0 AC-FT 14340

PEAK DISCHARGE (BASE, 1,000 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
10-31	0030	5.96	1,770	05-29	0130	6.00	1,790
11-03	0600	5.94	1,750	09-11	0200	5.98	1,780
05-28	0430	6.61	2,180				

BLUE RIVER BASIN

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06893350 TOMAHAWK CREEK NEAR OVERLAND PARK, KS

LOCATION.--Lat 38°54'47", Long 94°37'54", in NE¼NE¼NE¼, sec.21, T.13 S., R.25 E., Johnson County, on right bank at downstream side of bridge on 119th Street, 1.4 mi (2.3 km) south of Overland Park, 4.4 mi (7.1 km) northeast of Stanley.

DRAINAGE AREA.--23.9 mi² (61.9 km²).

PERIOD OF RECORD.--Annual maximum, water years 1970-74. October 1974 to current year.

GAGE.--Water-stage recorder. Datum of gage is 838.15 ft (255.468 m) above mean sea level (levels by Corps of Engineers). Prior to October 1, 1974, crest-stage gage at same site and datum.

EXTREMES.--Current year: Maximum discharge, 1,620 ft³/s (45.9 m³/s) May 28, gage height, 12.83 ft (3.911 m); minimum, 0.10 ft³/s (0.003 m³/s) July 13, 14, 16-18, Sept. 25, 26.

Period of record: Maximum discharge, 3,600 ft³/s (102 m³/s) June 9, 1974, gage height, 18.22 ft (5.553 m). October 1974 to current year: Minimum discharge, 0.10 ft³/s (0.003 m³/s) July 13, 14, 16-18, Sept. 25, 26, 1975.

REMARKS.--Records fair.

DISCHARGE, IN CUBIC FEET PER SECOND , WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.31	17	3.2	23	55	23	10	7.1	12	.24	.13	.18
2	.27	64	3.0	16	49	14	50	6.6	7.2	.22	.13	.18
3	.24	376	2.6	17	44	11	46	17	13	.18	.14	.18
4	.26	60	2.5	14	63	10	44	10	6.5	.17	.14	.17
5	.76	29	2.8	20	42	10	24	6.8	4.3	.17	.14	.18
6	1.3	19	5.8	73	29	9.8	16	5.9	2.8	.16	.15	.18
7	1.0	15	15	35	17	13	13	5.4	2.3	.15	.13	.18
8	1.0	13	5.8	26	17	7.5	13	4.6	17	.14	.15	.18
9	.77	11	3.3	19	13	7.6	18	3.9	31	.16	.14	.18
10	.67	25	3.2	72	11	10	11	3.6	47	.14	.15	.19
11	.60	24	50	27	14	11	8.1	5.2	50	.13	.16	1.9
12	.87	13	31	19	12	15	6.2	4.4	9.4	.12	.16	.24
13	14	11	14	11	11	13	7.0	3.3	5.9	.11	.24	.17
14	6.3	7.5	14	9.4	11	12	23	3.2	4.9	.12	.82	.16
15	2.8	6.7	16	10	12	34	15	3.0	3.9	.12	.23	.16
16	1.9	6.3	10	9.3	34	51	9.8	2.6	3.0	.12	.22	.13
17	1.0	5.6	7.1	7.9	49	34	7.4	2.3	5.4	.12	.20	.13
18	.48	5.5	6.6	9.4	36	23	7.7	2.1	4.2	.12	.21	.41
19	.33	5.7	6.6	8.0	23	16	6.3	1.9	3.5	.12	.19	.35
20	.36	5.1	6.7	7.0	85	13	4.8	1.5	2.7	.17	.17	.16
21	.38	4.4	6.4	7.0	67	12	4.7	1.3	2.1	.15	.17	.15
22	.45	4.2	6.2	8.0	43	9.7	4.2	1.0	1.7	.15	.17	.15
23	.46	4.3	5.7	8.4	26	9.0	4.4	3.1	1.5	.14	.17	.14
24	.57	3.6	6.0	11	22	7.2	116	2.0	1.2	.13	.17	.13
25	.60	3.0	4.9	16	35	5.6	61	1.5	1.0	.14	.37	.12
26	.72	3.0	4.2	11	42	5.9	27	3.9	.75	.13	.33	.12
27	.90	3.0	4.8	9.4	30	65	20	2.8	.79	.13	.19	.12
28	1.2	2.6	4.9	8.9	26	38	20	249	.52	.13	.49	.13
29	1.6	2.5	5.6	9.1	---	29	13	311	.40	.13	.19	.14
30	160	2.9	5.9	215	---	21	10	86	.30	.13	.17	.62
31	91	---	70	167	---	15	---	23	---	.13	.17	---
TOTAL	293.10	752.9	333.8	903.8	918	555.3	620.6	785.0	246.26	4.47	6.59	7.43
MEAN	9.45	25.1	10.8	29.2	32.8	17.9	20.7	25.3	8.21	.14	.21	.25
MAX	160	376	70	215	85	65	116	311	50	.24	.82	1.9
MIN	.24	2.5	2.5	7.0	11	5.6	4.2	1.0	.30	.11	.13	.12
AC-FT	581	1490	662	1790	1820	1100	1230	1560	488	8.9	13	15

WTR YR 1975 TOTAL 5427.25 MEAN 14.9 MAX 376 MIN .11 AC-FT 10760

PEAK DISCHARGE (BASE, 900 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-03	0215	11.70	1,280	05-29	0430	10.84	1,020
05-28	0600	12.83	1,620				

06910800 MARAIS DES CYGNES RIVER NEAR READING, KS

LOCATION.--Lat 38°34'00", long 95°57'50", in SE¼SW¼ sec.15, T.17 S., R.13 E., Lyon County, at downstream side of highway bridge, 1.9 mi (3.1 km) downstream from confluence of One Hundred and Fortytwo Mile Creek and Elm Creek, 4.3 mi (6.9 km) upstream from Duck Creek, 3.0 mi (4.8 km) north of Reading, and at mile 467.0 (751.4 km).

DRAINAGE AREA.--177 mi² (458 km²).

PERIOD OF RECORD.--May 1969 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,048.32 ft (319.528 m) above mean sea level (Corps of Engineers bench mark).

AVERAGE DISCHARGE.--6 years, 123 ft³/s (3.483 m³/s), 89,110 acre-ft/yr (110 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 6,620 ft³/s (187 m³/s) June 17, gage height, 21.68 ft (6.608 m); minimum, 1.2 ft³/s (0.034 m³/s) Aug. 8-9.

Period of record: Maximum discharge, 30,600 ft³/s (867 m³/s) June 27, 1969, gage height, 25.22 ft (7.687 m); minimum 0.03 ft³/s (0.001 m³/s) Oct. 18-20, 1972.

REMARKS.--Records good.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.9	256	24	78	167	77	81	46	43	54	2.9	3.9
2	6.9	116	24	66	110	68	81	43	73	49	2.2	3.4
3	6.9	3120	24	59	105	57	108	75	1500	44	2.0	3.1
4	6.6	1000	23	51	1240	52	269	62	233	39	1.7	3.0
5	9.4	203	22	48	530	51	267	47	99	35	1.5	3.1
6	19	126	25	53	130	58	137	40	66	32	1.3	3.4
7	20	96	49	101	110	220	102	36	48	29	1.3	3.3
8	26	83	62	163	113	101	277	33	62	25	1.2	3.0
9	36	80	42	142	83	72	213	39	1500	22	1.4	2.8
10	31	309	31	538	78	75	121	31	208	19	1.9	2.8
11	24	233	84	425	79	81	98	29	743	18	2.0	2.7
12	908	131	268	150	72	79	84	26	204	16	2.3	2.6
13	1220	89	119	100	66	75	93	26	106	14	4.9	2.4
14	631	73	84	76	65	65	1070	32	77	14	9.5	2.2
15	116	63	71	72	60	67	475	33	61	13	4.0	2.8
16	74	58	62	72	58	249	180	28	724	11	2.0	3.0
17	54	54	53	67	62	749	136	23	4460	11	34	2.8
18	39	51	48	64	66	384	117	20	388	10	119	2.4
19	30	49	45	74	60	162	103	19	192	9.8	65	2.9
20	26	46	44	74	89	107	89	17	138	8.6	24	2.5
21	22	42	43	68	582	88	79	15	110	7.8	12	1.9
22	20	38	41	55	1030	77	73	15	1700	7.2	7.9	1.5
23	17	37	40	52	166	70	72	72	1010	6.6	6.7	1.4
24	14	34	39	50	138	60	98	67	200	6.2	5.3	1.4
25	14	31	36	54	142	52	87	40	136	4.9	4.4	1.4
26	14	29	32	54	141	47	74	31	109	4.6	4.2	1.6
27	14	28	30	50	100	492	70	27	89	4.6	3.9	1.7
28	14	27	31	45	83	673	98	826	78	4.3	3.9	2.7
29	22	26	33	43	---	150	65	236	68	4.1	8.1	4.1
30	123	24	34	354	---	107	53	102	60	3.5	5.4	3.0
31	1110	---	52	714	---	91	---	61	---	3.0	4.3	---
TOTAL	4674.7	6552	1615	4012	5725	4756	4870	2197	14485	530.2	350.2	78.8
MEAN	151	218	52.1	129	204	153	162	70.9	483	17.1	11.3	2.63
MAX	1220	3120	268	714	1240	749	1070	826	4460	54	119	4.1
MIN	6.6	24	22	43	58	47	53	15	43	3.0	1.2	1.4
AC-FT	9270	13000	3200	7960	11360	9430	9660	4360	28730	1050	695	156

CAL YR 1974 TOTAL 46529.6 MEAN 127 MAX 5090 MIN 1.0 AC-FT 92290
WTR YR 1975 TOTAL 49845.9 MEAN 137 MAX 4460 MIN 1.2 AC-FT 98870

PEAK DISCHARGE (BASE, 3,000 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-03	1800	19.32	4,710	06-22	2200	16.58	3,550
06-17	0600	21.68	6,620				

OSAGE RIVER BASIN

111

06910997 MELVERN LAKE NEAR MELVERN, KS

LOCATION.--Lat 38°30'34", Long 95°42'36", in NW¼SW¼ sec. 1, T.18 S., R.15 E., Osage County, in control tower of Melvern Dam on Marais des Cygnes River, 4.0 mi (6.4 km) west of Melvern, and at 447.7 mi (720.3 km).

DRAINAGE AREA.--349 mi² (904 km²).

PERIOD OF RECORD.--November 1972 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Corps of Engineers).

EXTREMES.--Maximum elevation during period, 1,039.97 ft (316.983 m) June 25, contents, 183,700 acre-ft (227 hm³); minimum, 1,029.51 ft (313.795 m) Oct. 4, contents, 113,800 acre-ft (140 hm³).

Period of record: Maximum elevation, 1,039.97 ft (316.983 m) June 25, 1975, contents, 183,700 acre-ft (227 hm³); minimum, 971.45 ft (296.10 m) Nov. 13, 1972, contents, 359 acre-ft (0.443 hm³).

REMARKS.--Reservoir is formed by compact earth-fill dam. Storage began in July 1972. Total capacity 652,500 acre-ft (804 hm³), consisting of the following: dead storage 26 acre-ft (32,100 m³) below elevation 962.0 ft (293.2 m); conservation pool 154,400 acre-ft (190 hm³) between elevations 962.0 ft (293.2 m) and 1,036.0 ft (315.8 m); flood control pool 258,600 acre-ft (319 hm³) between elevations 1,036.0 ft (315.8 m) and 1,057.0 ft (322.2 m); and surcharge pool 507,600 acre-ft (626 hm³) between elevation 1,057.0 ft (322.2 m) and 1,073.0 ft (327.1 m). Reservoir is used to store water for flood control, irrigation and recreation.

Capacity table (elevation, in feet, and total contents, in acre-ft)
(Computed by Corps of Engineers in 1963)

1,025	90,250	1,035	147,600
1,030	116,600	1,040	184,000

ELEVATION, IN FEET, AT 2400, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,029.57	1,031.31	1,030.86	1,031.19	1,033.53	1,034.17	1,035.90	1,036.35	1,036.71	1,036.17	1,033.70	1,034.11
2	1,029.54	1,031.40	1,030.84	1,031.27	A	1,034.18	1,035.93	1,036.30	1,036.52	1,035.47	1,033.69	1,034.09
3	1,029.53	1,033.18	1,030.83	1,031.30		1,034.19	1,035.95	1,036.24	1,037.28	1,035.34	1,033.66	1,034.04
4	1,029.52	1,033.97	1,030.83	1,031.31		1,034.20	1,036.06	1,036.18	1,037.13	1,035.20	1,033.64	1,034.03
5	1,029.70	1,034.02	1,030.85	1,031.33		1,034.20	1,036.13	1,036.11	1,036.92	1,035.06	1,033.60	1,034.05
6	1,029.72	1,034.05	1,030.92	1,031.39		1,034.34	1,036.15	1,036.04	1,036.67	1,034.91	1,033.57	1,034.02
7	1,029.70	1,034.05	1,030.95	1,031.49		1,034.44	1,036.18	1,035.97	1,036.41	1,034.76	1,033.54	1,034.00
8	1,029.69	1,034.04	1,030.94	1,031.58		1,034.46	1,036.27	1,035.97	1,036.24	1,034.61	1,033.51	1,033.96
9	1,029.68	1,034.06	1,030.95	1,031.67		1,034.56	1,036.34	1,035.97	1,036.50	1,034.46	1,033.49	1,033.94
10	1,029.67	1,034.16	1,030.97	1,032.07	A	1,034.58	1,036.36	1,035.97	1,036.38	1,034.33	1,033.45	1,033.93
11	1,029.73	1,034.26	1,031.12	1,032.21	1,034.03	1,034.62	1,036.37	1,035.97	1,036.34	1,034.25	1,033.43	1,033.93
12	1,030.05	1,034.09	1,031.29	1,032.27	1,033.88	1,034.63	1,036.36	1,035.95	1,036.14	1,034.16	1,033.39	1,033.89
13	1,030.57	1,033.78	1,031.28	1,032.30	1,033.71	1,034.65	1,036.41	1,035.97	1,036.00	1,034.09	1,033.62	1,033.87
14	1,030.93	1,033.47	1,031.20	1,032.34	1,033.51	1,034.65	1,036.86	1,035.97	1,036.00	1,034.03	1,033.68	1,033.84
15	1,031.00	1,033.16	1,031.11	1,032.37	1,033.32	1,034.68	1,037.04	1,035.95	1,035.95	1,034.00	1,033.67	1,033.82
16	1,031.02	1,032.83	1,030.98	1,032.38	1,033.22	1,034.93	1,037.01	1,035.94	1,036.58	1,033.99	1,033.66	1,033.80
17	1,031.04	1,032.49	1,030.92	1,032.40	1,033.03	1,035.27	1,036.94	1,035.92	1,038.21	1,033.96	1,033.97	1,033.80
18	1,031.01	1,032.15	1,030.94	1,032.40	1,032.85	1,035.34	1,036.93	1,035.90	1,038.47	1,033.93	1,034.06	1,033.79
19	1,030.91	1,031.82	1,030.95	1,032.43	1,032.66	1,035.30	1,036.86	1,035.88	1,038.52	1,033.92	1,034.10	1,033.78
20	1,030.80	1,031.46	1,030.97	1,032.43	1,032.57	1,035.27	1,036.80	1,035.88	1,038.55	1,033.90	1,034.10	1,033.74
21	1,030.69	1,031.10	1,030.98	1,032.45	1,033.11	1,035.27	1,036.77	1,035.87	1,038.58	1,033.88	1,034.08	1,033.72
22	1,030.58	1,030.93	1,030.98	1,032.43	1,033.67	1,035.27	1,036.73	1,035.94	1,039.44	1,033.86	1,034.06	1,033.69
23	1,030.47	1,030.96	1,031.00	1,032.45	1,033.76	1,035.28	1,036.71	1,036.02	1,039.92	1,033.85	1,034.04	1,033.66
24	1,030.37	1,030.93	1,031.02	1,032.46	1,033.80	1,035.26	1,036.71	1,036.03	1,039.96	1,033.83	1,034.01	1,033.64
25	1,030.30	1,030.92	1,031.02	1,032.45	1,033.92	1,035.19	1,036.66	1,036.05	1,039.83	1,033.80	1,033.98	1,033.62
26	1,030.25	1,030.92	1,031.03	1,032.43	1,034.02	1,035.18	1,036.62	1,036.10	1,039.50	1,033.79	1,033.96	1,033.60
27	1,030.20	1,030.90	1,031.04	1,032.45	1,034.08	1,035.58	1,036.59	1,036.10	1,039.14	1,033.77	1,033.95	1,033.58
28	1,030.20	1,030.88	1,031.06	1,032.43	1,034.12	1,035.89	1,036.57	1,037.06	1,038.78	1,033.75	1,034.01	1,033.58
29	1,030.15	1,030.90	1,031.06	1,032.43	-----	1,035.93	1,036.52	1,037.24	1,038.26	1,033.77	1,034.14	1,033.56
30	1,030.47	1,030.88	1,031.10	1,032.94	-----	1,035.93	1,036.43	1,037.20	1,037.44	1,033.75	1,034.13	1,033.64
31	1,031.18	-----	1,031.17	1,033.45	-----	1,035.88	-----	1,036.96	-----	1,033.73	1,034.13	-----
MEAN	1,030.27	1,032.44	1,031.01	1,032.15		1,034.95	1,036.51	1,036.16	1,037.61	1,034.27	1,033.81	1,033.82
MAX	1,031.18	1,034.26	1,031.29	1,033.45	1,034.12	1,035.93	1,037.04	1,037.24	1,039.96	1,036.17	1,034.14	1,034.11
MIN	1,029.52	1,030.88	1,030.83	1,031.19	1,032.57	1,034.17	1,035.90	1,035.87	1,035.95	1,033.73	1,033.39	1,033.56
(+)	123,500	121,700	123,400	137,400	141,700	153,500	157,400	161,100	164,600	139,200	141,800	138,600
(#)	+9,200	-1,800	+1,700	+14,000	+4,300	+11,800	+3,900	+3,700	+3,500	-25,400	+2,600	-3,200
CAL YR 1974	..... (#)				+36,150							
WTR YR 1975	..... (#)				+24,300							

+ CONTENTS, IN ACRE-FEET, AT END OF MONTH.

CHANGE IN CONTENTS, IN ACRE-FEET.

A NO GAGE-HEIGHT RECORD.

06911500 SALT CREEK NEAR LYNDON, KS

LOCATION.--Lat 38°36'32", long 95°38'17", in SW $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.34, T.16 S., R.16 E., Osage County, at downstream side of highway bridge, 2.5 mi (4.0 km) east of Lyndon, and at mile 12.6 (20.3 km).

DRAINAGE AREA.--111 mi² (287 km²).

PERIOD OF RECORD.--September 1939 to current year.

GAGE.--Water-stage recorder. Datum of gage is 955.78 ft (291.322 m) above mean sea level. Prior to Nov. 25, 1957, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--36 years, 62.5 ft³/s (1.770 m³/s), 45,280 acre-ft/yr (55.8 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 18,000 ft³/s (510 m³/s) June 16, gage height, 15.51 ft (4.727 m); no flow for part of Sept. 27.

Period of record: Maximum discharge, 36,400 ft³/s (1,030 m³/s) July 11, 1951, gage height, 17.0 ft (5.18 m), from floodmark, from rating curve extended above 6,000 ft³/s (170 m³/s) on basis of slope-area measurement of peak flow; no flow at times.

Flood of 1935 reached a stage a few feet higher than that of July 11, 1951, from information by local residents.

REMARKS.--Records good.

REVISIONS (WATER YEARS).--WSP 1176: 1944-45(M). WSP 1340: 1943(M), 1946-47, 1948(P), 1949-50.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.79	244	13	53	136	81	39	29	37	16	1.2	.71
2	.79	82	13	45	81	60	46	25	31	14	1.2	.70
3	.77	2000	12	35	70	43	62	41	1050	12	.99	.63
4	.68	616	12	28	526	38	205	53	173	10	.88	.57
5	1.3	118	12	26	294	36	147	32	60	8.2	.88	.56
6	2.0	69	15	41	71	39	72	24	38	7.0	.83	.56
7	1.6	52	25	98	55	176	56	20	27	5.7	.88	.56
8	1.3	44	28	132	50	93	63	17	27	5.4	.79	.50
9	1.2	42	22	83	37	55	69	18	307	4.8	.70	.49
10	1.4	125	16	272	33	55	50	17	117	4.4	.49	.49
11	1.5	146	36	292	33	59	41	16	212	4.0	.40	.61
12	1.7	77	162	60	31	62	35	13	84	3.7	.35	.64
13	395	50	69	41	30	58	39	12	41	3.5	.40	.62
14	360	40	41	30	29	48	536	14	28	3.2	.79	.56
15	58	31	36	27	28	66	280	14	21	3.1	.79	.49
16	23	28	28	26	27	323	102	13	3550	3.0	.79	.42
17	13	26	21	23	33	677	70	10	7770	3.0	3.3	.42
18	8.2	25	19	24	36	319	56	8.8	287	2.6	3.4	.33
19	5.4	24	17	31	34	112	48	7.7	121	2.5	7.4	.21
20	4.8	23	17	28	53	70	40	6.7	79	2.1	3.7	.21
21	4.4	21	15	27	488	55	33	6.1	57	2.5	2.7	.14
22	4.1	19	15	20	642	46	31	7.5	1220	2.2	1.6	.14
23	3.7	19	15	18	109	40	30	142	508	2.2	1.1	.07
24	3.4	17	14	19	70	40	58	44	112	2.0	.85	.07
25	4.0	16	12	22	127	33	80	28	69	2.1	.59	.07
26	4.0	15	10	23	235	26	46	39	48	2.2	.63	.07
27	5.3	15	10	20	116	269	40	33	37	1.9	.63	.04
28	9.6	14	11	18	90	347	96	1320	29	1.6	.84	.07
29	14	14	12	18	---	84	69	395	24	1.6	1.9	.07
30	54	13	13	364	---	55	38	108	20	1.4	1.4	.18
31	968	---	29	736	---	46	---	56	---	1.3	.91	---
TOTAL	1956.93	4025	770	2680	3564	3511	2577	2569.8	16184	139.2	43.31	11.20
MEAN	63.1	134	24.8	86.5	127	113	85.9	82.9	539	4.49	1.40	.37
MAX	968	2000	162	736	642	677	536	1320	7770	16	7.4	.71
MIN	.68	13	10	18	27	26	30	6.1	20	1.3	.35	.04
AC-FT	3880	7980	1530	5320	7070	6960	5110	5100	32100	276	86	22

CAL YR 1974 TOTAL 21564.27 MEAN 59.1 MAX 2000 MIN 0 AC-FT 42770
WTR YR 1975 TOTAL 38031.44 MEAN 104 MAX 7770 MIN .04 AC-FT 75440

PEAK DISCHARGE (BASE, 3,000 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-03	1000	9.67	3,000	06-16	2200	15.51	18,000

OSAGE RIVER BASIN

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06911900 DRAGON CREEK NEAR BURLINGAME, KS

LOCATION.--Lat 38°42'30", long 95°50'20", in SE¼SE¼ sec.27, T.15 S., R.14 E., Osage County, on left bank, 110 ft (34 m) downstream from city of Burlingame pumping station and dam, 0.2 mi (0.3 km) downstream from bridge on U.S. Highway 56, 2.0 mi (3.2 km) downstream from Plum Creek and 3.0 mi (4.8 km) south of Burlingame.

DRAINAGE AREA.--114 mi² (295 km²).

PERIOD OF RECORD.--March 1960 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,016.06 ft (309.695 m) above mean sea level. Prior to June 8, 1960, nonrecording gage at bridge 180 ft (55 m) upstream at present datum.

AVERAGE DISCHARGE.--15 years, 69.0 ft³/s (1.954 m³/s), 49,990 acre-ft/yr (61.6 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 7,380 ft³/s (209 m³/s) June 17, gage height, 20.19 ft (6.154 m); minimum, 0.24 ft³/s (0.007 m³/s) Aug. 13.

Period of record: Maximum discharge, 11,400 ft³/s (323 m³/s) June 27, 1969, gage height, 20.81 ft (6.343 m); no flow at times. Maximum stage known since at least 1900, 23.4 ft (7.13 m) June 26, 1946, from information by local residents.

REMARKS.--Records good. Diversions 110 ft (34 m) above station for municipal supply of Burlingame.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.34	96	18	42	82	68	55	37	26	37	1.9	.80
2	.34	50	17	34	60	57	54	36	27	29	1.4	.63
3	.34	2080	16	30	60	44	63	63	354	29	1.3	.49
4	.34	312	14	25	691	40	151	49	86	27	.83	.34
5	.50	86	14	23	224	40	180	36	44	26	.69	.38
6	4.0	63	18	25	63	41	94	33	30	21	.65	.49
7	1.9	50	36	44	54	66	77	27	23	20	.65	.34
8	2.8	44	38	101	58	46	115	24	35	20	.65	.34
9	3.3	47	24	74	52	38	110	22	899	17	.50	.34
10	1.9	150	20	361	46	41	79	17	100	14	.50	.34
11	1.6	112	49	176	47	44	68	16	378	12	.42	22
12	529	71	100	69	42	44	62	17	91	9.4	.34	11
13	758	55	50	41	40	44	68	16	56	6.8	2.5	2.3
14	160	46	35	36	40	39	702	16	41	5.8	17	1.1
15	49	38	31	35	38	40	220	16	32	6.1	8.0	.95
16	27	37	26	36	38	128	111	11	1060	5.3	4.0	.80
17	17	34	23	34	41	365	90	6.4	3790	5.2	15	.53
18	12	33	21	33	41	157	80	3.3	159	4.0	8.0	.50
19	3.3	34	20	43	36	87	71	2.8	98	4.3	4.0	.96
20	2.3	30	20	38	41	67	62	2.3	73	3.4	3.0	1.0
21	2.3	28	19	36	202	59	57	1.3	58	3.3	1.9	.80
22	2.3	26	18	29	480	54	54	1.9	1860	2.9	1.6	.80
23	2.3	26	18	25	98	50	54	20	563	2.0	.99	1.2
24	2.3	24	17	25	64	45	79	25	106	1.9	.80	1.3
25	2.3	21	14	28	115	39	71	11	79	1.9	.66	1.3
26	3.3	21	12	29	196	37	62	16	65	1.6	.69	1.3
27	5.3	20	12	26	94	339	59	12	54	2.5	.65	1.3
28	7.9	20	12	23	74	288	98	591	45	1.7	.50	1.3
29	14	19	13	22	---	88	57	106	38	1.6	.88	1.2
30	30	18	15	134	---	69	43	58	37	1.6	1.0	2.2
31	446	---	26	335	---	62	---	37	---	1.6	.83	---
TOTAL	2092.96	3691	766	2012	3117	2626	3146	1330.0	10307	324.9	81.83	58.33
MEAN	67.5	123	24.7	64.9	111	84.7	105	42.9	344	10.5	2.64	1.94
MAX	758	2080	100	361	691	365	702	591	3790	37	17	22
MIN	.34	18	12	22	36	37	43	1.3	23	1.6	.34	.34
AC-FT	4150	7320	1520	3990	6180	5210	6240	2640	20440	644	162	116

CAL YR 1974 TOTAL 26125.12 MEAN 71.6 MAX 3120 MIN 0 AC-FT 51820
WTR YR 1975 TOTAL 29553.02 MEAN 81.0 MAX 3790 MIN .34 AC-FT 58620

PEAK DISCHARGE (BASE, 1,500 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-03	1600	14.63	3,220	06-17	0300	20.19	7,380
06-09	0700	9.48	1,820	06-22	1900	14.22	3,180

OSAGE RIVER BASIN

06912490 POMONA LAKE NEAR QUENEMO, KS

LOCATION.--Lat 38°38'51", long 95°33'50", in NE¼SE¼NE¼ sec.19, T.16 S., R.17 E., Osage County, in control tower at dam on Hundred and Ten Mile Creek, 5 mi (8.0 km) northwest of Quenemo, and 7.9 mi (12.7 km) above mouth.

DRAINAGE AREA.--322 mi² (834 km²).

PERIOD OF RECORD.--April 1964 to current year. Prior to October 1971, published as "Pomona Reservoir".

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (Corps of Engineers bench mark).

EXTREMES.--Current year: Maximum elevation, 985.41 ft (300.353 m) June 25, contents, 125,100 acre-ft (154 hm³); minimum, 971.83 ft (296.214 m) Jan. 26, 27, contents, 62,240 acre-ft (76.7 hm³).

Period of record: Maximum elevation, 989.01 ft (301.450 m) Apr. 5, 1973, contents, 146,100 acre-ft (180 hm³); minimum since conservation pool was first filled, 969.60 ft (295.534 m) Mar. 29, 30, 1967, contents, 54,260 acre-ft (66.9 hm³).

REMARKS.--Reservoir is formed by compacted earthfill dam. Storage began Oct. 18, 1963. Total capacity, 502,600 acre-ft (620 hm³), consisting of the following: Sedimentation, 28,000 acre-ft (34.5 hm³) below elevation 960.5 ft (292.8 m); conservation pool, 42,600 acre-ft (52.5 hm³) between elevations 960.5 (292.8 m) and 974.0 (296.9 m); flood control pool, 176,800 acre-ft (218 hm³) between elevations 974.0 (296.9 m) and 1,003.0 ft (305.7 m); and surcharge pool, 255,200 acre-ft (315 hm³) between elevations 1,003.0 (296.9 m) and 1,025.4 ft (312.5 m). Reservoir is used for flood control, conservation, and recreation. Figures given herein represent total contents.

Capacity table (elevation, in feet, and contents, in acre-feet)
(Based on survey by U.S. Army, Corps of Engineers, revised in 1964)

970	55,640	985	122,800
975	74,670	990	152,200
980	97,040		

ELEVATION, IN FEET, AT 2400, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	973.62	975.38	973.97	974.14	973.11	972.82	974.01	975.15	976.51	981.43	973.30	972.90
2	973.58	975.45	973.95	974.22	973.18	972.70	974.05	975.07	976.38	980.98	973.29	972.88
3	973.55	977.97	973.93	974.25	973.22	972.57	974.10	975.06	976.90	980.14	973.26	972.86
4	973.54	978.53	973.94	974.26	973.80	972.42	974.30	974.98	976.85	979.12	973.23	972.83
5	973.58	978.63	973.95	974.33	974.05	972.28	974.48	974.87	976.70	978.09	973.20	972.84
6	973.60	978.66	974.05	974.25	973.94	972.22	974.53	974.77	976.52	977.04	973.16	972.80
7	973.58	978.67	974.10	974.11	973.83	972.13	974.57	974.65	976.34	975.96	973.13	972.77
8	973.57	978.68	974.08	974.00	973.73	972.12	974.64	974.53	976.22	974.84	973.10	972.74
9	973.55	978.72	974.10	973.87	973.64	972.17	974.70	974.48	976.58	974.18	973.08	972.72
10	973.52	978.90	974.11	974.08	973.52	972.16	974.72	974.45	976.64	974.10	973.04	972.70
11	973.53	979.05	974.24	974.12	973.41	972.17	974.72	974.45	976.75	974.01	973.00	972.86
12	973.78	978.83	974.41	973.94	973.28	972.17	974.71	974.43	976.65	973.92	972.98	972.83
13	974.53	978.39	974.44	973.77	973.13	972.16	974.80	974.43	976.49	973.85	973.04	972.80
14	974.84	977.91	974.44	973.58	973.00	972.13	975.59	974.40	976.30	973.77	973.05	972.79
15	974.89	977.42	974.35	973.35	972.86	972.16	975.79	974.37	976.09	973.71	973.04	972.77
16	974.92	976.93	974.27	973.02	972.75	972.40	975.73	974.35	979.34	973.67	973.02	972.75
17	974.94	976.42	974.18	972.70	972.62	972.91	975.62	974.34	982.83	973.62	973.10	972.73
18	974.91	975.93	974.13	972.38	972.48	973.13	975.57	974.32	983.08	973.60	973.08	972.75
19	974.81	975.43	974.04	972.09	972.33	973.19	975.52	974.30	983.17	973.59	973.07	972.73
20	974.70	974.89	973.99	971.90	972.24	973.21	975.46	974.29	983.22	973.59	973.05	972.70
21	974.60	974.36	973.98	971.90	972.59	973.24	975.42	974.27	983.29	973.57	973.03	972.68
22	974.49	974.05	973.99	971.88	973.10	973.20	975.38	974.46	984.72	973.55	973.00	972.65
23	974.39	974.08	974.00	971.86	973.07	973.17	975.39	974.96	985.28	973.52	972.97	972.63
24	974.30	974.06	974.00	971.87	972.96	973.18	975.51	975.04	985.38	973.50	972.94	972.60
25	974.22	974.03	973.97	971.86	972.94	973.08	975.52	975.09	985.10	973.47	972.92	972.58
26	974.17	974.05	973.96	971.83	973.02	973.09	975.45	975.19	984.28	973.45	972.90	972.55
27	974.13	974.02	973.97	971.84	972.97	973.70	975.44	975.20	983.44	973.43	972.88	972.54
28	974.11	974.02	973.97	971.85	972.90	974.15	975.43	976.50	982.59	973.40	972.90	972.54
29	974.07	974.03	973.99	971.85	-----	974.13	975.37	976.82	981.82	973.38	972.96	972.53
30	974.31	974.01	974.03	972.35	-----	974.02	975.25	976.85	981.49	973.36	972.94	972.58
31	974.19	-----	974.10	972.95	-----	973.98	-----	976.69	-----	973.33	972.92	-----
MEAN	974.15	976.38	974.08	973.05	973.13	972.84	975.06	974.93	979.90	974.88	973.05	972.72
MAX	974.94	979.05	974.44	974.33	974.05	974.15	975.79	976.85	985.38	981.43	973.30	972.90
MIN	973.52	974.01	973.93	971.83	972.24	972.12	974.01	974.27	976.09	973.33	972.88	972.53
(+)	71,360	70,640	71,000	66,480	66,280	70,520	75,700	81,840	104,400	67,950	66,360	65,060
(*)	+2,150	-720	+360	-4,520	-200	+4,240	+5,180	+6,140	+22,560	-36,450	-1,590	-1,300

CAL YR 1974 (*) -570
WTR YR 1975 (*) -4,150

+ CONTENTS, IN ACRE-FEET, AT END OF MONTH.
* CHANGE IN CONTENTS, IN ACRE-FEET.

OSAGE RIVER BASIN

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06912500 HUNDRED AND TEN MILE CREEK NEAR QUENEMO, KS

LOCATION.--Lat 38°38'41", long 95°33'34", in NE¼NW¼SW¼ sec.20, T.16 S., R.17 E., Osage County, on left bank 800 ft (244 m) downstream from outlet works of Pomona Dam, 4.5 mi (7.2 km) northwest of Quenemo, and 7.7 mi (12.4 km) upstream from mouth.

DRAINAGE AREA.--322 mi² (834 km²).

PERIOD OF RECORD.--September 1939 to current year. Prior to October 1941, published as "Dragoon Creek".

GAGE.--Water-stage recorder. Datum of gage is 919.05 ft (280.126 m) above mean sea level (Corps of Engineers bench mark). See WSP 1919 for history of changes prior to Apr. 11, 1963.

AVERAGE DISCHARGE.--36 years, 178 ft³/s (5.041 m³/s), 129,000 acre-ft/yr (159 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,580 ft³/s (73.1 m³/s) June 26, gage height, 14.25 ft (4.343 m); minimum discharge, 2.4 ft³/s (0.068 m³/s) July 28.

Period of record: Maximum discharge, 38,600 ft³/s (1,090 m³/s) July 11, 1951, gage height, 28.47 ft (8.678 m), site and datum then in use, from rating curve extended above 20,000 ft³/s (566 m³/s) on basis of slope-area measurement of peak flow; no flow at times in 1952-57, 1960, 1968, 1970, 1971, 1973.

Maximum stage known since at least 1919, 28.47 ft (8.678 m) July 11, 1951, from information by local resident.

REMARKS.--Records good. Flow completely regulated since 1964 by Pomona Lake (see sta 06912490).

REVISIONS (WATER YEARS).--WSP 1116: 1942.

DISCHARGE, IN CUBIC FEET PER SECOND , WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	125	58	38	63	416	170	351	498	162	12	15
2	20	124	58	35	63	415	170	352	498	1170	12	15
3	20	170	45	34	181	416	173	353	505	2220	12	16
4	21	130	23	35	377	416	175	352	507	2530	12	16
5	22	123	23	35	368	417	175	350	496	2500	12	15
6	22	122	23	228	360	416	175	349	494	2460	12	15
7	22	122	22	508	364	303	175	349	493	2430	12	14
8	22	122	20	511	361	141	175	348	500	2400	12	15
9	22	122	20	509	361	141	175	213	506	1560	12	14
10	22	122	20	513	361	142	175	93	505	122	14	14
11	23	122	23	510	355	145	154	94	505	122	17	18
12	23	578	23	509	378	145	126	94	501	122	17	16
13	25	1280	104	508	406	144	126	93	498	122	17	15
14	25	1270	221	506	408	144	137	92	496	95	18	16
15	23	1260	217	590	408	147	335	93	493	69	18	16
16	21	1250	217	779	408	149	575	72	500	60	17	15
17	20	1240	217	777	408	142	575	30	250	31	17	16
18	92	1240	217	778	406	150	435	30	30	12	18	16
19	226	1230	217	774	407	151	242	27	27	12	18	15
20	227	1230	167	522	411	152	244	23	27	12	16	15
21	229	1220	60	113	424	150	244	22	26	12	13	15
22	226	754	59	111	416	151	203	23	27	12	14	14
23	225	58	58	111	413	153	119	24	27	12	14	14
24	226	58	58	111	414	151	119	24	27	12	14	15
25	185	58	58	111	416	116	196	23	935	12	14	15
26	113	57	58	111	416	56	348	23	2570	12	15	15
27	113	56	51	86	417	71	352	23	2570	12	15	15
28	113	58	39	60	418	60	349	24	2540	11	16	15
29	113	58	38	59	---	240	331	23	2310	12	16	15
30	131	58	38	72	---	443	349	180	1050	12	16	15
31	134	---	38	66	---	300	---	499	---	12	16	---
TOTAL	2726	14417	2490	9710	10188	6583	7297	4646	20411	18342	458	455
MEAN	87.9	481	80.3	313	364	212	243	150	680	592	14.8	15.2
MAX	229	1280	221	779	424	443	575	499	2570	2530	18	18
MIN	20	56	20	34	63	56	119	22	26	11	12	14
AC-FT	5410	28600	4940	19260	20210	13060	14470	9220	40490	36380	908	902
CAL YR 1974	TOTAL	74368	MEAN 204	MAX 1280	MIN 18	AC-FT 147500						
WTR YR 1975	TOTAL	97723	MEAN 268	MAX 2570	MIN 11	AC-FT 193800						

OSAGE RIVER BASIN

06913000 MARAIS DES CYGNES RIVER NEAR POMONA, KS

LOCATION.--Lat 38°35'03", long 95°27'12", in SE¼NE¼SE¼ sec.7, T.17 S., R.18 E., Franklin County, on right bank at downstream side of county highway bridge, 1.5 mi (2.4 km) south of Pomona, 4.7 mi (7.6 km) upstream from Miller Dam, 5.7 mi (9.2 km) downstream from 110 Mile Creek, and at mile 418.1 (672.7 km).

DRAINAGE AREA.--1,040 mi² (2,694 km²).

PERIOD OF RECORD.--July 1922 to February 1938, October 1968 to current year. Prior to October 1968, published as "near Quenemo".

GAGE.--Water-stage recorder. Datum of gage is 893.74 ft (272.412 m) above mean sea level. July 1922 to February 1938, nonrecording gage 1.7 mi (2.7 km) upstream at datum 891.36 ft (271.687 m) above mean sea level (levels by Corps of Engineers).

AVERAGE DISCHARGE.--22 years (1923-37, 1969-75), 484 ft³/s (13.71 m³/s), 350,700 acre-ft/yr (432 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 23,500 ft³/s (666 m³/s) June 17, gage height, 30.13 ft (9.184 m); minimum, 30 ft³/s (0.85 m³/s) Sept. 21-25.

Period of record: Maximum discharge, 69,400 ft³/s (1,970 m³/s) Nov. 17, 1928, gage height, 38.38 ft (11.698 m), from floodmark, site and datum then in use, from rating curve extended above 20,000 ft³/s (566 m³/s) by logarithmic plotting and unit-runoff study at gage height 40.35 ft (12.299 m) for flood of July 11, 1951; no flow at times in 1926, 1931, 1933, 1934, 1936-38.

REMARKS.--Records good. Flow regulated since 1973 by Melvern Lake (see sta 06910997) and since 1964 by Pomona Lake (see sta 06912490).

REVISIONS (WATER YEARS).--WSP 1310: 1924(M), 1929, 1931(M), 1934, 1935(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	55	3,300	172	295	1,750	937	602	757	1,660	3,580	38	95
2	55	930	170	278	733	841	526	742	1,630	4,950	38	68
3	55	4,620	170	243	592	744	562	764	2,720	5,080	38	54
4	55	7,630	137	216	1,240	732	800	778	3,100	3,400	38	86
5	62	2,870	100	196	2,180	740	832	775	1,850	3,240	36	46
6	82	970	102	289	1,200	728	645	744	1,700	3,190	35	36
7	72	726	159	905	1,060	898	544	727	1,640	3,150	35	38
8	65	635	199	952	982	741	576	612	1,620	3,110	35	37
9	62	580	158	889	1,040	551	582	468	1,880	2,930	35	37
10	60	626	135	837	1,150	524	537	240	2,090	940	35	37
11	58	762	169	1,350	929	529	498	197	3,950	495	36	67
12	65	741	716	900	876	564	425	190	2,780	344	37	43
13	102	2,160	586	872	1,060	583	402	184	1,790	341	39	36
14	528	2,590	681	719	1,150	541	784	183	1,160	333	50	34
15	358	2,540	844	699	1,150	555	1,350	183	799	221	58	33
16	152	2,520	812	845	1,140	1,100	1,360	180	2,300	105	67	33
17	98	2,490	789	884	1,160	1,960	1,330	135	16,900	78	56	35
18	80	2,470	552	903	1,210	1,670	1,260	112	13,000	47	120	49
19	298	2,460	368	914	1,230	1,270	849	107	3,900	42	220	69
20	582	2,440	365	891	1,230	1,040	661	96	648	45	93	41
21	585	2,420	243	435	1,420	730	635	70	463	44	65	31
22	590	2,320	177	313	3,230	565	617	76	1,300	43	53	30
23	590	677	172	296	1,520	506	518	1,970	3,150	41	45	30
24	595	210	167	302	939	474	518	891	937	42	40	30
25	595	195	158	307	898	451	575	267	650	42	39	31
26	452	190	149	312	1,280	311	781	240	3,630	42	40	32
27	302	184	145	303	1,220	534	802	332	4,480	43	38	32
28	298	178	133	247	1,020	2,080	804	408	4,450	44	39	33
29	302	177	128	233	-----	859	839	2,020	4,370	39	90	35
30	380	173	129	438	-----	841	799	793	4,200	39	600	46
31	4,060	-----	163	3,650	-----	954	-----	1,280	-----	40	172	-----
TOTAL	11,693	50,784	9,148	20,913	34,589	25,553	22,013	16,521	94,747	36,080	2,360	1,304
MEAN	377	1,693	295	675	1,235	824	734	533	3,158	1,164	76.1	43.5
MAX	4,060	7,630	844	3,650	3,230	2,080	1,360	2,020	16,900	5,080	600	95
MIN	55	173	100	196	592	311	402	70	463	39	35	30
AC-FT	23,190	100,700	18,150	41,480	68,610	50,680	43,660	32,770	187,900	71,560	4,680	2,590

CAL YR 1974 TOTAL 225,753 MEAN 619 MAX 7,630 MIN 37 AC-FT 447,800
WTR YR 1975 TOTAL 325,705 MEAN 892 MAX 16,900 MIN 30 AC-FT 646,000

PEAK DISCHARGE (REGULATED) ABOVE 4,000 CFS

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
10-31	2000	15.94	5,470	06-11	1500	14.59	4,640
11-04	0800	21.13	8,320	06-17	1600	30.13	23,500
01-31	1500	13.98	4,400	07-03	0200	17.49	6,340

06913500 MARAIS DES CYGNES RIVER NEAR OTTAWA, KS

LOCATION.--Lat 38°37'00", Long 95°15'25", in SW 1/4 SW 1/4 sec. 36, T.16 S., R.19 E., Franklin County, on right bank at sewage disposal plant in Ottawa, 0.9 mi (1.4 km) downstream from Main Street Bridge, 1.9 mi (3.1 km) downstream from Eightmile Creek, and at mile 398.9 (641.8 km).

DRAINAGE AREA.--1,250 mi² (3,240 km²), approximately.

PERIOD OF RECORD.--August 1902 to October 1905, October 1918 to current year. Published as Osage River at Ottawa 1902-5, and as Osage River near Ottawa 1918-47.

GAGE.--Water-stage recorder. Datum of gage is 857.68 ft (261.421 m) above mean sea level. Aug. 26, 1902, to Oct. 31, 1905, non-recording gages at Main Street Bridge in Ottawa at different datums. Oct. 27, 1918, to Sept. 4, 1962, water-stage recorder at Seventh Street Bridge, 0.9 mi (1.4 km) downstream at datum 0.47 ft (0.143 m) higher.

AVERAGE DISCHARGE.--59 years (1902-5, 1919-75), 648 ft³/s (18.35 m³/s), 469,500 acre-ft/yr (579 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 16,400 ft³/s (464 m³/s) June 18, gage height, 32.82 ft (10.004 m); minimum, 37 ft³/s (1.05 m³/s) Sept. 24, 25.

Period of record: Maximum discharge, 142,000 ft³/s (4,020 m³/s) July 11, 1951, gage height, 42.50 ft (12.954 m), site and datum then in use, from rating curve extended above 44,000 ft³/s (1,250 m³/s) on basis of slope-area measurement of peak flow; no flow at times in 1920, 1930-34, 1936, 1937, 1939-41.

The flood of 1951 is the highest known since Ottawa was settled (about 1864) according to information reported in "Climate of Kansas - 1948". Flood of June 13 or 14, 1844, reached a stage of about 1.5 ft (0.5 m) lower than that in 1951 according to same information.

REMARKS.--Records good. Flow regulated since 1973 by Melvern Lake (see sta 06910997) and since 1964 by Pomona Lake (see sta 06912490). Records of chemical analyses for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1006: 1923, 1927, 1929. WSP 1440: 1904-5, 1922, 1929(M), 1935, 1941-43, 1944-45(M), drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	49	5,290	199	410	3,200	1,060	803	753	1,660	3,460	48	140
2	49	1,610	197	390	1,090	947	628	730	1,620	3,650	47	90
3	48	4,850	196	328	779	818	701	760	2,650	4,810	46	70
4	50	8,060	182	288	1,280	761	1,020	787	3,340	3,330	46	74
5	50	4,830	143	264	2,680	779	1,030	775	1,990	2,940	44	79
6	63	1,450	150	480	1,650	767	788	738	1,680	2,880	44	45
7	79	905	232	1,090	1,170	917	642	712	1,580	2,840	43	43
8	64	767	284	1,260	1,230	902	645	659	1,560	2,810	43	43
9	56	674	220	1,100	959	648	671	500	1,750	2,760	42	43
10	56	800	179	1,050	1,170	595	620	329	2,090	1,390	42	41
11	52	1,030	260	1,550	1,080	605	568	239	3,810	549	40	204
12	59	899	848	1,140	986	650	515	219	3,560	342	44	96
13	82	1,740	821	740	1,090	683	470	210	1,930	332	51	49
14	380	2,620	653	680	1,310	625	830	209	1,390	332	102	43
15	532	2,590	938	779	1,310	665	1,690	210	822	284	78	40
16	208	2,540	893	869	1,300	1,280	1,390	201	1,260	153	90	40
17	129	2,510	854	944	1,320	2,020	1,400	174	10,300	112	87	41
18	97	2,490	698	983	1,400	1,970	1,300	135	15,100	83	88	67
19	142	2,470	425	1,000	1,420	1,480	1,020	130	12,300	59	247	436
20	535	2,460	398	1,000	1,450	1,140	704	121	2,710	62	132	96
21	568	2,420	342	656	2,150	890	662	96	570	59	97	54
22	568	2,410	226	358	3,630	650	642	86	1,060	56	75	45
23	565	1,330	214	348	2,320	578	589	2,590	3,180	52	65	42
24	565	280	206	346	1,110	530	651	1,680	1,460	52	57	38
25	562	236	192	350	1,010	492	766	438	616	50	55	37
26	508	226	182	360	1,390	422	786	349	2,420	50	57	39
27	312	216	179	348	1,470	635	838	442	3,910	50	53	39
28	290	210	170	310	1,190	2,590	809	976	3,990	52	64	39
29	292	205	162	280	-----	1,410	840	3,460	3,930	51	81	42
30	448	201	168	851	-----	920	803	1,630	3,760	48	509	104
31	5,310	-----	254	4,970	-----	986	-----	1,080	-----	49	268	-----
TOTAL	12,768	58,319	11,065	25,522	42,144	29,415	24,821	21,418	97,998	33,747	2,785	2,259
MEAN	412	1,944	357	823	1,505	949	827	691	3,267	1,089	89.8	75.3
MAX	5,310	8,060	938	4,970	3,630	2,590	1,690	3,460	15,100	4,810	509	436
MIN	48	201	143	264	779	422	470	86	570	48	40	37
AC-FT	25,330	115,700	21,950	50,620	83,590	58,340	49,230	42,480	194,400	66,940	5,520	4,480
CAL YR 1974	TOTAL 260,341											
WTR YR 1975	TOTAL 362,261											
	MEAN 713											
	MAX 8,060											
	MIN 35											
	AC-FT 516,400											
	MEAN 992											
	MAX 15,100											
	MIN 37											
	AC-FT 718,500											

PEAK DISCHARGE (REGULATED) ABOVE 7,000 CFS

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
10-31	2300	24.11	7,100	06-18	1900	32.82	16,400
11-04	0600	26.79	8,420				

OSAGE RIVER BASIN

06914000 POTTAWATOMIE CREEK NEAR GARNETT, KS

LOCATION.--Lat 38°20'01", long 95°14'55", in SW $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.6, T.20 S., R.20 E., Anderson County, at upstream side of bridge on U.S. Highway 59, 0.6 mi (1.0 km) downstream from confluence of North Pottawatomie and Cedar Creeks, 0.2 mi (0.3 km) upstream from Atchison, Topeka and Santa Fe Railway Co. bridge, 4.0 mi (6.4 km) north of Garnett, and at mile 40.7 (65.5 km).

DRAINAGE AREA.--334 mi² (865 km²).

PERIOD OF RECORD.--October 1939 to current year.

GAGE.--Water-stage recorder. Datum of gage is 873.23 ft (266.160 m) above mean sea level. See WSP 1919 for history of changes prior to May 16, 1958.

AVERAGE DISCHARGE.--36 years, 231 ft³/s (6.542 m³/s), 167,400 acre-ft/yr (206 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 19,900 ft³/s (564 m³/s) June 17, gage height, 30.57 ft (9.318 m); minimum, 0.64 ft³/s (0.018 m³/s) Aug. 13.

Period of record: Maximum discharge, 57,000 ft³/s (1,610 m³/s) Sept. 13, 1961, gage height, 35.38 ft (10.784 m); no flow at times in most years.

Maximum stage known since at least 1858, 35.38 ft (10.784 m) Sept. 13, 1961, from information by local newspaper.

REMARKS.--Records good.

REVISIONS (WATER YEARS).--WSP 1390: 1940, 1941(M), 1945, 1947(M), 1949-50.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.6	2970	29	1020	2190	426	223	65	167	31	1.3	60
2	6.8	812	27	425	567	286	211	55	114	29	1.3	31
3	6.2	6820	26	258	391	175	369	54	792	24	1.1	20
4	4.9	6930	25	206	700	142	323	54	874	19	1.2	14
5	4.2	3120	24	184	1310	123	255	54	210	16	1.2	11
6	4.0	991	29	865	483	110	169	47	193	13	1.2	7.5
7	4.2	499	102	1080	279	119	132	39	433	11	1.2	6.0
8	4.0	352	368	630	250	126	148	33	710	8.8	1.1	5.1
9	3.8	280	232	394	200	106	231	30	3850	7.1	.99	4.2
10	3.7	299	96	316	149	98	171	27	2120	6.1	.84	3.5
11	3.6	684	376	502	130	108	125	25	2010	4.9	.82	4.1
12	4.0	531	1840	260	130	178	102	24	1240	4.2	.79	4.7
13	4.3	310	731	150	130	351	90	22	248	3.7	.74	4.4
14	6.2	209	357	89	130	315	99	21	145	3.3	158	3.8
15	7.0	175	252	74	130	276	246	20	103	2.9	190	3.4
16	7.0	118	181	74	130	1520	200	18	813	2.6	70	3.2
17	6.8	97	128	71	203	2320	138	15	14800	2.4	154	3.0
18	6.0	87	94	68	632	840	109	12	6170	2.2	657	2.9
19	5.4	82	81	75	524	361	92	11	1160	1.9	142	2.5
20	6.4	73	74	79	510	228	81	10	270	1.8	64	2.2
21	7.9	64	66	76	1760	173	68	9.1	174	1.6	27	1.9
22	7.6	57	60	72	2000	138	59	7.9	344	1.5	15	1.6
23	5.6	51	56	57	557	116	57	2200	704	1.5	9.4	1.5
24	4.2	47	53	56	264	98	1460	3330	304	1.5	6.0	1.4
25	3.8	42	51	58	329	84	1390	545	154	1.5	4.5	1.2
26	3.8	39	43	62	1270	73	258	315	95	1.4	513	1.1
27	3.6	35	40	63	1050	259	153	630	70	1.4	131	1.1
28	3.5	33	40	55	588	1820	119	428	60	1.3	72	1.0
29	3.9	32	41	50	---	773	100	2240	47	1.4	415	.94
30	31	30	42	250	---	669	82	1710	39	1.4	446	.96
31	4150	---	368	4100	---	382	---	317	---	1.4	126	---
TOTAL	4331.0	25869	5932	11719	16986	12793	7260	12368.0	38413	210.8	3213.68	209.20
MEAN	140	862	191	378	607	413	242	399	1280	6.80	104	6.97
MAX	4150	6930	1840	4100	2190	2320	1460	3330	14800	31	657	60
MIN	3.5	30	24	50	130	73	57	7.9	39	1.3	.74	.94
AC-FT	8590	51310	11770	23240	33690	25370	14400	24530	76190	418	6370	415

CAL YR 1974 TOTAL 110759.47 MEAN 303 MAX 9920 MIN .18 AC-FT 219700
WTR YR 1975 TOTAL 139304.68 MEAN 382 MAX 14800 MIN .74 AC-FT 276300

PEAK DISCHARGE (BASE, 6,000 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-03	2200	28.79	11,800	06-17	1300	30.57	19,900

06915000 BIG BULL CREEK NEAR HILLSDALE, KS

LOCATION.--Lat 38°38'12", long 94°53'29", in SW¼SW¼SE¼ sec.20, T.16 S., R.23 E., Miami County, on right bank 1.0 mi (1.6 km) upstream from Tenmile Creek, 3.0 mi (4.8 km) southwest of Hillsdale, and 16.2 mi (26.1 km) upstream from mouth.

DRAINAGE AREA.--147 mi² (381 km²).

PERIOD OF RECORD.--July 1958 to current year. Records for 1949 to 1953 published in WSP 1146, 1176, 1210, 1240, and 1280 have been found to be unreliable and should not be used.

GAGE.--Water-stage recorder. Datum of gage is 854.49 ft (260.449 m) above mean sea level. Auxiliary water-stage recorder 1,850 ft (564 m) downstream from base gage. Datum of auxiliary gage is 848.49 ft (258.620 m) above mean sea level. Prior to July 29, 1958, water-stage recorder and nonrecording gage operated at auxiliary gage site. All records from this site were later discredited.

AVERAGE DISCHARGE.--17 years, 104 ft³/s (2.945 m³/s), 75,350 acre-ft/yr (92.9 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,270 ft³/s (120.9 m³/s) Oct. 31, gage height, 13.82 ft (4.212 m), backwater from Tenmile Creek; no flow July 28 to Sept. 10.
Period of record: Maximum discharge, 39,600 ft³/s (1,120 m³/s) Sept. 13, 1961, gage height, 20.85 ft (6.355 m); no flow at times in 1959-64, 1966-67, 1969, 1971, 1974, 1975.
Maximum stage known since 1910, 21.2 ft (6.462 m) July 11, 1951, present site and datum, discharge, 45,200 ft³/s (1,280 m³/s), on basis of slope-area measurement of peak flow.

REMARKS.--Records good. Some diversions above station for irrigation.

REVISIONS (WATER YEARS).--WSP 1919: 1958. See also PERIOD OF RECORD.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.84	422	17	264	397	170	82	26	44	2.6		0
2	.66	133	17	87	236	108	227	24	28	2.1		0
3	.69	2640	15	72	187	69	227	36	51	1.8		0
4	.82	820	14	61	247	61	343	43	52	1.5		0
5	1.5	323	14	66	328	59	165	31	24	1.4		0
6	2.0	149	20	337	101	58	92	26	15	.96		0
7	2.0	94	69	476	70	100	68	24	11	.75		0
8	2.0	74	63	247	60	69	62	21	19	.75		0
9	2.2	63	33	125	50	57	60	20	130	.75		0
10	2.3	95	26	254	48	63	52	18	51	.65		0
11	2.3	235	91	376	52	63	45	16	357	.73		1.7
12	2.3	108	411	77	47	96	42	18	106	.48		1.2
13	2.3	65	121	61	45	102	39	17	34	.36		5.2
14	2.8	52	67	52	44	78	145	15	20	.34		5.9
15	6.9	45	60	49	44	161	247	14	14	.34		2.8
16	5.4	43	52	47	47	484	97	12	11	.34		1.5
17	4.0	39	42	44	135	459	65	10	26	.34		.98
18	2.7	38	36	44	297	215	53	9.0	18	.34		13
19	2.1	37	35	50	113	126	47	9.0	13	.34		50
20	1.8	34	35	45	271	90	40	8.0	9.7	.23		13
21	1.4	29	34	45	701	76	35	7.0	8.9	.26		8.1
22	1.1	27	30	39	360	66	34	6.3	16	.34		3.4
23	.90	27	30	39	140	59	34	9.0	6.8	.26		1.7
24	.90	24	29	40	106	50	40	29	6.2	.22		1.1
25	.80	21	29	45	148	42	260	17	8.7	.22		.63
26	.75	19	23	44	305	39	86	23	7.6	.22		.49
27	.81	18	24	39	268	289	50	27	5.4	.21		.36
28	.99	17	24	37	196	532	42	27	5.5	0		.34
29	1.2	16	25	36	---	303	37	613	3.9	0		.34
30	7.0	16	26	658	---	199	31	442	3.2	0		.46
31	2690	---	279	1700	---	128	---	95	---	0		---
TOTAL	2753.46	5723	1791	5556	5043	4471	2847	1692.3	1105.9	18.83	0	112.20
MEAN	88.8	191	57.8	179	180	144	94.9	54.6	36.9	.61	0	3.74
MAX	2690	2640	411	1700	701	532	343	613	357	2.6	0	50
MIN	.66	16	14	36	44	39	31	6.3	3.2	0	0	0
AC-FT	5460	11350	3550	11020	10000	8870	5650	3360	2190	37	0	223
CAL YR 1974	TOTAL	44891.31	MEAN 123	MAX 3380	MIN 0	AC-FT 89040						
WTR YR 1975	TOTAL	31113.69	MEAN 85.2	MAX 2690	MIN 0	AC-FT 61710						

PEAK DISCHARGE (BASE, 2,500 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
10-31	1500	13.82	4,270	01-31	0330	11.66	2,940
11-03	1915	13.72	4,110				

OSAGE RIVER BASIN

06916600 MARAIS DES CYGNES RIVER NEAR KANSAS-MISSOURI STATE LINE, KS

LOCATION.--Lat 38°13'21", long 94°40'04", in NE¼SE¼NW¼ sec.16, T.21 S., R.25 E., Linn County, on right bank, 1.7 mi (2.7 km) downstream from Big Sugar Creek, 6.8 mi (10.9 km) upstream from Kansas-Missouri State line, and at mile 313.5 (504.4 km).

DRAINAGE AREA.--3,230 mi² (8,370 km²), approximately.

PERIOD OF RECORD.--October 1958 to current year.

GAGE.--Water-stage recorder. Datum of gage is 757.06 ft (230.752 m) above mean sea level. Prior to Jan. 15, 1959, nonrecording gage 6.8 mi (10.9 km) downstream at datum 15.62 ft (4.761 m) lower.

AVERAGE DISCHARGE.--17 years, 2,113 ft³/s (59.84 m³/s), 1,531,000 acre-ft/yr (1.88 km³/yr).

EXTREMES.--Current year: Maximum discharge, 24,100 ft³/s (683 m³/s) Nov. 5, gage height, 29.15 ft (8.885 m); minimum, 42 ft³/s (1.19 m³/s) Aug. 12, 13.

Period of record: Maximum discharge, 57,400 ft³/s (1,630 m³/s) Sept. 16, 1961, gage height, 33.93 ft (10.342 m); no flow at times in 1963-64.

Flood of July 14, 1951, reached a stage of 41.2 ft (12.56 m), from floodmark, discharge, 148,000 ft³/s (4,190 m³/s), from rating curve extended above 110,000 ft³/s (3,120 m³/s) on basis of velocity-area study. Flood of Nov. 18, 1928, reached a stage about 3.7 ft (1.13 m) lower, discharge, 106,000 ft³/s (3,000 m³/s).

REMARKS.--Records good. Natural flow of stream slightly affected by Pomona Lake since 1964 (see sta 06912490), Melvern Lake since 1973 (see sta 06910997), retention of overbank flow in wildlife refuge ponds, capacity, 5,500 acre-ft (6.78 hm³), and by numerous small diversions for irrigation above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	151	7060	516	3500	13500	4670	3270	1450	4350	4180	66	1090
2	153	11100	509	2870	13100	3620	2720	1320	2180	3970	60	549
3	136	15000	495	2580	10700	3040	3370	1210	2170	3650	60	334
4	126	19500	479	2150	5150	2520	2910	1220	3160	4370	57	240
5	115	23700	465	1860	4400	2150	2940	1250	4810	4390	54	214
6	110	22100	478	2820	5750	1960	2820	1230	4000	3350	52	167
7	107	19500	583	3520	5230	1950	2420	1150	2310	3040	47	166
8	105	17500	996	3980	3090	2060	2040	1090	1990	2960	44	133
9	114	12000	1060	3780	2320	2070	2160	1030	3700	2900	43	103
10	123	3470	954	3010	1990	1870	2230	895	5500	2850	43	96
11	114	2780	1060	3540	2100	1750	1950	761	9010	2290	43	130
12	107	3380	2970	3780	2220	1790	1720	597	8610	977	43	570
13	107	3010	3960	2930	2000	2090	1550	524	7380	546	47	509
14	112	2460	3870	1870	1960	2190	1500	486	5080	397	246	274
15	149	3230	2270	1710	2170	2170	1790	456	2460	376	231	176
16	606	3410	1870	1580	2270	3930	2770	430	1690	365	414	130
17	536	3330	1760	1430	3480	5540	2640	400	9080	305	398	116
18	316	3220	1580	1550	4010	6830	2300	369	13700	205	658	108
19	220	3140	1450	1580	4130	6690	2090	327	15200	154	1050	110
20	169	3060	1190	1620	3900	4550	1840	275	14900	131	818	1030
21	195	2990	1190	1610	4210	2850	1430	253	14600	105	503	605
22	523	2910	1030	1500	5850	2190	1240	233	14700	89	289	234
23	571	2860	849	1060	7280	1740	1190	204	12600	83	188	146
24	579	2490	774	916	7060	1500	1410	1690	5670	79	138	105
25	570	1190	764	916	4040	1350	2310	5280	3900	74	116	86
26	570	684	721	941	3690	1190	3690	4230	2280	69	2640	78
27	592	609	661	928	5200	1410	2730	1310	1990	59	1780	71
28	518	574	635	884	5560	4150	1850	1200	3730	55	1020	59
29	380	546	626	840	---	6280	1670	1650	4320	58	670	56
30	349	519	661	1210	---	6930	1550	5800	4320	64	848	66
31	640	---	1260	9210	---	4590	---	7790	---	78	997	---
TOTAL	9163	197322	37686	71675	136360	97620	66100	46110	189390	42219	13663	7751
MEAN	296	6577	1216	2312	4870	3149	2203	1487	6313	1362	441	258
MAX	640	23700	3960	9210	13500	6930	3690	7790	15200	4390	2640	1090
MIN	105	519	465	840	1960	1190	204	1690	55	43	56	56
AC-FT	18170	391400	74750	142200	270500	193600	131100	91460	375700	83740	27100	15370
CAL YR 1974 TOTAL	895726			2454	23700	41	AC-FT	1777000				
WTR YR 1975 TOTAL	915059			2507	23700	43	AC-FT	1815000				

PEAK DISCHARGE (BASE, 10,000 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-05	1400	29.15	24,100	06-11	1900	18.04	10,200
02-01	1700	23.07	13,700	06-19	1500	25.11	15,300

OSAGE RIVER BASIN

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06917000 LITTLE OSAGE RIVER AT FULTON, KS

LOCATION.--Lat 38°01'09", long 94°42'48", in SE¼NE¼ sec.25, T.23 S., R.24 E., Bourbon County, on right bank at downstream side of bridge on U.S. Highway 69, 0.8 mi (1.3 km) north of Fulton.

DRAINAGE AREA.--295 mi² (764 km²).

PERIOD OF RECORD.--November 1948 to current year.

GAGE.--Water-stage recorder. Datum of gage is 776.37 ft (236.638 m) above mean sea level. Prior to May 28, 1952, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--26 years (1949-75), 215 ft³/s (6.089 m³/s), 155,800 acre-ft/yr (192 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 12,600 ft³/s (357 m³/s) Nov. 4, gage height, 27.48 ft (8.376 m); minimum, 1.2 ft³/s (0.034 m³/s) Aug. 12, 13.

Period of record: Maximum discharge, 26,300 ft³/s (745 m³/s) July 1, 1969, gage height, 30.03 ft (9.153 m); no flow at times in 1949, 1952-57, 1959, 1961-64, 1966-68, 1974.

REMARKS.--Records good.

REVISIONS (WATER YEARS).--WSP 1440: 1949(P), 1950(M). Revised figure of discharge, in cubic feet per second, for high-water period in water year 1974, superseding figure published in WRD Kansas, Part 1, 1974 is given below:

Oct. 12, 1973 - - - - 2,890

Month	cfs-days	Maximum	Minimum	Mean	Runoff in acre-feet
October 1973 - - - -	13,863.2	2,890	8.5	447	27,500
CAL YR 1973 - - - -	242,262.50	8,200	1.1	664	480,500
WTR YR 1974 - - - -	137,378.13	10,800	.07	376	272,500

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35	518	62	778	2170	632	320	102	75	42	4.8	30
2	32	1550	59	353	684	443	255	89	53	35	4.1	20
3	25	8260	56	365	500	317	240	93	48	29	3.4	15
4	21	11200	54	347	638	260	208	95	47	23	2.9	12
5	18	6900	52	353	1090	238	183	87	97	19	2.9	10
6	16	1480	120	659	545	218	159	78	144	15	2.7	8.0
7	14	504	230	458	360	208	145	70	115	13	2.4	6.0
8	13	382	253	299	330	180	143	62	84	9.1	2.1	4.0
9	12	307	134	235	300	163	283	57	1210	8.1	1.9	3.2
10	10	475	102	270	270	183	323	57	632	7.3	1.9	3.0
11	9.6	581	776	238	240	193	190	59	2920	6.6	1.6	8.0
12	33	384	1160	168	240	223	155	59	789	4.9	1.4	30
13	39	269	458	139	230	268	137	49	301	3.8	1.4	15
14	83	219	288	129	250	235	173	46	193	3.8	30	11
15	47	185	243	119	260	344	180	42	138	3.5	5.8	9.0
16	25	165	200	117	416	985	159	38	351	3.5	7.2	8.0
17	28	151	163	109	810	1090	135	35	5970	3.3	21	7.0
18	27	140	147	107	602	518	125	32	6390	3.0	406	6.0
19	21	134	139	111	479	401	113	27	1200	2.8	85	5.0
20	18	124	129	113	371	283	98	22	343	2.6	49	4.5
21	16	109	119	107	332	235	89	19	242	2.4	24	4.0
22	13	101	111	98	290	203	83	17	189	2.6	14	3.5
23	12	96	102	90	273	175	81	19	295	2.5	9.6	3.2
24	13	90	99	87	260	155	133	293	202	2.9	6.5	3.6
25	12	80	99	93	317	133	296	141	134	3.3	5.1	3.5
26	11	74	93	95	764	119	220	82	107	3.6	800	3.2
27	9.9	71	89	87	1080	684	141	56	90	3.9	90	3.2
28	12	67	89	78	897	1360	195	45	71	4.3	40	3.4
29	15	65	90	77	---	747	161	52	59	4.7	60	3.5
30	14	63	93	1380	---	638	129	106	50	4.9	110	3.6
31	246	---	488	5710	---	458	---	116	---	5.0	50	---
TOTAL	900.5	34744	6297	13369	14998	12289	5252	2145	22539	278.4	1846.7	249.4
MEAN	29.0	1158	203	431	536	396	175	69.2	751	8.98	59.6	8.31
MAX	246	11200	1160	5710	2170	1360	323	293	6390	42	800	30
MIN	9.6	63	52	77	230	119	81	17	47	2.4	1.4	3.0
AC-FT	1790	68910	12490	26520	29750	24380	10420	4250	44710	552	3660	495

CAL YR 1974	TOTAL	132523.43	MEAN	363	MAX	11200	MIN	.07	AC-FT	262900
WTR YR 1975	TOTAL	114908.00	MEAN	315	MAX	11200	MIN	1.4	AC-FT	227900

PEAK DISCHARGE (BASE, 3,000 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-04	0800	27.48	12,600	06-11	1600	15.14	3,600
01-31	0800	22.00	6,550	06-18	1100	23.08	7,210

OSAGE RIVER BASIN

06917380 MARMATON RIVER NEAR MARMATON, KS

LOCATION.--Lat 37°49'03", long 94°47'30", in SW¼NE¼NW¼ sec.4, T.26 S., R.24 E., Bourbon County, on left bank 150 ft (46 m) downstream from Cedar Creek, 2.0 mi (3.2 km) southeast of Marmaton, and at mile 55.7 (89.6 km).

DRAINAGE AREA.--292 mi² (756 km²).

PERIOD OF RECORD.--May 1971 to current year.

GAGE.--Water-stage recorder. Datum of gage is 780.66 ft (237.945 m) above mean sea level.

EXTREMES.--Current year: Maximum discharge, 22,700 ft³/s (643 m³/s) Nov. 3, gage height, 34.32 ft (10.461 m); minimum, 0.50 ft³/s (0.014 m³/s) Aug. 13, 25.
 Period of record: Maximum discharge, 24,000 ft³/s (680 m³/s) March 10, 1974, gage height, 34.69 ft (10.574 m); minimum, 0.04 ft³/s (0.001 m³/s) Aug. 6, 1974.
 Maximum discharge since at least 1915 about 40,000 ft³/s (1,130 m³/s) on Sept. 7, 1915 and May 1935, from information by State of Kansas and Missouri-Kansas-Texas Railroad.

REMARKS.--Records fair.

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	175	723	53	561	1580	511	318	202	153	27	1.4	27
2	127	4930	51	322	566	331	271	127	59	23	1.5	21
3	94	18900	49	550	404	238	242	182	269	20	1.7	14
4	73	11800	46	470	611	201	216	188	232	18	1.4	9.7
5	56	3770	44	336	886	187	197	102	3260	15	1.3	6.7
6	62	622	236	460	412	171	177	81	440	13	1.2	4.4
7	74	378	453	294	260	155	164	71	255	11	1.1	3.2
8	67	308	210	236	240	128	175	62	206	9.6	.98	2.3
9	66	259	128	205	230	124	223	60	385	7.6	.87	1.9
10	70	652	95	308	220	155	247	68	496	7.5	.83	1.8
11	64	787	1720	256	210	174	179	62	4700	6.2	.70	4.8
12	66	362	892	176	200	213	151	51	627	4.4	.64	13
13	1080	274	333	140	200	305	136	44	302	3.7	.51	4.1
14	525	227	240	125	210	225	157	44	210	3.3	2.0	2.6
15	336	200	216	113	210	436	186	52	134	2.8	2.8	2.1
16	243	187	182	99	308	1840	170	46	580	2.4	3.9	1.8
17	197	172	156	90	690	1290	148	36	11300	2.0	3.8	1.6
18	164	160	142	85	385	518	135	29	3850	1.8	2.2	1.5
19	134	154	133	99	354	403	125	24	430	1.9	1.6	1.4
20	112	137	122	99	270	279	101	20	295	2.2	1.3	1.2
21	84	110	99	86	241	221	75	18	231	2.0	1.3	1.1
22	51	89	81	77	249	184	82	17	183	1.7	1.2	1.0
23	41	92	75	64	341	162	54	23	129	1.7	1.1	.90
24	42	85	70	62	278	138	1740	83	172	1.8	.82	.93
25	41	59	67	78	389	108	1330	71	87	2.0	.77	1.0
26	38	51	54	77	1060	93	429	49	71	1.6	803	.98
27	38	56	53	62	1150	1680	289	38	59	1.5	82	.98
28	42	51	68	51	864	1660	467	30	47	1.5	33	.89
29	105	45	69	46	---	964	330	100	39	1.4	60	1.3
30	69	49	71	1670	---	601	238	415	33	1.4	98	1.4
31	1700	---	632	8580	---	419	---	398	---	1.4	49	---
TOTAL	6036	45689	6840	15877	13018	14114	8752	2793	29234	200.4	1161.92	136.58
MEAN	195	1523	221	512	465	455	292	90.1	974	6.46	37.5	4.55
MAX	1700	18900	1720	8580	1580	1840	1740	415	11300	27	803	27
MIN	38	45	44	46	200	93	54	17	33	1.4	.51	.89
AC-FT	11970	90620	13570	31490	25820	28000	17360	5540	57990	397	2300	271

CAL YR 1974 TOTAL 171764.10 MEAN 471 MAX 18900 MIN .07 AC-FT 340700
 WTR YR 1975 TOTAL 143851.90 MEAN 394 MAX 18900 MIN .51 AC-FT 285300

PEAK DISCHARGE (BASE, 3,000 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-03	1700	34.32	22,700	04-24	2300	12.79	3,460
12-11	1500	12.25	3,210	06-05	0800	18.27	5,920
01-31	0700	27.66	10,400	06-11	0600	18.92	6,210
03-27	2100	16.17	4,980	06-17	1200	31.05	13,900

ARKANSAS RIVER BASIN

123

07137000 FRONTIER DITCH NEAR COOLIDGE, KS

LOCATION.--Lat 38°02'18", long 102°02'19", in SW¼SE¼NE¼ sec.21, T.23 S., R.43 W., Hamilton County, on left bank 0.3 mi (0.5 km) east of Colorado-Kansas State line, 0.5 mi (0.8 km) downstream from Holly drain diversion, 1.5 mi (2.4 km) west of Coolidge, and 2.3 mi (3.7 km) downstream from diversion from Arkansas River.

PERIOD OF RECORD.--October 1950 to current year.

GAGE.--Water-stage recorders and Parshall flume. Datum of gage is 3,353.14 ft (1,022.037 m) above mean sea level.

EXTREMES.--Period of record: Maximum daily discharge, 84 ft³/s (2.38 m³/s) Aug. 1, 1975; no flow for many days each year.

REMARKS.--Records good. This ditch diverts water from Arkansas River in Colorado for use in Kansas. These records and records for Arkansas River near Coolidge represent total flow of Arkansas River at the Colorado-Kansas State line.

REVISIONS (WATER YEARS).--WSP 1731: 1951.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.7	7.9	3.6				0	22	1.1	4.9	84	21
2	3.7	7.9	5.0				0	26	6.8	24	45	21
3	4.3	7.9	6.9				0	21	6.8	23	51	25
4	4.1	7.9	4.6				0	21	6.8	18	54	30
5	4.1	7.9	7.7				0	19	8.4	14	46	26
6	4.3	7.7	10				0	15	9.8	15	28	24
7	4.6	7.9	10				0	16	9.0	24	18	19
8	4.6	9.2	7.8				0	16	8.2	46	13	20
9	4.6	8.7	10				0	16	16	42	13	17
10	4.6	8.7	8.9				23	16	15	37	13	18
11	4.6	8.4	7.7				45	30	16	35	12	18
12	12	9.2	7.8				43	21	13	24	11	16
13	9.8	9.2	7.8				41	19	29	24	24	14
14	7.2	9.2	10				38	18	24	34	44	13
15	7.0	8.7	10				24	16	20	42	41	13
16	6.5	8.2	12				21	15	19	40	31	14
17	6.3	8.4	11				16	17	20	43	.56	14
18	6.1	8.4	11				8.2	12	15	38	33	12
19	6.1	8.2	12				12	11	16	32	36	13
20	6.1	8.4	12				24	12	17	33	34	12
21	6.5	8.4	14				24	12	12	23	29	12
22	6.3	9.7	14				24	11	0	30	18	11
23	6.3	9.0	14				22	11	.21	27	39	13
24	6.5	7.4	12				20	12	0	36	39	14
25	7.0	7.2	0				19	11	0	28	33	16
26	7.2	7.7	0				20	10	0	26	31	17
27	7.7	7.9	0				17	11	0	22	28	16
28	7.9	7.7	0				17	37	14	33	27	16
29	7.9	7.4	0				18	4.1	0	63	26	16
30	8.2	7.0	0		---		21	0	0	65	24	16
31	8.2	---	0		---		---	0	---	47	23	---
TOTAL	194.0	247.4	229.8	0	0	0	497.2	478.1	303.11	992.9	948.56	507
MEAN	6.26	8.25	7.41	0	0	0	16.6	15.4	10.1	32.0	30.6	16.9
MAX	12	9.7	14	0	0	0	45	37	29	65	84	30
MIN	3.7	7.0	0	0	0	0	0	0	0	4.9	.56	11
AC-FT	385	491	456	0	0	0	986	948	601	1970	1880	1010

CAL YR 1974 TOTAL 4745.30 MEAN 13.0 MAX 48 MIN 0 AC-FT 9410
WTR YR 1975 TOTAL 4398.07 MEAN 12.0 MAX 84 MIN 0 AC-FT 8720

ARKANSAS RIVER BASIN

07137500 ARKANSAS RIVER NEAR COOLIDGE, KS

LOCATION.--Lat 38°01'34", long 102°00'41", in NW¼NE¼NW¼ sec.26, T.23 S., R.43 W., Hamilton County, on right bank at downstream side of bridge, 1.0 mi (1.6 km) south of Coolidge, and 1.9 mi (3.1 km) downstream from Colorado-Kansas State line.

DRAINAGE AREA.--25,410 mi² (65,812 km²), of which 1,708 mi² (4,424 km²) is probably noncontributing.

PERIOD OF RECORD.--May to October 1903, March to May 1921, October 1950 to current year. Monthly discharge only for some periods, published in WSP 1311.

GAGE.--Water-stage recorder. Datum of gage is 3,330.84 ft (1,015.240 m) above mean sea level. May 5 to Oct. 31, 1903, nonrecording gage, and Mar. 1 to May 31, 1921, water-stage recorder at present site at different datums. Oct. 1, 1950, to Mar. 31, 1966, water-stage recorder at site 0.3 mi (0.5 km) upstream at datum 3.00 ft (0.914 m) higher.

AVERAGE DISCHARGE.--25 years, 207 ft³/s (5.862 m³/s), 150,000 acre-ft/yr (185 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 5,500 ft³/s (156 m³/s) June 28; gage height, 6.95 ft (2.118 m); minimum daily discharge, 2.2 ft³/s (0.062 m³/s) Oct. 10.

Period of record: Maximum discharge, 158,000 ft³/s (4,470 m³/s) June 17, 1965, gage height, 14.8 (4.51 m), present site and datum, from floodmarks, from rating curve extended above 13,000 ft³/s (370 m³/s) on basis of slope-area measurement of peak flow; no flow for many days in 1903, 1954, 1960.

REMARKS.--Records good except those for winter periods, which are fair. Combined flow of river and Frontier ditch (see sta 07137000) represents entire flow that enters Kansas. Flow regulated by John Martin Reservoir (see sta 07130000). Natural flow of stream affected by transmountain diversions, storage reservoirs, power developments, ground-water withdrawals and diversions for irrigation of about 500,000 acres (2,020 km²), and return flow from irrigated areas.

REVISIONS (WATER YEARS).--WSP 1341: 1903, drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.6	4.9	6.0	6.0	18	27	19	11	36	192	710	13
2	3.9	5.3	6.0	6.0	18	27	19	11	22	92	296	13
3	4.9	5.3	6.0	6.0	18	27	22	11	16	83	164	11
4	4.9	5.3	6.5	7.0	15	26	19	11	19	65	110	11
5	6.7	4.9	6.5	8.0	13	25	19	11	19	55	86	13
6	3.6	4.6	6.5	9.0	12	25	16	11	19	44	77	11
7	3.0	4.9	6.5	9.0	12	25	16	11	19	39	57	11
8	2.8	5.3	6.5	9.0	12	25	19	11	19	24	55	10
9	3.0	5.3	6.5	9.0	12	25	24	11	32	26	49	10
10	2.2	5.3	6.7	8.0	13	30	52	11	49	24	49	13
11	2.6	5.3	7.2	7.0	16	40	125	14	47	29	47	16
12	14	4.9	9.0	6.0	18	34	188	41	36	39	42	16
13	44	5.7	11	6.0	18	32	208	89	85	24	41	16
14	9.3	5.3	9.0	10	18	32	125	13	55	37	16	14
15	4.6	5.7	8.6	20	20	34	55	8.6	39	62	16	16
16	4.9	5.3	7.8	24	20	34	47	7.8	44	24	146	16
17	4.9	4.9	7.8	22	20	36	39	7.8	44	26	593	14
18	4.6	4.9	8.0	20	20	36	32	8.6	39	24	179	16
19	5.7	4.9	9.0	18	20	42	26	7.8	29	26	89	16
20	4.6	6.2	10	18	22	36	22	7.8	36	149	77	14
21	3.3	7.8	14	18	26	34	14	7.2	55	1120	68	9.3
22	3.3	6.2	10	16	30	34	14	7.2	95	196	55	9.3
23	3.6	5.7	8.0	16	25	32	14	8.6	200	110	39	10
24	4.9	7.0	7.5	19	20	32	14	7.2	914	116	32	13
25	4.6	8.6	7.0	16	23	29	13	6.7	345	89	24	19
26	4.2	8.6	6.0	16	25	29	11	6.7	184	77	24	16
27	3.9	8.6	6.0	16	23	150	11	6.7	110	74	22	9.3
28	3.9	8.6	6.0	13	25	32	9.3	167	2220	60	19	8.6
29	3.9	8.0	6.0	14	---	22	11	872	622	42	19	7.2
30	4.2	7.0	6.0	14	---	22	11	128	310	32	19	6.7
31	4.6	---	6.0	18	---	22	---	55	---	32	14	---
TOTAL	182.2	180.3	233.6	404.0	532	1056	1214.3	1587.7	5759	3032	3234	378.4
MEAN	5.88	6.01	7.54	13.0	19.0	34.1	40.5	51.2	192	97.8	104	12.6
MAX	44	8.6	14	24	30	150	208	872	2220	1120	710	19
MIN	2.2	4.6	6.0	6.0	12	22	9.3	6.7	16	24	14	6.7
AC-FT	361	358	463	801	1060	2090	2410	3150	11420	6010	6410	751

CAL YR 1974 TOTAL 21913.5 MEAN 60.0 MAX 625 MIN 1.1 AC-FT 43470
WTR YR 1975 TOTAL 17793.5 MEAN 48.7 MAX 2220 MIN 2.2 AC-FT 35290

ARKANSAS RIVER BASIN

125

07138000 ARKANSAS RIVER AT SYRACUSE, KS

LOCATION.--Lat 37°57'58", long 101°45'23", in NW¼SE¼NW¼ sec.18, T.24 S., R.40 W., Hamilton County, at left end of bridge on U.S. Highway 270, 0.5 mi (0.8 km) south of Syracuse, and at mile 1,080.9 (1,739.2 km).

DRAINAGE AREA.--25,763 mi² (66,726 km²), of which 1,857 mi² (4,810 km²) is probably noncontributing.

PERIOD OF RECORD.--August 1902 to September 1906 (published as "near Syracuse"), October 1920 to current year. Monthly discharge only for some periods published in WSP 1311.

GAGE.--Water-stage recorder. Datum of gage is 3,209.32 ft (978.201 m) above mean sea level. See WSP 1921 for history of changes prior to Nov. 15, 1956.

AVERAGE DISCHARGE.--59 years, 341 ft³/s (9.657 m³/s), 247,100 acre-ft/yr (305 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,210 ft³/s (90.9 m³/s) June 29, gage height, 8.61 ft (2.624 m); minimum, 0.05 ft³/s (0.001 m³/s) Oct. 1.

Period of record: Maximum discharge, 174,000 ft³/s (4,930 m³/s) June 17, 1965, gage height, 19.75 ft (6.020 m) from rating curve extended above 62,000 ft³/s (1.760 m³/s) on basis of indirect measurements; maximum gage height, 21.80 ft (6.645 m) June 17, 1965; no flow Aug. 17, 1946 and part of each day Sept. 26, 27, 1974.

Flood in October 1908 reached a stage of about 11.7 ft (3.57 m) from information by local newspaper, discharge, about 87,000 ft³/s (2,460 m³/s).

REMARKS.--Records good. Flow moderately regulated by John Martin Reservoir (see sta 07130000). Natural flow of stream affected by transmountain diversions, storage reservoirs, power developments, ground-water withdrawals and diversions for irrigation and return flow from irrigated areas. Records of suspended sediment loads for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.10	.58	.80	.80	20	28	29	21	70	282	251	6.4
2	.26	.58	.80	1.1	19	28	28	22	55	220	592	5.2
3	.15	.89	.70	1.0	21	27	28	23	39	153	212	4.7
4	.10	.68	.58	1.0	22	29	28	17	33	132	153	4.0
5	.12	.58	.58	1.1	16	29	26	14	30	119	109	4.7
6	.14	.58	.72	1.1	13	28	25	14	29	108	77	4.2
7	.17	.58	.58	1.3	15	27	25	14	29	112	67	3.6
8	.19	.58	.70	1.0	17	28	24	12	29	96	58	3.2
9	.15	.65	.80	.80	15	30	24	11	29	87	37	2.7
10	.16	.72	.70	.60	20	34	24	12	39	85	22	2.4
11	.16	.72	.70	.50	30	38	61	14	41	73	21	2.0
12	.86	.72	.65	.50	30	40	148	14	39	87	17	2.5
13	.41	.72	.65	1.0	31	39	180	46	37	86	16	3.2
14	.30	.89	.52	2.2	32	39	197	51	76	71	20	4.7
15	.29	.79	.70	2.5	30	39	119	26	60	92	20	5.2
16	.27	.72	.60	3.0	25	36	82	14	50	105	16	5.8
17	.27	.72	.65	4.0	22	38	76	9.6	44	79	310	6.0
18	.27	.89	.61	5.0	22	37	70	7.3	40	65	347	5.6
19	.27	.85	.58	6.0	24	36	67	5.4	33	58	154	4.9
20	.27	.72	.75	7.0	27	36	63	4.3	28	48	106	4.4
21	.27	.72	.75	7.0	24	33	52	3.7	34	725	84	4.4
22	.27	.82	.72	8.0	23	32	46	3.6	95	366	69	3.1
23	.29	.81	.80	9.0	19	30	41	3.2	161	160	53	2.3
24	.30	.86	.70	12	24	26	37	2.8	655	103	41	2.5
25	.30	.86	.70	17	24	25	33	2.7	554	108	34	2.1
26	.38	.75	.70	17	25	26	28	2.4	282	82	29	1.9
27	.44	.86	.75	17	25	45	26	1.6	199	77	22	1.8
28	.44	.86	.80	15	26	35	25	8.1	542	73	16	1.8
29	.44	.85	.70	17	-----	30	23	710	1,640	64	12	1.7
30	.79	.80	.70	17	-----	31	21	293	411	38	9.1	1.6
31	.66	-----	.70	16	-----	31	-----	119	-----	38	7.8	-----
TOTAL	9.49	22.35	21.39	193.50	641	1,010	1,656	1,501.7	5,403	3,992	2,981.9	108.6
MEAN	.31	.75	.69	6.24	22.9	32.6	55.2	48.4	180	129	96.2	3.62
MAX	.86	.89	.80	17	32	45	197	710	1,640	725	592	6.4
MIN	.10	.58	.52	.50	13	25	21	1.6	28	38	7.8	1.6
AC-FT	19	44	42	384	1,270	2,000	3,280	2,980	10,720	7,920	5,910	215

CAL YR 1974 TOTAL 22,694.95 MEAN 62.2 MAX 503 MIN .03 AC-FT 45,020
WTR YR 1975 TOTAL 17,540.93 MEAN 48.1 MAX 1,640 MIN .10 AC-FT 34,790

07138650 WHITEWOMAN CREEK NEAR LEOTI, KS

LOCATION.--Lat 38°28'52", long 101°29'16", in NW¼ sec.23, T.18 S., R.38 W., Wichita County, near center of span at downstream side of bridge on State Highway 96, 7 mi (11 km) west of Leoti, 0.8 mi (1.3 km) upstream from small right-bank tributary, and at mile 42.0 (67.6 km).

DRAINAGE AREA.--750 mi² (1,942 km²).

PERIOD OF RECORD.--October 1966 to current year.

GAGE.--Water-stage recorder. Datum of gage is 3,324.79 ft (1,013.396 m) above mean sea level.

AVERAGE DISCHARGE.--9 years, 1.47 ft³/s (0.0416 m³/s), 1,070 acre-ft/yr (1.32 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 652 ft³/s (18.5 m³/s) July 31, gage height, 3.72 ft (1.134 m); no flow most days.

Period of record: Maximum discharge, 5,600 ft³/s (159 m³/s) July 10, 1972, gage height, 13.10 ft (3.993 m); no flow most days.

REMARKS.--Records poor.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1							0	0	0	0	1.0	
2							0	0	0	0	0	
3							0	0	0	0	0	
4							0	0	0	0	0	
5							0	0	0	0	0	
6							0	0	0	0	0	
7							0	0	0	0	0	
8							0	0	0	0	0	
9							0	0	0	0	0	
10							0	0	0	0	0	
11							0	0	0	0	0	
12							0	8.9	0	0	0	
13							0	2.0	0	0	0	
14							0	0	0	0	0	
15							0	0	0	0	0	
16							0	0	0	0	0	
17							0	0	0	0	0	
18							0	0	0	0	0	
19							0	0	0	0	0	
20							0	0	0	0	0	
21							0	0	13	0	0	
22							0	0	.20	0	0	
23							0	0	0	0	0	
24							0	0	0	0	0	
25							0	0	0	0	0	
26							4.2	0	0	0	0	
27							.10	0	0	0	0	
28							0	0	0	0	0	
29							0	0	0	0	0	
30							0	0	0	0	0	
31								0		168	0	
TOTAL	0	0	0	0	0	0	4.30	10.9	13.20	168	1.0	0
MEAN	0	0	0	0	0	0	.14	.35	.44	5.42	.032	0
MAX	0	0	0	0	0	0	4.2	8.9	13	168	1.0	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	0	0	0	8.5	22	26	333	2.0	0

CAL YR 1974 TOTAL 595.98 MEAN 1.63 MAX 514 MIN 0 AC-FT 1,180
WTR YR 1975 TOTAL 197.40 MEAN .54 MAX 168 MIN 0 AC-FT 392

PEAK DISCHARGE (BASE, 300 CFS)

DATE TIME G.H. DISCHARGE

07-31 0300 3.72 652

ARKANSAS RIVER BASIN

127

07139500 ARKANSAS RIVER AT DODGE CITY, KS

LOCATION.--Lat 37°44'51", long 100°01'08", in NE¼NE¼ sec.35, T.26 S., R.25 W., Ford County, on right bank, 30 ft (9 m) downstream from Second Street Bridge in Dodge City, at mile 970.2 (1,561.1 km).

DRAINAGE AREA.--30,600 mi² (79,254 km²), of which 5,583 mi² (14,460 km²) is probably noncontributing.

PERIOD OF RECORD.--October 1902 to September 1906 (published as "near Dodge"), September 1944 to current year. Monthly discharge only for some periods, published in WSP 1311. Gage-height records collected at same site at different datum 1909-1932 are contained in reports of U.S. Weather Bureau.

GAGE.--Water-stage recorder. Datum of gage is 2,467.71 ft (752.158 m) above mean sea level. Nov. 28, 1902, to Aug. 10, 1906, non-recording gage at same site at datum about 5.00 ft (1.524 m) higher. Sept. 1 to Nov. 5, 1944, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--35 years, 206 ft³/s (5.834 m³/s), 149,200 acre-ft/yr (184 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 301 ft³/s (8.52 m³/s) Apr. 7, gage height, 4.19 ft (1.277 m); no flow Aug. 22 to Sept. 30. Period of record: Maximum discharge, 82,000 ft³/s (2,320 m³/s) June 19, 1965, gage height, 15.68 ft (4.779 m); no flow at times in 1903, 1946, 1954, 1956, 1974, 1975.

REMARKS.--Records good except those for winter months, which are poor. Flow moderately regulated since 1943 by John Martin Reservoir (see sta 07130000). Natural flow of stream affected by transmountain diversions, storage reservoirs, power developments, ground-water withdrawals and diversions for irrigation, and return flow from irrigated areas. Records of chemical and biological analyses, water temperatures, suspended sediment loads, and specific conductance for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1341: 1903(M), 1904, 1905(M), 1947(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.04	3.0	7.0	11	20	19	20	19	19	19	1.8	
2	.24	3.8	8.0	13	20	21	20	24	19	20	1.6	
3	.09	5.7	8.5	12	20	20	20	21	22	18	1.4	
4	.04	5.1	9.0	12	21	21	21	22	20	17	1.0	
5	.17	4.9	9.4	12	17	22	20	21	19	13	.59	
6	.33	5.0	9.0	13	15	21	20	21	23	14	.66	
7	.04	5.0	8.8	14	17	20	55	19	19	17	.37	
8	.10	5.0	8.0	14	15	20	25	18	21	23	.15	
9	.14	5.4	8.0	14	15	22	24	18	21	23	.14	
10	.24	5.3	9.0	15	19	21	23	19	21	17	.01	
11	.17	5.5	9.4	13	21	21	23	17	24	9.4	.20	
12	1.9	5.5	9.8	11	20	21	24	18	23	8.2	.20	
13	1.1	5.7	9.8	15	19	20	36	31	22	7.2	.84	
14	1.0	5.8	9.8	18	20	20	28	20	21	7.5	.37	
15	1.0	6.0	9.0	18	20	23	26	19	21	6.8	.15	
16	1.2	6.0	9.0	17	19	22	26	19	22	6.0	.09	
17	1.1	6.0	10	17	17	18	27	18	18	3.4	.39	
18	.88	6.0	11	17	17	19	28	16	18	2.7	1.3	
19	.82	7.4	11	17	21	19	28	16	16	2.0	1.5	
20	1.0	7.6	10	17	24	19	27	16	14	.98	.08	
21	1.2	7.5	10	17	23	19	29	15	32	1.2	.07	
22	1.3	8.1	11	17	23	20	30	16	38	1.6	0	
23	1.6	7.9	11	17	22	20	29	15	47	1.9	0	
24	1.5	8.1	9.0	17	23	19	27	15	34	.93	0	
25	1.6	8.1	8.0	19	22	19	27	14	31	.36	0	
26	2.3	8.4	8.0	19	22	19	26	13	27	.22	0	
27	1.6	8.1	9.0	19	22	20	39	17	31	.03	0	
28	1.7	8.3	10	19	20	18	20	22	25	.02	0	
29	1.7	8.0	10	19	-----	19	19	25	22	.03	0	
30	6.9	7.0	11	19	-----	19	20	19	20	1.3	0	
31	3.1	-----	12	19	-----	19	-----	18	-----	1.3	0	-----
TOTAL	36.10	189.2	292.5	491	554	620	787	581	710	244.07	12.91	0
MEAN	1.16	6.31	9.44	15.8	19.8	20.0	26.2	18.7	23.7	7.87	.42	0
MAX	6.9	8.4	12	19	24	23	55	31	47	23	1.8	0
MIN	.04	3.0	7.0	11	15	18	19	13	14	.02	0	0
AC-FT	72	375	580	974	1,100	1,230	1,560	1,150	1,410	484	26	0

CAL YR 1974 TOTAL 12,631.45 MEAN 34.6 MAX 142 MIN 0 AC-FT 25,050
WTR YR 1975 TOTAL 4,517.78 MEAN 12.4 MAX 55 MIN 0 AC-FT 8,960

PEAK DISCHARGE (BASE, 500 CFS).--NO PEAK ABOVE BASE.

ARKANSAS RIVER BASIN

07139800 MULBERRY CREEK NEAR DODGE CITY, KS

LOCATION.--Lat 37°35'53", long 100°00'52", in NW¼ sec.24, T.28 S., R.25 W., Ford County, on right bank 75 ft (23 m) downstream from bridge on U.S. Highway 283, 9 mi (14 km) south of Dodge City, and 24 mi (39 km) above mouth.

DRAINAGE AREA.--73.8 mi² (191.1 km²).

PERIOD OF RECORD.--March 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,509.96 ft (765.036 m) above mean sea level.

AVERAGE DISCHARGE.--7 years, 1.37 ft³/s (0.0388 m³/s), 993 acre-ft/yr (1.22 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 816 ft³/s (23.1 m³/s) June 7, gage height, 10.52 ft (3.206 m); no flow most days.
Period of record: Maximum discharge, 1,220 ft³/s (34.6 m³/s) Oct. 16, 1968, gage height, 11.35 ft (3.459 m); no flow for most days.

REMARKS.--Records fair. Low flow infrequently augmented by irrigation runoff.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0						0	0	0	0	.08	0
2	0						0	0	0	0	.01	0
3	0						0	0	0	0	0	0
4	0						1.1	0	.21	3.4	0	.01
5	0						1.1	0	0	4.2	0	.02
6	0						0	0	0	9.2	0	.03
7	0						.70	0	305	3.2	0	0
8	0						.08	0	18	.09	0	0
9	0						0	0	2.0	0	.24	0
10	0						0	0	.17	0	0	0
11	0						0	0	.04	0	.60	.90
12	0						0	0	2.1	.03	.41	.06
13	0						0	.51	.46	.60	0	.90
14	0						0	0	.06	.63	0	.01
15	0						0	0	0	0	0	0
16	0						0	0	0	0	0	0
17	0						0	0	0	.04	0	0
18	0						0	0	0	.60	0	0
19	0						0	0	0	.70	3.7	0
20	0						0	0	0	.84	0	0
21	0						0	0	2.1	.60	0	0
22	0						0	0	3.8	0	0	0
23	0						0	0	.81	0	0	0
24	0						0	0	4.4	0	0	0
25	1.2						0	0	.70	.01	0	0
26	0						0	0	.17	.90	0	0
27	0						0	0	.28	.80	0	0
28	0						0	.13	.05	.48	0	0
29	0						0	1.1	0	.33	0	0
30	.49						0	0	0	.01	.76	0
31	.02	-----					-----	0	-----	.38	.21	-----
TOTAL	1.71	0	0	0	0	0	2.98	1.74	340.35	27.04	6.01	1.93
MEAN	.055	0	0	0	0	0	.099	.056	11.3	.87	.19	.064
MAX	1.2	0	0	0	0	0	1.1	1.1	305	9.2	3.7	.90
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	3.4	0	0	0	0	0	5.9	3.5	675	54	12	3.8

CAL YR 1974 TOTAL 258.96 MEAN .71 MAX 140 MIN 0 AC-FT 514
WTR YR 1975 TOTAL 381.76 MEAN 1.05 MAX 305 MIN 0 AC-FT 757

PEAK DISCHARGE (BASE, 100 CFS)

DATE	TIME	G.H.	DISCHARGE
06-07	0500	10.52	816

ARKANSAS RIVER BASIN

129

07140000 ARKANSAS RIVER NEAR KINSLEY, KS

LOCATION.--Lat 37°55'33", long 99°22'31", in SW¼SE¼ sec.26, T.24 S., R.19 W., Edwards County, on right bank at upstream side of bridge on U.S. Highway 50, 2.0 mi (3.0 km) east of Kinsley, and at mile 920.3 (1,480.8 km).

DRAINAGE AREA.--31,066 mi² (80,461 km²), of which 5,660 mi² (14,660 km²) is probably noncontributing.

PERIOD OF RECORD.--September 1944 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,144.64 ft (653.686 m) above mean sea level. Prior to Nov. 10, 1944, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--31 years, 192 ft³/s (5.437 m³/s), 139,100 acre-ft/yr (172 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 445 ft³/s (12.6 m³/s) June 29, gage height, 3.66 ft (1.116 m); minimum discharge, 9.4 ft³/s (0.27 m³/s) Sept. 30.

Period of record: Maximum discharge, 49,800 ft³/s (1,410 m³/s) June 21, 1965, gage height, 14.60 ft (4.450 m); minimum, 0.70 ft³/s (0.020 m³/s) Oct. 28, 1956.

REMARKS.--Records good. Flow moderately regulated by John Martin Reservoir (see sta 07130000). Natural flow of stream affected by transmountain diversions, storage reservoirs, power developments, ground-water withdrawals and diversions for irrigation, and return flow from irrigated areas. Records of suspended sediment loads for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37	42	30	46	50	55	47	54	54	135	27	15
2	39	47	33	51	50	55	46	56	54	111	40	14
3	39	51	44	47	50	55	45	57	52	97	34	14
4	40	52	53	44	50	55	46	54	50	87	31	13
5	42	52	52	49	41	55	46	53	50	80	29	13
6	41	53	51	49	31	54	48	52	48	75	27	13
7	41	51	51	53	30	52	50	53	46	71	26	13
8	40	50	45	54	25	51	52	53	47	129	25	12
9	40	50	41	55	26	51	58	51	210	98	24	11
10	39	50	45	55	46	51	64	52	142	82	23	11
11	37	49	48	49	56	51	60	52	109	73	21	11
12	40	48	47	25	62	54	58	52	90	64	20	11
13	47	49	46	20	66	54	61	57	78	58	20	10
14	47	48	46	46	63	53	65	61	69	54	20	10
15	46	47	41	50	58	52	66	62	62	49	20	11
16	45	46	42	56	38	52	66	63	55	45	20	12
17	44	46	42	58	42	53	64	62	52	42	19	12
18	42	46	48	58	50	53	62	58	49	39	19	12
19	42	46	47	56	55	51	61	54	46	35	24	12
20	40	44	46	56	64	51	60	52	44	33	25	12
21	40	43	47	55	64	50	60	50	44	32	37	11
22	40	45	47	50	61	50	60	49	46	29	34	11
23	39	43	45	51	57	51	59	48	56	27	29	10
24	38	43	39	52	56	50	60	48	253	26	26	9.8
25	43	44	37	52	56	49	60	47	203	25	23	10
26	45	45	40	53	56	49	58	45	150	23	21	10
27	42	45	40	53	55	51	57	45	121	23	20	10
28	42	45	46	52	55	50	55	46	128	21	19	10
29	41	43	50	51	-----	50	56	50	347	20	17	9.8
30	40	34	50	51	-----	48	56	53	186	19	17	9.7
31	42	-----	51	51	-----	47	-----	54	-----	20	16	-----
TOTAL	1,280	1,397	1,390	1,548	1,413	1,603	1,706	1,643	2,941	1,722	753	343.3
MEAN	41.3	46.6	44.8	49.9	50.5	51.7	56.9	53.0	98.0	55.5	24.3	11.4
MAX	47	53	53	58	66	55	66	63	347	135	40	15
MIN	37	34	30	20	25	47	45	45	44	19	16	9.7
AC-FT	2,540	2,770	2,760	3,070	2,800	3,180	3,380	3,260	5,830	3,420	1,490	681

CAL YR 1974 TOTAL 32,481.0 MEAN 89.0 MAX 572 MIN 25 AC-FT 64,430

WTR YR 1975 TOTAL 17,739.3 MEAN 48.6 MAX 347 MIN 9.7 AC-FT 35,190

PEAK DISCHARGE (BASE, 500 CFS).--NO PEAK ABOVE BASE.

ARKANSAS RIVER BASIN

07140700 GUZZLERS GULCH NEAR NESS CITY, KS

LOCATION.--Lat 38°17'40", long 99°57'10", in SW¼SW¼ sec.23, T.20 S., R.24 W., Ness County, on right bank 30 ft downstream from highway bridge, 5 mi (8 km) upstream from mouth, and 11 mi (18 km) southwest of Ness City.

DRAINAGE AREA.--58.2 mi² (150.7 km²).

PERIOD OF RECORD.--March 1961 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 2,240 ft (683 m); from topographic map.

AVERAGE DISCHARGE.--14 years (1962-75), 2.36 ft³/s (0.0668 m³/s), 1,710 acre-ft/yr (2.11 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 504 ft³/s (14.3 m³/s) June 23, gage height, 8.30 ft (2.530 m); no flow most days.

Period of record: Maximum discharge, 3,050 ft³/s (86.4 m³/s) July 29, 1971, gage height, 14.29 ft (4.356 m); from rating curve extended above 1,900 ft³/s (53.8 m³/s); no flow most days.

REMARKS.--Records fair. Records of suspended sediment loads for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.01					0	0	0	.65	0	
2	0	.52					0	0	0	.10	0	
3	0	1.8					0	0	0	0	0	
4	0	.36					0	0	0	0	0	
5	.53	0					0	0	0	0	0	
6	.29	0					0	0	0	0	0	
7	0	0					0	0	0	0	0	
8	0	0					0	0	0	0	0	
9	0	0					0	0	0	0	0	
10	0	0					0	0	0	0	0	
11	0	0					0	0	0	0	0	
12	1.7	0					0	0	0	0	0	
13	.58	0					0	1.8	0	0	0	
14	.05	0					0	.43	0	0	0	
15	0	0					0	0	0	0	0	
16	0	0					0	0	0	0	0	
17	0	0					0	0	0	0	0	
18	0	0					0	0	0	0	.28	
19	0	0					0	0	0	0	1.3	
20	0	0					0	0	0	0	.50	
21	0	0					0	0	12	0	.15	
22	0	0					0	0	134	0	0	
23	0	0					0	0	362	0	0	
24	0	0					0	0	114	0	0	
25	0	0					0	0	59	0	0	
26	0	0					0	0	19	0	0	
27	0	0					.55	0	7.1	0	0	
28	0	0					.12	0	2.5	0	0	
29	0	0					0	0	1.8	0	0	
30	1.3	0					0	0	.99	0	0	
31	.28	-----					-----	0	-----	0	0	-----
TOTAL	4.73	2.69	0	0	0	0	.67	2.23	712.39	.75	2.23	0
MEAN	.15	.090	0	0	0	0	.022	.072	23.7	.024	.072	0
MAX	1.7	1.8	0	0	0	0	.55	1.8	362	.65	1.3	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	9.4	5.3	0	0	0	0	1.3	4.4	1,410	1.5	4.4	0
CAL YR 1974	TOTAL	8.60	MEAN .02	MAX 1.8	MIN 0	AC-FT 17						
WTR YR 1975	TOTAL	725.69	MEAN 1.99	MAX 362	MIN 0	AC-FT 1,440						

PEAK DISCHARGE (BASE, 75 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
06-21	2100	4.40	92	06-23	1100	8.30	504
06-22	0700	6.82	316				

ARKANSAS RIVER BASIN

131

07141200 PAWNEE RIVER NEAR LARNED, KS

LOCATION.--Lat 38°12'00", Long 99°20'50", in NW¼NW¼ sec.30, T.21 S., R.18 W., Pawnee County, on right bank, 0.8 mi (1.3 km) north of U.S. Highway 156, 14 mi (23 km) west of Larned, and at mile 24.8 (39.9 km).

DRAINAGE AREA.--2,148 mi² (5,563 km²), of which 138 mi² (357 km²) is probably noncontributing.

PERIOD OF RECORD.--April to September 1924 (gage heights and discharge measurements only), October 1924 to current year. Monthly discharge only for some periods, published in WSP 1311.

GAGE.--Water-stage recorder. Concrete control since June 2, 1959. Datum of gage is 2,040.90 ft (622.066 m) above mean sea level. See WSP 1921 for history of changes prior to June 2, 1959.

AVERAGE DISCHARGE.--51 years, 75.9 ft³/s (2.149 m³/s), 54,990 acre-ft/yr (67.8 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,510 ft³/s (42.8 m³/s) June 26, gage height, 8.84 ft (2.694 m); no flow at times.

Period of record: Maximum discharge, 16,300 ft³/s (462 m³/s) July 28, 1958, gage height, 28.22 ft (8.601 m); site and datum then in use, or 22.9 ft (6.98 m), present site and datum; no flow at times in most years.

REMARKS.--Records good. Diversions for irrigation above station. Records of chemical analyses and suspended sediment loads for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1177: 1949. WSP 1241: 1927-28(M), 1935, 1940, 1943. WSP 1341: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.31	1.4	1.0	1.5	1.8	2.4	1.7	1.3	1.5	86	0	
2	.44	1.4	.98	1.5	1.8	2.4	1.5	1.5	1.5	52	0	
3	.54	1.9	.88	1.5	1.8	2.4	1.2	1.8	1.5	34	0	
4	.46	1.9	.84	1.5	1.6	2.4	1.0	1.3	1.6	24	0	
5	.34	2.0	.84	1.6	1.4	2.4	1.0	1.3	1.7	23	0	
6	.48	2.2	.96	1.6	1.4	2.5	1.0	2.8	1.5	20	0	
7	165	2.2	1.1	1.6	1.6	2.4	1.0	3.8	1.7	14	0	
8	27	2.2	1.2	1.8	1.5	2.4	1.2	3.5	1.8	9.4	0	
9	13	2.1	1.2	1.6	1.6	2.3	1.2	2.7	2.3	6.8	0	
10	7.4	2.1	1.2	1.4	1.8	2.3	1.3	2.4	2.0	5.2	0	
11	4.0	2.2	1.2	1.2	1.9	2.2	1.7	2.6	1.9	3.9	0	
12	2.3	2.3	1.2	1.2	1.9	2.2	1.8	4.0	1.6	1.9	0	
13	1.6	2.2	1.3	1.5	1.9	2.2	2.5	9.8	1.3	1.9	0	
14	8.9	1.5	1.7	1.7	1.8	2.3	3.5	8.5	1.1	3.5	0	
15	21	1.4	1.7	1.8	1.7	2.4	4.8	4.9	.80	3.8	0	
16	11	1.4	1.7	1.9	1.7	2.4	5.7	4.0	.63	2.7	0	
17	5.6	1.3	1.5	1.9	1.9	2.6	7.2	8.7	.55	1.6	0	
18	3.0	1.1	1.6	2.0	2.1	2.6	6.9	12	.53	.82	0	
19	1.5	1.1	1.7	1.7	2.0	2.2	6.3	9.6	.53	.51	0	
20	.94	1.1	1.7	1.8	2.1	2.1	4.6	7.3	.55	.28	74	
21	.46	1.0	1.7	1.9	2.3	2.1	3.5	6.6	.94	.02	122	
22	.40	1.1	1.7	1.9	2.2	2.2	2.8	6.3	1.2	0	60	
23	.34	1.3	1.7	1.8	2.3	2.2	2.8	5.8	7.4	0	35	
24	.28	1.1	1.5	1.9	2.4	1.9	2.5	4.6	895	0	25	
25	.34	.99	1.4	1.9	2.4	1.7	2.1	3.5	1,240	0	12	
26	.40	1.1	1.4	1.9	2.4	1.6	1.7	2.4	1,390	0	4.9	
27	.40	1.1	1.4	1.9	2.4	2.3	1.7	1.8	385	0	2.6	
28	.46	1.0	1.4	1.9	2.4	2.1	1.8	1.6	165	0	.87	
29	.55	1.0	1.4	1.9	-----	2.0	1.4	1.9	96	0	.40	
30	1.2	1.0	1.4	1.8	-----	1.9	1.4	1.6	70	0	0	
31	1.5	-----	1.5	1.8	-----	1.8	-----	1.5	-----	0	0	-----
TOTAL	281.14	45.69	42.00	52.9	54.1	68.9	78.8	131.4	4,277.13	295.33	336.77	0
MEAN	9.07	1.52	1.35	1.71	1.93	2.22	2.63	4.24	143	9.53	10.9	0
MAX	165	2.3	1.7	2.0	2.4	2.6	7.2	12	1,390	86	122	0
MIN	.28	.99	.84	1.2	1.4	1.6	1.0	1.3	.53	0	0	0
AC-FT	558	91	83	105	107	137	156	261	8,480	586	668	0

CAL YR 1974 TOTAL 4,641.49 MEAN 12.7 MAX 861 MIN 0 AC-FT 9,210
WTR YR 1975 TOTAL 5,664.16 MEAN 15.5 MAX 1,390 MIN 0 AC-FT 11,230

PEAK DISCHARGE (BASE, 900 CFS)

DATE TIME G.H. DISCHARGE

06-26 1000 8.84 1,510

ARKANSAS RIVER BASIN

07141300 ARKANSAS RIVER AT GREAT BEND, KS

LOCATION.--Lat 38°21'11", long 98°45'50", in SW¼NW¼SE¼ sec.33, T.19 S., R.13 W., Barton County, at downstream side of bridge on U.S. Highway 281, 0.5 mi (0.8 km) south of Great Bend, 4.5 mi (7.2 km) upstream from Walnut Creek, and at mile 873.2 (1,405.0 km).

DRAINAGE AREA.--34,356 mi² (88,982 km²), of which 6,002 mi² (15,545 km²) is probably noncontributing.

PERIOD OF RECORD.--September 1940 to current year. Fragmentary gage-height records collected at same site, at datum 3.0 ft (0.9 m) higher, 1906, 1908-12, are contained in reports of U.S. Weather Bureau.

GAGE.--Water-stage recorder. Datum of gage is 1,839.82 ft (560.777 m) above mean sea level (levels by Corps of Engineers).

AVERAGE DISCHARGE.--35 years, 373 ft³/s (10.56 m³/s), 270,200 acre-ft/yr (333 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,370 ft³/s (38.8 m³/s) June 27, gage height, 3.34 ft (1.018 m); minimum, 10 ft³/s (0.28 m³/s) Oct. 2-4.

Period of record: Maximum discharge, 27,800 ft³/s (787 m³/s) June 23, 1965, gage height, 13.10 ft (3.993 m); maximum gage height, 13.18 ft (4.017 m) June 23, 1965; no flow at times in 1940, 1946, 1956.

Maximum stage known prior to June 23, 1965, and since at least 1895, about 11.7 ft (3.57 m) in June 1921, from reports of U.S. Weather Bureau (discharge not determined).

REMARKS.--Records poor. Flow moderately regulated since 1943 by John Martin Reservoir (see sta 07130000). Natural flow of stream affected by transmountain diversions, storage reservoirs, power developments, ground-water withdrawals, diversions for irrigation and to Cheyenne Bottoms State Waterfowl Refuge, and return flow from irrigated areas. Records of chemical analyses and suspended sediment loads for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1341: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	74	70	70	70	74	40	25	81	300	20	12
2	10	74	70	77	66	74	35	25	70	250	20	12
3	10	78	73	73	74	75	35	25	60	200	20	11
4	10	80	75	73	81	70	35	25	57	175	20	11
5	10	78	77	73	70	60	33	25	51	150	20	11
6	25	77	80	71	65	50	42	25	47	125	20	11
7	25	76	84	66	60	45	40	25	45	110	20	11
8	25	76	77	60	50	40	28	25	42	95	15	11
9	25	76	82	75	45	38	29	26	46	89	13	11
10	30	78	82	70	50	41	33	26	46	87	13	11
11	45	78	80	60	60	51	32	28	82	77	13	11
12	50	76	77	50	70	53	32	29	87	69	13	11
13	50	76	77	50	78	49	32	31	77	65	15	11
14	48	74	75	62	84	46	35	35	68	60	12	11
15	45	72	68	65	74	47	35	30	63	56	11	15
16	45	73	71	70	60	46	35	26	62	50	11	20
17	45	74	73	76	50	46	35	27	58	43	11	24
18	46	75	75	80	60	46	35	38	56	37	11	35
19	48	76	71	82	70	44	35	47	52	35	11	36
20	50	74	73	79	80	45	35	44	49	35	12	33
21	49	78	73	75	84	47	30	36	51	30	16	32
22	48	79	73	71	84	48	30	34	59	30	61	31
23	49	77	75	75	84	49	30	33	61	30	44	29
24	48	77	65	71	83	51	30	32	58	30	33	28
25	49	73	60	64	86	51	30	30	101	25	23	28
26	55	71	65	66	84	50	30	29	864	25	13	25
27	63	71	70	67	81	50	27	29	1,260	25	13	20
28	70	70	75	71	74	50	25	29	794	20	14	23
29	72	70	71	69	-----	50	29	36	462	20	15	24
30	72	66	71	70	-----	40	25	49	368	20	13	18
31	74	-----	73	75	-----	40	-----	86	-----	20	13	-----
TOTAL	1,302	2,247	2,281	2,156	1,977	1,566	977	1,010	5,277	2,383	559	577
MEAN	42.0	74.9	73.6	69.5	70.6	50.5	32.6	32.6	176	76.9	18.0	19.2
MAX	74	80	84	82	86	75	42	86	1,260	300	61	36
MIN	10	66	60	50	45	38	25	25	42	20	11	11
AC-FT	2,580	4,460	4,520	4,280	3,920	3,110	1,940	2,000	10,470	4,730	1,110	1,140

CAL YR 1974 TOTAL 52,295 MEAN 143 MAX 774 MIN 10 AC-FT 103,700
WTR YR 1975 TOTAL 22,312 MEAN 61.1 MAX 1,260 MIN 10 AC-FT 44,260

PEAK DISCHARGE (BASE, 1,300 CFS)

DATE TIME G.H. DISCHARGE

06-27 1800 3.34 1,370

ARKANSAS RIVER BASIN

133

07141780 WALNUT CREEK NEAR RUSH CENTER, KS

LOCATION.--Lat 38°28'07", long 99°22'07", in NE¼SW¼SE¼ sec.24, T.18 S., R.19 W., Rush County, on left bank at downstream side of bridge on State Highway 96, 3.0 mi (4.8 km) west of Rush Center.

DRAINAGE AREA.--1,256 mi² (3,253 km²), of which 104 mi² (269 km²) is probably noncontributing.

PERIOD OF RECORD.--October 1969 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,983.99 ft (604.720 m) above mean sea level.

AVERAGE DISCHARGE.--6 years, 32.4 ft³/s (0.918 m³/s), 23,470 acre-ft/yr (28.9 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,680 ft³/s (75.9 m³/s) June 24, gage height, 20.71 ft (6.312 m); no flow at times.

Period of record: Maximum discharge, 5,020 ft³/s (142 m³/s) June 14, 1970, gage height, 24.89 ft (7.586 m); no flow for many days.

REMARKS.--Records fair, except those for period of no gage-height record, which are poor. Occasional low flow diversions for irrigation.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.20	.38	2.1	2.2	4.6	2.7	3.2	2.9	29	1.0	.31
2	0	.21	.36	2.0	2.4	4.2	2.8	3.5	2.3	23	2.5	.16
3	0	.37	.38	2.1	2.9	3.9	2.7	3.5	1.9	19	2.0	.10
4	0	.50	.79	2.2	2.8	3.9	2.7	3.3	1.6	16	1.3	.05
5	0	.52	1.9	2.2	2.7	3.9	2.8	3.1	1.3	14	1.0	0
6	135	.46	1.9	2.3	2.9	3.8	2.8	3.0	2.3	12	.92	.35
7	30	.36	1.8	2.4	2.9	3.7	2.9	2.9	4.4	11	.70	.73
8	5.0	.26	1.5	2.6	3.0	3.4	5.0	2.9	14	8.1	.56	.48
9	2.0	.22	1.5	2.9	3.0	3.6	4.5	3.0	53	6.4	.39	.34
10	1.0	.20	1.5	2.6	3.0	4.0	4.0	3.0	43	5.7	.32	.11
11	.70	.60	1.6	2.5	3.0	4.0	3.5	2.8	20	4.6	.19	0
12	1.7	.75	1.6	2.3	3.4	4.3	3.3	2.7	10	3.2	.09	0
13	50	.80	1.7	2.0	3.5	4.2	3.1	2.7	6.4	2.8	.03	0
14	18	.80	1.8	2.2	3.4	4.1	3.5	2.8	5.8	3.0	.02	0
15	3.7	.78	1.7	2.6	3.2	4.2	3.7	2.8	9.8	2.0	.01	0
16	1.4	.58	1.7	3.1	3.1	4.6	3.7	3.0	7.4	1.4	.26	0
17	.65	.52	1.6	2.9	3.2	4.7	3.5	2.7	5.9	1.3	.15	.05
18	.51	.48	1.8	2.8	3.3	4.7	3.2	2.2	5.1	1.1	.15	.15
19	.35	.48	2.0	3.0	3.7	4.5	3.0	1.9	4.0	.95	7.3	.29
20	.18	.48	2.2	2.9	3.6	4.4	2.8	1.7	3.3	.93	237	.43
21	.12	.44	2.2	2.7	3.8	4.6	2.6	1.7	3.1	.99	67	.49
22	.07	.44	2.2	2.4	3.9	5.2	2.5	1.8	66	.88	22	.45
23	.02	.44	1.9	2.4	3.3	5.1	2.5	2.3	867	.90	13	.27
24	0	.49	1.7	2.7	3.6	4.4	2.6	2.7	2,350	.87	6.5	.09
25	0	.56	1.7	3.0	3.9	4.0	2.6	3.0	1,580	1.4	3.2	0
26	0	.65	1.7	2.9	4.4	3.7	2.5	3.1	205	1.3	1.9	0
27	0	.60	2.0	2.8	6.0	3.8	2.5	2.8	251	1.2	1.6	0
28	0	.53	2.1	2.4	4.8	3.3	2.5	2.5	150	1.0	1.5	0
29	.01	.51	2.1	2.3	-----	3.1	2.7	4.6	55	.95	1.3	0
30	.13	.45	2.0	2.6	-----	3.0	3.0	5.7	37	.83	.97	0
31	.20	-----	2.0	2.6	-----	2.9	-----	4.2	-----	.83	.56	-----
TOTAL	250.74	14.68	51.31	78.5	94.9	125.8	92.2	91.1	5,768.5	176.63	375.42	4.85
MEAN	8.09	.49	1.66	2.53	3.39	4.06	3.07	2.94	192	5.70	12.1	.16
MAX	135	.80	2.2	3.1	6.0	5.2	5.0	5.7	2,350	29	237	.73
MIN	0	.20	.36	2.0	2.2	2.9	2.5	1.7	1.3	.83	.01	0
AC-FT	497	29	102	156	188	250	183	181	11,440	350	745	9.6

CAL YR 1974 TOTAL 5,428.12 MEAN 14.9 MAX 335 MIN 0 AC-FT 10,770

WTR YR 1975 TOTAL 7,124.63 MEAN 19.5 MAX 2,350 MIN 0 AC-FT 14,130

PEAK DISCHARGE (BASE, 1,000 CFS)

NOTE.--NO GAGE-HEIGHT RECORD APR. 9 TO MAY 13.

DATE TIME G.H. DISCHARGE
06-24 1630 20.71 2,680

ARKANSAS RIVER BASIN

07141900 WALNUT CREEK AT ALBERT, KS

LOCATION.--Lat 38°27'40", long 99°00'50", in SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec.29, T.18 S., R.15 W., Barton County, at downstream side of highway bridge, 0.2 mi (0.3 km) north of Albert, 14 mi (22.5 km) northwest of Great Bend, and at mile 43.0 (69.2 km).

DRAINAGE AREA.--1,410 mi² (3,652 km²), approximately, of which 104 mi² (269 km²) is probably noncontributing.

PERIOD OF RECORD.--May 1958 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,897.37 ft (578.318 m) above mean sea level (Corps of Engineers bench mark).

AVERAGE DISCHARGE.--17 years, 66.5 ft³/s (1.883 m³/s), 48,180 acre-ft/yr (59.4 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,100 ft³/s (59.5 m³/s) June 26, gage height, 20.91 ft (6.373 m); minimum, 0.13 ft³/s (0.004 m³/s) Sept. 30.

Period of record: Maximum discharge, 12,700 ft³/s (360 m³/s) Sept. 22, 1959, gage height, 25.75 ft (7.849 m); no flow at times in most years.

Maximum stage known prior to July 1958 and since at least 1908, 21.3 ft (6.49 m) in August 1927, from floodmark and information by local residents (discharge not determined, but due to levees built in 1934 is substantially greater than indicated by current rating).

REMARKS.--Records fair. Records of chemical analyses, water temperatures and suspended sediment loads for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.36	4.2	2.4	3.9	4.8	5.8	6.6	12	16	39	.80	.28
2	.90	3.8	2.4	4.0	4.8	5.7	6.4	20	12	29	1.0	.20
3	1.2	7.0	2.4	4.1	5.0	5.8	6.4	40	10	23	.65	.19
4	2.3	11	2.5	4.2	5.2	5.8	6.2	14	9.5	20	.39	.18
5	10	4.1	2.5	4.3	5.2	5.8	5.8	9.8	7.8	17	.26	.23
6	881	3.5	2.5	4.4	5.2	6.8	6.0	8.0	7.0	13	.24	.22
7	590	3.5	2.4	4.3	5.2	6.6	6.2	7.0	7.4	12	.21	.16
8	82	3.5	2.3	4.3	5.2	6.2	6.2	6.4	7.6	11	.20	.18
9	26	3.5	2.3	4.4	5.2	6.8	6.2	6.6	22	10	.20	.30
10	14	3.5	2.4	4.3	5.1	7.2	5.8	6.4	23	8.3	.20	.75
11	9.5	3.5	2.3	4.2	5.2	7.0	5.7	5.1	32	7.4	.18	1.0
12	7.8	3.3	2.2	4.2	5.2	7.0	5.6	4.8	30	6.4	.16	.28
13	32	3.1	2.3	4.3	5.2	6.6	7.4	5.4	22	5.6	.16	.23
14	68	3.2	2.3	4.6	5.2	6.6	10	5.4	17	5.0	.17	.25
15	52	3.3	2.3	4.6	5.2	6.8	10	5.4	13	4.5	.26	.29
16	23	3.2	2.5	4.5	5.4	9.2	11	5.1	10	5.0	.28	.24
17	11	3.2	2.7	4.5	5.7	9.5	13	4.3	8.3	5.0	.26	.20
18	6.4	3.4	2.9	4.6	5.8	9.5	12	4.1	8.6	4.2	.29	.19
19	4.3	3.5	3.0	4.8	6.0	9.8	9.8	3.9	10	3.1	.75	.18
20	4.1	3.4	3.1	5.0	6.2	9.8	8.3	3.8	9.5	2.7	.27	.17
21	3.8	3.3	2.9	5.0	6.4	11	7.4	3.5	9.5	3.1	96	.16
22	3.8	3.4	3.2	4.6	6.2	9.8	5.2	3.6	10	3.0	66	.16
23	3.5	3.1	3.4	4.6	6.0	9.5	5.6	3.8	17	2.1	25	.16
24	3.7	2.9	3.2	4.8	6.0	8.3	5.8	3.4	674	2.1	12	.15
25	3.8	2.8	3.4	4.8	7.0	7.8	5.8	9.1	1330	1.6	6.6	.15
26	4.4	2.7	3.6	4.5	6.4	7.8	5.1	55	2010	1.3	4.4	.15
27	4.3	2.8	3.7	4.5	6.2	9.8	5.2	5.0	823	1.0	3.1	.14
28	4.2	2.6	3.8	4.5	6.0	8.9	5.1	5.0	508	.80	2.0	.14
29	4.1	2.4	3.8	4.8	---	8.3	4.8	130	207	.65	1.2	.14
30	4.2	2.3	3.7	5.0	---	7.4	4.3	98	60	.45	.80	.13
31	9.5	---	3.8	5.0	---	6.8	---	29	---	.51	.54	---
TOTAL	1875.16	109.0	88.2	139.6	156.2	239.7	208.9	522.9	5931.2	247.81	224.57	7.20
MEAN	60.5	3.63	2.85	4.50	5.58	7.73	6.96	16.9	198	7.99	7.24	.24
MAX	881	11	3.8	5.0	7.0	11	13	130	2010	39	96	1.0
MIN	.36	2.3	2.2	3.9	4.8	5.7	4.3	3.4	7.0	.45	.16	.13
AC-FT	3720	216	175	277	310	475	414	1040	11760	492	445	14

CAL YR 1974 TOTAL 13048.74 MEAN 35.8 MAX 881 MIN .24 AC-FT 25880
WTR YR 1975 TOTAL 9750.44 MEAN 26.7 MAX 2010 MIN .13 AC-FT 19340

PEAK DISCHARGE (BASE, 1,000 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
10-06	0700	16.83	1,290	06-26	1500	20.91	2,100

ARKANSAS RIVER BASIN

135

07142015 WALNUT CREEK NEAR HEIZER, KS

LOCATION.--Lat 38°25'11", long 98°50'49", in SW $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.2, T.19 S., R.14 W., Barton County, at upstream side of county highway bridge, 2.2 mi (3.5 km) east of Heizer, 4.0 mi (6.4 km) northwest of Great Bend, and at mile 24.7 (39.7 km).

DRAINAGE AREA.--1,490 mi² (3,859 km²).

PERIOD OF RECORD.--June 1974 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,855 ft (565 m); from topographic map.

EXTREMES.--Current year: Maximum discharge, 1,430 ft³/s (40.5 m³/s) June 27, gage height, 22.14 ft (6.748 m); no flow Sept. 26-30.
Period of record: Maximum discharge, 1,430 ft³/s (40.5 m³/s) June 27, 1975, gage height, 22.14 ft (6.748 m); no flow Sept. 26-30, 1975.

REMARKS.--Records fair.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.39	13	3.7	5.5	6.3	8.3	7.8	12	78	67	1.7	6.2
2	.48	14	4.0	5.5	6.4	8.0	8.0	14	30	48	1.5	4.9
3	.27	15	4.0	5.7	6.6	7.8	8.0	37	20	37	1.5	3.8
4	.03	34	4.0	5.9	7.6	7.8	8.2	56	16	30	1.5	3.2
5	.58	30	4.0	5.9	7.3	7.8	8.1	24	14	26	1.9	2.5
6	404	15	4.0	5.9	7.5	7.8	8.0	14	12	23	1.9	1.9
7	873	9.0	3.8	5.9	7.6	7.8	7.9	9.9	12	19	1.4	1.2
8	425	7.0	3.8	6.0	7.5	7.5	7.4	7.5	11	20	1.1	.67
9	92	5.6	3.8	6.2	7.2	7.6	6.6	7.0	10	24	.94	.49
10	44	5.1	3.8	6.3	7.2	7.8	6.7	7.0	34	22	.58	.52
11	29	5.1	3.8	6.3	7.5	7.8	7.0	7.1	34	17	.40	.55
12	26	5.2	3.7	6.3	7.6	8.0	6.8	7.6	34	14	.30	.58
13	67	5.3	3.9	5.9	7.8	8.3	7.9	7.2	37	12	.20	.67
14	90	5.2	4.3	6.3	7.8	8.3	9.4	7.5	27	11	.13	1.1
15	81	5.2	3.9	6.5	7.6	7.8	11	7.2	19	9.5	.12	1.0
16	66	5.2	4.0	6.5	7.3	7.8	13	6.4	15	8.3	.11	.80
17	38	5.2	4.1	6.5	7.3	8.0	13	5.9	11	6.9	.09	.50
18	24	5.2	4.3	6.6	8.0	9.1	15	5.4	9.8	6.4	5.2	.24
19	17	5.2	4.3	6.8	8.3	9.6	16	4.3	8.5	6.4	114	.19
20	12	5.4	4.4	6.8	8.3	9.6	15	3.5	8.8	5.8	39	.15
21	9.3	5.4	4.6	6.9	8.5	9.6	12	3.0	10	5.4	24	.14
22	7.1	5.4	4.7	6.9	8.5	10	12	2.9	10	4.5	88	.10
23	6.6	5.4	4.7	6.8	8.1	10	12	2.9	12	4.9	75	.08
24	6.4	5.3	4.2	6.9	7.5	9.0	11	3.0	94	5.8	42	.05
25	7.2	5.2	4.3	7.0	7.9	8.8	11	3.3	672	5.2	27	.03
26	8.0	4.7	4.7	7.0	8.4	8.1	12	88	1010	4.1	20	0
27	7.8	4.4	5.1	6.9	8.8	10	12	141	1340	3.8	16	0
28	8.6	4.2	5.3	6.4	8.5	8.7	12	32	700	3.8	12	0
29	9.0	4.0	5.5	6.3	---	8.5	12	26	454	4.3	10	0
30	8.9	3.5	5.5	6.2	---	8.7	12	294	130	3.7	9.2	0
31	8.8	---	5.5	6.2	---	8.5	---	273	---	2.5	7.6	---
TOTAL	2377.45	247.4	133.7	196.8	214.9	262.4	308.8	1119.6	4873.1	461.3	504.37	31.56
MEAN	76.7	8.25	4.31	6.35	7.68	8.46	10.3	36.1	162	14.9	16.3	1.05
MAX	873	34	5.5	7.0	8.8	10	16	294	1340	67	114	6.2
MIN	.03	3.5	3.7	5.5	6.3	7.5	6.6	2.9	8.5	2.5	.09	0
AC-FT	4720	491	265	390	426	520	613	2220	9670	915	1000	63

WTR YR 1975 TOTAL 10731.38 MEAN 29.4 MAX 1340 MIN 0 AC-FT 21290

PEAK DISCHARGE (BASE, 1,000 CFS)

DATE TIME G.H. DISCHARGE

06-27 1300 22.14 1,430

ARKANSAS RIVER BASIN

07142300 RATTLESNAKE CREEK NEAR MACKSVILLE, KS

LOCATION.--Lat 37°52'20", long 98°52'30", in SW¼SW¼ sec.16, T.25 S., R.14 W., Stafford County, at downstream side of highway bridge, 8 mi (13 km) southeast of Macksville, and 87.5 mi (140.8 km) upstream from mouth.

DRAINAGE AREA.--784 mi² (2,030 km²), of which about 428 mi² (1,110 km²) is probably noncontributing.

PERIOD OF RECORD.--October 1959 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,963.46 ft (598.463 m), from Stafford County bench mark. Prior to July 14, 1960, non-recording gage and crest-stage gages at same site and datum.

AVERAGE DISCHARGE.--16 years, 36.8 ft³/s (1.042 m³/s), 26,660 acre-ft/yr (32.9 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,800 ft³/s (79.3 m³/s) June 25, gage height, 9.70 ft (2.957 m); minimum, 26 ft³/s (0.74 m³/s) Aug. 12, 13.

Period of record: Maximum discharge, 17,700 ft³/s (501 m³/s) Sept. 26, 1973, gage height, 11.02 ft (3.359 m); minimum, 0.10 ft³/s (0.022 m³/s) Sept. 20, 1968.

REMARKS.--Records good, except those for winter periods, which are fair.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35	44	41	39	40	42	39	39	49	237	44	169
2	34	45	41	40	45	42	39	40	46	137	41	59
3	34	46	41	42	50	41	38	40	45	97	38	47
4	33	46	41	44	50	41	37	40	43	85	36	43
5	33	46	41	44	48	41	36	40	42	77	35	41
6	35	44	42	46	45	41	37	39	43	71	33	40
7	35	43	43	46	40	41	38	38	50	67	31	38
8	36	44	41	45	38	41	39	37	52	62	30	37
9	36	44	41	45	40	41	39	37	50	61	31	35
10	35	45	41	44	42	41	39	36	47	59	29	35
11	35	45	43	43	45	41	39	36	46	57	28	35
12	36	44	44	43	48	42	39	36	45	56	27	35
13	40	43	43	44	43	42	42	40	45	54	28	34
14	40	42	42	46	42	41	49	42	43	51	32	34
15	39	42	42	48	42	41	48	41	43	50	31	35
16	38	42	42	46	40	41	45	39	42	49	30	36
17	38	42	42	45	38	41	43	38	52	47	29	36
18	37	42	42	44	40	42	42	37	60	46	48	35
19	37	43	43	43	42	41	42	36	313	46	363	35
20	37	43	43	42	42	41	41	35	243	46	266	34
21	36	42	42	42	43	41	41	34	86	45	90	34
22	37	42	42	42	45	41	40	36	69	44	59	34
23	37	42	42	42	43	41	41	40	89	42	50	34
24	37	42	41	41	43	41	41	38	648	41	46	34
25	39	42	41	41	44	40	41	37	2,150	40	44	34
26	41	42	41	41	43	40	41	35	703	39	42	34
27	41	42	41	41	42	43	41	35	369	37	40	34
28	41	43	40	40	42	45	41	39	224	36	39	34
29	41	42	39	40	-----	41	41	57	1,240	35	38	34
30	42	41	38	40	-----	40	40	60	463	35	56	34
31	43	-----	38	40	-----	39	-----	52	-----	39	385	-----
TOTAL	1,158	1,295	1,284	1,329	1,205	1,277	1,219	1,229	7,440	1,888	2,119	1,233
MEAN	37.4	43.2	41.4	42.9	43.0	41.2	40.6	39.6	248	60.9	68.4	41.1
MAX	43	46	44	48	50	45	49	60	2,150	237	385	169
MIN	33	41	38	39	38	39	36	34	42	35	27	34
AC-FT	2,300	2,570	2,550	2,640	2,390	2,530	2,420	2,440	14,760	3,740	4,200	2,450

CAL YR 1974 TOTAL 22,029 MEAN 60.4 MAX 266 MIN 33 AC-FT 43,690
WTR YR 1975 TOTAL 22,676 MEAN 62.1 MAX 2,150 MIN 27 AC-FT 44,980

PEAK DISCHARGE (BASE, 100 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
06-19	1200	8.10	486	08-19	1400	8.28	552
06-25	0500	9.70	2,800	08-31	0400	8.20	520
06-29	0600	9.55	2,220				

ARKANSAS RIVER BASIN

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07142575 RATTLESNAKE CREEK NEAR ZENITH, KS

LOCATION.--Lat 38°06'01", long 98°30'32", in SW $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.26, T.22 S., R.11 W., Stafford County, at downstream side of highway bridge, 1.1 mi (1.8 km) upstream from Little Salt Marsh, 10.0 mi (16.1 km) north of Zenith, and at mile 19.3 (31.1 km).

DRAINAGE AREA.--1,052 mi² (2,725 km²), of which 519 mi² (1,344 km²) are noncontributing.

PERIOD OF RECORD.--May 1973 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,785 ft (544 m), from topographic map.

EXTREMES.--Current year: Maximum discharge, 1,420 ft³/s (40.2 m³/s) June 28, gage height, 7.27 ft (2.216 m); minimum, 18 ft³/s (0.51 m³/s) Aug. 13, 14.

Period of record: Maximum discharge, 18,200 ft³/s (515 m³/s) Sept. 26, 1973, gage height, 9.95 ft (3.033 m); minimum, 18 ft³/s (0.51 m³/s) Aug. 13, 14, 1975.

REMARKS.--Records good except those for period Oct. 31 to Feb. 24, which are poor.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	51	75	60	85	72	91	84	67	111	545	36	52
2	49	72	80	80	71	89	83	71	94	854	40	69
3	48	80	90	75	73	86	85	74	77	467	38	192
4	47	74	85	75	70	84	81	75	67	290	35	176
5	47	77	82	80	80	81	80	73	62	208	32	93
6	47	76	82	85	70	80	79	71	59	159	29	70
7	47	71	82	86	70	80	77	69	58	117	27	63
8	45	66	75	81	70	78	83	67	57	109	25	58
9	41	70	85	86	70	78	80	65	60	99	23	54
10	42	70	86	80	80	80	78	64	66	88	22	51
11	39	68	86	75	85	81	77	64	66	82	21	54
12	42	66	88	70	90	84	74	64	63	78	20	53
13	47	66	84	80	95	84	79	66	60	74	19	51
14	45	65	84	90	90	85	106	73	56	70	20	49
15	48	64	80	95	90	85	113	69	52	65	21	50
16	50	62	80	95	90	84	106	66	51	63	24	51
17	51	60	80	95	80	83	99	62	58	60	24	53
18	49	61	85	90	80	83	94	59	56	58	32	53
19	48	62	85	86	85	80	87	56	58	56	38	51
20	44	63	85	83	100	77	84	53	59	54	180	50
21	48	63	83	81	100	75	83	50	68	52	416	48
22	48	62	78	79	98	75	81	50	111	50	402	46
23	49	60	78	78	100	74	79	51	248	50	287	44
24	49	64	75	77	100	73	79	52	227	48	167	43
25	59	66	70	77	101	73	77	55	136	46	100	43
26	68	66	75	75	104	74	75	53	127	44	76	42
27	86	66	80	74	104	86	74	51	617	42	70	41
28	84	64	90	73	97	95	73	57	1,270	40	65	41
29	80	60	92	72	-----	92	71	68	776	38	63	42
30	80	55	93	72	-----	90	68	95	442	36	59	40
31	76	-----	95	72	-----	86	-----	112	-----	35	54	-----
TOTAL	1,654	1,994	2,553	2,502	2,415	2,546	2,489	2,022	5,312	4,077	2,465	1,823
MEAN	53.4	66.5	82.4	80.7	86.3	82.1	83.0	65.2	177	132	79.5	60.8
MAX	86	80	95	95	104	95	113	112	1,270	854	416	192
MIN	39	55	60	70	70	73	68	50	51	35	19	40
AC-FT	3,280	3,960	5,060	4,960	4,790	5,050	4,940	4,010	10,540	8,090	4,890	3,620

CAL YR 1974 TOTAL 36,095 MEAN 98.9 MAX 315 MIN 27 AC-FT 71,590
WTR YR 1975 TOTAL 31,852 MEAN 87.3 MAX 1,270 MIN 19 AC-FT 63,180

PEAK DISCHARGE (BASE, 100 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
02-26	2400	4.01	105	06-28	0800	7.27	1,420
04-15	0400	4.00	116	07-02	0400	6.86	980
05-31	1400	4.06	113	08-21	1400	5.60	440
06-23	1800	4.94	276	09-03	1800	4.40	218

ARKANSAS RIVER BASIN

07142620 RATTLESNAKE CREEK NEAR RAYMOND, KS

LOCATION.--Lat 38°13'50", long 98°25'00", in SW¼NW¼ sec.15, T.21 S., R.10 W., Rice County, at downstream side of highway bridge, 3.5 mi (5.6 km) south of Raymond, and 5.4 mi (8.7 km) upstream from mouth.

DRAINAGE AREA.--1,167 mi² (3,023 km²), of which 569 mi² (1,474 km²) is probably noncontributing.

PERIOD OF RECORD.--April 1960 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,701.64 ft (518.660 m) above mean sea level. Prior to July 27, 1960, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--15 years, 62.1 ft³/s (1.759 m³/s), 44,990 acre-ft/yr (55.5 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 444 ft³/s (12.6 m³/s) July 4, gage height, 6.09 ft (1.856 m); minimum, 5.7 ft³/s (0.16 m³/s) Oct. 3, 4.

Period of record: Maximum discharge, 2,140 ft³/s (60.6 m³/s) Sept. 29, 1973, gage height, 8.74 ft (2.664 m); no flow at times in 1964, 1968, 1969.

Flood of Sept. 29, 1973 was the maximum known since at least 1891, from information by local resident.

REMARKS.--Records fair except those for winter periods, which are poor. Flow regulated by salt refinement operations and by sportsmens' dams upstream.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	61	65	81	82	128	90	72	107	377	26	96
2	13	61	70	83	89	124	83	75	115	391	24	85
3	6.4	66	70	77	89	119	87	76	118	410	23	77
4	13	67	65	84	99	115	91	76	112	438	24	84
5	20	67	64	82	90	114	93	78	102	425	26	104
6	21	67	65	86	80	108	88	75	98	363	23	99
7	18	68	64	88	78	101	87	71	92	277	23	90
8	22	68	61	86	76	101	88	68	87	207	24	87
9	12	69	61	90	74	105	82	65	91	165	20	82
10	18	74	72	91	95	106	77	62	89	145	18	78
11	33	73	69	80	120	106	59	62	90	127	17	62
12	43	72	69	75	115	106	63	59	91	110	17	50
13	50	73	70	90	115	97	86	66	86	99	15	57
14	50	70	71	115	112	97	97	66	80	89	14	55
15	46	70	67	110	111	97	102	66	76	75	12	57
16	48	70	60	110	100	96	107	67	78	70	12	57
17	48	70	60	107	95	97	111	71	78	59	13	59
18	49	69	62	107	90	94	111	69	73	55	13	62
19	42	67	62	106	90	90	103	67	76	50	17	54
20	37	67	61	107	110	94	101	65	71	46	20	50
21	29	67	60	105	120	93	100	59	72	43	24	47
22	37	67	61	99	124	90	92	41	73	41	69	44
23	38	67	57	99	120	91	94	49	87	39	120	43
24	33	66	47	96	120	84	89	53	114	39	154	41
25	44	66	44	94	133	79	82	53	134	34	160	40
26	48	66	50	92	129	82	86	60	142	33	144	39
27	49	66	60	93	132	98	89	53	168	32	135	39
28	54	66	70	88	130	92	84	66	196	31	128	38
29	54	64	77	90	-----	90	76	76	256	29	130	38
30	55	60	75	88	-----	93	72	92	337	28	119	37
31	61	-----	78	86	-----	96	-----	98	-----	28	109	-----
TOTAL	1,119.4	2,024	1,987	2,885	2,918	3,083	2,670	2,076	3,389	4,355	1,673	1,851
MEAN	36.1	67.5	64.1	93.1	104	99.5	89.0	67.0	113	140	54.0	61.7
MAX	61	74	78	115	133	128	111	98	337	438	160	104
MIN	6.4	60	44	75	74	79	59	41	71	28	12	37
AC-FT	2,220	4,010	3,940	5,720	5,790	6,120	5,300	4,120	6,720	8,640	3,320	3,670
CAL YR 1974	TOTAL 40,901.6	MEAN 112	MAX 405	MIN 5.5	AC-FT 81,130							
WTR YR 1975	TOTAL 30,030.4	MEAN 82.3	MAX 438	MIN 6.4	AC-FT 59,570							

PEAK DISCHARGE (REGULATED) ABOVE 100 CFS

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
01-14	--	--	115	06-03	0500	4.30	124
02-11	--	--	120	07-04	1600	6.09	444
02-24	2300	4.62	164	08-25	1000	4.54	161
04-17	1200	4.19	112	09-05	2000	4.00	107

07142860 COW CREEK NEAR CLAFLIN, KS

LOCATION.--Lat 38°31'20", long 98°35'00", in NE¼NW¼ sec.6, T.18 S., R.11 W., Barton County, at downstream side of bridge on State Highway 4, 2.5 mi (4.0 km) west of Claflin, and at mile 97.8 (157.4 km).

DRAINAGE AREA.--43 mi² (111 km²).

PERIOD OF RECORD.--October 1966 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,780.90 ft (542.818 m) above mean sea level.

AVERAGE DISCHARGE.--9 years, 9.45 ft³/s (0.268 m³/s), 6,850 acre-ft/yr (8.45 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 5,060 ft³/s (143 m³/s) Aug. 29, gage height, 16.15 ft (4.923 m), from rating curve extended as explained below; minimum, 0.02 ft³/s (0.001 m³/s) Oct. 4, 5.

Period of record: Maximum discharge, 5,060 ft³/s (143 m³/s) Aug. 29, 1975, gage height, 16.15 ft (4.923 m), from rating curve extended above 2,000 ft³/s (65.1 m³/s) on basis of contracted-opening measurement of peak flow; no flow at times in most years.

REMARKS.--Records good.

REVISIONS.--The figures of maximum discharge for some water years have been revised, as shown in the following table. They supersede figures published in the Water-Supply Papers and WRD Kansas, as indicated.

	Water year	Date	Discharge (ft ³ /s) (m ³ /s)	Gage height (feet) (m)
WSP 2121	1969	Aug.24, 1969	2,410 (68.3)	14.00 (4.267)
WRD Kansas, Part I	1971	May 22, 1971	2,480 (70.2)	14.07 (4.289)
WRD Kansas, Part I	1974	May 25, 1974	2,190 (62.0)	13.73 (4.185)

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.03	4.0	.73	.73	2.1	3.8	3.3	1.2	20	5.0	.21	18
2	.04	3.8	.73	1.2	2.1	3.2	2.9	1.1	10	2.5	.30	11
3	.05	11	.73	1.7	2.1	3.0	2.2	147	5.0	1.5	.30	3.1
4	.03	8.4	.73	1.7	3.0	2.8	2.0	32	2.5	1.2	.25	1.5
5	2.5	5.8	.73	1.7	3.5	2.6	2.0	9.3	2.0	1.0	.19	1.3
6	29	5.8	1.0	1.7	3.0	2.6	2.0	5.8	2.0	.90	.17	1.2
7	24	4.2	1.0	1.7	2.6	2.6	1.7	3.6	100	.80	.13	1.0
8	6.8	3.8	1.0	1.7	2.1	2.3	1.7	2.2	15	.70	.11	.74
9	.73	3.2	1.0	1.7	1.7	2.3	1.7	1.8	25	.65	.13	.74
10	.09	2.6	1.0	2.1	1.5	2.3	1.4	1.5	10	.60	.13	.80
11	.05	3.2	1.0	1.7	1.2	2.1	1.3	1.4	5.0	.55	.11	.80
12	1.8	2.6	1.0	1.5	1.2	1.9	1.3	1.3	3.5	.50	.04	.69
13	141	1.9	1.0	1.0	1.2	1.5	1.5	1.4	2.5	.45	.07	.64
14	31	.73	1.0	1.2	1.2	1.5	8.6	1.5	2.0	.45	224	.58
15	12	.73	1.0	1.5	1.2	1.5	15	1.5	1.7	.45	59	.64
16	5.5	.66	1.0	2.3	1.0	1.7	7.2	1.5	1.6	.40	6.4	.69
17	2.6	.66	.80	2.6	.80	2.6	5.0	1.4	1.5	.40	2.7	1.5
18	.66	.66	.80	2.6	.80	3.2	3.3	1.2	1.5	.40	17	1.2
19	.46	.60	.80	3.2	.80	4.8	3.1	1.1	1.5	.40	53	.90
20	.26	.60	.80	3.8	.80	4.8	2.5	1.0	1.5	.40	25	.80
21	.19	.60	1.2	3.8	1.0	4.2	2.0	.80	2.2	.36	5.0	.80
22	.12	.60	1.9	3.8	1.9	3.2	1.8	.74	23	.42	2.0	.64
23	.12	.60	1.2	3.5	1.7	3.0	1.8	.80	24	.36	1.0	.58
24	.12	.60	1.0	3.5	1.7	2.3	1.7	.80	13	.36	.50	.52
25	.12	.60	.80	3.5	4.0	2.1	1.6	1.1	5.0	.30	.35	.36
26	.32	.66	.73	3.5	5.0	1.5	1.6	5.7	2.5	.25	.30	.42
27	.53	.73	.73	3.2	5.0	2.8	2.5	2.2	1.5	.23	.21	.42
28	.53	.73	.73	3.0	4.2	12	1.8	1.7	150	.30	.21	.30
29	.60	.73	.73	2.6	---	8.4	1.4	15	40	.23	1700	.30
30	.73	.73	.73	2.3	---	5.5	1.3	188	10	.21	376	.42
31	6.1	---	.73	2.6	---	4.0	---	210	---	.21	31	---
TOTAL	268.08	71.52	28.33	72.63	58.40	102.1	87.2	645.64	485.0	22.48	2505.81	52.58
MEAN	8.65	2.38	.91	2.34	2.09	3.29	2.91	20.8	16.2	.73	80.8	1.75
MAX	141	11	1.9	3.8	5.0	12	15	210	150	5.0	1700	18
MIN	.03	.60	.73	.73	.80	1.5	1.3	.74	1.5	.21	.04	.30
AC-FT	532	142	56	144	116	203	173	1280	962	45	4970	104
CAL YR 1974	TOTAL	5082.56	MEAN	13.9	MAX	887	MIN	0	AC-FT	10080		
WTR YR 1975	TOTAL	4399.77	MEAN	12.1	MAX	1700	MIN	.03	AC-FT	8730		

PEAK DISCHARGE (BASE, 250 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
05-03	1600	7.49	289	08-14	1800	8.06	359
05-31	0200	9.12	524	08-29	1400	16.15	5,060
06-28	UNKNOWN	7.72	316				

ARKANSAS RIVER BASIN

07142900 BLOOD CREEK NEAR BOYD, KS

LOCATION.--Lat 38°32'10", Long 98°51'35", in NE¼NW¼ sec.34, T.17 S., R.14 W., Barton County, at downstream side of bridge on State Highway 4, 1.3 mi (2.1 km) northwest of Boyd, 4.8 mi (7.7 km) northwest of Hoisington, and 11.9 mi (19.1 km) upstream from Cheyenne Bottoms.

DRAINAGE AREA.--61 mi² (158 km²).

PERIOD OF RECORD.--Annual maximum, water years 1957-62. March 1962 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,834.947 ft (559.292 m) above mean sea level. Prior to Mar. 23, 1962, crest-stage gage at site 0.7 mi (1.1 km) upstream at different datum.

AVERAGE DISCHARGE.--13 years, 8.60 ft³/s (0.244 m³/s), 6,230 acre-ft/yr (7.68 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 712 ft³/s (20.2 m³/s) June 27, gage height, 12.23 ft (3.728 m); minimum, 0.03 ft³/s (0.001 m³/s) Sept. 3, 4.

Period of record: Maximum discharge, 3,860 ft³/s (109 m³/s) June 29, 1967, gage height, 14.87 ft (4.532 m); no flow at times during most years.

REMARKS.--Records fair.

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTMRER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.72	1.1	.97	1.2	1.1	6.2	1.4	.74	6.8	4.4	.24	.07
2	.74	1.1	.95	1.2	1.1	1.8	1.4	2.9	3.7	2.1	.22	.04
3	.74	3.6	.95	1.3	1.2	1.7	1.4	25	2.7	1.4	.24	.04
4	.79	1.8	.97	1.3	1.4	1.6	1.5	2.2	2.0	1.2	.22	.04
5	1.8	1.2	1.0	1.3	1.4	1.6	1.5	1.3	1.4	1.0	.18	.05
6	12	1.0	1.0	1.2	1.2	1.6	1.5	1.3	1.2	.96	.14	.05
7	1.4	.95	1.0	1.3	1.1	1.6	1.4	1.1	5.4	1.0	.12	.06
8	.97	.95	1.0	1.3	1.1	1.5	1.4	1.0	87	1.1	.10	.05
9	.90	.95	1.0	1.4	1.1	1.5	1.2	1.0	90	1.1	.14	.05
10	.92	1.0	.97	1.4	1.1	1.6	1.2	1.0	8.6	1.2	.12	.07
11	1.0	1.0	.97	1.3	1.1	1.7	1.2	1.0	4.4	1.1	.10	.10
12	5.9	.95	1.0	1.3	1.1	1.6	1.2	1.0	2.5	1.1	.10	.14
13	11	.95	1.0	1.3	1.1	1.6	1.6	1.4	1.6	1.0	.10	.14
14	1.4	.92	1.1	1.4	1.1	1.5	2.4	1.4	1.2	.96	.16	.14
15	.87	.92	1.1	1.4	1.1	1.5	1.8	1.4	1.1	.96	.26	.18
16	.82	.95	1.1	1.4	1.1	1.6	1.5	1.3	1.1	.80	.28	.18
17	.79	1.0	1.1	1.4	1.1	1.7	1.4	1.1	1.3	.77	.30	.20
18	.82	1.0	1.1	1.4	1.1	1.9	1.2	1.1	1.5	.71	.48	.22
19	.74	1.0	1.1	1.4	1.1	1.8	1.2	1.0	1.6	.74	8.2	.22
20	.77	1.0	1.2	1.4	1.2	1.7	1.1	.96	1.4	.74	.42	.20
21	.79	1.0	1.2	1.4	1.2	1.6	1.0	.92	1.5	.71	.16	.20
22	.84	.97	1.2	1.2	1.2	1.5	1.0	.92	1.6	.50	.10	.20
23	.84	.97	1.2	1.2	1.2	1.5	1.0	1.1	7.7	.50	.08	.16
24	.87	.95	1.1	1.2	1.2	1.4	1.0	1.0	3.8	.42	.06	.18
25	.90	.95	1.1	1.3	1.2	1.2	.97	.96	1.6	.36	.05	.18
26	.97	.95	1.1	1.2	1.3	1.2	.92	31	1.3	.30	.04	.18
27	1.1	.95	1.2	1.2	1.4	1.4	.92	2.9	217	.28	.05	.18
28	1.2	.97	1.2	1.2	1.5	1.5	.97	2.3	194	.30	.07	.18
29	1.8	.97	1.2	1.2	---	1.4	.90	83	20	.30	.14	.20
30	1.4	.97	1.2	1.1	---	1.3	.82	220	7.6	.24	.12	.20
31	1.4	---	1.2	1.1	---	1.4	---	39	---	.22	.10	---
TOTAL	57.20	32.99	33.48	39.9	33.1	52.7	38.00	432.30	682.6	28.47	13.09	4.10
MEAN	1.85	1.10	1.08	1.29	1.18	1.70	1.27	13.9	22.8	.92	.42	.14
MAX	12	3.6	1.2	1.4	1.5	6.2	2.4	220	217	4.4	8.2	.22
MIN	.72	.92	.95	1.1	1.1	1.2	.82	.74	1.1	.22	.04	.04
AC-FT	113	65	66	79	66	105	75	857	1350	56	26	8.1

CAL YR 1974 TOTAL 4203.35 MEAN 11.5 MAX 746 MIN .49 AC-FT 8340
WTR YR 1975 TOTAL 1447.93 MEAN 3.97 MAX 220 MIN .04 AC-FT 2870

PEAK DISCHARGE (BASE, 250 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
05-30	1400	10.53	373	06-27	2000	12.23	712
06-08	2400	10.30	350				

ARKANSAS RIVER BASIN

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07143300 COW CREEK NEAR LYONS, KS

LOCATION.--Lat 38°18'30", long 98°11'30", in SW¼SE¼ sec.15, T.20 S., R.8 W., Rice County, at downstream side of Missouri Pacific Railroad bridge, 500 ft (150 m) downstream from Little Cow Creek, 3.0 mi (4.8 km) south of Lyons, and 33 mi (53 km) upstream from mouth.

DRAINAGE AREA.--728 mi² (1,890 km²), includes 229 mi² (593 km²) in Cheyenne Bottoms, closed basin.

PERIOD OF RECORD.--October 1937 to September 1951. Occasional low-flow measurements, water years 1954-60. Annual maximum, water years 1960-61. October 1961 to current year. Prior to April 1938, monthly discharge only, published in WSP 1311.

GAGE.--Water-stage recorder. Datum of gage is 1,628.16 ft (496.263 m) above mean sea level (levels by Corps of Engineers). Prior to July 3, 1938, nonrecording gage at present site and datum. July 3, 1938, to Sept. 30, 1951, water-stage recorder at site 60 ft (18 m) upstream at same datum. October 1959, to Mar. 12, 1962, crest-stage gage at present site and datum.

AVERAGE DISCHARGE.--28 years, 89.4 ft³/s (2.532 m³/s), 64,770 acre-ft/yr (79.9 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 5,980 ft³/s (169 m³/s) Aug. 30, gage height, 18.08 ft (5.511 m); minimum, 13 ft³/s (0.368 m³/s) Aug. 10, 13, 26, 27.

Period of record: Maximum discharge, 24,100 ft³/s (683 m³/s) Sept. 26, 1973, gage height, 20.38 ft (6.212 m), from rating curve extended above 7,200 ft³/s (200 m³/s); no flow at times during 1938, 1946.

Maximum stage known, 22.75 ft (6.934 m) July 11, 1929, from information by Missouri Pacific Railroad Co. Flood on Oct. 20, 1941 reached a stage of 20.49 ft (6.245 m), discharge, 12,400 ft³/s (351 m³/s), from rating curve extended above 2,700 ft³/s (76.5 m³/s).

REMARKS.--Records fair except those for winter periods, which are poor. Natural flow of stream affected by releases from Cheyenne Bottoms, which in turn is affected by diversions from Arkansas River and Walnut Creek. Records of suspended sediment loads for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 877: 1938(M). WSP 1117: Drainage area. WSP 1177: 1950(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	428	19	21	25	523	51	40	963	405	16	1320
2	21	198	20	21	24	183	47	40	746	128	18	304
3	21	67	22	20	24	87	45	31	136	114	17	112
4	20	57	22	21	34	57	39	22	100	132	17	80
5	22	44	22	22	66	44	44	123	121	123	17	64
6	84	38	23	22	81	39	40	88	118	117	16	51
7	971	34	23	22	90	36	31	37	120	112	15	43
8	1000	31	23	23	65	33	30	26	298	108	14	39
9	161	30	22	24	45	31	29	22	521	106	14	35
10	56	29	22	23	33	31	26	20	307	105	13	37
11	37	28	25	22	31	32	37	19	173	101	14	58
12	31	26	23	21	32	32	39	18	103	94	14	42
13	166	24	23	20	31	32	42	22	70	90	13	38
14	840	23	22	21	31	31	50	30	49	90	14	42
15	635	22	22	23	29	30	54	21	40	88	30	35
16	144	23	23	24	28	30	52	22	45	66	339	33
17	60	23	22	26	27	34	59	23	56	33	124	33
18	39	22	21	27	26	47	58	19	228	27	50	47
19	31	22	22	27	26	60	49	17	118	24	122	49
20	25	22	23	30	26	62	44	15	41	22	66	68
21	20	22	22	29	27	54	45	15	31	22	48	45
22	18	21	21	29	28	55	41	14	78	21	51	33
23	17	21	22	29	29	51	34	14	384	22	24	28
24	17	21	21	28	30	46	38	14	479	22	18	25
25	46	21	20	30	32	41	30	15	369	19	14	24
26	293	21	20	30	41	43	43	16	168	19	13	22
27	251	22	21	29	133	50	39	15	1200	18	13	21
28	83	20	21	30	449	61	25	28	4320	18	16	20
29	198	21	22	29	---	139	21	30	2540	18	896	20
30	215	20	21	27	---	80	25	30	1470	18	3020	20
31	297	---	21	25	---	61	---	386	---	18	4200	---
TOTAL	5840	1401	676	775	1543	2135	1207	1232	15392	2300	9256	2788
MEAN	188	46.7	21.8	25.0	55.1	68.9	40.2	39.7	513	74.2	299	92.9
MAX	1000	428	25	30	449	523	59	386	4320	405	4200	1320
MIN	17	20	19	20	24	30	21	14	31	18	13	20
AC-FT	11580	2780	1340	1540	3060	4230	2390	2440	30530	4560	18360	5530

CAL YR 1974 TOTAL 69948 MEAN 192 MAX 6080 MIN 10 AC-FT 138700
WTR YR 1975 TOTAL 44545 MEAN 122 MAX 4320 MIN 13 AC-FT 88360

PEAK DISCHARGE (BASE, 1,200 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
10-08	0400	15.61	1,280	08-30	2300	18.08	5,980
06-28	0100	18.01	5,560				

ARKANSAS RIVER BASIN

07143330 ARKANSAS RIVER NEAR HUTCHINSON, KS

LOCATION.--Lat 37°56'47", long 97°46'29", in SW¼NW¼SW¼ sec.21, T.24 S., R.4 W., Reno County, at downstream side of highway bridge, 3.0 mi (4.8 km) north of Haven, 4.5 mi (7.2 km) downstream from Cow Creek, 11 mi (17.7 km) southeast of Hutchinson, and at mile 800.3 (1,287.7 km).

DRAINAGE AREA.--38,910 mi² (100,780 km²), of which 7,186 mi² (18,612 km²) is probably noncontributing.

PERIOD OF RECORD.--October 1959 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,454.10 ft (443.210 m) above mean sea level. Prior to June 22, 1960, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--16 years, 683 ft³/s (19.34 m³/s), 494,800 acre-ft/yr (610 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,960 ft³/s (112 m³/s) June 30, gage height, 7.09 ft (2.161 m); minimum, 178 ft³/s (5.04 m³/s) Oct. 5, 6.

Period of record: Maximum discharge, 24,700 ft³/s (700 m³/s) Sept. 28, 1973, gage height, 12.95 ft (3.947 m); minimum, 30 ft³/s (0.85 m³/s) Oct. 4, 5, 1964.

Maximum stage since at least 1901, that of Sept. 28, 1973, from information by local resident.

REMARKS.--Records fair. Flow slightly regulated by John Martin Reservoir (see sta 07130000). Records of chemical and biological analyses, water temperatures, suspended sediment loads, and specific conductance for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	191	550	286	308	340	725	430	320	471	3,620	222	1,580
2	190	606	278	308	338	904	409	324	859	3,150	225	3,240
3	190	737	281	307	343	826	387	340	1,400	2,440	218	2,300
4	182	536	285	303	402	549	358	339	1,170	1,400	212	1,200
5	178	438	286	314	381	483	352	333	654	1,150	210	504
6	184	404	314	308	382	447	340	320	515	1,050	209	403
7	189	398	332	305	328	417	340	352	494	926	198	330
8	229	398	309	312	300	393	363	348	549	793	198	303
9	776	408	288	315	300	405	345	310	1,160	728	202	290
10	1,300	417	287	334	350	438	334	299	1,030	606	202	284
11	710	416	328	317	400	438	319	286	1,010	558	201	275
12	487	401	327	300	454	438	305	277	750	551	190	258
13	445	391	314	250	505	431	323	317	596	556	190	248
14	386	382	306	300	479	413	365	325	555	509	194	231
15	487	368	305	360	437	396	382	301	489	511	198	224
16	930	362	308	367	411	392	391	296	450	521	196	222
17	940	362	307	347	300	394	392	282	462	469	194	244
18	558	362	313	340	350	404	394	275	447	425	363	240
19	452	362	313	345	400	404	381	272	484	382	364	231
20	404	356	306	334	472	411	358	282	535	351	300	223
21	380	350	305	338	498	432	338	288	473	344	290	226
22	362	345	308	340	454	438	341	293	440	324	259	231
23	356	339	312	340	428	429	357	305	509	310	246	234
24	356	327	313	344	417	397	365	298	766	298	264	228
25	356	319	281	345	422	373	372	285	994	279	295	218
26	356	321	258	344	440	366	377	311	991	269	319	211
27	392	321	285	340	450	404	363	295	1,650	261	324	210
28	566	318	285	333	571	409	354	295	2,950	246	315	193
29	550	302	285	327	-----	409	348	320	3,490	236	452	204
30	445	295	292	332	-----	401	334	399	3,910	222	800	207
31	422	-----	308	340	-----	443	-----	468	-----	222	1,080	-----
TOTAL	13,949	11,891	9,305	10,097	11,352	14,209	10,817	9,755	30,253	23,707	9,130	14,992
MEAN	450	396	300	326	405	458	361	315	1,008	765	295	500
MAX	1,300	737	332	367	571	904	430	468	3,910	3,620	1,080	3,240
MIN	178	295	258	250	300	366	305	272	440	222	190	193
AC-FT	27,670	23,590	18,460	20,030	22,520	28,180	21,460	19,350	60,010	47,020	18,110	29,740

CAL YR 1974 TOTAL 311,457 MEAN 853 MAX 7,160 MIN 178 AC-FT 617,800
WTR YR 1975 TOTAL 169,457 MEAN 464 MAX 3,910 MIN 178 AC-FT 336,100

PEAK DISCHARGE (BASE, 1,800 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
06-30	0500	7.09	3,960	09-02	1000	6.82	3,480

ARKANSAS RIVER BASIN

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07143665 LITTLE ARKANSAS RIVER AT ALTA MILLS, KS

LOCATION.--Lat 38°06'44", long 97°35'30", in SW 1/4 NW 1/4 sec. 30, T.22 S., R.2 W., Harvey County, at downstream side of county highway bridge, 0.4 mi (0.6 km) south of Alta Mills, 0.8 mi (1.3 km) downstream from Sand Creek, and at mile 50.1 (80.6 km).

DRAINAGE AREA.--736 mi² (1,910 km²), of which 55 mi² (140 km²) is noncontributing.

PERIOD OF RECORD.--June 1973 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,395 ft (425.2 m), from topographic map.

EXTREMES.--Maximum discharge, 3,360 ft³/s (95.2 m³/s) June 25, gage height, 18.06 ft (5.505 m); minimum, 9.0 ft³/s (0.25 m³/s) Aug. 25, 26, 27, Sept. 29, 30.

Period of record: Maximum discharge, 15,300 ft³/s (433 m³/s) Oct. 12, 1973, gage height, 27.42 ft (8.358 m) from rating curve extended above 7,000 ft³/s (198 m³/s); minimum, 9.0 ft³/s (0.25 m³/s) Aug. 25, 26, 27, Sept. 29, 30, 1975.

REMARKS.--Records good except those for winter periods and period of no gage-height record, which are poor.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	306	20	22	27	970	37	22	132	1680	12	200
2	13	289	18	21	26	748	34	22	262	365	27	82
3	12	228	19	20	26	318	30	21	225	193	39	50
4	12	369	20	20	76	152	30	20	338	126	25	35
5	12	256	20	21	135	100	31	19	225	94	21	31
6	12	149	21	22	80	78	32	18	144	75	17	210
7	12	78	22	23	50	67	31	17	76	62	14	170
8	141	51	22	25	40	62	32	16	89	53	12	60
9	189	41	22	24	35	60	32	15	444	48	12	34
10	47	38	23	23	30	56	37	14	514	42	13	23
11	26	37	25	22	30	50	35	13	833	39	12	18
12	19	37	26	23	30	49	32	15	357	34	10	16
13	19	36	27	25	31	50	30	25	109	44	10	14
14	17	34	26	26	32	52	31	30	70	33	16	34
15	359	30	24	26	27	50	46	25	52	28	16	27
16	199	28	23	24	25	52	66	20	41	24	18	20
17	52	27	22	26	24	60	72	19	74	22	17	16
18	33	25	22	29	23	128	60	18	733	20	22	15
19	24	25	22	31	23	235	44	17	685	20	41	14
20	20	24	22	32	24	163	39	16	177	19	35	14
21	17	23	22	35	24	97	34	15	86	17	23	13
22	16	24	22	30	25	65	31	14	626	17	19	12
23	16	24	22	32	26	51	30	13	2660	17	16	12
24	16	23	22	34	27	43	28	12	3160	18	13	11
25	16	23	18	35	30	38	27	15	3240	22	10	11
26	15	22	20	33	38	35	26	25	1860	19	9.0	11
27	16	22	21	30	99	34	25	70	408	13	9.0	10
28	180	21	20	29	719	35	24	150	1780	12	9.8	9.8
29	76	21	21	29	---	38	24	213	3010	12	880	9.2
30	121	20	21	28	---	41	23	130	3110	10	1340	9.2
31	291	---	22	27	---	42	---	79	---	11	805	---
TOTAL	2012	2331	677	827	1782	4019	1053	1118	25520	3189	3522.8	1191.2
MEAN	64.9	77.7	21.8	26.7	63.6	130	35.1	36.1	851	103	114	39.7
MAX	359	369	27	35	719	970	72	213	3240	1680	1340	210
MIN	12	20	18	20	23	34	23	12	41	10	9.0	9.2
AC-FT	3990	4620	1340	1640	3530	7970	2090	2220	50620	6330	6990	2360

CAL YR 1974 TOTAL 116204.0 MEAN 318 MAX 8840 MIN 12 AC-FT 230500
WTR YR 1975 TOTAL 47242.0 MEAN 129 MAX 3240 MIN 9.0 AC-FT 93700

PEAK DISCHARGE (BASE, 1,000 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
02-28	2300	10.69	1,020	06-30	0300	17.93	3,310
06-25	0200	18.06	3,360	08-29	1700	12.58	1,440

NOTE: NO GAGE-HEIGHT RECORD APR. 26 TO MAY 28.

07144200 LITTLE ARKANSAS RIVER AT VALLEY CENTER, KS

LOCATION.--Lat 37°49'56", long 97°23'16", river gage is in NE¼NW¼SW¼ sec.36, T.25 S., R.1 W., Sedgwick County, at downstream side of highway bridge, 0.5 mi (0.8 km) west of Valley Center, and 17.5 mi (28.2 km) upstream from mouth. Little Arkansas River Floodway gage is in NE¼NE¼NE¼ sec.34, T.25 S., R.1 W., at downstream side of highway bridge, 1.2 mi (1.9 km) northwest of river gage.

DRAINAGE AREA.--1,327 mi² (3,437 km²), of which about 77 mi² (199 km²) is probably noncontributing.

PERIOD OF RECORD.--June 1922 to current year. Monthly discharge only for some periods, published in WSP 1311.

GAGE.--River gage is water-stage recorder. Datum of gage is 1,325.66 ft (404.061 m) above mean sea level. Prior to Feb. 12, 1935, nonrecording gage at site 2.0 mi (3.2 km) downstream at different datum. Feb. 12, 1935, to July 1, 1951, water-stage recorder, July 2, 1951, to Feb. 16, 1952, nonrecording gage, and Feb. 17, 1952, to Sept. 30, 1974, water-stage recorder at present site and at datum 2.00 ft (0.610 m) higher. Floodway gage is water-stage recorder. Datum of floodway gage is 1,340.00 ft (408.432 m) above mean sea level (levels by Wichita-Valley Center Flood Control project).

AVERAGE DISCHARGE.--53 years, 273 ft³/s (7.731 m³/s), 197,800 acre-ft/yr (244 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,640 ft³/s (74.8 m³/s) June 23 at river gage, gage height, 10.47 ft (3.191 m); 7,000 ft³/s (198 m³/s) June 23 at floodway gage, gage height, 9.45 ft (2.880 m); combined discharge, 9,620 ft³/s (272 m³/s) June 23; minimum, 47 ft³/s (1.33 m³/s) Sept. 28-30, but may have been less during construction period Aug. 8-29.

Period of record: Maximum discharge, 32,000 ft³/s (906 m³/s) Apr. 16, 1945, gage height, 24.05 ft (7.330 m), present datum, from rating curve extended above 12,000 ft³/s (340 m³/s) on basis of slope-area measurement of peak flow; minimum, 1.0 ft³/s (0.028 m³/s) Oct. 6, 1956.

REMARKS.--Combined records good. Natural flow of stream affected by diversions and ground-water withdrawal for irrigation and municipal supply. Since May 1957, part of high-water flow bypasses river gage through floodway channel for which separate records are computed; figures representing combined discharge are given herein. Records of chemical and bacteriological analyses for the current year are published in Part 2 of this report. Discharge, in cubic feet per second, through floodway occurred only on the days given on the following page.

REVISIONS (WATER YEARS).--WSP 1037: 1944. WSP 1117: Drainage area. WSP 1241: 1923, 1924-26(M), 1928-29(M), 1930(M, m), 1931(M), 1932(M, m), 1933(M), 1934, 1937(M), 1949(M). WSP 1711: 1958.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	65	305	87	83	243	2200	131	97	354	2510	53	637
2	64	296	83	84	138	2140	125	94	293	1610	58	247
3	63	1490	83	85	113	1100	121	94	1830	472	69	149
4	62	1670	81	80	394	486	140	93	1270	306	75	113
5	60	956	81	84	1240	329	142	91	592	247	61	134
6	58	384	85	80	478	300	129	89	350	210	57	134
7	56	267	96	83	250	274	141	86	253	208	52	243
8	56	205	91	96	210	226	1150	83	463	180	50	217
9	86	176	84	124	180	200	838	80	3230	161	50	125
10	168	200	83	167	170	191	265	79	1940	156	50	93
11	89	204	203	184	154	187	190	78	2440	143	50	96
12	65	174	351	118	132	179	162	75	1510	133	50	92
13	65	150	198	124	128	181	150	84	598	123	50	71
14	78	132	145	105	124	170	170	121	341	126	50	66
15	65	124	121	100	116	171	365	106	259	117	52	70
16	198	118	106	98	105	201	268	89	216	107	60	79
17	198	112	98	98	100	367	212	82	237	97	60	74
18	104	110	94	104	100	446	186	79	1270	91	75	69
19	75	107	91	102	102	327	168	75	876	86	72	65
20	65	104	89	109	101	321	149	72	652	84	70	61
21	58	101	88	112	105	259	137	69	334	82	68	58
22	56	100	87	106	112	203	129	67	2370	80	66	56
23	55	96	85	96	102	168	124	76	8170	75	64	55
24	54	94	82	98	99	147	121	81	4040	73	62	53
25	57	93	77	97	105	133	116	73	3210	72	60	51
26	61	92	77	92	123	124	112	160	2990	69	58	50
27	60	90	78	91	178	174	110	150	2130	67	56	50
28	58	94	80	86	783	326	110	180	720	63	55	48
29	136	106	79	83	---	202	110	1040	1380	57	155	47
30	136	90	78	84	---	149	105	564	2250	55	879	47
31	184	---	80	151	---	137	---	310	---	52	1130	---
TOTAL	2655	8240	3241	3204	6185	12018	6376	4517	46568	7912	3817	3350
MEAN	85.6	275	105	103	221	388	213	146	1552	255	123	112
MAX	198	1670	351	184	1240	2200	1150	1040	8170	2510	1130	637
MIN	54	90	77	80	99	124	105	67	216	52	50	47
AC-FT	5270	16340	6430	6360	12270	23840	12650	8960	92370	15690	7570	6640

CAL YR 1974 TOTAL 201873 MEAN 553 MAX 23200 MIN 46 AC-FT 400400
WTR YR 1975 TOTAL 108083 MEAN 296 MAX 8170 MIN 47 AC-FT 214400

PEAK DISCHARGE (BASE, 3,000 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
06-09	1200	--	3,560	06-23	0900	--	9,620

07144200 LITTLE ARKANSAS RIVER AT VALLEY CENTER, KS--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975, THROUGH FLOODWAY

NOV.	3	98	JUNE	9	860	JUNE	25	1190
	4	10		10	149		26	1020
MAR.	1	312		11	436		27	410
	2	255		12	7.2		29	148
JUNE	3	208		22	1080		30	758
	4	12		23	5620	JULY	1	922
	8	14		24	1820		2	292

ARKANSAS RIVER BASIN

07144300 ARKANSAS RIVER AT WICHITA, KS

LOCATION.--Lat 37°38'41", long 97°20'06", river gage is in SE $\frac{1}{4}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.5, T.28 S., R.1 E., Sedgwick County, at bridge on U.S. Highway 81 in Wichita, 3.7 mi (6.0 km) downstream from mouth of Little Arkansas River and at mile 759.7 (1,222 km). Big Slough-Cowskin Floodway gage is in sec.11, T.27 S., R.1 W., Sedgwick County, at downstream side of Bickel Avenue Bridge in Wichita, 1.0 mi (1.6 km) downstream from control structure and 6.5 mi (10.5 km) northwest of U.S. Highway 81 gage.

DRAINAGE AREA.--40,490 mi² (104,900 km²), of which 7,263 mi² (18,810 km²) is probably noncontributing.

PERIOD OF RECORD.--July 1934 to current year. Gage-height records collected at site 3.2 mi (5.1 km) upstream since 1897 are contained in reports of U.S. Weather Bureau.

GAGE.--River gage is water-stage recorder. Datum of gage is 1,267.42 ft (386.310 m) above mean sea level. See WSP 1921 for history of changes prior to Oct. 1, 1968. Floodway gage is water-stage recorder. Datum of floodway gage is 1,300.00 ft (396.240 m) above mean sea level (levels by Wichita-Valley Center Flood Control Project).

AVERAGE DISCHARGE.--41 years, 1,105 ft³/s (31.29 m³/s), 800,600 acre-ft/yr (987 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 9,950 ft³/s (282 m³/s) June 9 at river gage, gage height, 9.23 ft (2.813 m); 3,200 ft³/s (90.6 m³/s) June 9 at floodway gage, gage height, 10.29 ft (3.136 m); combined discharge 13,200 ft³/s (374 m³/s) June 9.

Minimum discharge at river gage, 215 ft³/s (6.09 m³/s) Aug. 13.

Period of record: Maximum discharge, 39,400 ft³/s (1,120 m³/s) Oct. 1, 1973; minimum, 3.0 ft³/s (0.085 m³/s) Sept. 3, 1934.

Floods of May 18, 1877, and July 8, 1904, reached stages of 21 ft (6.4 m) and 20.3 ft (6.19 m), respectively, river gage site and datum then in use (from reports of U.S. Weather Bureau).

REMARKS.--Records good. Flow slightly regulated by John Martin Reservoir since 1943 (see sta 07130000). Considerable low-flow regulation by City of Wichita dam 2.2 mi (3.5 km) upstream. Natural flow of stream affected by transmountain diversions, storage reservoirs, power developments, ground-water withdrawals, diversions for irrigation, and return flow from irrigated areas. Since May 1957, part of high-water flow bypasses river gage through floodway channel for which separate records are computed; figures representing floodway discharge and combined discharge are given herein. Discharge, in cubic feet per second, through floodway occurred only on the days given in the following table:

1975
June 9 2230 June 23 1490
10 386 24 157

REVISIONS (WATER YEARS).--WSP 1241: 1940, 1944. WSP 1341: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	274	1110	404	420	683	3280	610	428	1040	6490	344	2710
2	268	1400	388	436	570	4430	620	436	1180	5920	343	2870
3	250	2910	373	460	514	3790	600	460	4800	4600	335	3960
4	245	4300	366	436	772	2210	580	436	4710	3460	333	2960
5	235	3460	380	428	2200	1340	590	428	3020	2470	332	1890
6	240	1670	487	428	1600	1070	580	428	1670	2160	298	1070
7	230	1080	478	420	600	1000	694	420	1160	1960	278	798
8	235	844	452	444	683	844	1530	590	968	1830	256	913
9	245	738	444	478	396	760	2790	541	10600	1630	249	628
10	1100	749	444	560	469	772	1100	452	6780	1530	240	555
11	1810	784	796	650	620	738	672	436	5570	1350	245	515
12	1100	705	1250	412	630	716	570	412	4400	1210	228	466
13	856	630	928	292	784	694	532	856	2820	1110	424	403
14	694	560	694	366	683	683	541	650	1650	1040	416	388
15	590	532	590	469	620	661	738	590	1270	976	246	368
16	760	523	541	630	478	683	928	496	1190	898	248	338
17	1670	514	505	560	292	820	716	469	1160	802	251	356
18	1400	487	487	523	404	1200	661	428	1820	743	279	310
19	832	496	478	514	620	988	672	412	2290	696	454	360
20	650	478	469	487	661	904	620	396	1820	641	508	363
21	541	452	452	514	672	856	560	396	1430	630	424	350
22	478	452	436	496	661	749	505	566	1400	616	389	346
23	444	460	428	478	570	683	523	611	9070	541	331	343
24	436	444	412	478	532	620	541	457	6530	531	275	338
25	590	428	396	478	541	570	505	409	5240	518	276	326
26	444	420	380	460	560	541	505	1190	4890	486	292	309
27	444	436	373	452	705	796	505	912	4650	467	315	308
28	514	436	373	428	1460	964	487	2730	5000	448	324	303
29	760	444	388	428	---	844	452	3430	5080	401	628	296
30	1100	428	396	514	---	650	444	2300	6050	374	1140	295
31	832	---	436	487	---	600	---	1250	---	353	2500	---
TOTAL	20267	28370	15424	14626	19980	35456	21371	24015	109258	46881	13201	25435
MEAN	654	946	498	472	714	1144	712	775	3642	1512	426	848
MAX	1810	4300	1250	650	2200	4430	2790	3430	10600	6490	2500	3960
MIN	230	420	366	292	292	541	444	396	968	353	228	295
AC-FT	40200	56270	30590	29010	39630	70330	42390	47630	216700	92990	26180	50450

CAL YR 1974 TOTAL 603908 MEAN 1655 MAX 32300 MIN 230 AC-FT 1198000
WTR YR 1975 TOTAL 374284 MEAN 1025 MAX 10600 MIN 228 AC-FT 742400

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-04	0545	5.82	4,580	06-03	1200	7.71	7,040	07-01	1030	7.41	6,570
03-02	0945	5.79	4,550	06-09	1545	---	13,200	09-03	0345	5.42	4,100
05-28	1730	5.33	4,000	06-23	1515	---	10,600				

ARKANSAS RIVER BASIN

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07144550 ARKANSAS RIVER AT DERBY, KS

LOCATION.--Lat 37°32'34", long 97°16'31", in SE¼SW¼NW¼ sec.12, T.29 S., R.1 E., Sedgwick County, at highway bridge on the west edge of Derby, 0.9 mi (1.4 km) below mouth of bypass channel, and at mile 749.5 (1,205.9 km).

DRAINAGE AREA.--40,830 mi² (105,750 km²), of which 7,263 mi² (18,810 km²) is probably noncontributing.

PERIOD OF RECORD.--October 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,229.95 ft (374.889 m) above mean sea level (City of Wichita bench mark).

AVERAGE DISCHARGE.--7 years, 1,505 ft³/s (42.62 m³/s), 1,090,000 acre-ft/yr (1.34 km³/yr).

EXTREMES.--Current year: Maximum discharge, 11,600 ft³/s (329 m³/s) June 9, gage height, 9.59 ft (2.923 m); minimum, 286 ft³/s (8.10 m³/s) Aug. 13.

Period of record: Maximum discharge, 45,800 ft³/s (1,300 m³/s) Oct. 1, 1973, gage height, 15.51 ft (4.727 m); minimum, 105 ft³/s (2.97 m³/s) Aug. 23, 1972.

REMARKS.--Records good. Flow moderately regulated by John Martin Reservoir (see sta 07130000). Low flow regulated by City of Wichita low-water dam. Diversions above station for irrigation. Records for chemical and bacteriological analyses, water temperatures, and specific conductance for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	369	863	502	502	717	2,610	830	620	1,330	6,800	461	2,310
2	370	1,100	530	523	717	4,160	857	653	1,490	6,360	473	2,060
3	359	3,420	538	570	650	3,660	857	683	6,040	4,770	450	3,450
4	355	4,300	538	554	1,160	2,240	827	604	5,520	3,450	446	2,650
5	350	3,340	554	530	1,800	1,460	827	579	3,580	2,420	457	1,960
6	352	1,710	762	538	1,740	1,240	805	572	2,150	2,110	433	1,020
7	348	1,100	699	562	666	1,200	863	566	1,560	1,920	419	767
8	351	910	578	602	780	1,050	1,710	586	1,490	1,800	387	879
9	358	834	562	626	467	950	2,730	1,000	7,740	1,690	370	697
10	685	816	546	699	554	1,010	1,490	587	8,370	1,550	322	636
11	1,510	807	1,330	726	708	970	950	529	7,000	1,400	334	674
12	1,100	771	1,280	530	650	940	765	501	5,000	1,220	328	511
13	919	699	1,000	424	789	900	705	1,510	3,170	1,090	328	464
14	762	658	726	442	753	861	737	1,430	2,010	1,000	1,040	435
15	673	626	594	509	708	852	812	827	1,550	950	402	449
16	648	618	546	642	610	900	1,050	634	1,420	862	370	471
17	1,240	610	523	650	370	960	933	563	3,690	814	346	601
18	1,250	610	516	610	474	1,250	871	525	2,010	776	645	532
19	827	610	502	586	674	1,200	806	515	2,460	724	560	478
20	661	610	502	570	798	1,060	802	510	1,970	677	621	430
21	599	594	502	586	890	1,020	777	506	1,740	658	513	394
22	549	594	495	570	900	910	746	910	1,340	700	492	388
23	520	594	488	554	717	834	720	1,840	7,380	621	430	383
24	505	562	474	554	690	780	745	735	7,560	615	364	378
25	1,040	546	460	562	726	708	708	618	5,420	600	400	373
26	549	538	454	562	771	674	682	2,080	4,870	560	578	365
27	504	562	460	562	890	1,320	671	1,390	4,820	540	762	353
28	585	562	467	562	1,330	1,200	721	4,590	4,950	521	516	343
29	818	546	488	554	-----	1,070	642	3,850	5,040	504	717	349
30	980	554	488	780	-----	842	629	2,910	6,140	483	762	349
31	1,070	-----	586	753	-----	782	-----	1,770	-----	480	1,060	-----
TOTAL	21,206	30,664	18,690	17,994	22,699	39,613	27,268	35,193	118,810	48,665	15,786	25,149
MEAN	684	1,022	603	580	811	1,278	909	1,135	3,960	1,570	509	838
MAX	1,510	4,300	1,330	780	1,800	4,160	2,730	4,590	8,370	6,800	1,060	3,450
MIN	348	538	454	424	370	674	629	501	1,330	480	322	343
AC-FT	42,060	60,820	37,070	35,690	45,020	78,570	54,090	69,810	235,700	96,530	31,310	49,880
CAL YR 1974	TOTAL	609,030	MEAN	1,669	MAX	33,200	MIN	250	AC-FT	1,208,000		
WTR YR 1975	TOTAL	421,737	MEAN	1,155	MAX	8,370	MIN	322	AC-FT	836,500		

PEAK DISCHARGE (BASE, 4,000 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-04	1200	6.39	4,800	06-17	0200	7.63	7,260
03-02	1800	6.18	4,420	06-23	2200	8.85	9,870
05-28	1000	7.34	6,680	06-28	1800	7.01	6,020
06-03	1500	8.09	8,200	07-01	1800	7.46	6,920
06-09	2100	9.59	11,600				

07144780 NORTH FORK MINNESCAH RIVER ABOVE CHENEY RESERVOIR, KS

LOCATION.--Lat 37°50'41", long 97°56'09", in SW $\frac{1}{4}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.25, T.25 S., R.6 W., Reno County, at downstream side of bridge on State Highway 17, 12 mi (19.3 km) south of Hutchinson, 12.5 mi (20.1 km) upstream from Cheney Dam, and at mile 28.2 (45.4 km).

DRAINAGE AREA.--787 mi² (2,040 km²), of which 237 mi² (614 km²) is probably noncontributing.

PERIOD OF RECORD.--July 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,431.75 ft (436.397 m) above mean sea level.

AVERAGE DISCHARGE.--10 years, 123 ft³/s (3.483 m³/s), 89,110 acre-ft/yr (110 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 18,500 ft³/s (524 m³/s) June 27, gage height, 9.75 ft (2.972 m); minimum, 14 ft³/s (0.40 m³/s) Sept. 10, 11, 12.

Period of record: Maximum discharge, 43,000 ft³/s (1,220 m³/s) Apr. 20, 1974, gage height, 10.80 ft (3.292 m); no flow July 14, 1966, part of day Aug. 23, 1968.

REMARKS.--Records good except those for winter periods, which are poor. Records of suspended sediment loads for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	43	146	100	125	146	419	146	92	203	224	28	25
2	42	140	110	134	134	298	152	92	183	179	28	21
3	42	191	110	130	122	219	143	100	331	150	28	17
4	39	243	105	120	227	171	137	100	203	131	28	16
5	38	227	105	125	311	149	134	100	163	118	26	17
6	38	163	108	130	330	140	131	95	143	106	24	17
7	38	128	118	131	340	137	134	92	134	98	22	18
8	39	105	140	134	320	125	146	88	531	90	20	17
9	43	95	150	131	310	128	152	88	1050	88	18	15
10	44	102	155	137	280	134	146	82	262	92	17	14
11	44	108	163	130	230	137	137	78	203	86	17	15
12	46	102	239	125	180	149	131	73	158	77	15	16
13	65	98	231	130	160	159	128	95	143	69	16	17
14	90	88	191	150	143	159	167	120	124	66	17	17
15	92	80	171	160	146	155	207	118	114	60	17	21
16	85	75	159	155	142	155	195	112	132	53	21	24
17	75	71	149	150	140	152	171	98	1380	48	21	29
18	69	78	149	146	145	152	155	88	636	42	24	31
19	65	82	149	146	150	146	140	78	306	40	67	29
20	59	85	152	140	160	143	122	73	209	39	39	27
21	57	88	149	137	170	143	112	69	176	37	50	26
22	55	88	146	137	179	137	108	69	168	35	50	26
23	59	88	143	137	199	128	102	73	406	33	36	23
24	61	88	135	134	183	125	100	73	630	35	31	22
25	71	85	130	137	183	118	100	73	318	33	28	22
26	82	85	120	140	247	112	98	73	238	31	27	21
27	102	85	115	143	275	131	98	73	4650	29	26	21
28	125	88	110	140	352	199	98	78	1020	28	25	21
29	125	88	112	137	---	195	98	102	494	27	41	21
30	131	96	120	140	---	171	92	146	298	26	31	24
31	143	---	131	146	---	155	---	203	---	25	28	---
TOTAL	2107	3286	4365	4257	5904	5041	3980	2894	15006	2195	866	630
MEAN	68.0	110	141	137	211	163	133	93.4	500	70.8	27.9	21.0
MAX	143	243	239	160	352	419	207	203	4650	224	67	31
MIN	38	71	100	120	122	112	92	69	114	25	15	14
AC-FT	4180	6520	8660	8440	11710	10000	7890	5740	29760	4350	1720	1250
CAL YR 1974	TOTAL	78344	MEAN 215	MAX 19200	MIN 14	AC-FT 155400						
WTR YR 1975	TOTAL	50531	MEAN 138	MAX 4650	MIN 14	AC-FT 100200						

PEAK DISCHARGE (BASE 1,300 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
06-09	0100	6.37	2,700	06-27	1100	9.75	18,500
06-17	1100	5.38	1,680				

ARKANSAS RIVER BASIN

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07144790 CHENEY RESERVOIR NEAR CHENEY, KS

LOCATION.--Lat 37°43'34", long 97°47'38", in NW¼NE¼SE¼ sec.6, T.27 S., R.4 W., Sedgwick County, in control-house structure at outlet works of Cheney Dam on North Fork Ninnescah River, 6 mi (9.7 km) north of Cheney, and at mile 15.9 (25.6 km).

DRAINAGE AREA.--901 mi² (2,334 km²), of which 237 mi² (614 km²) is probably noncontributing.

PERIOD OF RECORD.--November 1964 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by U.S. Bureau of Reclamation).

EXTREMES.--Current year: Maximum elevation, 1,424.06 ft (434.053 m) June 30, contents, 191,600 acre-ft (236 hm³); minimum, 1,420.28 ft (432.901 m) Sept. 29, contents, 154,800 acre-ft (191 hm³).

Period of record: Maximum elevation, 1,429.00 ft (435.559 m) Oct. 14, 1973, contents, 247,900 acre-ft (306 hm³); minimum since conservation pool was first filled, 1,412.33 ft (430.478 m) Dec. 2-4, 1971, contents, 93,300 acre-ft (115 hm³).

REMARKS.--Reservoir is formed by compacted earthfill dam. Storage began Nov. 17, 1964. Total capacity, 566,300 acre-ft (698 hm³), consisting of the following: Dead storage, 979 acre-ft (1.21 hm³) below elevation 1,378.5 ft (420.17 m); fish and wildlife storage, 14,310 acre-ft (17.6 hm³) between elevations 1,378.5 ft (420.17 m) and 1,392.9 ft (424.56 m); conservation pool, 151,800 acre-ft (187 hm³) between elevations 1,392.9 ft (424.56 m) and 1,421.6 ft (433.30 m); flood control pool, 80,860 acre-ft (99.7 hm³) between elevations 1,421.6 ft (433.30 m) and 1,429.0 ft (435.56 m), crest of uncontrolled spillway; and uncontrolled storage, 318,300 acre-ft (392 hm³) between elevations 1,429.0 ft (435.56 m) and 1,447.8 ft (441.29 m). Reservoir is used for supplemental water supply for municipal and industrial uses in the city of Wichita, fish and wildlife conservation, flood control, and recreational purposes in Cheney Division, Wichita project. Figures given herein represent total contents.

Capacity table (elevation, in feet, and contents, in acre-feet)
(Based on survey by U.S. Bureau of Reclamation computed in 1965)

1,420	152,200	1,427	223,900
1,424	191,000		

ELEVATION, IN FEET, AT 2400, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,421.55	1,421.75	1,422.24	1,422.01	1,421.65	1,422.35	1,421.87	1,421.55	1,422.05	1,423.97	1,421.30	1,420.74
2	1,421.52	1,421.87	1,422.24	1,422.13	1,421.65	1,422.35	1,421.85	1,421.58	1,422.13	1,423.87	1,421.28	1,420.71
3	1,421.48	1,421.99	1,422.24	1,422.06	1,421.65	1,422.32	1,421.85	1,421.61	1,422.36	1,423.69	1,421.26	1,420.69
4	1,421.48	1,422.01	1,422.25	1,422.03	1,421.80	1,422.30	1,421.85	1,421.60	1,422.34	1,423.53	1,421.23	1,420.70
5	1,421.49	1,422.03	1,422.23	1,422.07	1,421.77	1,422.26	1,421.86	1,421.60	1,422.27	1,423.32	1,421.21	1,420.67
6	1,421.50	1,422.03	1,422.25	1,422.02	1,421.68	1,422.22	1,421.92	1,421.63	1,422.18	1,423.09	1,421.17	1,420.62
7	1,421.48	1,422.03	1,422.22	1,422.02	1,421.68	1,422.18	1,421.98	1,421.62	1,422.07	1,422.88	1,421.12	1,420.60
8	1,421.47	1,422.05	1,422.08	1,422.00	1,421.71	1,422.12	1,422.06	1,421.62	1,422.49	1,422.67	1,421.10	1,420.55
9	1,421.47	1,422.10	1,422.03	A	1,421.64	1,422.10	1,422.08	1,421.63	1,422.81	1,422.43	1,421.06	1,420.51
10	1,421.46	1,422.15	1,422.00	A	1,421.65	1,422.10	1,422.12	1,421.63	1,422.90	1,422.23	1,421.06	1,420.54
11	1,421.48	1,422.17	1,422.08	1,421.96	1,421.68	1,422.05	1,422.12	1,421.63	1,422.85	1,422.09	1,421.00	1,420.56
12	1,421.50	1,422.15	1,422.06	1,421.92	1,421.70	1,422.07	1,422.12	1,421.61	1,422.73	1,421.99	A	1,420.48
13	1,421.53	1,422.18	1,422.00	1,421.90	1,421.75	1,422.00	1,422.14	1,421.79	1,422.61	1,421.83	A	1,420.43
14	1,421.55	1,422.15	1,422.00	1,421.89	1,421.79	1,421.94	1,422.22	1,421.81	1,422.49	1,421.73	A	1,420.39
15	1,421.53	1,422.14	1,421.93	1,421.89	1,421.80	1,421.88	1,422.24	1,421.81	1,422.32	1,421.67	1,420.96	1,420.40
16	1,421.53	1,422.17	1,421.87	1,421.89	1,421.94	1,421.83	1,422.18	1,421.81	1,422.37	1,421.62	1,420.93	1,420.40
17	1,421.55	1,422.17	1,421.83	1,421.87	1,421.94	1,421.80	1,422.13	1,421.80	1,422.60	1,421.55	1,420.90	1,420.44
18	1,421.56	1,422.17	1,421.77	1,421.87	1,421.95	1,421.78	1,422.10	1,421.80	1,422.67	1,421.54	1,420.94	1,420.46
19	1,421.53	1,422.24	1,421.77	1,421.84	1,421.97	1,421.73	1,422.04	A	1,422.68	1,421.52	1,420.99	1,420.44
20	1,421.51	1,422.24	1,421.79	1,421.80	1,422.02	1,421.68	1,421.95	A	1,422.55	1,421.52	1,420.98	1,420.42
21	1,421.48	1,422.24	1,421.77	1,421.80	1,422.08	1,421.72	1,421.91	A	1,422.40	1,421.52	1,420.97	1,420.40
22	1,421.48	1,422.23	1,421.82	1,421.78	1,422.15	1,421.68	1,421.82	1,421.85	1,422.25	1,421.47	1,420.92	1,420.39
23	1,421.51	1,422.30	1,421.85	1,421.77	1,422.15	1,421.69	1,421.80	1,421.87	1,422.20	1,421.49	1,420.88	1,420.38
24	1,421.51	1,422.26	1,421.85	1,421.77	1,422.17	1,421.68	1,421.77	1,421.86	1,422.19	1,421.48	1,420.84	1,420.34
25	1,421.57	1,422.20	1,421.84	1,421.75	1,422.21	1,421.60	1,421.68	1,421.87	1,422.04	1,421.44	1,420.85	1,420.33
26	1,421.57	1,422.28	1,421.85	1,421.68	1,422.26	1,421.53	1,421.62	1,421.87	1,421.90	1,421.42	1,420.80	1,420.30
27	1,421.58	1,422.25	1,421.87	1,421.72	1,422.28	1,421.78	1,421.60	1,421.87	1,423.77	1,421.41	1,420.80	1,420.30
28	1,421.61	1,422.30	1,421.87	1,421.68	1,422.30	1,421.80	1,421.57	1,421.93	1,423.99	1,421.38	1,420.77	1,420.29
29	1,421.63	1,422.29	1,421.93	1,421.67	-----	1,421.77	1,421.58	1,421.96	1,424.05	1,421.35	1,420.80	1,420.28
30	1,421.69	1,422.31	1,421.96	1,421.72	-----	1,421.76	1,421.55	1,422.02	1,424.05	1,421.33	1,420.80	1,420.30
31	1,421.75	-----	1,422.01	1,421.66	-----	1,421.82	-----	1,422.03	-----	1,421.32	1,420.78	-----
MEAN	1,421.53	1,422.15	1,421.98		1,421.89	1,421.93	1,421.92		1,422.61	1,422.08		1,420.47
MAX	1,421.75	1,422.31	1,422.25	1,422.13	1,422.30	1,422.35	1,422.24	1,422.03	1,424.05	1,423.97	1,421.30	1,420.74
MIN	1,421.46	1,421.75	1,421.77	1,421.66	1,421.64	1,421.53	1,421.55	1,421.55	1,421.90	1,421.32	1,420.77	1,420.28
(+)	168,500	173,900	171,000	167,600	173,800	169,200	166,600	171,200	191,500	164,400	159,400	155,000
(#)	+1,800	+5,400	-2,900	-3,400	+6,200	-4,600	-2,600	+4,600	+20,300	-27,100	-5,000	-4,400

CAL YR 1974 (#) +2,600
WTR YR 1975 (#) -11,700

+ CONTENTS, IN ACRE-FEET, AT END OF MONTH.

CHANGE IN CONTENTS, IN ACRE-FEET.

A NO GAGE-HEIGHT RECORD.

ARKANSAS RIVER BASIN

07144795 NORTH FORK MINNESCAH RIVER AT CHENEY DAM, KS

LOCATION.--Lat 37°43'17", long 97°47'39", in NE¼SW¼SE¼ sec.6, T.27 S., R.4 W., Sedgwick County, 1,400 ft (427 m) downstream from Cheney Dam, 6.0 mi (9.7 km) north of Cheney, and at mile 15.5 (24.9 km).

DRAINAGE AREA.--901 mi² (2,330 km²), of which 237 mi² (614 km²) is probably noncontributing.

PERIOD OF RECORD.--October 1964 to current year.

GAGE.--Water-stage recorder and concrete Parshall flume. Datum of gage is 1,366.022 ft (416.364 m) above mean sea level (Bureau of Reclamation bench mark). Prior to Oct. 1, 1973, at datum 1.00 ft (0.305 m) higher.

AVERAGE DISCHARGE.--11 years, 91.0 ft³/s (2.577 m³/s), 65,930 acre-ft/yr (81.3 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,460 ft³/s (41.3 m³/s) June 20, gage height, 5.03 ft (1.533 m); minimum, 0.08 ft³/s (0.002 m³/s) Oct. 18.

Period of record: Maximum discharge, 1,960 ft³/s (55.5 m³/s) Apr. 29, 30, 1969, gage height, 5.45 ft (1.661 m); maximum observed gage height, 5.92 ft (1.804 m) Oct. 23, 1973; no flow at times in 1966, 1968.

REMARKS.--Records good. Flow completely regulated by Cheney Reservoir 1,400 ft (427 m) upstream (see sta 07144790). Records of chemical analyses for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.15	.18	.61	.80	191	370	.97	1.5	1.4	620	.92	.64
2	.16	.33	.58	.80	192	370	1.1	1.5	1.4	609	.91	.69
3	.15	.62	.56	120	192	370	.95	1.5	2.0	1040	1.0	.70
4	.16	.38	.57	190	189	370	.91	1.6	642	1250	1.1	.70
5	.14	.46	246	190	186	370	.96	1.7	1010	1220	1.1	.75
6	.18	.85	370	190	185	370	.91	1.7	978	1180	1.0	.73
7	.16	.82	366	190	185	369	1.1	1.7	953	1150	1.0	.75
8	.15	.78	366	190	185	370	.99	1.7	788	1120	1.0	.77
9	.16	.81	365	192	185	370	1.0	1.7	1.8	1080	.97	.81
10	.16	.72	363	192	115	370	1.1	1.7	1.5	1040	.92	.92
11	.14	.68	372	192	1.5	370	1.1	1.7	567	693	.85	.75
12	.14	.69	371	190	1.2	370	1.1	1.8	1220	508	.85	.57
13	.34	.71	376	194	1.2	370	1.2	2.1	1200	514	.82	.69
14	.16	.70	376	192	1.1	370	1.2	1.7	1180	284	.72	.77
15	.13	.72	380	192	1.1	370	147	1.7	1160	166	.65	.47
16	.14	.72	378	192	1.1	370	375	1.8	947	171	.67	.35
17	.13	.72	386	192	1.1	370	370	1.8	1.6	171	.76	.54
18	.12	.72	385	192	1.1	370	371	1.7	1.3	58	1.0	.39
19	.12	.68	143	192	1.2	370	370	1.7	502	1.2	.98	.31
20	.13	.66	.90	192	1.2	370	371	1.6	1180	1.1	.66	.40
21	.12	.70	.87	192	1.2	220	370	1.5	1370	1.1	.59	.39
22	.12	.71	.83	192	1.4	150	372	1.5	1330	1.0	.58	.43
23	.15	.69	.84	192	1.5	150	371	1.5	1310	1.1	.59	.45
24	.13	.66	.80	191	1.5	150	370	1.4	997	1.0	.71	.17
25	.32	.66	.80	192	1.2	150	374	1.4	1230	.9	.69	.14
26	.16	.65	.80	192	1.3	63	378	1.4	1220	.9	.55	.20
27	.15	.62	.80	190	245	1.3	378	1.4	579	.9	.57	.21
28	.23	.59	.80	191	370	1.1	136	1.5	1.5	.9	.65	.22
29	.25	.67	.80	191	---	1.1	1.4	1.4	1.4	1.0	.72	.26
30	.28	.64	.80	191	---	1.1	1.4	1.5	389	.9	.62	.31
31	.27	---	.80	190	---	1.0	---	1.4	---	.9	.64	---
TOTAL	5.30	19.54	5255.16	5479.60	2439.9	8287.6	4770.39	49.8	20765.9	12886.90	24.79	15.48
MEAN	.17	.65	170	177	87.1	267	159	1.61	692	416	.80	.52
MAX	.34	.85	386	194	370	370	378	2.1	1370	1250	1.1	.92
MIN	.12	.18	.56	.80	1.1	1.0	.91	1.4	1.3	.90	.55	.14
AC-FT	11	39	10420	10870	4840	16440	9460	99	41190	25560	49	31
CAL YR 1974	TOTAL	67309.63	MEAN	184	MAX	1760	MIN	.12	AC-FT	133500		
WTR YR 1975	TOTAL	60000.36	MEAN	164	MAX	1370	MIN	.12	AC-FT	119000		

ARKANSAS RIVER BASIN

151

07144850 SOUTH FORK SOUTH FORK NINNESCAH RIVER NEAR PRATT, KS

LOCATION.--Lat 37°35'10", long 98°49'40", in NW¼NW¼ sec.26, T.28 S., R.14 W., Pratt County, at downstream side of highway bridge, 6.0 mi (9.7 km) southwest of Pratt, and 6.5 mi (10.5 km) upstream from mouth.

DRAINAGE AREA.--21 mi² (54 km²), approximately.

PERIOD OF RECORD.--March 1961 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,920 ft (585 m), from topographic map.

AVERAGE DISCHARGE.--14 years, 2.71 ft³/s (0.0767 m³/s), 1,960 acre-ft/yr (2.42 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 970 ft³/s (27.5 m³/s) June 17, gage height, 5.75 ft (1.753 m); no flow for most days.
Period of record: Maximum discharge, 7,050 ft³/s (200 m³/s) Apr. 20, 1974, gage height, 10.05 ft (3.063 m); no flow for most days.

REMARKS.--Records good.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0						0	0			
2		57						0	0			
3		70						0	0			
4		2.4						0	0			
5		.01						0	0			
6		0						0	.81			
7		0						0	51			
8		0						0	116			
9		0						0	109			
10		0						0	8.3			
11		0						0	.82			
12		0						0	0			
13		0						0	0			
14		0						0	0			
15		0						0	0			
16		0						0	78			
17		0						0	268			
18		0						0	28			
19		0						0	2.2			
20		0						0	.05			
21		0						0	205			
22		0						0	78			
23		0						0	306			
24		0						0	81			
25		0						0	16			
26		0						0	3.7			
27		0						0	260			
28		0						0	41			
29		0			-----			0	6.6			
30		0			-----			3.6	1.1			
31		-----			-----		-----	3.5	-----			-----
TOTAL	0	129.41	0	0	0	0	0	7.1	1,660.58	0	0	0
MEAN	0	4.31	0	0	0	0	0	.23	55.4	0	0	0
MAX	0	70	0	0	0	0	0	3.6	306	0	0	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	257	0	0	0	0	0	14	3,290	0	0	0

CAL YR 1974 TOTAL 1,465.54 MEAN 4.02 MAX 956 MIN 0 AC-FT 2,910
WTR YR 1975 TOTAL 1,797.09 MEAN 4.92 MAX 306 MIN 0 AC-FT 3,560

PEAK DISCHARGE (BASE, 100 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-02	2200	4.38	314	06-21	1000	4.69	476
06-07	0400	3.79	148	06-23	0900	5.14	660
06-08	1900	4.60	400	06-27	0400	4.98	592
06-17	0100	5.75	970				

ARKANSAS RIVER BASIN

07145200 SOUTH FORK NINNESCAH RIVER NEAR MURDOCK, KS

LOCATION.--Lat 37°33'51", long 97°51'10", in SW¼SW¼SE¼ sec.34, T.28 S., R.5 W., Kingman County, near right bank on downstream side of pier of county highway bridge, 4.0 mi (6.4 km) southeast of Murdock, and at mile 68.0 (109.4 km).

DRAINAGE AREA.--650 mi² (1,680 km²), of which 107 mi² (277 km²) is probably noncontributing.

PERIOD OF RECORD.--August 1950 to September 1959. Annual maximums, water years 1960-64. June 1964 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,357.81 ft (413.860 m) above mean sea level (Corps of Engineers bench mark). Prior to Mar. 30, 1951, nonrecording gage, Mar. 30, 1951, to Sept. 30, 1959, water-stage recorder, and Oct. 1, 1959 to June 3, 1964, crest-stage gage, at same stie and datum.

AVERAGE DISCHARGE.--20 years, 197 ft³/s (5.579 m³/s), 142,700 acre-ft/yr (176 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 10,300 ft³/s (292 m³/s) June 16, gage height, 9.57 ft (2.917 m); minimum, 47 ft³/s (1.33 m³/s) Aug. 12.

Period of record: Maximum discharge, 25,900 ft³/s (733 m³/s) June 26, 1957, gage height, 11.87 ft (3.618 m); maximum gage height, 11.93 ft (3.636 m) Oct. 11, 1973; minimum discharge, 5.0 ft³/s (0.14 m³/s) Aug. 5, 1964.

REMARKS.--Records good except those for winter periods, which are poor. Records of chemical analyses and suspended sediment loads for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1561: 1957(P).

DISCHARGE, IN CUBIC FEET PER SECOND • WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	91	188	164	188	176	428	240	157	292	230	66	79
2	94	188	160	210	168	396	225	168	245	196	68	70
3	100	702	151	205	165	262	215	184	215	176	70	66
4	103	558	145	184	155	240	210	176	210	164	79	62
5	103	484	145	184	150	240	210	168	196	160	70	66
6	106	280	148	172	145	245	230	172	184	148	64	70
7	109	220	160	176	140	274	450	164	180	142	60	73
8	112	196	172	184	130	310	350	154	176	142	56	70
9	118	188	164	188	120	298	250	142	650	145	54	62
10	118	192	160	165	130	274	200	139	896	139	56	58
11	112	188	225	145	130	268	184	136	722	133	52	64
12	106	184	345	140	130	250	172	133	366	124	48	58
13	124	180	292	140	130	256	192	250	250	118	50	54
14	145	172	250	140	130	274	240	404	192	115	56	54
15	148	168	235	150	130	286	250	268	168	109	62	64
16	136	168	210	160	130	280	235	200	1210	100	68	82
17	124	168	192	170	125	280	215	164	2360	88	66	88
18	124	168	192	180	120	274	215	154	1320	85	68	85
19	124	168	192	180	120	255	210	151	1080	85	462	73
20	124	164	200	164	140	235	200	142	388	85	427	62
21	124	157	200	168	170	220	192	136	245	85	164	64
22	127	154	200	160	210	215	188	142	188	82	124	79
23	130	151	205	154	235	205	192	176	518	76	103	82
24	154	151	210	164	230	200	188	164	2030	88	79	79
25	160	151	210	154	235	200	180	151	1920	88	79	76
26	172	151	215	148	274	210	176	154	660	88	82	73
27	180	151	215	148	324	250	184	148	396	85	88	70
28	184	151	205	136	373	330	184	154	292	76	91	70
29	176	148	196	157	---	350	176	168	516	64	88	73
30	172	154	188	168	---	260	168	205	331	62	82	79
31	200	---	184	184	---	235	---	292	---	62	79	---
TOTAL	4100	6443	6130	5166	4815	8300	6521	5516	18396	3540	3061	2105
MEAN	132	215	198	167	172	268	217	178	613	114	98.7	70.2
MAX	200	702	345	210	373	428	450	404	2360	230	462	88
MIN	91	148	145	136	120	200	168	133	168	62	48	54
AC-FT	8130	12780	12160	10250	9550	16460	12930	10940	36490	7020	6070	4180

CAL YR 1974 TOTAL 92753 MEAN 254 MAX 7500 MIN 57 AC-FT 184000
WTR YR 1975 TOTAL 74093 MEAN 203 MAX 2360 MIN 48 AC-FT 147000

PEAK DISCHARGE (BASE, 2,000 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
06-16	2300	9.57	10,300	06-25	0100	7.49	3,580
06-18	2000	6.84	2,410				

ARKANSAS RIVER BASIN

153

07145500 NINNESCAH RIVER NEAR PECK, KS

LOCATION.--Lat 37°27'34", long 97°25'20", in NW¼SW¼NW¼ sec.10, T.30 S., R.1 W., Sumner County, at downstream side of highway bridge, 3.0 mi (4.8 km) southwest of Peck, and at mile 31.6 (50.8 km).

DRAINAGE AREA.--2,129 mi² (5,514 km²), of which 344 mi² (891 km²) is probably noncontributing.

PERIOD OF RECORD.--October 1937 to current year. Prior to April 1938 monthly discharge only, published in WSP 1311.

GAGE.--Water-stage recorder. Datum of gage is 1,222.38 ft (372.581 m) above mean sea level (levels by Corps of Engineers). Prior to Feb. 4, 1939, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--38 years, 507 ft³/s (14.36 m³/s), 367,300 acre-ft/yr (453 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 31,700 ft³/s (898 m³/s) June 17, gage height, 20.88 ft (6.364 m); minimum, 71 ft³/s (2.01 m³/s) Aug. 13.

Period of record: Maximum discharge, 38,200 ft³/s (1,080 m³/s) May 17, 1957, gage height, 21.85 ft (6.660 m); minimum daily, 0.20 ft³/s (0.0057 m³/s) Sept. 3, 1956.

Maximum stage known, 26.4 ft (8.047 m) June 9, 1923, from floodmark, discharge, about 70,000 ft³/s (2,000 m³/s).

REMARKS.--Records good except those for winter periods, which are poor. Flow partially regulated by Cheney Reservoir since 1964 (see sta 07144790). Records of chemical analyses and suspended sediment loads for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1117: Drainage area. WSP 1211: 1944(M). WSP 1241: 1944, 1945(M), 1947-48(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	116	390	185	259	496	2360	366	265	602	898	119	113
2	115	604	190	277	474	2960	352	249	608	1030	117	100
3	109	3700	207	290	497	1480	336	271	2980	975	115	95
4	104	2510	210	310	1200	1020	327	279	1520	1220	111	91
5	102	1660	198	350	1060	920	317	264	1010	1390	111	88
6	106	774	339	410	660	963	307	236	1080	1350	109	88
7	108	541	626	462	450	960	318	216	991	1340	98	85
8	115	441	643	534	350	850	1040	202	985	1310	91	85
9	119	387	628	587	280	812	920	192	1420	1300	87	85
10	120	374	618	590	350	824	563	186	1520	1290	82	84
11	121	369	892	480	460	835	427	182	1890	1270	79	85
12	127	324	1400	380	470	886	366	175	1340	945	74	87
13	145	288	1080	336	440	938	349	360	1400	772	71	96
14	160	274	869	416	400	878	375	1660	1310	746	93	93
15	182	254	782	489	365	919	435	898	1160	562	88	97
16	182	240	734	541	250	1380	524	559	1360	408	90	105
17	165	235	709	512	150	1240	733	406	22800	374	95	119
18	151	228	697	472	250	942	736	310	8530	349	97	129
19	145	220	703	467	350	871	736	263	2710	298	1000	129
20	141	219	510	457	410	829	716	236	1940	218	1130	119
21	138	211	328	447	442	816	708	214	1940	196	553	111
22	137	202	301	444	438	660	700	210	2100	180	300	106
23	138	200	286	427	403	528	700	316	2520	167	208	102
24	140	204	275	427	377	500	716	274	3180	163	169	100
25	201	202	256	432	385	471	716	244	3260	168	148	98
26	234	197	238	428	513	461	700	352	2320	158	133	97
27	236	197	277	420	826	696	696	340	1840	139	129	95
28	258	195	275	416	1340	1090	696	1010	1370	145	127	91
29	365	196	259	408	---	605	511	850	908	131	125	91
30	366	175	252	433	---	437	304	761	890	123	123	90
31	408	---	255	512	---	384	---	727	---	121	121	---
TOTAL	5254	16011	15222	13413	14086	29515	16690	12707	77484	19736	5993	2954
MEAN	169	534	491	433	503	952	556	410	2583	637	193	98.5
MAX	408	3700	1400	590	1340	2960	1040	1660	22800	1390	1130	129
MIN	102	175	185	259	150	384	304	175	602	121	71	84
AC-FT	10420	31760	30190	26600	27940	58540	33100	25200	153700	39150	11890	5860
CAL YR 1974 TOTAL	213203			MEAN 584	MAX 11000	MIN 45	AC-FT 422900					
WTR YR 1975 TOTAL	229065			MEAN 628	MAX 22800	MIN 71	AC-FT 454400					

PEAK DISCHARGE (BASE, 3,500 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-03	0300	9.21	4,190	06-17	1700	20.88	31,700
06-03	1800	8.66	3,690	06-24	0200	8.75	3,680

07145700 SLATE CREEK AT WELLINGTON, KS

LOCATION.--Lat 37°15'00", long 97°24'12", in SE $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.22, T.32 S., R.1 W., Sumner County, on right bank at upstream side of U.S. Highway 81 bridge, at southern edge of Wellington.

DRAINAGE AREA.--154 mi² (399 km²).

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1954-66. Annual maximum, water years 1960-69. April 1969 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,157.24 ft (352.727 m) above mean sea level. Prior to Apr. 1, 1969, crest-stage gage at present site and at datum 3.0 ft (0.91 m) higher.

AVERAGE DISCHARGE.--6 years (1970-75), 70.1 ft³/s (1.985 m³/s), 50,790 acre-ft/yr (62.6 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 28,500 ft³/s (807 m³/s) June 17, gage height, 25.82 ft (7.870 m), from rating curve extended above 18,000 ft³/s (510 m³/s); minimum daily, 1.2 ft³/s (0.034 m³/s) Aug. 24 to Sept. 4.

1960-75: Maximum discharge, 28,500 ft³/s (807 m³/s) June 17, 1975, gage height, 25.82 ft (7.870 m), from rating curve extended above 18,000 ft³/s (510 m³/s); no flow at times.

REMARKS.--Records good, except those for period of backwater, which are poor.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.4	60	9.1	15	66	876	27	12	72	40	3.9	1.2
2	2.1	294	9.1	18	35	931	24	16	34	29	3.7	1.2
3	1.9	3700	9.1	19	61	227	22	14	1370	23	3.5	1.2
4	1.6	2380	9.1	16	969	87	21	13	766	21	3.3	1.2
5	1.6	611	9.3	19	418	63	20	13	85	18	3.1	1.5
6	3.8	99	17	22	61	106	20	12	43	16	2.8	1.9
7	2.1	50	22	63	36	102	25	12	48	14	2.6	2.4
8	1.6	38	18	157	30	54	252	11	44	13	2.6	2.6
9	1.9	34	13	272	25	39	143	11	103	12	2.4	1.7
10	1.6	38	13	124	29	44	41	11	98	11	2.2	1.3
11	1.6	38	141	50	28	53	29	11	385	11	1.9	1.4
12	9.2	31	354	20	26	96	24	10	107	9.8	1.7	1.4
13	122	26	104	20	24	139	25	61	35	9.3	1.5	1.4
14	13	22	47	20	25	66	27	354	22	9.1	1.7	1.4
15	6.3	18	30	20	26	88	26	132	16	8.7	2.8	1.4
16	4.6	18	22	20	24	493	24	36	34	8.5	3.0	1.4
17	3.6	17	19	20	20	462	21	20	10200	7.6	2.8	5.9
18	3.1	15	17	19	20	101	20	16	3570	7.4	2.6	3.9
19	2.4	15	16	19	21	58	20	14	218	7.4	14	4.1
20	3.1	15	15	18	26	42	18	13	101	6.9	282	4.1
21	2.8	13	14	16	46	37	16	12	78	6.7	57	3.3
22	2.6	13	14	15	54	33	16	42	129	6.5	30	2.1
23	2.4	12	13	14	33	31	17	293	429	5.8	5.4	1.4
24	2.6	12	12	14	33	29	17	49	200	6.3	1.2	1.4
25	4.9	10	10	15	57	25	16	21	160	6.0	1.2	1.4
26	5.5	9.8	9.8	14	177	24	15	510	109	5.8	1.2	1.4
27	6.6	10	10	14	354	108	17	186	56	5.6	1.2	1.4
28	7.7	10	10	13	584	257	16	143	45	5.2	1.2	1.4
29	384	9.8	11	12	---	59	14	640	92	4.8	1.2	1.4
30	201	9.6	11	56	---	35	13	600	101	4.3	1.2	1.4
31	661	---	16	238	---	29	---	314	---	3.9	1.2	---
TOTAL	1470.6	7628.2	1024.5	1372	3308	4794	986	3602	18750	343.6	446.1	59.2
MEAN	47.4	254	33.0	44.3	118	155	32.9	116	625	11.1	14.4	1.97
MAX	661	3700	354	272	969	931	252	640	10200	40	282	5.9
MIN	1.6	9.6	9.1	12	20	24	13	10	16	3.9	1.2	1.2
AC-FT	2920	15130	2030	2720	6560	9510	1960	7140	37190	682	885	117

CAL YR 1974 TOTAL 22525.25 MEAN 61.7 MAX 3700 MIN .45 AC-FT 44680
WTR YR 1975 TOTAL 43784.20 MEAN 120 MAX 10200 MIN 1.2 AC-FT 86950

PEAK DISCHARGE (BASE, 1,000 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
10-31	0500	14.04	1,170	05-26	2000	13.43	1,050
11-03	1200	21.52	4,420	06-03	2000	17.08	1,980
02-04	1800	14.33	1,230	06-17	1200	25.82	28,500
03-02	1500	13.89	1,140				

NOTE: BACKWATER FROM TEMPORARY DAM AUG. 22 TO SEPT. 30.

ARKANSAS RIVER BASIN

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07146500 ARKANSAS RIVER AT ARKANSAS CITY, KS

LOCATION.--Lat 37°03'23", long 97°03'32", in NE¼NE¼ sec.35, T.34 S., R.3 E., Cowley County, near left bank at downstream side of bridge on U.S. Highway 166, 0.1 mi (0.2 km) downstream from St. Louis - San Francisco Railway Co. bridge, 0.5 mi (0.8 km) west of Arkansas City, 5.4 mi (8.7 km) upstream from Walnut River and at mile 701.4 (1,128.6 km).

DRAINAGE AREA.--43,713 mi² (113,220 km²), of which 7,607 mi² (19,700 km²) is probably noncontributing.

PERIOD OF RECORD.--September 1902 to September 1906, September 1921 to current year. Published as "near Arkansas City" 1903-4. Monthly discharge only for some periods, published in WSP 1311.

GAGE.--Water-stage recorder. Datum of gage is 1,050.04 ft (320.052 m) above mean sea level (levels by Corps of Engineers). Sept. 23, 1902, to July 31, 1906, nonrecording gage at site 0.5 mi (0.8 km) upstream at datum 9.5 ft (2.90 m) higher. Sept. 10, 1921, to Sept. 27, 1929, nonrecording gage and Sept. 28, 1929, to Aug. 28, 1956, water-stage recorder at site 0.5 mi (0.8 km) upstream at datum 2.97 ft (0.905 m) higher than present datum.

AVERAGE DISCHARGE.--58 years, 1,825 ft³/s (51.68 m³/s), 1,322,000 acre-ft/yr (1.63 km³/yr).

EXTREMES.--Current year: Maximum discharge, 32,800 ft³/s (929 m³/s) June 19, gage height, 19.85 ft (6.050 m); minimum, 504 ft³/s (14.3 m³/s) Sept. 30.

Period of record: Maximum discharge, 103,000 ft³/s (2,920 m³/s) June 10, 1923, gage height, 25.46 ft (7.760 m), from floodmarks, site and datum then in use, from rating curve extended above 8,000 ft³/s (226.6 m³/s) on basis of field estimate, maximum gage height, 25.55 ft (7.788 m) May 18, 1957; minimum discharge, 1.0 ft³/s (0.028 m³/s) Oct. 9, 1921, result of diversion by local power canal.

Maximum stage known since at least 1877, 25.55 ft (7.788 m) May 18, 1957, from information by local residents.

REMARKS.--Records good. Flow moderately regulated by John Martin Reservoir since 1943 (see sta 07130000) and Cheney Reservoir since 1964 (see sta 07144790). Diversions above station for irrigation. Records of chemical and biological analyses, water temperatures, suspended sediment loads and specific conductance for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1311: 1905. WSP 1341: 1922-23, 1927, 1929, 1931, 1933, 1940, 1945-46(M), drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	604	2,900	930	1,430	2,990	4,630	1,870	1,500	3,450	7,920	874	1,700
2	586	2,100	912	1,480	2,080	6,990	1,810	1,480	2,640	7,920	848	2,400
3	580	17,500	904	1,480	1,980	9,190	1,790	1,470	5,440	7,250	824	2,300
4	568	17,100	912	1,490	3,470	6,420	1,760	1,480	14,000	5,800	800	3,220
5	568	13,200	950	1,520	5,140	4,050	1,710	1,420	10,300	4,920	776	2,710
6	550	7,970	977	1,630	4,420	3,040	1,680	1,390	6,660	4,340	764	2,200
7	550	3,700	1,040	1,830	3,050	2,840	1,680	1,360	4,450	3,980	732	1,500
8	550	2,370	1,250	2,180	2,080	2,780	1,760	1,330	3,470	3,780	705	1,160
9	556	1,870	1,260	2,180	1,860	2,600	2,910	1,310	3,580	3,660	672	1,100
10	556	1,610	1,240	2,280	1,410	2,460	4,180	1,610	14,300	3,530	639	1,030
11	598	1,520	1,360	2,140	1,680	2,710	2,670	1,380	11,900	3,390	601	902
12	1,230	1,470	2,870	1,880	1,960	3,090	2,070	1,290	10,900	3,220	567	964
13	1,350	1,400	3,500	1,520	1,930	2,740	1,840	1,600	7,210	2,940	556	797
14	1,210	1,300	2,780	1,380	1,960	2,720	1,770	4,120	5,270	2,550	632	766
15	1,100	1,240	2,240	1,420	1,870	2,520	1,750	4,010	4,010	2,400	968	729
16	1,000	1,200	2,000	1,580	1,820	2,550	1,780	2,760	3,360	2,260	710	704
17	970	1,160	1,890	1,820	1,630	3,440	1,960	1,910	9,320	1,940	613	728
18	1,230	1,140	1,870	1,860	1,410	3,650	2,060	1,570	22,500	1,760	580	752
19	1,410	1,110	1,820	1,770	1,380	2,860	2,050	1,420	26,200	1,680	778	782
20	1,190	1,090	1,820	1,690	1,590	2,660	1,970	1,330	9,500	1,600	847	709
21	1,030	1,090	1,750	1,680	1,830	2,460	1,920	1,280	5,500	1,480	2,220	662
22	960	1,070	1,570	1,670	2,250	2,380	1,860	1,260	5,520	1,330	1,530	629
23	920	1,050	1,500	1,680	2,210	2,240	1,860	2,350	5,280	1,270	1,070	602
24	920	1,030	1,440	1,670	1,890	1,990	1,820	3,290	13,500	1,200	839	585
25	1,000	1,020	1,420	1,660	1,820	1,890	1,830	2,920	10,400	1,140	720	570
26	1,290	1,010	1,380	1,650	2,480	1,810	1,810	4,780	9,020	1,100	660	565
27	1,080	960	1,350	1,630	3,650	2,000	1,790	6,560	7,580	1,080	639	550
28	1,020	950	1,360	1,590	4,140	2,490	1,780	3,300	6,780	1,010	649	537
29	1,060	950	1,370	1,590	-----	3,140	1,820	6,760	6,640	972	632	527
30	1,980	950	1,370	2,070	-----	2,450	1,730	6,340	7,680	944	994	510
31	2,140	-----	1,380	4,850	-----	2,050	-----	5,010	-----	902	937	-----
TOTAL	30,356	93,030	48,415	56,300	65,980	98,840	59,290	79,590	256,360	89,268	25,376	32,890
MEAN	979	3,101	1,562	1,816	2,356	3,188	1,976	2,567	8,545	2,880	819	1,096
MAX	2,140	17,500	3,500	4,850	5,140	9,190	4,180	6,760	26,200	7,920	2,220	3,220
MIN	550	950	904	1,380	1,380	1,810	1,680	1,260	2,640	902	556	510
AC-FT	60,210	184,500	96,030	111,700	130,900	196,000	117,600	157,900	508,500	177,100	50,330	65,240

CAL YR 1974 TOTAL 995,878 MEAN 2,728 MAX 33,600 MIN 550 AC-FT 1,975,000
WTR YR 1975 TOTAL 935,695 MEAN 2,564 MAX 26,200 MIN 510 AC-FT 1,856,000

PEAK DISCHARGE (BASE, 10,000 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-03	1800	17.85	22,400	06-19	0300	19.85	32,800
06-04	0800	15.62	15,100	06-24	1600	15.92	14,800
06-10	1500	16.17	16,700				

ARKANSAS RIVER BASIN

07146570 COLE CREEK NEAR DEGRAFF, KS

LOCATION.--Lat 37°56'50", long 96°46'50", in NE¼NW¼ sec.21, T.24 S., R.6 E., Butler County, at downstream side of highway bridge, 5.0 mi (8.0 km) southeast of DeGraff, and 6.0 mi (9.7 km) upstream from mouth.

DRAINAGE AREA.--30 mi² (80 km²), approximately.

PERIOD OF RECORD.--March 1961 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,332.83 ft (406.247 m) above mean sea level (levels by Corps of Engineers).

AVERAGE DISCHARGE.--14 years, 16.6 ft³/s (0.470 m³/s), 12,030 acre-ft/yr (14.8 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,290 ft³/s (64.9 m³/s) June 17, gage height, 11.44 ft (3.487 m); no flow at times.

Period of record: Maximum discharge, 11,100 ft³/s (314 m³/s) June 5, 1965, gage height, 14.12 ft (4.304 m); no flow at times in most years.

Maximum stage known since at least 1947, 17.0 ft (5.18 m) May 1955, from information by local resident.

REMARKS.--Records good prior to Mar. 5 and poor thereafter.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	.63	2.1	9.9	49	4.0	3.5	2.0	3.0	.20	2.0
2	0	0	.63	2.7	4.8	20	4.0	3.0	1.5	2.5	.15	1.5
3	0	25	.69	3.0	4.1	7.8	4.0	3.0	328	2.0	.10	1.0
4	0	5.0	.76	2.8	233	6.0	3.5	3.0	45	1.7	.08	.80
5	0	2.0	.76	2.6	50	5.5	3.5	2.5	9.3	1.5	.07	.67
6	0	1.0	1.1	2.5	9.3	5.5	3.5	2.5	5.2	1.3	.06	.50
7	0	.90	1.7	2.7	6.0	5.0	10	2.5	3.7	1.2	.05	.40
8	0	.85	1.7	30	5.4	5.0	284	2.0	220	1.1	.04	.30
9	0	.80	1.4	9.5	4.8	5.0	10	2.0	275	1.0	.03	.25
10	0	.76	1.3	6.1	3.7	4.5	7.0	2.0	31	.90	.02	.20
11	0	.72	18	4.0	3.9	4.5	5.5	2.0	20	.85	.02	.15
12	0	.70	73	3.4	4.3	4.5	4.5	2.0	12	.80	.02	.10
13	0	.67	12	3.0	4.0	4.5	4.0	2.0	5.1	.75	.02	.08
14	0	.65	6.0	2.8	3.9	4.0	4.0	2.0	3.5	.70	.02	.07
15	0	.63	4.2	2.8	4.1	4.0	27	1.8	2.6	.65	.01	.06
16	0	.63	3.6	3.0	4.1	50	6.5	1.8	58	.60	.01	.06
17	0	.63	3.0	2.7	4.1	44	5.0	1.8	943	.55	.01	.05
18	0	.63	2.8	2.7	4.1	25	5.0	1.8	60	.50	.01	.05
19	0	.76	2.5	2.8	3.9	10	4.0	1.8	27	.50	.01	.05
20	0	.76	2.5	2.8	3.7	6.5	3.5	1.8	6.5	.50	.01	.05
21	0	.76	2.3	2.8	6.4	5.5	3.5	1.8	2.5	.45	.01	.05
22	0	.76	2.3	2.6	66	5.0	3.5	1.8	229	.45	.01	.04
23	0	.76	2.1	2.4	14	4.5	3.5	5.5	183	.45	.01	.04
24	0	.76	2.0	2.3	8.2	4.5	4.0	5.5	65	.45	.01	.04
25	0	.76	1.8	2.3	19	4.0	10	2.0	18	.40	.01	.04
26	0	.76	1.8	2.4	116	4.0	8.0	15	10	.40	.01	.04
27	0	.76	1.8	2.5	144	145	5.0	3.0	7.0	.40	.01	.04
28	0	.68	1.8	2.5	94	60	4.0	2.0	5.0	.40	.01	.04
29	0	.63	1.8	2.4	---	5.0	4.0	5.0	4.0	.35	42	.04
30	0	.63	1.8	3.4	---	4.0	3.5	6.0	3.5	.30	5.0	.04
31	.16	---	2.1	63	---	4.0	---	3.5	---	.25	3.0	---
TOTAL	.16	50.35	159.87	182.6	838.7	515.8	455.5	95.9	2585.4	26.90	51.02	8.75
MEAN	.005	1.68	5.16	5.89	30.0	16.6	15.2	3.09	86.2	.87	1.65	.29
MAX	.16	25	73	63	233	145	284	15	943	3.0	42	2.0
MIN	0	0	.63	2.1	3.7	4.0	3.5	1.8	1.5	.25	.01	.04
AC-FT	.3	100	317	362	1660	1020	903	190	5130	53	101	17

CAL YR 1974 TOTAL 4440.45 MEAN 12.2 MAX 736 MIN 0 AC-FT 8810
WTR YR 1975 TOTAL 4970.95 MEAN 13.6 MAX 943 MIN 0 AC-FT 9860

PEAK DISCHARGE (BASE, 1,000 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
06-08	2045	8.83	1,190	06-17	0645	11.44	2,290

ARKANSAS RIVER BASIN

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07147070 WHITEWATER RIVER AT TOWANDA, KS

LOCATION.--Lat 37°47'45", long 97°00'45", in SE¼SW¼SE¼ sec.8, T.26 S., R.4 E., Butler County, at downstream side of bridge on State Highway 254, 0.5 mi (0.8 km) west of Towanda, 2.4 mi (3.9 km) downstream from West Branch, and at mile 17.5 (28.2 km).

DRAINAGE AREA.--426 mi² (1,100 km²).

PERIOD OF RECORD.--Annual maximum, water years 1960-61. October 1961 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,231.47 ft (375.352 m) above mean sea level (levels by State Highway Commission). Prior to Oct. 1, 1961, crest-stage gage at same site at datum 5.22 ft (1.591 m) higher.

AVERAGE DISCHARGE.--14 years, 212 ft³/s (6.004 m³/s), 153,600 acre-ft/yr (189 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 7,820 ft³/s (221 m³/s) June 9, gage height, 23.19 ft (7.068 m); minimum, 15 ft³/s (0.42 m³/s) Sept. 25, 27-30.

Period of record: Maximum discharge, 40,200 ft³/s (1,140 m³/s) June 5, 1965, gage height, 28.02 ft (8.540 m); minimum, 0.20 ft³/s (0.006 m³/s) July 14, 1966.

Maximum stage known since at least 1923, 28.6 ft (8.72 m) April 1944, from floodmark.

REMARKS.--Records good. Records of chemical analyses for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	51	36	52	234	1230	108	76	552	127	28	50
2	26	47	36	57	128	597	105	72	302	117	28	30
3	26	1650	36	59	101	292	104	72	3450	108	26	23
4	26	2910	36	55	1340	187	104	72	3320	102	24	20
5	26	881	36	52	1470	162	113	72	366	94	23	24
6	25	280	41	55	232	171	106	71	241	88	22	43
7	24	146	52	76	156	188	101	69	174	90	21	61
8	23	104	58	177	135	148	1410	66	794	79	21	41
9	22	88	56	255	115	122	980	63	6970	74	21	24
10	21	86	49	325	115	127	229	60	3870	80	20	40
11	21	100	635	250	117	131	159	58	5930	73	20	95
12	22	114	1040	98	113	134	135	53	2880	67	18	32
13	23	94	352	88	110	134	125	62	397	62	19	21
14	27	73	178	82	112	135	134	113	275	59	28	19
15	28	62	126	79	110	135	202	103	209	58	28	18
16	26	56	99	76	87	247	167	83	367	55	24	19
17	25	56	83	76	82	384	133	68	3930	52	23	20
18	24	61	75	77	84	309	121	61	4570	49	23	20
19	22	56	69	74	86	183	114	55	349	53	22	20
20	22	51	64	71	86	136	103	51	224	50	22	19
21	22	49	59	75	145	117	94	47	238	43	21	18
22	24	47	56	66	344	107	88	50	707	40	21	17
23	22	47	53	58	197	101	87	612	3840	41	20	17
24	22	44	50	59	145	91	85	170	2570	37	20	16
25	26	41	45	59	180	84	85	97	409	33	19	15
26	27	40	43	59	409	75	83	1030	247	32	19	16
27	27	43	44	58	885	229	83	457	198	33	18	15
28	28	42	44	53	1620	491	83	3660	171	35	18	15
29	29	38	44	52	---	198	83	5930	152	36	70	15
30	30	37	45	65	---	136	82	2190	138	32	158	15
31	42	---	48	257	---	118	---	528	---	30	100	---
TOTAL	784	7394	3688	2995	8938	6899	5606	16171	47840	1929	945	798
MEAN	25.3	246	119	96.6	319	223	187	522	1595	62.2	30.5	26.6
MAX	42	2910	1040	325	1620	1230	1410	5930	6970	127	158	95
MIN	21	37	36	52	82	75	82	47	138	30	18	15
AC-FT	1560	14670	7320	5940	17730	13680	11120	32080	94890	3830	1870	1580

CAL YR 1974 TOTAL 88725 MEAN 243 MAX 6790 MIN 15 AC-FT 176000
WTR YR 1975 TOTAL 103987 MEAN 285 MAX 6970 MIN 15 AC-FT 206300

PEAK DISCHARGE (BASE, 2,000 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-04	0600	15.74	3,510	06-09	1600	23.19	7,820
02-05	0100	12.97	2,540	06-11	1800	21.83	6,480
04-08	2200	12.94	2,530	06-18	0500	21.38	6,170
05-29	0200	22.02	6,620	06-23	1600	17.91	4,410
06-04	0200	20.72	5,760				

07147800 WALNUT RIVER AT WINFIELD, KS

LOCATION.--Lat 37°13'27", long 96°59'40", in SW¼SW¼NE¼ sec.33, T.32 S., R.4 E., Cowley County, at downstream side of bridge on U.S. Highway 77, 1.0 mi (1.6 km) south of Winfield, 1.0 mi (1.6 km) upstream from Black Crook Creek, and at mile 24.8 (39.9 km).

DRAINAGE AREA.--1,872 mi² (4,848 km²).

PERIOD OF RECORD.--October 1921 to current year. October to November 1921 monthly discharge only, published in WSP 1311.

GAGE.--Water-stage recorder. Datum of gage is 1,082.86 ft (330.056 m) above mean sea level (Corps of Engineers bench mark). Prior to Oct. 1, 1934, nonrecording gage on upstream side of former bridge just upstream from present gage at same datum.

AVERAGE DISCHARGE.--54 years, 805 ft³/s (22.80 m³/s), 583,200 acre-ft/yr (719 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 20,300 ft³/s (575 m³/s) Nov. 3, June 18; maximum gage height, 22.86 ft (6.968 m) June 18; minimum discharge, 72 ft³/s (2.04 m³/s) Sept. 30.

Period of record: Maximum discharge, 105,000 ft³/s (2,970 m³/s) Apr. 23, 1944, gage height, 38.30 ft (11.674 m); no flow at times in 1929, 1936, 1954-56.

Maximum floods known since at least 1877, that of Apr. 23, 1944; Nov. 18, 1928, discharge, 94,400 ft³/s (2,670 m³/s), gage height, 41.0 ft (12.50 m), from graph based on gage readings at former site.

REMARKS.--Records good. Some regulation at low flow by City Water Works Dam and Timber Creek Reservoir above station. Records of chemical analyses, water temperatures, and suspended sediment loads for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 607: 1923(M). WSP 1117: Drainage area. WSP 1241: 1922(M), 1923, 1926-27, 1928-29(M), 1934, 1940-41.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	120	1030	284	414	4070	5040	1160	400	1670	701	152	330
2	110	1240	271	482	2620	3870	1000	400	1440	622	146	215
3	100	17400	264	515	1810	2560	917	404	4430	557	141	161
4	93	17200	258	525	3670	1770	820	397	7680	508	135	130
5	90	13000	257	515	6310	1390	757	382	8590	467	132	111
6	91	7100	279	638	5130	1250	723	369	3250	428	125	103
7	91	4050	316	998	2060	1160	736	352	1930	394	117	100
8	92	3000	328	1450	1550	1100	1020	335	1360	367	111	127
9	93	2360	331	1400	1310	993	3110	456	4230	352	105	136
10	89	1910	323	1360	1120	982	2640	620	10800	332	102	125
11	87	1550	893	1340	1210	1130	1740	393	11900	319	98	1100
12	94	1250	5400	1200	1010	1550	953	330	9490	311	92	924
13	166	1050	4510	722	912	1810	812	635	6050	284	90	410
14	154	884	2400	699	866	1630	772	3870	1860	267	124	266
15	120	739	1540	655	834	1390	784	2340	1300	254	145	202
16	109	633	1160	570	822	1820	829	1290	1060	249	156	166
17	111	563	926	530	807	2720	876	911	10900	241	135	151
18	110	517	782	496	791	2620	732	692	19100	233	213	141
19	100	494	682	482	786	1990	666	558	17700	227	192	134
20	95	467	616	468	728	1540	610	472	6280	220	153	127
21	92	436	555	450	960	1260	548	413	3280	216	128	119
22	90	410	515	428	3270	1090	504	390	3330	208	113	110
23	88	391	482	410	3510	972	484	1390	3310	193	102	104
24	87	372	450	388	2190	866	489	4040	6910	188	94	101
25	147	353	419	374	1730	763	495	2010	5450	184	94	93
26	311	336	396	365	2490	689	480	3880	2100	179	198	85
27	196	322	365	365	3570	1170	460	4860	1370	173	113	81
28	170	315	361	349	4590	2830	458	2640	1120	170	97	81
29	260	302	361	337	---	3470	463	4180	941	163	94	81
30	233	288	357	932	---	1920	437	6400	803	161	177	77
31	1410	---	374	3830	---	1410	---	4130	---	156	530	---
TOTAL	5199	79962	26455	23687	60726	54755	25975	49939	159634	9324	4404	6091
MEAN	168	2665	853	764	2169	1766	866	1611	5321	301	142	203
MAX	1410	17400	5400	3830	6310	5040	3110	6400	19100	701	530	1100
MIN	87	288	257	337	728	689	437	330	803	156	90	77
AC-FT	10310	158600	52470	46980	120500	108600	51520	99050	316600	18490	8740	12080
CAL YR 1974	TOTAL	478214	MEAN	1310	MAX	17400	MIN	71	AC-FT	948500		
WTR YR 1975	TOTAL	506151	MEAN	1387	MAX	19100	MIN	77	AC-FT	1004000		

PEAK DISCHARGE (BASE, 9,600 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-03	1500	22.73	20,300	06-11	1100	16.12	12,100
06-05	0700	14.91	10,700	06-18	2200	22.86	20,300

ARKANSAS RIVER BASIN

159

07149000 MEDICINE LODGE RIVER NEAR KIOWA, KS

LOCATION.--Lat 37°02'17", long 98°28'04", in SE¼SW¼ sec.36, T.34 S., R.11 W., Barber County, at downstream side of bridge on State Highway 14, 200 ft (61 m) downstream from the Atchison, Topeka and Santa Fe Railway Co. bridge, 1.5 mi (2.4 km) northeast of Kiowa, and at mile 22.2 (35.7 km).

DRAINAGE AREA.--903 mi² (2,340 km²).

PERIOD OF RECORD.--May 1895 to October 1896, October 1937 to September 1950, October 1954 to September 1955, June 1959 to current year. Published as Medicine River near Kiowa 1895-96. All figures of discharge above 2,000 ft³/s (57 m³/s) for June and July 1896, published in Eighteenth Annual Report of the Geological Survey (Part 4), have been found to be unreliable and should not be used.

GAGE.--Water-stage recorder. Datum of gage is 1,286.99 ft (382.275 m) above mean sea level (levels by Corps of Engineers). May 1895 to October 1896, nonrecording gage at site 2.0 mi (3.2 km) upstream at different datum. Feb. 11 to Mar. 2, 1938, nonrecording gage and Mar. 3, 1938, to Sept. 30, 1944, water-stage recorder at present site at datum 3.00 ft (0.914 m) higher. Oct. 1, 1944, to Sept. 30, 1950, and Oct. 1, 1954, to Sept. 30, 1955, water-stage recorder at present site and datum.

AVERAGE DISCHARGE.--30 years (1937-50, 1954-55, 1959-75), 141 ft³/s (3.993 m³/s), 102,200 acre-ft/yr (126 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,740 ft³/s (49.3 m³/s) June 24, gage height, 6.88 ft (2.097 m); minimum, 11 ft³/s (0.312 m³/s) Aug. 13, 14.

Period of record: Maximum discharge, 16,000 ft³/s (453 m³/s) Oct. 22, 1941, gage height, 11.75 ft (3.581 m), present datum; maximum gage height, 12.10 ft (3.688 m) Oct. 12, 1973; no flow at times in most years.

Floods of May 8, 1922, and June 1957 reached stages of about 16 ft (4.9 m) and 15.5 ft (4.7 m), respectively, present site and datum, from the Atchison, Topeka and Santa Fe Railway Co. records and information by local resident.

REMARKS.--Records good, except those for winter periods, which are poor.

REVISIONS (WATER YEARS).--WSP 1117: Drainage area. WSP 1391: 1938(M), 1942(M). WSP 1921: Drainage area. See also PERIOD OF RECORD.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	64	135	116	128	112	204	170	116	300	212	24	86
2	62	146	118	128	112	191	167	122	221	170	32	52
3	60	235	118	125	118	179	158	124	184	148	36	34
4	58	525	121	125	110	176	149	128	168	142	30	25
5	56	322	121	133	100	179	146	124	176	136	25	19
6	56	238	123	140	90	185	143	116	186	128	23	17
7	64	191	126	143	80	179	149	110	180	122	20	16
8	74	173	123	143	70	164	156	102	176	114	17	14
9	76	164	116	140	50	164	158	96	385	108	16	14
10	76	158	118	130	95	185	146	100	499	96	15	13
11	76	149	140	110	175	197	140	118	266	94	14	12
12	78	138	173	90	167	200	138	112	200	86	13	13
13	88	130	170	80	135	197	144	475	166	78	12	14
14	100	123	149	85	130	191	172	534	146	74	12	15
15	114	121	135	95	128	191	227	289	130	64	13	18
16	100	121	123	110	90	191	221	202	124	56	16	23
17	90	121	116	120	70	194	184	166	962	50	16	26
18	88	121	118	121	80	194	170	146	494	50	17	29
19	90	116	123	116	90	185	160	134	358	46	36	32
20	90	112	126	108	160	176	148	120	208	42	32	30
21	90	112	128	108	173	167	140	110	186	40	24	29
22	90	112	128	102	191	161	134	98	566	38	20	28
23	88	110	128	100	191	158	136	116	796	34	17	26
24	94	110	126	100	182	146	140	182	1,390	32	15	25
25	106	110	121	102	194	138	138	144	1,070	32	13	23
26	118	112	118	102	210	133	136	118	434	36	13	22
27	232	114	121	100	214	167	134	108	269	32	13	22
28	173	118	123	98	207	214	134	114	251	30	13	22
29	149	121	123	98	-----	221	124	184	597	26	14	23
30	138	118	126	110	-----	191	120	338	310	24	13	24
31	138	-----	128	116	-----	173	-----	501	-----	23	111	-----
TOTAL	2,976	4,676	3,943	3,506	3,724	5,591	4,582	5,447	11,398	2,363	685	746
MEAN	96.0	156	127	113	133	180	153	176	380	76.2	22.1	24.9
MAX	232	525	173	143	214	221	227	534	1,390	212	111	86
MIN	56	110	116	80	50	133	120	96	124	23	12	12
AC-FT	5,900	9,270	7,820	6,950	7,390	11,090	9,090	10,800	22,610	4,690	1,360	1,480

CAL YR 1974 TOTAL 57,996.7 MEAN 159 MAX 2,580 MIN 5.7 AC-FT 115,000
WTR YR 1975 TOTAL 49,637.0 MEAN 136 MAX 1,390 MIN 12 AC-FT 98,450

PEAK DISCHARGE (BASE, 3,700 CFS).--NO PEAK ABOVE BASE.

ARKANSAS RIVER BASIN

07155590 CIMARRON RIVER NEAR ELKHART, KS

LOCATION.--Lat 37°07'30", long 101°53'50", in NW¼ sec.4, T.34 S., R.42 W., Morton County, Cimarron National Grasslands, on downstream side of bridge near left end on State Highway 27, 8.0 mi (12.9 km) north of Elkhart, and at mile 499.4 (803.5 km).

DRAINAGE AREA.--2,899 mi² (7,508 km²), of which 483 mi² (1,251 km²) do not contribute directly to surface runoff.

PERIOD OF RECORD.--April 1971 to current year.

GAGE.--Water-stage recorder. Datum of gage is 3,381.89 ft (1,030.800 m) above mean sea level.

EXTREMES.--Current year: Maximum discharge, 2,520 ft³/s (71.4 m³/s) June 24, gage height, 5.10 ft (1.554 m); no flow most days.

Period of record: Maximum discharge, 5,100 ft³/s (144 m³/s) June 23, 1972, gage height, 7.45 ft (2.271 m), from rating curve extended above 400 ft³/s (11.3 m³/s); no flow most days.

REMARKS.--Records poor.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1						0	0	0	.07	0	0	
2						0	0	.04	0	0	101	
3						0	0	0	0	0	147	
4						0	0	0	0	0	234	
5						0	0	0	0	0	21	
6						0	0	0	0	0	.14	
7						0	0	0	0	0	0	
8						0	0	0	0	0	0	
9						.03	0	0	0	0	0	
10						0	.02	0	0	132	0	
11						0	.02	.08	0	436	0	
12						0	0	.02	0	95	0	
13						0	.01	0	0	2.4	0	
14						0	0	0	0	1.2	0	
15						0	0	0	0	.02	0	
16						0	0	0	0	0	0	
17						0	0	0	0	0	0	
18						0	0	0	0	0	0	
19						0	0	0	0	0	0	
20						0	0	0	0	0	0	
21						0	0	0	.06	0	0	
22						0	0	0	0	0	0	
23						0	0	0	0	0	0	
24						0	0	0	689	0	0	
25						0	0	0	552	0	0	
26						0	0	0	195	0	0	
27						0	0	0	16	0	0	
28						0	0	.11	.79	0	0	
29						0	0	74	.18	0	0	
30						0	0	48	0	0	0	
31		---			---	0	---	.86	---	0	0	---
TOTAL	0	0	0	0	0	.03	.05	123.11	1453.10	666.62	503.14	0
MEAN	0	0	0	0	0	.001	.002	3.97	48.4	21.5	16.2	0
MAX	0	0	0	0	0	.03	.02	74	689	436	234	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	0	0	.06	.10	244	2880	1320	998	0

CAL YR 1974 TOTAL 2637.08 MEAN 7.22 MAX 935 MIN 0 AC-FT 5230
WTR YR 1975 TOTAL 2746.05 MEAN 7.52 MAX 689 MIN 0 AC-FT 5450

PEAK DISCHARGE (BASE, 1,000 CFS)

DATE TIME G.H. DISCHARGE

06-24 1400 5.10 2,520

ARKANSAS RIVER BASIN

161

07156010 NORTH FORK CIMARRON RIVER AT RICHFIELD, KS

LOCATION.--Lat 37°15'30", long 101°46'30", in SE¼SE¼ sec.16, T.32 S., R.41 W., Morton County, at downstream side of bridge on State Highway 51, at Richfield, and at mile 85.8 (138.1 km).

DRAINAGE AREA.--463 mi² (1,199 km²).

PERIOD OF RECORD.--April 1971 to current year.

GAGE.--Water-stage recorder. Datum of gage is 3,343.5 ft (1,019.10 m) above mean sea level.

EXTREMES.--Current year: Maximum discharge, 271 ft³/s (7.67 m³/s) May 29, gage height, 7.3 ft (2.22 m), from floodmark; no flow most days.

Period of record: Maximum discharge, 5,900 ft³/s (167 m³/s) May 10, 1972, gage height, 14.30 ft (4.359 m), from rating curve extended above 2,100 ft³/s (59.5 m³/s), maximum gage height, 15.17 ft (4.624 m) Aug. 24, 1972; no flow most days.

REMARKS.--Records poor.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1			0			0		0	45	.12		
2			.04			0		0	32	.16		
3			.05			0		0	7.4	.22		
4			0			0		0	.53	.29		
5			0			0		0	.01	.10		
6			0			0		0	0	.20		
7			0			0		0	0	.30		
8			0			0		0	0	.40		
9			0			0		0	0	.40		
10			0			0		0	0	.50		
11			0			0		0	0	.50		
12			0			0		0	0	.40		
13			0			0		0	0	.40		
14			0			0		0	0	.40		
15			0			0		0	0	.20		
16			0			0		0	0	.10		
17			0			0		0	.29	.40		
18			0			0		0	2.0	.50		
19			0			0		0	.93	.40		
20			0			0		0	.85	.40		
21			0			0		0	29	.40		
22			0			0		0	53	.40		
23			0			0		0	38	.40		
24			0			0		0	26	.40		
25			0			0		0	11	.40		
26			0			0		0	1.8	.40		
27			0			0		0	.21	.40		
28			0			.04		17	0	.40		
29			0		---	0		133	.30	.50		
30			0		---	0		70	.21	.30		
31		---	0		---	0	---	51	---	0		---
TOTAL	0	0	.09	0	0	.04	0	271	248.53	10.39	0	0
MEAN	0	0	.003	0	0	.001	0	8.74	8.28	.34	0	0
MAX	0	0	.05	0	0	.04	0	133	53	.50	0	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	.2	0	0	.08	0	538	493	21	0	0

CAL YR 1974 TOTAL 515.18 MEAN 1.41 MAX 172 MIN 0 AC-FT 1020
WTR YR 1975 TOTAL 530.05 MEAN 1.45 MAX 133 MIN 0 AC-FT 1050

PEAK DISCHARGE (BASE, 150 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
05-29	UNKNOWN	7.3	271	06-21	2200	6.00	153

ARKANSAS RIVER BASIN

07156100 SAND ARROYO CREEK NEAR JOHNSON, KS

LOCATION.--Lat 37°30'00", long 101°45'40", in SW 1/4 sec.25, T.29 S., R.41 W., Stanton County, at bridge on State Highway 27, 4.3 mi (6.9 km) south of Johnson, and at mile 22.5 (36.2 km).

DRAINAGE AREA.--619 mi² (1,603 km²).

PERIOD OF RECORD.--April 1971 to current year. Prior to Oct. 1, 1972 published as "Sandy Arroyo Creek near Johnson".

GAGE.--Water-stage recorder. Datum of gage is 3,328.40 ft (1,014.496 m) above mean sea level.

EXTREMES.--Current year: Maximum discharge, 520 ft³/s (14.7 m³/s) May 29, gage height, 6.5 ft (1.98 m), from floodmark; no flow most days.

Period of record: Maximum discharge, 520 ft³/s (14.7 m³/s) May 29, 1975, gage height, 6.5 ft (1.98 m), from floodmark; no flow most days.

REMARKS.--Records poor.

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1								0			0	
2								0			38	
3								0			0	
4								0			0	
5								0			0	
6								0			0	
7								0			0	
8								0			0	
9								0			0	
10								0			0	
11								0			0	
12								0			0	
13								0			0	
14								0			0	
15								0			0	
16								0			0	
17								0			0	
18								0			0	
19								0			0	
20								0			0	
21								0			0	
22								0			0	
23								0			0	
24								0			0	
25								0			0	
26								0			0	
27								0			0	
28								2.1			0	
29					---			60			0	
30					---			0			0	
31		---			---		---	0	---		0	---
TOTAL	0	0	0	0	0	0	0	62.1	0	0	38	0
MEAN	0	0	0	0	0	0	0	2.00	0	0	1.23	0
MAX	0	0	0	0	0	0	0	60	0	0	38	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	0	0	0	0	123	0	0	75	0
CAL YR 1974	TOTAL	0.11	MEAN .0003	MAX	.06	MIN 0	AC-FT	0.2				
WTR YR 1975	TOTAL	100.10	MEAN .27	MAX	60	MIN 0	AC-FT	199				

PEAK DISCHARGE (BASE, 50 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
05-29	UNKNOWN	6.5	520	08-02	0200	6.25	420

ARKANSAS RIVER BASIN

163

07156220 BEAR CREEK NEAR JOHNSON, KS

LOCATION.--Lat 37°37'35", long 101°45'40", in NW¼SW¼ sec.12, T.28 S., R.41 W., Stanton County, at bridge on U.S. Highway 270, 3.5 mi (5.6 km) north of Johnson, and at mile 42.0 (67.6 km).

DRAINAGE AREA.--835 mi² (2,163 km²).

PERIOD OF RECORD.--October 1966 to current year.

GAGE.--Water-stage recorder. Datum of gage is 3,292.44 ft (1,003.536 m) above mean sea level.

AVERAGE DISCHARGE.--9 years, 5.29 ft³/s (0.150 m³/s), 3,830 acre-ft/yr (4.72 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,160 ft³/s (32.9 m³/s) May 29, gage height, 5.87 ft (1.789 m); no flow most days.
Period of record: Maximum discharge, 6,900 ft³/s (195 m³/s) May 11, 1972, gage height, 9.10 ft (2.774 m); no flow most days.

REMARKS.--Records poor.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1								0	.20	0		
2								0	0	0		
3								0	0	0		
4								0	0	0		
5								0	0	0		
6								0	0	0		
7								0	0	0		
8								0	0	0		
9								0	0	0		
10								0	0	0		
11								0	0	0		
12								0	0	0		
13								0	0	0		
14								0	0	0		
15								0	0	0		
16								0	0	0		
17								0	0	0		
18								0	0	0		
19								0	0	0		
20								0	0	0		
21								0	0	0		
22								0	0	0		
23								0	0	0		
24								0	0	0		
25								0	0	0		
26								0	0	0		
27								0	0	10		
28								49	0	16		
29					---			474	0	5.3		
30					---			532	0	0		
31		---			---		---	40	---	0		---
TOTAL	0	0	0	0	0	0	0	1095	.20	31.3	0	0
MEAN	0	0	0	0	0	0	0	35.3	.007	1.01	0	0
MAX	0	0	0	0	0	0	0	532	.20	16	0	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	0	0	0	0	2170	.4	62	0	0
CAL YR 1974	TOTAL	40.94	MEAN .11	MAX 37	MIN 0	AC-FT	81					
WTR YR 1975	TOTAL	1126.50	MEAN 3.09	MAX 532	MIN 0	AC-FT	2230					

PEAK DISCHARGE (BASE, 500 CFS)

DATE TIME G.H. DISCHARGE

05-29 1700 5.87 1,160

ARKANSAS RIVER BASIN

07156900 CIMARRON RIVER NEAR FORGAN, OK

LOCATION.--Lat 37°00'45", Long 100°29'39", in SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.8, T.35 S., R.24 E., Meade County, Kans., near center of span on downstream side of pier of bridge on Kansas State Highway 23, 0.8 mi (1.3 km) north of Oklahoma-Kansas State line, 7.8 mi (12.6 km) north of Forgan, and at mile 375.7 (604.5 km).

DRAINAGE AREA.--8,536 mi² (22,108 km²), of which 4,316 mi² (11,178 km²) is probably noncontributing.

PERIOD OF RECORD.--October 1965 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 2,325 ft (708.7 m), from topographic map.

AVERAGE DISCHARGE.--10 years, 83.6 ft³/s (2.368 m³/s), 60,570 acre-ft/yr (74.7 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,660 ft³/s (75.3 m³/s) Aug. 2, gage height, 4.79 ft (1.460 m); minimum daily, 28 ft³/s (0.793 m³/s) Feb. 27, Mar. 24.

Period of record: Maximum discharge, 21,200 ft³/s (600 m³/s) Oct. 20, 1965, gage height, 8.10 ft (2.469 m); minimum, 18 ft³/s (0.510 m³/s) Jan. 4, 1974.

REMARKS.--Records good except those for winter periods, which are fair. Extensive diversion for irrigation above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	57	56	53	73	97	35	39	63	91	71	1440	47
2	62	54	59	74	93	51	35	90	76	70	1310	47
3	62	64	58	80	79	62	57	68	70	69	162	49
4	58	56	62	76	95	73	61	60	68	66	83	50
5	47	54	63	70	98	65	58	57	69	65	67	50
6	54	53	60	72	70	64	83	47	67	63	62	50
7	52	54	58	74	60	58	94	45	66	62	60	51
8	53	63	57	72	70	58	91	47	66	59	57	50
9	50	60	58	72	95	69	86	51	66	61	59	49
10	48	58	58	81	120	65	83	55	66	104	60	47
11	45	54	64	79	75	64	76	56	65	64	55	45
12	48	56	60	40	65	54	67	56	63	53	56	47
13	71	56	60	44	61	48	104	83	63	53	59	48
14	50	56	62	60	43	48	78	86	63	48	64	48
15	39	59	62	80	49	56	66	66	62	46	58	48
16	38	60	61	96	52	52	64	58	63	45	54	60
17	37	61	63	104	35	52	67	54	63	42	53	58
18	35	61	63	92	32	46	65	51	60	44	52	51
19	34	59	61	92	36	39	67	46	59	43	52	45
20	35	57	61	91	42	39	71	41	61	45	53	43
21	38	59	61	96	30	38	67	44	122	42	53	45
22	37	59	62	87	33	43	71	57	83	42	51	46
23	41	59	62	83	29	34	68	61	70	40	50	47
24	42	57	64	84	39	28	60	53	67	40	51	50
25	43	57	62	77	38	30	65	51	69	40	50	55
26	52	56	66	74	34	45	68	49	68	41	57	53
27	62	56	74	78	28	40	64	50	69	38	56	48
28	63	59	72	77	34	40	63	60	69	38	56	50
29	59	58	72	79	---	50	62	144	68	36	53	53
30	74	55	68	89	---	40	61	168	69	36	55	55
31	74	---	73	89	---	38	---	102	---	33	51	---
TOTAL	1560	1726	1939	2435	1632	1524	2061	2019	2081	1599	4499	1485
MEAN	50.3	57.5	62.5	78.5	58.3	49.2	68.7	65.1	69.4	51.6	145	49.5
MAX	74	64	74	104	120	73	104	168	122	104	1440	60
MIN	34	53	53	40	28	28	35	41	59	33	50	43
AC-FT	3090	3420	3850	4830	3240	3020	4090	4000	4130	3170	8920	2950

CAL YR 1974 TOTAL 27515 MEAN 75.4 MAX 170 MIN 18 AC-FT 54580
WTR YR 1975 TOTAL 24560 MEAN 67.3 MAX 1440 MIN 28 AC-FT 48710

PEAK DISCHARGE (BASE, 3,000 CFS).--NO PEAK ABOVE BASE.

ARKANSAS RIVER BASIN

165

07157500 CROOKED CREEK NEAR NYE, KS

LOCATION.--Lat 37°02'02", long 100°11'55", in SE¼NW¼ sec.1, T.35 S., R.27 W., Meade County, on left bank at upstream side of county road bridge, 6.5 mi (10.5 km) east of Nye, and at mile 14.0 (22.5 km).

DRAINAGE AREA.--1,157 mi² (2,997 km²), of which 344 mi² (891 km²) is probably noncontributing.

PERIOD OF RECORD.--August 1942 to current year. Monthly discharge only for some periods, published in WSP 1311.

GAGE.--Water-stage recorder. Datum of gage is 2,163.79 ft (659.523 m) above mean sea level, unadjusted. Prior to Sept. 12, 1942, non-recording gage at same site and datum.

AVERAGE DISCHARGE.--33 years, 44.0 ft³/s (1.246 m³/s), 31,880 acre-ft/yr (39.3 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 205 ft³/s (5.81 m³/s) May 30, gage height, 3.53 ft (1.076 m); no flow many days.

Period of record: Maximum discharge, 13,600 ft³/s (385 m³/s) May 20, 1955, gage height, 8.01 ft (2.441 m); right-bank gage, from rating curve extended above 2,400 ft³/s (68.0 m³/s) on basis of contracted-opening measurement of peak flow at site 10 mi (16 km) upstream and a mean of slope-area measurement at gage site and discharge measurement at site 10 mi (16 km) upstream at gage height 7.59 ft (2.313 m); maximum stage, 9.00 ft (2.743 m) Aug. 31, 1963, at left-bank gage, 8.2 ft (2.50 m), floodmark, at right-bank gage; no flow at times in most years.

REMARKS.--Records good except those for winter periods, which are poor. Extensive diversion for irrigation above station. Records of suspended sediment loads for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1117: Drainage area. WSP 1211: 1950. WSP 1311: 1949(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.1	19	10	17	17	24	17	13	32	12	2.9	0
2	7.4	18	13	21	17	23	16	20	31	12	2.9	0
3	8.1	18	15	20	18	23	17	18	72	12	1.6	0
4	8.9	19	18	24	17	26	17	16	86	11	1.0	0
5	8.9	18	19	22	16	25	16	14	78	6.2	.42	0
6	13	16	19	21	15	23	16	13	64	8.1	0	0
7	14	17	18	22	15	21	20	12	55	6.2	0	0
8	13	17	17	21	15	20	23	12	45	7.4	0	0
9	12	17	16	23	15	23	23	9.8	36	8.1	.42	0
10	11	17	16	18	20	25	24	8.9	55	6.2	.18	0
11	9.8	15	18	15	25	26	21	11	82	6.2	0	0
12	13	16	18	15	23	25	20	12	77	6.2	0	0
13	21	14	17	17	21	23	26	19	70	5.2	0	0
14	16	14	17	20	22	22	26	19	54	4.2	1.7	0
15	16	13	18	25	21	22	25	22	42	2.5	4.6	0
16	15	13	16	25	20	23	24	22	28	1.2	2.9	0
17	14	14	19	22	20	24	25	18	23	.54	1.9	0
18	12	14	18	21	20	24	24	15	18	.25	3.4	0
19	12	14	17	18	20	23	21	14	18	.16	3.8	0
20	12	14	16	18	19	22	17	14	15	.08	1.4	0
21	12	14	16	17	20	22	16	16	27	.04	.56	0
22	11	14	15	18	21	22	16	18	20	0	0	.05
23	12	13	15	19	22	22	15	18	15	0	0	.01
24	11	14	15	18	23	20	17	15	14	0	0	0
25	12	14	12	18	24	18	18	14	14	0	0	.34
26	11	14	15	18	25	19	15	12	12	0	0	.54
27	11	13	20	17	25	20	18	13	14	0	0	.54
28	11	13	25	18	25	17	16	15	18	0	0	.84
29	11	13	19	17	---	19	13	23	19	0	0	1.0
30	17	10	17	18	---	18	15	114	15	.52	0	1.0
31	18	---	19	17	---	19	---	46	---	.63	0	---
TOTAL	382.2	449	523	600	561	683	577	606.7	1149	116.92	29.68	4.32
MEAN	12.3	15.0	16.9	19.4	20.0	22.0	19.2	19.6	38.3	3.77	.96	.14
MAX	21	19	25	25	25	26	26	114	86	12	4.6	1.0
MIN	7.4	10	10	15	15	17	13	8.9	12	0	0	0
AC-FT	758	891	1040	1190	1110	1350	1140	1200	2280	232	59	8.6

CAL YR 1974 TOTAL 8085.68 MEAN 22.2 MAX 394 MIN 0 AC-FT 16040
WTR YR 1975 TOTAL 5681.82 MEAN 15.6 MAX 114 MIN 0 AC-FT 11270

PEAK DISCHARGE (BASE, 1,400 CFS).--NO PEAK ABOVE BASE.

ARKANSAS RIVER BASIN

07157740 CIMARRON RIVER NEAR BUTTERMILK, KS

LOCATION.--Lat 37°01'36", long 99°28'45", NW¼ sec.3, T.35 S., R.20 W., Comanche County, Kans., near left abutment of county road bridge, 0.5 mi (0.8 km) from Bluff Creek, 2 mi (3.2 km) north of Kansas-Oklahoma State line, 11.5 mi (18.5 km) southwest of Buttermilk, and at mile 304.8 (490.4 km).

DRAINAGE AREA.--11,120 mi² (28,800 km²), of which 4,737 mi² (12,270 km²) is probably noncontributing.

PERIOD OF RECORD.--September 1973 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,704.57 ft (519.553 m) above mean sea level.

EXTREMES.--Current year: Maximum discharge, 1,910 ft³/s (54.1 m³/s) Aug. 2, gage height, 5.37 ft (1.637 m); no flow at times.

Period of record: Maximum discharge, 6,690 ft³/s (189 m³/s) Sept. 26, 1973, gage height, 8.29 ft (2.527 m); no flow at times each year.

REMARKS.--Records fair. Extensive diversions for irrigation above station. Records of chemical analyses and of water temperatures for the current year are published in Part 2 of "Water Resources Data for Oklahoma".

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38	112	79	205	85	111	77	8.0	251	7.0	556	
2	30	114	84	197	94	106	71	28	188	5.2	787	
3	27	192	75	186	98	98	70	55	130	3.8	886	
4	23	211	83	183	110	113	74	40	101	3.0	276	
5	24	171	179	128	84	126	66	29	117	2.5	171	
6	23	134	166	126	60	125	57	22	117	2.1	115	
7	63	107	121	139	64	107	52	16	156	1.9	77	
8	67	102	108	131	68	97	87	10	175	1.2	50	
9	77	99	102	126	60	95	93	7.2	503	1.5	23	
10	72	94	124	114	80	110	88	8.9	209	1.3	4.5	
11	56	93	121	80	140	155	101	38	133	1.1	2.4	
12	45	91	151	60	221	161	77	62	107	.80	.27	
13	67	85	142	74	138	132	66	69	85	.64	.95	
14	94	84	135	95	101	122	89	100	65	.50	.27	
15	88	80	129	78	97	102	148	118	49	.40	1.3	
16	77	80	124	145	80	106	148	95	39	.32	1.0	
17	67	82	129	162	54	122	92	69	39	.18	32	
18	63	85	120	98	64	122	63	45	39	.06	17	
19	54	86	129	90	60	105	50	24	28	0	51	
20	51	80	123	84	90	99	45	14	16	0	3.1	
21	47	77	121	80	172	91	36	8.9	15	0	1.3	
22	47	79	124	76	129	84	34	8.0	103	0	0	
23	45	82	127	77	116	93	33	7.2	114	0	0	
24	49	85	126	80	124	77	28	6.2	70	0	0	
25	56	85	136	82	159	71	24	8.2	47	0	0	
26	56	86	140	82	113	63	24	12	40	0	0	
27	72	88	137	76	99	85	21	6.7	36	0	0	
28	78	90	109	75	106	115	13	6.6	30	0	0	
29	77	95	165	74	---	105	11	41	20	0	0	
30	86	61	241	72	---	92	8.5	95	15	0	0	
31	97	---	214	80	---	81	---	424	---	36	0	---
TOTAL	1816	3010	4064	3355	2866	3271	1846.5	1481.9	3037	69.50	3056.09	0
MEAN	58.6	100	131	108	102	106	61.6	47.8	101	2.24	98.6	0
MAX	97	211	241	205	221	161	148	424	503	36	886	0
MIN	23	61	75	60	54	63	8.5	6.2	15	0	0	0
AC-FT	3600	5970	8060	6650	5680	6490	3660	2940	6020	138	6060	0

CAL YR 1974 TOTAL 30773.58 MEAN 84.3 MAX 980 MIN 0 AC-FT 61040

WTR YR 1975 TOTAL 27872.99 MEAN 76.4 MAX 886 MIN 0 AC-FT 55290

PEAK DISCHARGE (BASE, 3,000 CFS).--NO PEAK ABOVE BASE.

07157900 CAVALRY CREEK AT COLDWATER, KS

LOCATION.--Lat 37°16'00", long 99°20'40", in NE¼NE¼ sec.14, T.32 S., R.19 W., Comanche County, at downstream side of county highway bridge, 1.0 mi (1.6 km) west of Coldwater, and at mile 18.3 (29.4 km).

DRAINAGE AREA.--39 mi² (101 km²).

PERIOD OF RECORD.--Annual maximum, water years 1957-66. October 1966 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,016.474 ft (614.621 m) above mean sea level. Prior to October 1, 1966, crest-stage gage at present site and at datum 6.00 ft (1.829 m) lower. October 1, 1966, to September 30, 1969, water-stage recorder at present site and at datum 2.00 ft (0.610 m) higher.

AVERAGE DISCHARGE.--9 years, 4.04 ft³/s (0.114 m³/s), 2,930 acre-ft/yr (3.61 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,200 ft³/s (62.3 m³/s) June 28, gage height, 7.00 ft (2.134 m); minimum, 1.0 ft³/s (0.028 m³/s) Sept. 4.

Period of record: Maximum gage height, 10.68 ft (3.255 m), present datum, June 16, 1958 (discharge not determined). October 1966 to current year: Maximum discharge, 3,550 ft³/s (101 m³/s) Sept. 26, 1973, gage height, 9.40 ft (2.865 m), from rating curve extended above 840 ft³/s (23.8 m³/s); no flow July 1-24, 1974.

REMARKS.--Records fair. Records of suspended sediment loads for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.2	3.2	2.5	2.4	3.4	3.0	2.9	2.2	8.7	5.3	2.6	1.1
2	2.2	10	2.5	2.5	3.5	3.0	2.7	2.4	4.4	4.7	2.6	1.2
3	2.2	4.4	2.6	2.5	3.5	2.8	2.7	2.4	3.5	4.3	2.4	1.1
4	2.2	3.2	2.6	2.5	3.6	2.8	2.7	2.3	3.4	4.2	2.3	1.1
5	2.2	2.9	2.5	2.5	3.6	2.8	2.8	2.3	3.4	4.0	2.3	1.2
6	2.3	2.7	2.5	2.6	3.6	2.8	2.8	2.2	7.1	3.9	2.2	1.2
7	2.4	2.7	2.5	2.6	3.6	2.8	2.8	2.2	4.0	3.9	2.2	1.2
8	2.4	2.6	2.5	2.7	3.8	2.7	2.8	2.2	3.7	3.9	2.2	1.2
9	2.4	2.6	2.5	2.7	3.5	2.8	2.8	2.2	4.2	3.8	2.1	1.2
10	2.4	2.6	2.5	2.7	3.5	2.9	2.8	2.4	4.9	3.8	2.0	1.2
11	2.4	2.5	2.8	2.7	3.3	2.9	2.8	2.7	2.9	3.6	2.0	1.3
12	2.5	2.4	2.8	2.6	3.4	2.9	2.6	2.6	2.9	3.5	1.9	1.4
13	3.3	2.4	2.8	2.7	3.4	2.9	2.9	2.7	2.5	3.3	1.8	1.4
14	2.9	2.4	2.7	2.7	3.5	2.9	3.1	2.4	2.7	3.1	1.8	1.6
15	2.7	2.4	2.7	2.8	3.5	2.9	2.8	2.3	2.4	3.1	1.8	1.6
16	2.7	2.4	2.7	2.8	3.6	2.9	2.7	2.2	2.4	3.0	1.7	1.7
17	2.6	2.4	2.7	2.8	3.5	2.9	2.6	2.2	3.7	2.8	1.7	1.8
18	2.5	2.4	2.7	2.8	3.5	3.0	2.5	2.2	2.2	2.8	1.6	1.8
19	2.5	2.4	2.8	3.0	3.5	3.0	2.4	2.2	2.2	2.7	1.5	1.7
20	2.5	2.6	2.8	3.0	3.4	2.9	2.4	2.3	2.0	2.7	1.5	1.7
21	2.5	2.6	2.8	3.1	3.4	2.9	2.4	2.4	118	2.7	1.5	1.7
22	2.5	2.6	2.8	3.0	3.4	2.8	2.4	2.8	82	2.6	1.4	1.7
23	2.6	2.5	2.7	3.1	3.3	2.8	2.4	3.1	527	2.5	1.4	1.7
24	2.7	2.5	2.4	3.1	3.3	2.7	2.3	2.9	140	2.6	1.4	1.6
25	2.8	2.6	2.5	3.2	3.2	2.7	2.3	3.0	20	2.5	1.3	1.5
26	2.9	2.6	2.5	3.2	3.2	2.6	2.3	3.1	4.0	2.4	1.3	1.5
27	2.9	2.5	2.5	3.3	3.2	3.0	2.2	3.2	431	2.4	1.3	1.4
28	2.9	2.6	2.4	3.3	3.1	3.0	2.2	3.3	662	2.3	1.3	1.4
29	2.9	2.6	2.4	3.3	---	3.0	2.2	8.8	27	2.6	1.2	1.4
30	3.1	2.6	2.4	3.3	---	3.1	2.2	39	7.6	3.1	1.3	1.4
31	3.3	---	2.4	3.4	---	3.0	---	50	---	2.8	1.2	---
TOTAL	80.6	86.9	80.5	88.9	96.3	89.2	77.5	168.2	2091.8	100.9	54.8	43.0
MEAN	2.60	2.90	2.60	2.87	3.44	2.88	2.58	5.43	69.7	3.25	1.77	1.43
MAX	3.3	10	2.8	3.4	3.8	3.1	3.1	50	662	5.3	2.6	1.8
MIN	2.2	2.4	2.4	2.4	3.1	2.6	2.2	2.2	2.0	2.3	1.2	1.1
AC-FT	160	172	160	176	191	177	154	334	4150	200	109	85

CAL YR 1974 TOTAL 1453.80 MEAN 3.98 MAX 232 MIN 0 AC-FT 2880
WTR YR 1975 TOTAL 3058.60 MEAN 8.38 MAX 662 MIN 1.1 AC-FT 6070

PEAK DISCHARGE (BASE, 310 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
06-21	0900	3.93	362	06-28	0100	7.00	2,200
06-23	1500	5.93	1,380				

ARKANSAS RIVER BASIN

07157940 BLUFF CREEK NEAR BUTTERMILK, KS

LOCATION.--Lat 37°01'55", long 99°28'45", NW¼ sec.3, T.35 S., R.20 W., Comanche County, Kans., near left bank of county road bridge, 2.2 mi (3.5 km) north of Kansas-Oklahoma State line, 11.3 mi (18.2 km) southwest of Buttermilk, and at mile 0.3 (0.5 km).

DRAINAGE AREA.--657 mi² (1,702 km²), of which 76 mi² (197 km²) is probably noncontributing.

PERIOD OF RECORD.--September 1973 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,700.33 ft (518.261 m) above mean sea level.

EXTREMES.--Current year: Maximum discharge, 3,110 ft³/s (88.1 m³/s) June 24, gage height, 10.19 ft (3.106 m); minimum daily, 2.4 ft³/s (0.068 m³/s) Sept. 29, 30.

Period of record: Maximum discharge, 16,000 ft³/s (453 m³/s) Sept. 26, 1973, gage height, 14.35 ft (4.374 m); minimum daily, 1.8 ft³/s (0.051 m³/s) July 11, 1974.

REMARKS.--Records good. Records of chemical analyses and water temperature for the current year are published in Part 2 of "Water Resources Data for Oklahoma"

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	28	20	38	33	40	41	33	73	276	717	8.8
2	12	28	18	40	33	39	38	36	59	246	149	7.5
3	11	43	22	41	34	38	38	36	50	222	123	6.0
4	11	51	24	40	37	39	37	35	46	204	46	4.0
5	10	45	29	41	33	40	36	33	57	186	35	3.6
6	10	38	29	39	27	40	36	33	50	171	29	3.8
7	13	35	24	41	30	37	36	31	2470	150	25	3.5
8	20	34	23	41	27	35	38	30	721	112	21	3.1
9	19	33	24	41	25	37	37	32	336	77	19	3.0
10	16	35	25	42	33	42	36	30	223	62	17	2.8
11	15	33	28	43	48	44	35	73	140	56	15	2.8
12	14	31	32	40	43	42	34	68	100	50	13	2.9
13	23	30	31	41	38	40	39	56	62	44	12	3.1
14	30	28	29	51	38	40	58	88	56	45	12	3.4
15	25	27	28	56	38	39	57	57	50	40	11	4.0
16	21	25	27	47	35	41	49	46	45	36	11	3.8
17	18	27	27	45	25	41	45	41	56	31	9.7	3.4
18	17	31	28	41	28	39	43	38	75	26	8.9	3.4
19	16	27	28	41	32	37	40	34	53	24	8.1	3.1
20	15	24	27	39	50	38	38	31	42	22	8.6	3.0
21	15	24	26	37	46	39	35	28	50	21	8.2	2.8
22	15	28	27	37	44	38	34	27	186	19	6.9	2.9
23	17	28	27	37	42	38	35	29	384	18	6.2	2.7
24	18	27	25	36	43	36	39	28	1380	17	5.9	2.7
25	18	26	26	36	44	34	46	26	387	15	5.4	2.7
26	19	26	27	35	42	34	42	25	291	13	5.2	2.8
27	21	26	29	35	40	46	43	24	339	12	4.9	2.7
28	21	25	30	35	40	59	41	24	1160	11	5.0	2.5
29	20	25	34	34	---	46	38	45	465	10	6.9	2.4
30	21	23	37	34	---	43	35	105	324	13	9.7	2.4
31	24	---	36	34	---	42	---	119	---	64	9.8	---
TOTAL	537	911	847	1238	1028	1243	1199	1341	9730	2293	1364.4	105.6
MEAN	17.3	30.4	27.3	39.9	36.7	40.1	40.0	43.3	324	74.0	44.0	3.52
MAX	30	51	37	56	50	59	58	119	2470	276	717	8.8
MIN	10	23	18	34	25	34	34	24	42	10	4.9	2.4
AC-FT	1070	1810	1680	2460	2040	2470	2380	2660	19300	4550	2710	209
CAL YR 1974	TOTAL	15488.9	MEAN 42.4	MAX 723	MIN 1.8	AC-FT 30720						
WTR YR 1975	TOTAL	21837.0	MEAN 59.8	MAX 2470	MIN 2.4	AC-FT 43310						

PEAK DISCHARGE (BASE, 1,000 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
06-07	1030	10.17	3,090	06-28	1130	9.21	2,260
06-24	0030	10.19	3,110	08-01	0745	7.76	1,320

ARKANSAS RIVER BASIN

169

07165700 VERDIGRIS RIVER NEAR MADISON, KS

LOCATION.--Lat 38°08'15", long 96°06'05", in NW¼SW¼ sec.16, T.22 S., R.12 E., Greenwood County, on downstream side of bridge on State Highway 57, 1.5 mi (2.4 km) east of Madison, 3.0 mi (4.8 km) upstream from Halderman Creek, and at mile 321.9 (517.9 km).

DRAINAGE AREA.--181 mi² (469 km²).

PERIOD OF RECORD.--September 1955 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,034.51 ft (315.319 m) above mean sea level (levels by Corps of Engineers). Prior to Oct. 6, 1955, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--20 years, 128 ft³/s (3.625 m³/s), 92,740 acre-ft/yr (114 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,620 ft³/s (131 m³/s) Nov. 3, gage height, 16.13 ft (4.916 m); minimum, 0.80 ft³/s (0.023 m³/s) Sept. 18, 21-23.

Period of record: Maximum discharge, 34,700 ft³/s (983 m³/s) July 16, 1958, gage height, 27.35 ft (8.336 m); no flow for many days in 1955-57, 1964, 1966, 1967.

Flood of July 11, 1951, reached a stage of 33.4 ft (10.18 m) from floodmark, discharge, 128,000 ft³/s (3,625 m³/s), on basis of slope-area measurement of peak flow.

REMARKS.--Records good.

COOPERATION.--Gage-height record and 19 discharge measurements furnished by Corps of Engineers; records computed by Geological Survey.

REVISIONS.--WSP 1711: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	462	50	107	320	220	162	97	75	69	3.3	9.5
2	15	272	47	97	211	182	156	85	82	60	4.6	7.2
3	13	2,770	46	101	186	152	150	91	1,100	52	6.2	5.6
4	13	1,940	45	89	706	138	204	88	438	47	5.8	4.2
5	12	1,520	45	89	534	131	176	75	214	41	5.0	3.4
6	13	1,040	51	139	275	121	144	67	140	36	4.5	3.7
7	15	546	95	282	275	119	138	61	103	31	5.7	3.3
8	17	365	85	288	235	103	231	53	274	27	8.8	3.0
9	16	265	63	193	169	100	196	48	887	27	8.7	3.0
10	14	242	56	346	165	119	160	44	442	27	6.4	30
11	13	228	420	329	148	124	141	43	1,050	25	7.5	20
12	39	213	600	196	130	143	125	40	586	23	9.3	3.9
13	38	182	290	206	122	139	119	43	347	21	5.2	2.2
14	53	153	202	153	119	115	203	66	246	18	12	1.3
15	47	106	166	131	111	154	231	58	182	15	8.4	1.1
16	34	96	137	124	103	483	178	46	221	15	7.5	1.1
17	26	96	121	114	110	606	151	39	2,380	16	7.4	1.1
18	21	96	111	109	110	402	145	35	1,040	15	8.5	.96
19	19	96	105	112	103	298	132	31	844	12	11	1.5
20	18	90	95	105	113	212	112	29	425	11	9.9	1.4
21	18	82	87	97	516	178	100	27	214	9.6	7.0	1.1
22	17	78	83	86	940	153	92	38	1,380	9.7	5.3	.95
23	16	76	78	78	418	138	90	790	1,150	8.2	4.0	1.0
24	15	71	73	78	263	118	163	371	611	7.3	3.1	1.2
25	16	64	65	81	249	102	195	177	328	9.2	2.5	1.8
26	36	61	60	77	392	92	140	166	210	8.7	2.3	2.2
27	33	58	60	70	318	819	118	151	157	6.9	2.1	2.0
28	28	57	61	66	259	824	189	184	125	5.2	3.1	1.9
29	211	56	61	64	-----	381	159	158	101	4.2	13	2.8
30	442	51	61	166	-----	252	119	111	83	3.3	14	8.4
31	1,370	-----	81	657	-----	197	-----	86	-----	3.9	12	-----
TOTAL	2,653	11,432	3,600	4,830	7,600	7,315	4,619	3,398	15,435	664.2	214.1	130.81
MEAN	85.6	381	116	156	271	236	154	110	515	21.4	6.91	4.36
MAX	1,370	2,770	600	657	940	824	231	790	2,380	69	14	30
MIN	12	51	45	64	103	92	90	27	75	3.3	2.1	.95
AC-FT	5,260	22,680	7,140	9,580	15,070	14,510	9,160	6,740	30,620	1,320	425	259

CAL YR 1974 TOTAL 54,196.61 MEAN 148 MAX 2,770 MIN .52 AC-FT 107,500
 WTR YR 1975 TOTAL 61,891.11 MEAN 170 MAX 2,770 MIN .95 AC-FT 122,800

PEAK DISCHARGE (BASE, 5,000 CFS).--NO PEAK ABOVE BASE.

ARKANSAS RIVER BASIN

07165900 TORONTO LAKE NEAR TORONTO, KS

LOCATION.--Lat 37°44'30", long 95°56'00", in NW¼SE¼ sec.36, T.26 S., R.13 E., Woodson County, in control tower of dam on Verdigris River, 4.0 mi (6.4 km) southeast of town of Toronto, and at mile 271.5 (436.8 km).

DRAINAGE AREA.--730 mi² (1,891 km²).

PERIOD OF RECORD.--March 1960 to current year. Prior to October 1971 published as "Toronto Reservoir".

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Corps of Engineers).

EXTREMES.--Current year: Maximum elevation, 924.07 ft (281.657 m) Nov. 8, contents, 137,400 acre-ft (169 hm³); minimum, 901.06 ft (274.643 m) Aug. 13, contents, 20,730 acre-ft (25.6 hm³).

Period of record: Maximum elevation, 928.35 ft (282.961 m) Sept. 16, 1961, contents, 170,000 acre-ft (210 hm³); minimum since conservation pool first reached, 897.25 ft (273.482 m) Mar. 30, 1967, contents, 13,480 acre-ft (16.6 hm³).

REMARKS.--Reservoir is formed by compacted earthfill dam. Storage began Mar. 15, 1960. Maximum pool is 311,200 acre-ft (384 hm³) at elevation 940.6 ft (286.69 m) consisting of the following: Minimum pool, 13,000 acre-ft (16.0 hm³) at elevation 897.0 ft (273.41 m); conservation pool, 10,290 acre-ft (12.7 hm³) between elevations 897.0 ft (273.41 m) and 901.5 ft (274.78 m); flood-control pool, 172,000 acre-ft (212 hm³) between elevations 901.5 ft (274.78 m) and 931.0 ft (283.77 m); uncontrolled storage, 115,900 acre-ft (143 hm³) between elevations 931.0 ft (283.78 m) and 940.6 ft (286.69 m). Reservoir is used for flood control and conservation. Figures given herein represent total contents.

COOPERATION.--Elevations and contents furnished by Corps of Engineers; records reviewed by Geological Survey.

Capacity table (elevation, in feet, and contents, in acre-feet)
(Based on survey made by Corps of Engineers in 1966)

900	17,930	915	76,570
905	32,460	920	107,400
910	51,650	925	145,000

ELEVATION, IN FEET, AT 2400, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	902.05	910.39	906.62	902.43	908.22	903.52	906.76	901.53	904.74	901.77	901.29	901.62
2	902.01	911.95	905.32	902.65	908.55	902.84	905.93	901.53	903.67	901.65	901.28	901.63
3	901.97	919.40	903.86	902.83	908.63	902.06	905.06	901.51	905.06	901.64	901.26	901.62
4	901.95	922.08	902.56	902.99	909.64	901.57	904.31	901.47	904.88	901.62	901.24	901.63
5	901.93	923.47	901.68	903.35	909.67	901.52	903.70	901.45	904.16	901.58	901.22	901.64
6	901.95	923.97	901.41	903.56	909.08	901.71	903.00	901.46	903.58	901.54	901.20	901.63
7	901.91	924.07	901.56	903.61	908.40	901.74	902.47	901.44	903.52	901.52	901.17	901.61
8	901.89	924.04	901.58	903.48	907.82	901.77	902.33	901.45	903.25	901.53	901.16	901.60
9	901.87	923.97	901.61	903.27	906.98	901.94	901.93	901.65	906.22	901.56	901.13	901.58
10	901.85	923.89	901.62	903.16	906.18	901.88	901.62	901.63	907.83	901.57	901.11	901.60
11	901.83	923.58	903.17	903.25	905.37	901.81	901.58	901.60	909.49	901.57	901.09	901.61
12	902.15	922.87	904.56	903.10	904.45	902.05	901.59	901.56	910.12	901.56	901.07	901.59
13	902.43	922.16	904.59	902.87	903.52	902.32	901.62	901.62	909.89	901.55	901.18	901.58
14	902.65	921.41	904.40	902.65	902.96	902.31	901.77	902.96	909.13	901.53	901.29	901.58
15	902.58	920.63	904.02	902.42	902.68	902.90	901.86	902.92	908.26	901.52	901.29	901.57
16	902.27	919.78	903.73	902.17	902.44	905.27	901.72	902.61	907.92	901.49	901.28	901.57
17	901.90	918.95	903.32	901.98	902.27	906.49	901.55	902.25	911.13	901.46	901.31	901.57
18	901.70	918.11	902.89	901.94	902.17	907.15	901.51	901.87	911.98	901.45	901.30	901.58
19	901.63	917.27	902.44	901.94	902.05	906.98	901.49	901.57	911.67	901.43	901.29	901.56
20	901.54	916.36	902.13	901.88	902.22	906.63	901.45	901.47	910.70	901.42	901.29	901.54
21	901.51	915.43	901.95	901.87	903.13	906.22	901.45	901.46	909.55	901.40	901.26	901.52
22	901.53	914.47	901.79	901.78	904.85	905.70	901.47	901.53	909.98	901.38	901.24	901.51
23	901.56	913.52	901.61	901.69	905.18	905.21	901.53	905.62	910.12	901.38	901.20	901.50
24	901.60	912.48	901.53	901.68	904.93	904.57	903.03	906.37	909.36	901.38	901.16	901.48
25	901.68	911.89	901.54	901.70	904.63	903.92	903.23	906.66	908.26	901.36	901.17	901.46
26	901.71	911.89	901.55	901.72	904.75	903.27	902.91	907.28	906.99	901.35	901.13	901.44
27	901.76	911.38	901.56	901.75	904.52	906.05	902.50	907.37	905.85	901.35	901.11	901.43
28	901.89	910.29	901.57	901.72	904.08	907.53	902.07	907.13	904.82	901.35	901.14	901.43
29	902.22	909.08	901.60	901.74	-----	907.86	901.79	907.17	903.72	901.34	901.52	901.44
30	904.28	907.89	901.66	904.27	-----	907.92	901.63	906.65	902.51	901.32	901.59	901.44
31	909.73	-----	902.16	907.53	-----	907.53	-----	905.73	-----	901.31	901.61	-----
MEAN	902.24	917.56	902.63	902.68	905.33	904.20	902.50	903.20	907.28	901.48	901.24	901.55
MAX	909.73	924.07	906.62	907.53	909.67	907.92	906.76	907.37	911.98	901.77	901.61	901.64
MIN	901.51	907.89	901.41	901.68	902.05	901.52	901.45	901.44	902.51	901.31	901.07	901.43
(+)	50,520	42,850	23,680	41,500	29,410	41,500	22,230	34,890	24,720	21,390	22,180	21,730
(#)	+27,130	-7,670	-19,170	+17,820	-12,090	+12,090	-19,270	+12,660	-10,170	-3,330	+790	-450

CAL YR 1974 (#) -9,180

WTR YR 1975 (#) -1,660

+ CONTENTS IN ACRE-FEET, AT END OF MONTH.

CHANGE IN CONTENTS, IN ACRE-FEET.

171

LOCATION.--Lat 37°42'20", long 95°54'20", in SW¼SW¼ sec.8, T.27 S., R.14 E., Wilson County, on county highway bridge, 1.2 mi (1.9 km) upstream from Meadow Creek, 1.5 mi (2.4 km) northwest of Coyville, 2.5 mi (4.0 km) downstream from Pig Creek, and at mile 268.0 (431.2 km).

PERIOD OF RECORD.--August 1939 to current year.

GAGE.--Water-stage recorder. Datum of gage is 845.28 ft (257.64 m) above mean sea level (levels by Corps of Engineers). Prior to Jan. 25, 1952, nonrecording gage and Jan. 26, 1952, to July 17, 1961, water-stage recorder, both 100 ft (30 m) upstream at same datum. July 18, 1961, to Jan. 28, 1962, nonrecording gage at present site and datum. Since Jan. 26, 1961, auxiliary nonrecording gage 3.2 mi (5.1 km) downstream.

EXTREMES.--Current year: Maximum discharge, 5,720 ft³/s (162 m³/s) Nov. 3, gage height, 23.94 ft (7.297 m); minimum, 7.9 ft³/s (0.22 m³/s) many days in Aug.

Period of record: Maximum discharge, 130,000 ft³/s (3,680 m³/s) July 12, 1951, gage height, 41.25 ft (12.573 m), from graph based on gage readings, from rating curve extended above 46,000 ft³/s (1,300 m³/s) on basis of slope-area measurement of peak flow; no flow at times in 1939-41, 1953-58.

REMARKS.--Records good. Flow regulated since Mar. 15, 1960 by Toronto Lake, 3.5 mi (5.6 km) upstream (see sta 07165900). Records of chemical analyses for the current year are published in Part 2 of this report.

COOPERATION.--Gage-height record, and 23 discharge measurements furnished by Corps of Engineers; records computed by Geological Survey.

REVISIONS (WATER YEARS).--WSP 1117: Drainage area. WSP 1211: 1945(M), 1948(M). WSP 1241: 1941-42, 1943(M).

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	58	836	2,690	194	230	1,690	2,140	350	2,070	1,400	8.5	9.2
2	57	2,620	2,630	188	221	1,660	2,110	236	2,030	323	8.8	8.7
3	57	3,660	2,570	194	578	1,640	2,080	237	2,440	133	8.5	8.5
4	57	1,220	2,310	193	1,780	1,180	1,810	237	2,080	133	8.5	9.0
5	57	138	1,480	227	2,280	580	1,520	206	2,060	132	8.5	9.3
6	57	494	870	583	2,230	245	1,500	167	1,560	132	8.5	8.8
7	57	1,080	184	1,010	2,200	252	1,510	166	975	103	8.8	8.8
8	57	1,070	175	996	2,190	245	1,580	167	970	29	8.2	8.8
9	57	1,070	172	989	2,150	248	1,490	243	727	29	8.2	8.9
10	56	1,070	172	846	2,110	420	1,060	177	130	30	8.2	11
11	56	1,710	424	658	2,080	650	479	171	100	30	8.2	9.8
12	58	3,360	618	652	2,050	705	321	141	29	30	8.2	8.8
13	59	3,370	1,020	650	2,020	689	322	428	919	35	8.7	9.2
14	60	3,330	1,010	648	1,430	659	327	588	2,180	35	24	9.5
15	324	3,290	1,000	646	803	784	476	321	2,160	34	8.5	9.4
16	661	3,250	994	643	804	859	640	650	2,140	34	7.9	9.4
17	654	3,220	986	560	820	1,080	637	643	2,590	34	8.2	9.6
18	406	3,180	978	339	829	2,090	474	638	559	34	9.2	9.7
19	170	3,150	969	341	826	1,480	316	507	1,960	34	7.9	9.4
20	170	3,110	758	341	852	1,430	315	214	3,330	34	7.9	9.7
21	110	3,070	493	339	845	1,410	248	92	3,330	30	7.9	9.7
22	18	3,030	492	333	836	1,400	171	92	3,420	9.7	7.9	9.6
23	18	2,990	490	337	842	1,390	171	184	3,360	9.4	7.9	9.4
24	18	2,940	347	286	1,150	1,370	191	111	3,290	9.1	8.0	9.4
25	25	2,040	172	173	1,750	1,360	556	110	3,230	9.1	8.2	9.5
26	24	212	172	173	1,790	1,350	964	285	3,170	9.1	8.2	9.6
27	21	988	173	172	1,750	1,940	957	415	2,740	9.4	8.0	9.7
28	28	2,820	173	172	1,710	815	948	1,110	2,130	8.8	9.4	10
29	45	2,800	173	172	-----	755	786	1,100	2,090	9.7	143	12
30	664	2,740	173	600	-----	744	464	1,530	2,050	8.8	25	10
31	2,530	-----	264	711	-----	1,320	-----	2,100	-----	8.5	11	-----
TOTAL	6,689	67,858	25,132	14,366	39,156	32,440	26,563	13,616	59,819	2,899.6	427.9	284.4
MEAN	216	2,262	811	463	1,398	1,046	885	439	1,994	93.5	13.8	9.48
MAX	2,530	3,660	2,690	1,010	2,280	2,090	2,140	2,100	3,420	1,400	143	12
MIN	18	138	172	172	221	245	171	92	29	8.5	7.9	8.5
AC-FT	13,270	134,600	49,850	28,490	77,670							

ARKANSAS RIVER BASIN

07166500 VERDIGRIS RIVER NEAR ALTOONA, KS

LOCATION.--Lat 37°29'26", long 95°40'49", in SE¼NE¼SW¼ sec.29, T.29 S., R.16 E., Wilson County, on downstream side of highway bridge, 2.5 mi (4.0 km) southwest of Altoona, 2.5 mi (4.0 km) downstream from Big Cedar Creek, and at mile 227.9 (366.7 km).

DRAINAGE AREA.--1,138 mi² (2,947 km²).

PERIOD OF RECORD.--October 1938 to current year. Monthly discharge only for some periods, published in WSP 1311.

GAGE.--Water-stage recorder. Datum of gage is 780.18 ft (237.799 m) above mean sea level (levels by Corps of Engineers). Prior to Sept. 9, 1944, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--37 years, 738 ft³/s (20.90 m³/s), 534,700 acre-ft/yr (659 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 18,500 ft³/s (524 m³/s) Nov. 3, gage height, 25.74 ft (7.846 m); minimum, 10 ft³/s (0.28 m³/s) Aug. 12, 13.

Period of record: Maximum discharge, 71,000 ft³/s (2,010 m³/s) July 12, 1951, gage height, 31.09 ft (9.476 m); no flow at times in 1939-41, 1952-57.

REMARKS.--Records good. Considerable regulation since 1960 by Toronto Lake 43.6 mi (70.2 km) upstream (see sta 07165900). Diversion above station from Altoona Reservoir for municipal supply of Altoona.

COOPERATION.--Gage-height record and 22 discharge measurements furnished by Corps of Engineers; records computed by Geological Survey.

REVISIONS.--WSP 1117: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	189	8,340	2,800	1,130	3,510	2,200	2,090	598	2,310	2,250	16	158
2	145	5,600	2,760	567	981	2,030	2,460	472	2,240	1,190	17	104
3	126	14,200	2,710	651	754	1,920	2,380	420	3,530	550	27	78
4	113	14,200	2,660	726	2,290	1,860	2,300	396	3,150	335	22	67
5	107	11,000	2,150	641	3,700	1,200	1,880	367	2,750	224	17	90
6	109	2,890	1,580	1,050	2,850	698	1,690	323	2,590	195	15	94
7	101	1,250	808	1,250	2,580	443	1,710	264	2,800	179	14	66
8	100	1,480	422	1,350	2,600	428	2,400	252	1,420	176	13	61
9	98	1,400	324	1,270	2,420	413	2,180	482	2,500	130	12	56
10	96	1,530	285	1,270	2,460	435	1,820	733	1,310	94	12	59
11	94	1,620	1,280	1,040	2,380	683	1,080	369	1,760	83	12	70
12	125	2,520	2,600	842	2,340	1,170	620	294	902	82	11	119
13	721	3,400	1,320	774	2,290	1,610	533	592	600	80	48	100
14	367	3,390	1,320	831	2,260	1,170	560	4,730	1,620	82	3,000	65
15	222	3,340	1,240	782	1,370	1,460	587	1,830	2,400	83	633	58
16	388	3,290	1,180	783	1,160	3,470	739	750	2,380	74	190	57
17	670	3,270	1,140	775	1,610	2,750	837	883	7,410	52	126	55
18	646	3,240	1,120	646	1,900	3,170	827	827	6,580	48	1,500	53
19	384	3,200	1,100	463	1,600	3,630	617	794	1,460	48	269	50
20	213	3,160	1,080	462	1,630	2,050	470	610	2,760	46	127	44
21	203	3,120	780	448	1,540	1,810	457	338	3,390	46	111	29
22	176	3,090	616	434	1,320	1,710	385	192	3,860	47	94	21
23	84	3,060	608	422	1,210	1,650	297	837	4,640	40	75	18
24	56	3,020	600	423	1,200	1,590	536	790	3,630	26	47	17
25	73	2,980	433	393	1,890	1,540	1,690	331	3,390	19	37	16
26	103	1,440	270	284	3,070	1,510	1,010	307	3,290	17	35	28
27	116	346	270	271	2,930	3,820	1,160	794	3,210	16	64	37
28	259	1,740	280	263	2,470	6,260	1,190	872	2,710	15	233	27
29	694	2,870	282	260	-----	2,250	1,170	1,750	2,350	18	761	21
30	782	2,850	280	1,240	-----	1,960	875	1,620	2,310	24	1,990	18
31	8,440	-----	712	7,610	-----	1,360	-----	2,160	-----	19	319	-----
TOTAL	16,000	116,836	35,010	29,351	58,315	58,250	36,550	25,977	85,252	6,288	9,847	1,736
MEAN	516	3,895	1,129	947	2,083	1,879	1,218	838	2,842	203	318	57.9
MAX	8,440	14,200	2,800	7,610	3,700	6,260	2,460	4,730	7,410	2,250	3,000	158
MIN	56	346	270	260	754	413	297	192	600	15	11	16
AC-FT	31,740	231,700	69,440	58,220	115,700	115,500	72,500	51,530	169,100	12,470	19,530	3,440

CAL YR 1974 TOTAL 483,853.8 MEAN 1,326 MAX 14,200 MIN 5.8 AC-FT 959,700

WTR YR 1975 TOTAL 479,412.0 MEAN 1,313 MAX 14,200 MIN 11 AC-FT 950,900

PEAK DISCHARGE (REGULATED) ABOVE 9,000 CFS

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-01	0400	22.48	9,260	11-03	1130	25.74	18,500

ARKANSAS RIVER BASIN

173

07167000 FALL RIVER NEAR EUREKA, KS

LOCATION.--Lat 37°47'07", long 96°13'52", in NW¼SW¼ sec.17, T.26 S., R.11 E., Greenwood County, on left downstream side of bridge on State Highway 99, 3.0 mi (4.8 km) southeast of Eureka, 5.0 mi (8.0 km) downstream from Spring Creek, and at mile 76.3 (122.8 km).

DRAINAGE AREA.--307 mi² (795 km²).

PERIOD OF RECORD.--August 1946 to current year.

GAGE.--Water-stage recorder. Datum of gage is 988.50 ft (301.295 m) above mean sea level (levels by Corps of Engineers).

AVERAGE DISCHARGE.--29 years, 195 ft³/s (5.522 m³/s), 141,300 acre-ft/yr (174 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 12,800 ft³/s (362 m³/s) Nov. 3, gage height, 17.55 ft (5.349 m); minimum, 4.7 ft³/s (0.133 m³/s) Sept. 25-27.

Period of record: Maximum discharge, 91,800 ft³/s (2,600 m³/s) June 29, 1951, gage height, 29.60 ft (9.022 m), from floodmark in gage house, from rating curve extended above 70,000 ft³/s (1,980 m³/s) on basis of slope-area measurement of peak flow; no flow at times in 1953-57, 1963-64, 1966.

Flood in 1923 reached a stage of 27.1 ft (8.260 m), from floodmarks, discharge, 70,000 ft³/s (1,980 m³/s).

REMARKS.--Records good.

COOPERATION.--Gage-height record and 28 discharge measurements furnished by Corps of Engineers; records computed by Geological Survey.

REVISIONS (WATER YEARS).--WSP 1211: 1951.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	53	487	99	240	691	680	404	142	165	141	11	23
2	46	716	95	210	455	500	388	137	159	126	9.7	16
3	45	7,650	100	228	434	396	365	141	2,080	112	9.9	12
4	41	3,960	118	216	1,340	350	342	143	909	100	9.1	11
5	39	2,620	121	210	950	343	298	132	432	89	9.3	11
6	38	1,410	136	320	540	316	266	122	324	83	8.9	9.1
7	36	856	200	476	500	296	260	109	244	76	20	8.9
8	35	541	173	396	594	252	452	100	341	68	13	8.7
9	34	434	137	320	450	244	404	92	1,750	63	12	8.3
10	30	411	127	396	358	294	292	82	1,260	47	11	8.2
11	27	373	1,270	388	350	312	260	76	2,100	37	11	20
12	26	302	1,190	234	279	495	240	68	722	34	9.4	21
13	46	273	567	246	266	501	240	90	479	31	8.2	13
14	72	271	408	222	266	341	342	202	359	24	20	10
15	57	235	339	216	246	645	380	150	274	22	23	8.9
16	43	227	277	210	234	1,460	312	103	241	21	19	7.8
17	37	213	239	198	253	1,110	286	77	1,660	19	15	8.3
18	32	207	227	186	253	744	286	65	660	18	12	8.7
19	33	196	217	186	228	565	272	57	388	17	11	8.5
20	27	184	204	175	240	468	228	53	228	16	10	7.8
21	25	167	198	160	880	422	210	49	198	16	9.5	6.7
22	28	154	192	150	1,460	377	207	62	789	16	9.2	6.2
23	28	154	180	140	612	351	222	2,180	980	15	8.5	6.0
24	28	138	175	140	436	326	261	524	549	15	8.7	5.5
25	100	126	160	147	443	295	327	272	321	14	7.8	4.7
26	70	117	145	138	957	283	234	295	248	14	7.8	4.7
27	46	113	150	127	972	2,320	203	306	215	14	7.8	5.1
28	56	106	160	120	900	1,680	211	234	195	13	8.7	6.2
29	114	104	155	112	-----	785	197	292	170	12	252	6.1
30	554	100	150	874	-----	574	163	208	157	12	142	7.0
31	1,480	-----	228	2,070	-----	491	-----	182	-----	12	44	-----
TOTAL	3,326	22,845	8,137	9,451	15,587	18,216	8,552	6,745	18,597	1,297	758.5	288.4
MEAN	107	762	262	305	557	588	285	218	620	41.8	24.5	9.61
MAX	1,480	7,650	1,270	2,070	1,460	2,320	452	2,180	2,100	141	252	23
MIN	25	100	95	112	228	244	163	49	157	12	7.8	4.7
AC-FT	6,600	45,310	16,140	18,750	30,920	36,130	16,960	13,380	36,890	2,570	1,500	572

CAL YR 1974 TOTAL 110,256.0 MEAN 302 MAX 7,650 MIN 2.9 AC-FT 218,700
WTR YR 1975 TOTAL 113,799.9 MEAN 312 MAX 7,650 MIN 4.7 AC-FT 225,700

PEAK DISCHARGE (BASE, 9,000 CFS)

DATE	TIME	G.H.	DISCHARGE
11-03	0900	17.55	12,800

ARKANSAS RIVER BASIN

07167500 OTTER CREEK AT CLIMAX, KS

LOCATION.--Lat 37°42'30", long 96°13'30", in SW¼SE¼ sec.8, T.27 S., R.11 E., Greenwood County, near right bank on downstream side of pier of bridge on State Highway 99, 0.5 mi (0.8 km) south of Climax, 5.2 mi (8.4 km) upstream from mouth, and 5.5 mi (8.8 km) downstream from South Branch.

DRAINAGE AREA.--129 mi² (334 km²).

PERIOD OF RECORD.--August 1946 to current year.

GAGE.--Water-stage recorder. Datum of gage is 977.76 ft (298.021 m) above mean sea level (levels by Corps of Engineers).

AVERAGE DISCHARGE.--29 years, 77.8 ft³/s (2.203 m³/s), 56,370 acre-ft/yr (69.5 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 17,200 ft³/s (487 m³/s) Nov. 3, gage height, 24.15 ft (7.361 m); minimum, 1.2 ft³/s (0.034 m³/s) Sept. 27-30.

Period of record: Maximum discharge, 44,000 ft³/s (1,250 m³/s) Sept. 13, 1961, gage height, 28.50 ft (8.687 m), from rating curve extended above 17,000 ft³/s (481 m³/s); no flow at times in 1953-57, 1963, 1964-68, 1971-73.

REMARKS.--Records good.

COOPERATION.--Gage-height record and 22 discharge measurements furnished by Corps of Engineers; records computed by Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	296	31	145	308	206	112	31	60	34	5.9	5.1
2	17	1,370	30	87	221	160	106	30	53	31	5.6	3.4
3	14	7,040	30	101	207	129	94	34	1,380	29	5.2	2.7
4	13	1,760	29	98	667	115	85	36	214	26	4.8	2.5
5	11	650	29	113	344	110	76	30	708	24	4.3	2.4
6	9.5	303	32	267	200	101	69	27	185	21	3.3	2.3
7	9.1	223	64	284	170	96	69	26	107	19	4.9	2.0
8	8.7	184	55	160	216	78	155	24	92	17	8.1	1.8
9	9.1	156	36	114	130	77	108	37	251	16	7.2	1.8
10	9.1	149	33	127	108	97	79	28	355	14	6.2	2.5
11	8.3	138	1,210	108	121	106	71	24	524	13	3.3	2.9
12	9.1	108	538	64	94	298	65	21	134	11	2.7	2.3
13	12	94	204	62	90	315	64	65	100	9.8	2.9	2.3
14	25	80	145	62	94	153	93	351	74	9.1	9.4	2.1
15	26	70	119	63	84	431	91	87	59	9.2	12	2.2
16	21	66	95	63	80	640	72	52	220	9.4	6.7	2.2
17	17	63	84	58	103	280	65	40	5,760	7.5	4.3	2.5
18	14	60	79	57	132	690	62	34	386	6.8	3.3	2.7
19	12	59	73	61	116	253	58	29	189	6.7	2.9	3.2
20	11	54	67	58	222	167	52	26	135	6.5	2.7	2.8
21	10	48	62	51	958	137	47	23	105	5.5	2.4	2.2
22	9.1	46	58	47	624	115	45	53	188	7.1	2.3	2.1
23	8.7	46	56	43	228	103	48	1,690	133	6.5	2.2	1.8
24	8.7	43	51	44	192	88	51	213	118	5.6	2.1	1.5
25	227	40	46	47	208	76	50	217	78	6.0	2.1	1.7
26	94	38	42	43	391	72	44	227	64	5.7	2.1	1.6
27	43	37	44	39	379	1,270	42	158	56	5.8	2.1	1.4
28	45	36	47	37	296	369	40	125	50	5.2	2.3	1.2
29	134	35	46	36	-----	223	37	133	44	7.3	13	1.4
30	686	33	44	907	-----	178	34	90	38	7.9	12	1.3
31	2,540	-----	184	1,660	-----	137	-----	71	-----	7.0	7.0	-----
TOTAL	4,082.4	13,325	3,663	5,106	6,983	7,270	2,084	4,032	11,860	389.6	155.3	67.9
MEAN	132	444	118	165	249	235	69.5	130	395	12.6	5.01	2.26
MAX	2,540	7,040	1,210	1,660	958	1,270	155	1,690	5,760	34	13	5.1
MIN	8.3	33	29	36	80	72	34	21	38	5.2	2.1	1.2
AC-FT	8,100	26,430	7,270	10,130	13,850	14,420	4,130	8,000	23,520	773	308	135

CAL YR 1974 TOTAL 55,581.25 MEAN 152 MAX 7,040 MIN .84 AC-FT 110,200
WTR YR 1975 TOTAL 59,018.20 MEAN 162 MAX 7,040 MIN 1.2 AC-FT 117,100

PEAK DISCHARGE (BASE, 5,000 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
10-31	0145	17.10	6,870	06-17	0630	24.00	16,600
11-03	0830	24.15	17,200				

ARKANSAS RIVER BASIN

175

07168000 FALL RIVER LAKE NEAR FALL RIVER, KS

LOCATION.--Lat 37°38'48", long 96°04'39", in NW¼NE¼ sec.3, T.28 S., R.12 E., Greenwood County, in right bank control tower at dam on Fall River, 4.0 mi (6.4 km) northwest of town of Fall River, and at mile 54.2 (87.2 km).

DRAINAGE AREA.--585 mi² (1,515 km²).

PERIOD OF RECORD.--April 1949 to current year (monthly records only prior to October 1957). Prior to October 1971 published as "Fall River Reservoir".

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Corps of Engineers).

EXTREMES.--Current year: Maximum elevation, 968.73 ft (295.269 m) Nov. 7, contents, 110,900 acre-ft (137 hm³); minimum, 947.07 ft (288.667 m) Mar. 7, contents, 20,620 acre-ft (25.4 hm³).

Period of record: Maximum elevation, 987.18 ft (300.892 m) July 13, 1951, contents, 260,200 acre-ft (321 hm³); minimum, 933.08 ft (284.403 m) Feb. 3, 1955, contents, 3,110 acre-ft (3.83 hm³).

REMARKS.--Reservoir is formed by earthfill dam. Spillway is a concrete, gravity, ogee-weir type. Regulated storage began Apr. 20, 1949. Conservation pool stage, elevation, 948.5 ft (289.10 m) was first reached June 5, 1949. Elevation of top of dam, 996.5 ft (303.73 m); maximum design pool, 990.0 ft (301.75 m); flood-control pool level, 987.5 ft (300.99 m), capacity, 259,000 acre-ft (319 hm³); and conservation pool level, 948.5 ft (289.10 m), capacity, 23,940 acre-ft (29.5 hm³), of which 17,000 acre-ft (21.0 hm³) is for pollution abatement. Reservoir was designed for flood control and conservation. Figures given herein represent total contents.

COOPERATION.--Elevations and contents furnished by Corps of Engineers; records reviewed by Geological Survey.

Capacity table (elevation, in feet, and contents, in acre-feet)
(Based on survey made by Corps of Engineers, revised in 1964)

945	16,470	960	65,040
950	27,890	965	90,190
955	43,990	970	118,500

ELEVATION, IN FEET, AT 2400, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	949.21	954.76	950.42	949.42	954.37	949.30	952.11	948.31	950.25	948.60	948.12	948.49
2	949.18	956.40	950.33	949.55	954.71	948.84	951.08	948.19	949.27	948.58	948.11	948.48
3	949.16	964.75	950.23	949.67	954.93	948.26	949.95	948.07	951.67	948.56	948.09	948.48
4	949.13	967.17	950.14	949.87	955.38	947.62	949.23	947.94	951.88	948.55	948.07	948.47
5	949.10	968.29	950.05	950.00	955.39	947.26	948.80	947.86	952.08	948.53	948.05	948.46
6	949.09	968.68	950.09	950.08	954.74	947.14	948.30	947.86	951.84	948.49	948.03	948.45
7	949.07	968.72	950.13	949.95	954.07	947.11	947.91	947.85	951.38	948.47	948.02	948.45
8	949.04	968.65	950.10	949.68	953.55	947.15	947.73	947.82	950.93	948.47	948.00	948.44
9	949.01	968.53	950.05	949.34	952.74	947.28	947.63	947.88	951.73	948.47	947.98	948.43
10	948.96	968.42	950.00	949.28	951.92	947.26	947.60	947.90	952.66	948.47	947.96	948.42
11	948.96	968.28	952.03	949.38	951.14	947.18	947.65	947.91	954.44	948.48	947.96	948.42
12	948.97	967.76	952.88	949.36	950.27	947.45	947.79	947.90	954.96	948.46	947.92	948.42
13	949.00	966.83	952.77	949.28	949.36	947.78	947.90	948.02	955.00	948.44	A	948.41
14	949.02	965.86	952.53	949.23	948.85	947.85	948.08	948.39	953.99	948.41	948.13	948.41
15	949.02	964.87	952.18	949.17	948.65	948.40	948.25	948.63	952.89	948.38	948.11	948.40
16	949.03	963.88	951.79	949.12	948.49	949.69	948.27	948.73	951.94	948.35	948.11	948.40
17	949.03	962.87	951.37	949.03	948.34	950.13	948.20	948.78	957.26	948.32	948.11	948.40
18	949.00	961.79	950.92	948.95	948.25	951.15	948.15	948.78	957.56	948.28	948.09	948.40
19	948.97	960.72	950.47	948.89	947.77	950.88	948.13	948.53	956.80	948.25	948.12	948.40
20	948.95	959.52	950.15	948.77	947.44	950.39	948.08	948.28	955.36	948.22	948.12	948.40
21	948.90	958.35	949.96	948.72	948.30	949.82	948.02	948.21	953.78	948.20	948.11	948.40
22	948.89	957.12	949.80	948.71	949.78	949.19	947.94	948.48	952.82	948.20	948.10	948.39
23	948.88	955.83	949.63	948.67	950.00	948.56	947.91	952.23	951.68	948.20	948.07	948.39
24	948.88	954.46	949.44	948.66	949.84	947.77	947.93	952.77	950.46	948.20	948.03	948.39
25	949.10	953.67	949.22	948.65	949.49	947.37	948.01	953.15	949.23	948.18	948.02	948.39
26	949.23	953.68	949.00	948.61	949.62	947.38	948.08	953.90	948.69	948.18	948.01	948.38
27	949.26	953.00	948.90	948.58	949.71	950.88	948.15	954.02	948.67	948.18	948.01	948.37
28	949.50	951.45	948.89	948.51	949.61	952.43	948.21	953.73	948.68	948.15	A	948.36
29	949.68	950.60	948.88	948.49	-----	952.99	948.27	953.47	948.67	948.15	948.31	948.36
30	951.35	950.52	948.90	949.76	-----	953.35	948.30	952.66	948.63	948.14	948.46	948.35
31	954.76	-----	949.23	953.68	-----	953.07	-----	951.54	-----	948.13	948.48	-----
MEAN	949.33	961.18	950.34	949.32	950.95	949.06	948.39	949.61	952.17	948.34		948.41
MAX	954.76	968.72	952.88	953.68	955.39	953.35	952.11	954.02	957.56	948.60	948.48	948.49
MIN	948.88	950.52	948.88	948.49	947.44	947.11	947.60	947.82	948.63	948.13	947.92	948.35
(+)	43,150	29,320	25,770	39,370	26,820	37,240	23,440	32,310	24,260	23,030	23,890	23,560
(#)	+17,410	-13,830	-3,550	+13,600	-12,550	+10,420	-13,800	+8,870	-8,050	-1,230	+860	-330

CAL YR 1974 (#) -4,050

WTR YR 1975 (#) -2,180

+ CONTENTS, IN ACRE-FEET, AT END OF MONTH.

CHANGE IN CONTENTS, IN ACRE-FEET.

A NO GAGE-HEIGHT RECORD.

ARKANSAS RIVER BASIN

07168500 FALL RIVER NEAR FALL RIVER, KS

LOCATION.--Lat 37°38'34", Long 96°03'33", in SW¼NE¼ sec.2, T.28 S., R.12 E., Greenwood County, near left bank on downstream side of highway bridge, 0.3 mi (0.5 km) downstream from Fall River Dam, 2.5 mi (4.0 km) upstream from Salt Creek, 3.0 mi (4.8 km) northwest of town of Fall River, and at mile 53.9 (86.7 km).

DRAINAGE AREA.--585 mi² (1,515 km²).

PERIOD OF RECORD.--April 1904 to September 1905 (gage heights only) published as "at Fall River", May 1939 to current year. Monthly discharge only for May 1939, published in WSP 1311.

GAGE.--Water-stage recorder. Datum of gage is 898.44 ft (273.845 m) above mean sea level (levels by Corps of Engineers). Prior to Sept. 30, 1905, nonrecording gage at site 4.7 mi (7.6 km) downstream at datum 21.6 ft (6.58 m) lower. May 5, 1939, to June 12, 1946, nonrecording gage at present site and datum. June 13 to Aug. 26, 1946, nonrecording gage and Aug. 27, 1946, to Sept. 30, 1957, water-stage recorder, at site 3.1 mi (5.0 km) downstream at datum 12.79 ft (3.898 m) lower.

AVERAGE DISCHARGE.--36 years, 346 ft³/s (9.799 m³/s), 250,700 acre-ft/yr (309 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,360 ft³/s (95.2 m³/s) June 19, gage height, 10.08 ft (3.072 m); minimum, 0.80 ft³/s (0.023 m³/s) Oct. 31, Nov. 1.

Period of record: Maximum discharge, 45,600 ft³/s (1,290 m³/s) Apr. 16, 1945, gage height, 31.15 ft (9.495 m), present site and datum; no flow at times in 1939-40, 1946, 1955, 1967.

REMARKS.--Records good. Flow regulated since 1949 by Fall River Lake, 0.3 mi (0.5 km) above station (see sta 07168000).

COOPERATION.--Gage-height record and 23 discharge measurements furnished by Corps of Engineers; records computed by Geological Survey.

REVISIONS.--WSP 1147: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	78	1,050	245	267	73	1,360	2,090	347	2,110	232	12	13
2	78	1,410	245	267	74	1,350	2,060	345	1,650	186	13	13
3	78	5.0	245	270	611	1,340	2,030	344	1,080	170	13	13
4	78	7.5	245	267	1,510	1,330	1,440	342	1,100	143	14	13
5	78	4.3	245	270	1,820	933	1,040	247	1,100	143	14	13
6	78	536	245	686	1,810	681	1,030	177	1,100	143	13	13
7	78	1,060	245	1,040	1,790	488	1,020	176	1,100	102	14	13
8	78	1,050	242	1,040	1,770	357	1,020	175	1,100	49	14	13
9	78	1,040	242	1,040	1,730	358	744	175	711	49	14	13
10	78	1,040	242	713	1,720	530	527	175	16	49	14	13
11	78	1,040	245	428	1,710	682	326	174	16	49	14	13
12	78	2,010	740	428	1,700	683	190	113	17	50	14	13
13	78	3,240	1,090	428	1,680	688	191	66	1,160	51	14	13
14	78	3,200	1,080	428	1,100	691	191	65	2,210	51	14	13
15	78	3,160	1,080	428	690	693	382	307	2,180	51	14	13
16	78	3,120	1,080	428	689	706	524	543	2,140	51	14	13
17	78	3,080	1,070	428	686	1,100	525	537	857	51	14	13
18	78	3,030	1,060	428	685	1,390	412	532	636	51	13	13
19	78	2,990	1,060	428	1,120	1,390	335	527	2,240	51	13	13
20	78	2,950	785	428	1,020	1,380	337	372	3,300	50	13	13
21	78	2,890	536	325	690	1,380	337	147	3,230	33	13	13
22	78	2,840	536	251	704	1,370	340	64	3,170	11	13	13
23	78	2,800	532	251	711	1,360	245	56	3,120	11	13	13
24	78	2,740	532	251	1,000	1,350	181	57	2,590	11	13	13
25	80	1,480	532	251	1,370	785	183	57	2,090	11	13	13
26	80	197	528	251	1,360	247	185	58	1,180	12	13	13
27	80	1,340	408	251	1,360	172	185	485	332	12	13	13
28	80	2,590	264	251	1,360	179	185	1,150	262	12	13	14
29	170	1,400	264	141	-----	181	184	1,140	262	12	14	14
30	284	248	267	66	-----	182	272	1,700	262	12	13	14
31	125	-----	267	71	-----	1,150	-----	2,160	-----	12	13	-----
TOTAL	2,771	53,547.8	16,397	12,500	32,543	26,486	18,711	12,813	42,321	1,921	416	393
MEAN	89.4	1,785	529	403	1,162	854	624	413	1,411	62.0	13.4	13.1
MAX	284	3,240	1,090	1,040	1,820	1,390	2,090	2,160	3,300	232	14	14
MIN	78	4.3	242	66	73	172	181	56	16	11	12	13
AC-FT	5,500	106,200	32,520	24,790	64,550	52,530	37,110	25,410	83,940	3,810	825	780

CAL YR 1974 TOTAL 224,133.00 MEAN 614 MAX 3,240 MIN .60 AC-FT 444,600
WTR YR 1975 TOTAL 220,819.80 MEAN 605 MAX 3,300 MIN 4.3 AC-FT 438,000

ARKANSAS RIVER BASIN

177

07169500 FALL RIVER AT FREDONIA, KS

LOCATION.--Lat 37°30'30", long 95°50'00", in SW¼ sec.24, T.29 S., R.14 E., Wilson County, on downstream side of left pier of bridge on State Highway 96, 0.8 mi (1.3 km) upstream from Clear Creek, 1.0 mi (1.6 km) downstream from Salt Creek, 1.0 mi (1.6 km) south of Fredonia, and at mile 25.3 (40.7 km).

DRAINAGE AREA.--827 mi² (2,142 km²).

PERIOD OF RECORD.--October 1938 to current year. Monthly discharge only for October and November 1938, published in WSP 1311. Published as "near Fredonia" 1952-57.

GAGE.--Water-stage recorder. Datum of gage is 819.09 ft (249.659 m) above mean sea level (levels by Corps of Engineers). Prior to Dec. 21, 1949, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--37 years, 481 ft³/s (13.62 m³/s), 348,500 acre-ft/yr (430 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 16,800 ft³/s (476 m³/s) Nov. 3, gage height, 26.98 ft (8.224 m); minimum, 15 ft³/s (0.42 m³/s) Sept. 29.

Period of record: Maximum discharge, 49,000 ft³/s (1,390 m³/s) Apr. 16, 1945, gage height, 36.17 ft (11.025 m); no flow at times in 1939-40.

Maximum stage known since at least 1904, that of Apr. 16, 1945.

REMARKS.--Records good. Considerable regulation since 1949 by Fall River Lake 28.9 mi (46.5 km) above (see sta 07168000) and during low flow by Fredonia City Water Reservoir 1.0 mi (1.6 km) upstream. Records of chemical analyses for the current year are published in Part 2 of this report.

COOPERATION.--Gage-height record and 21 discharge measurements furnished by Corps of Engineers; records computed by Geological Survey.

REVISIONS (WATER YEARS).--WSP 1117: Drainage area. WSP 1341: 1939-40.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	188	1,900	337	816	917	1,740	2,130	359	2,170	326	24	28
2	155	5,090	327	487	566	1,630	2,190	398	2,100	286	24	24
3	137	14,800	324	635	423	1,560	2,130	471	3,380	251	24	22
4	129	10,900	321	597	2,180	1,540	2,010	447	1,790	227	22	22
5	116	2,460	321	568	2,640	1,480	1,170	405	2,870	208	22	62
6	109	646	334	888	2,140	859	1,110	289	1,780	202	22	40
7	106	1,300	394	1,300	2,020	791	1,330	244	1,260	192	22	25
8	102	1,320	385	1,280	2,030	482	2,060	240	1,180	152	22	21
9	101	1,280	340	1,210	1,940	463	1,370	282	1,290	90	22	19
10	100	1,300	327	1,210	2,000	502	735	293	568	70	21	25
11	98	1,300	1,980	780	1,900	811	636	253	1,680	68	21	114
12	117	1,260	1,870	550	1,870	1,090	346	237	336	68	21	42
13	1,060	2,850	1,410	497	1,850	1,410	319	491	230	68	20	24
14	378	3,110	1,310	518	1,780	1,010	342	4,640	2,030	68	157	21
15	250	3,080	1,260	511	864	1,310	349	690	2,200	67	105	20
16	185	3,060	1,210	514	842	2,120	587	673	2,180	67	45	19
17	155	3,020	1,190	511	1,090	1,460	603	655	8,190	65	32	19
18	135	2,990	1,170	511	1,170	3,700	588	616	2,440	65	38	19
19	125	2,960	1,160	518	1,120	2,560	436	593	1,470	65	30	18
20	118	2,920	1,140	521	1,810	1,730	416	569	3,000	63	25	17
21	113	2,870	665	511	1,220	1,610	408	350	3,150	63	24	17
22	109	2,840	623	358	1,040	1,550	403	192	4,030	56	23	17
23	104	2,800	620	337	971	1,510	416	863	3,420	31	22	16
24	104	2,740	612	340	971	1,460	297	471	3,070	27	21	16
25	209	2,660	604	344	1,620	1,350	282	374	2,320	26	21	16
26	444	620	597	342	2,330	497	271	633	2,050	25	21	18
27	246	301	589	337	2,180	3,130	265	768	625	25	21	17
28	422	2,330	358	336	1,860	2,530	277	1,180	374	24	28	17
29	1,050	2,490	337	327	-----	913	270	1,630	342	24	31	15
30	1,190	543	332	1,150	-----	875	258	1,380	333	32	61	17
31	9,460	-----	764	5,140	-----	610	-----	2,170	-----	25	40	-----
TOTAL	17,315	87,740	23,211	23,944	43,344	44,283	24,004	22,856	61,858	3,026	1,032	767
MEAN	559	2,925	749	772	1,548	1,428	800	737	2,062	97.6	33.3	25.6
MAX	9,460	14,800	1,980	5,140	2,640	3,700	2,190	4,640	8,190	326	157	114
MIN	98	301	321	327	423	463	258	192	230	24	20	15
AC-FT	34,340	174,000	46,040	47,490	85,970	87,840	47,610	45,330	122,700	6,000	2,050	1,520

CAL YR 1974 TOTAL 369,696 MEAN 1,013 MAX 14,800 MIN 35 AC-FT 733,300
WTR YR 1975 TOTAL 353,380 MEAN 968 MAX 14,800 MIN 15 AC-FT 700,900

PEAK DISCHARGE (BASE, 8,000 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
10-31	0730	21.58	11,100	06-17	0945	19.62	9,580
11-03	1315	26.98	16,800				

ARKANSAS RIVER BASIN

07169800 ELK RIVER AT ELK FALLS, KS

LOCATION.--Lat 37°22'32", long 96°11'07", in SW¼SE¼SE¼ sec.3, T.31 S., R.11 E., Elk County, at downstream side of bridge on U.S. Highway 160 in Elk Falls, 2.0 mi (3.2 km) upstream from Wild Cat Creek, and at mile 57.5 (92.5 km).

DRAINAGE AREA.--220 mi² (570 km²).

PERIOD OF RECORD.--January 1967 to current year.

GAGE.--Water-stage recorder. Datum of gage is 897.300 ft (273.497 m) above mean sea level (levels by Corps of Engineers).

AVERAGE DISCHARGE.--8 years, 188 ft³/s (5.324 m³/s), 136,200 acre-ft/yr (168 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 22,400 ft³/s (634 m³/s) Nov. 3, gage height, 24.05 ft (7.330 m); minimum, 3.8 ft³/s (0.11 m³/s) Aug. 13, 27-29.

Period of record: Maximum discharge, 29,300 ft³/s (830 m³/s) Apr. 18, 1970, gage height, 27.48 ft (8.376 m); no flow at times in 1967, 1970-72.

REMARKS.--Records good.

COOPERATION.--Gage-height record and 23 discharge measurements furnished by Corps of Engineers; records computed by Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	60	719	60	338	660	313	248	50	136	60	5.0	18
2	45	4,190	57	180	458	246	216	51	114	53	5.0	11
3	37	12,700	56	226	362	210	186	76	2,620	47	5.0	7.0
4	32	4,290	53	216	1,100	196	166	77	476	43	4.7	5.1
5	27	1,360	52	243	734	188	150	61	1,900	39	4.3	8.2
6	25	714	60	552	341	173	132	56	508	34	4.2	11
7	23	468	136	381	258	160	156	79	256	30	4.0	7.2
8	24	352	105	260	330	132	620	54	191	27	4.0	5.3
9	26	299	73	193	216	125	274	213	204	25	4.0	4.8
10	26	290	63	256	193	163	176	121	605	27	4.5	6.3
11	26	271	1,730	246	193	186	139	72	517	26	4.7	100
12	36	218	1,110	128	168	477	121	58	180	22	4.5	54
13	1,050	198	419	101	153	676	116	1,460	119	19	4.1	20
14	183	173	274	103	156	260	146	3,170	92	17	101	10
15	101	156	228	105	150	568	160	409	76	14	87	7.7
16	65	150	186	105	143	1,040	123	208	95	13	29	7.1
17	52	139	163	100	213	524	107	143	3,540	12	16	6.2
18	43	136	150	98	371	1,660	101	115	887	12	12	6.2
19	38	132	143	100	310	672	98	98	594	10	9.3	5.9
20	32	119	128	98	477	352	83	86	288	9.7	7.7	5.9
21	31	112	116	90	1,110	271	77	74	200	8.3	7.4	5.3
22	30	107	112	86	752	223	72	64	369	7.8	7.3	4.8
23	27	101	107	77	355	196	77	1,410	328	7.9	6.6	4.6
24	28	93	98	76	299	166	79	337	294	10	5.6	4.1
25	686	81	89	80	403	139	76	342	183	9.5	4.9	4.1
26	362	79	84	80	935	132	69	483	134	7.8	4.7	4.1
27	141	73	84	73	656	3,030	66	395	108	7.3	4.0	4.1
28	280	68	87	68	422	905	66	375	91	6.4	3.8	4.1
29	771	65	87	66	-----	580	60	392	77	5.6	5.5	4.1
30	1,550	61	87	1,660	-----	513	54	225	67	5.6	6.3	4.1
31	6,190	-----	455	3,200	-----	318	-----	226	-----	5.5	17	-----
TOTAL	12,047	27,914	6,652	9,585	11,918	14,794	4,214	10,980	15,249	621.4	393.1	350.3
MEAN	389	930	215	309	426	477	140	354	508	20.0	12.7	11.7
MAX	6,190	12,700	1,730	3,200	1,110	3,030	620	3,170	3,540	60	101	100
MIN	23	61	52	66	143	125	54	50	67	5.5	3.8	4.1
AC-FT	23,900	55,370	13,190	19,010	23,640	29,340	8,360	21,780	30,250	1,230	780	695

CAL YR 1974 TOTAL 128,959.3 MEAN 353 MAX 12,700 MIN 1.5 AC-FT 255,800

WTR YR 1975 TOTAL 114,717.8 MEAN 314 MAX 12,700 MIN 3.8 AC-FT 227,500

PEAK DISCHARGE (BASE, 4,000 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
10-31	0400	19.32	12,900	05-14	0045	15.97	8,270
11-03	1000	24.05	22,400	06-03	1100	12.66	5,760
01-31	0100	14.19	6,830	06-05	1315	10.54	4,280
03-27	1745	13.82	6,570	06-17	1045	14.25	6,880

07170050 ELK CITY LAKE NEAR INDEPENDENCE, KS

LOCATION.--Lat 37°16'39", long 95°46'37", in SW¼SW¼NW¼ sec.9, T.32 S., R.15 E., Montgomery County, in gate tower of Elk City Dam, on Elk River, 5.0 mi (8.0 km) northwest of Independence, and at mile 8.7 (14.0 km).

DRAINAGE AREA.--634 mi² (1,642 km²).

PERIOD OF RECORD.--March 1966 to current year. Prior to October 1971 published as "Elk City Reservoir".

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Corps of Engineers).

EXTREMES.--Current year: Maximum elevation, 821.79 ft (250.482 m) Nov. 7, contents, 250,800 acre-ft (309 hm³); minimum, 785.09 ft (239.295 m) Mar. 25, contents, 14,880 acre-ft (18.3 hm³).

Period of record: Maximum elevation, 821.79 ft (250.482 m) Nov. 7, 1974, contents, 250,800 acre-ft (309 hm³); minimum since conservation pool first reached, 781.25 ft (238.125 m) Apr. 12, 1967, contents, 8,090 acre-ft (9.97 hm³).

REMARKS.--Reservoir is formed by compacted earthfill dam. Storage began Mar. 17, 1966. Total capacity 667,000 acre-ft (822 hm³), consisting of the following: Sedimentation, 1,100 acre-ft (1.36 hm³) below elevation 764.0 ft (232.87 m); conservation, 33,500 acre-ft (41.3 hm³) between elevations 764.0 ft (232.87 m) and 792.0 ft (241.40 m); flood control, 256,100 acre-ft (316 hm³) between elevations 792.0 ft (241.40 m) and 825.0 ft (251.46 m); uncontrolled storage, 376,300 acre-ft (464 hm³) between elevations 825.0 ft (251.46 m) and 843.7 ft (257.16 m). Reservoir is designed for flood control, pollution control, conservation and recreation. Figures given herein represent total contents.

COOPERATION.--Records furnished by Corps of Engineers; reviewed by Geological Survey.

Capacity table (elevation, in feet, and contents, in acre-feet)
(Based on survey made in 1939 by Corps of Engineers)

785	14,680	810	137,500
790	27,930	815	180,700
795	46,240	820	231,000
800	70,290	825	290,700
805	100,800		

ELEVATION, IN FEET, AT 2400, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	796.36	806.20	796.12	793.41	798.09	786.41	794.45	787.50	794.73	794.05	793.79	795.01
2	796.17	808.50	796.09	793.69	798.55	785.91	792.93	787.72	794.30	794.05	793.76	795.01
3	796.11	815.10	796.06	794.13	798.54	785.87	791.26	788.57	795.66	794.03	793.75	795.00
4	796.12	820.00	795.96	794.40	797.79	786.05	789.72	788.85	796.71	794.00	793.74	794.99
5	796.15	821.37	795.87	794.62	796.14	786.20	788.36	789.00	797.44	793.98	793.73	794.97
6	796.14	821.70	795.80	794.68	793.62	786.32	786.86	789.13	798.07	793.92	793.71	794.96
7	796.14	821.78	795.69	794.33	A	786.38	786.20	789.22	797.87	793.94	793.67	794.94
8	796.16	821.62	795.63	793.90	A	786.41	788.28	789.29	797.57	793.95	793.65	794.92
9	796.18	821.34	795.53	793.37	786.78	786.57	788.30	789.43	797.37	793.96	793.64	794.90
10	796.19	821.11	795.43	793.06	785.73	786.42	787.40	789.74	797.78	793.96	793.62	794.90
11	796.21	820.69	796.63	792.95	785.92	786.17	787.04	789.87	798.88	793.95	793.60	794.87
12	796.28	819.84	797.90	792.74	786.11	786.82	787.05	789.86	799.12	793.94	793.58	794.86
13	796.75	818.77	797.64	792.44	786.24	787.99	787.08	790.81	798.81	793.93	793.54	794.88
14	797.05	817.66	797.14	792.26	786.31	787.69	787.10	795.84	798.06	793.91	793.79	794.92
15	796.97	816.54	796.53	792.16	786.31	787.25	786.97	797.23	797.21	793.92	793.98	794.92
16	796.64	815.38	795.87	792.17	786.47	787.58	786.59	796.33	796.60	793.91	794.10	794.92
17	796.29	814.16	795.17	792.27	787.02	787.18	786.17	795.28	801.23	793.90	794.69	794.92
18	796.09	812.94	794.43	792.35	787.61	788.36	786.00	794.13	803.13	793.89	794.94	794.91
19	796.09	811.70	793.91	792.42	787.50	789.20	786.13	792.90	803.14	793.88	794.97	794.93
20	796.06	810.38	793.75	792.14	786.91	787.93	786.26	792.40	802.06	793.88	794.99	794.92
21	796.04	809.03	793.57	791.18	786.98	786.84	786.37	792.48	800.57	793.87	795.00	794.90
22	796.04	807.63	793.36	790.21	787.42	786.35	786.55	792.62	799.15	793.85	794.98	794.89
23	796.07	806.16	793.15	789.12	787.48	785.73	786.69	793.10	797.69	793.88	794.97	794.88
24	796.09	804.62	792.97	788.16	787.12	785.27	786.77	793.83	796.28	793.84	794.95	794.85
25	796.25	803.00	792.75	787.50	786.76	785.25	786.92	794.12	795.10	793.84	794.90	794.85
26	796.79	801.30	792.60	786.84	787.65	785.60	787.04	794.45	794.35	793.85	794.93	794.85
27	796.98	799.42	792.49	786.44	787.72	790.22	787.20	794.97	794.23	793.85	794.91	794.84
28	797.63	797.38	792.41	A	787.19	794.38	787.25	795.12	794.17	793.83	794.99	794.87
29	798.44	796.23	792.32	A	-----	795.31	787.35	795.54	794.12	793.83	795.03	794.86
30	798.80	796.15	792.23	788.60	-----	796.10	787.43	795.45	794.06	793.83	795.02	794.86
31	803.10	-----	792.82	796.15	-----	795.83	-----	795.12	-----	793.80	795.02	-----
MEAN	796.72	811.92	794.77			787.92	787.66	792.25	797.52	793.91	794.32	794.91
MAX	803.10	821.78	797.90	796.15	798.55	796.10	794.45	797.23	803.14	794.05	795.03	795.01
MIN	796.04	796.15	792.23	786.44	785.73	785.25	786.00	787.50	794.06	793.80	793.54	794.84
(+)	88,480	51,260	37,630	51,260	19,870	49,820	20,520	46,730	42,390	41,350	46,320	45,670
(#)	+35,340	-37,220	-13,630	+13,630	-31,390	+29,950	-29,300	+26,210	-4,340	-1,040	+4,970	-650

CAL YR 1974 (#) -12,910

WTR YR 1975 (#) -7,470

+ CONTENTS, IN ACRE-FEET, AT END OF MONTH.

CHANGE IN CONTENTS, IN ACRE-FEET.

A NO GAGE-HEIGHT RECORD.

ARKANSAS RIVER BASIN

07170060 ELK RIVER BELOW ELK CITY LAKE, KS

LOCATION.--Lat 37°16'46", long 95°46'53", in NW¼SW¼NW¼ sec.9, T.32 S., R.15 E., Montgomery County, near left bank, 600 ft (183 m) below Elk City Dam, and at mile 8.6 (13.8 km).

DRAINAGE AREA.--634 mi² (1,642 km²).

PERIOD OF RECORD.--October 1965 to current year. Prior to October 1971, published as "below Elk City Reservoir".

GAGE.--Water-stage recorder. Datum of gage is 740.00 ft (225.552 m) above mean sea level (levels by Corps of Engineers).

AVERAGE DISCHARGE.--10 years, 425 ft³/s (12.04 m³/s), 307,900 acre-ft/yr (380 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 6,310 ft³/s (179 m³/s) Nov. 13, gage height, 24.24 ft (7.388 m); minimum, 2.3 ft³/s (0.065 m³/s) May 9.

Period of record: Maximum discharge, 7,900 ft³/s (224 m³/s) June 5, 1969, gage height, 27.96 ft (8.522 m); no flow at times in 1966, 1967, 1971.

REMARKS.--Records good. Flow completely regulated by Elk City Dam 600 ft (183 m) upstream (see sta 07170050).

COOPERATION.--Gage-height record and 35 discharge measurements furnished by Corps of Engineers; records computed by Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	541	16	208	347	85	1,600	3,300	18	1,050	86	5.0	4.3
2	538	16	208	344	85	1,080	3,240	18	1,040	86	5.0	4.4
3	254	16	209	341	981	477	3,170	19	1,060	88	5.0	4.4
4	8.7	16	265	346	3,850	242	2,610	20	1,070	93	7.7	4.4
5	7.6	15	384	348	6,210	242	2,150	20	1,080	93	9.5	4.4
6	7.1	15	384	926	6,030	242	2,120	21	1,090	93	8.9	4.4
7	6.5	637	385	1,450	4,800	243	1,090	21	1,090	58	6.8	4.4
8	6.3	1,800	385	1,440	3,600	243	359	9.8	1,080	6.8	5.1	4.4
9	7.4	2,300	384	1,440	3,500	242	1,170	3.7	670	6.8	5.0	4.4
10	8.0	2,310	385	1,080	1,690	534	1,620	3.9	3.8	6.7	5.0	4.4
11	8.0	2,940	394	751	212	811	855	3.8	2.7	6.8	5.0	4.2
12	7.8	5,090	1,150	748	212	827	347	3.8	2.5	6.8	5.0	4.0
13	6.5	6,270	1,870	744	213	830	346	4.3	1,080	6.7	4.7	4.1
14	6.5	6,220	1,850	526	299	1,320	347	4.7	2,120	6.7	4.0	4.1
15	472	6,160	1,840	382	365	1,640	590	1,110	2,090	6.7	3.4	4.1
16	943	6,080	1,820	197	365	1,660	776	2,560	2,090	6.5	3.4	4.1
17	937	6,010	1,800	78	366	2,170	773	2,540	870	6.4	3.4	4.1
18	403	5,940	1,790	78	514	2,550	350	2,520	6.5	6.1	3.6	4.1
19	89	5,900	1,300	78	1,210	2,640	70	2,480	1,090	6.0	3.6	4.1
20	89	5,820	577	723	1,610	2,600	69	1,030	3,830	5.9	3.5	4.1
21	47	5,750	574	1,720	1,240	2,000	56	5.0	4,530	5.8	3.6	4.1
22	9.0	5,680	571	1,700	819	1,070	34	4.8	4,470	6.0	3.6	4.1
23	8.7	5,620	570	1,670	820	1,050	26	4.9	4,430	6.1	3.6	4.2
24	8.5	5,530	570	1,440	1,140	809	20	4.8	3,690	5.8	3.7	4.2
25	8.5	5,430	570	976	1,610	291	20	6.4	2,860	5.8	3.8	4.3
26	12	5,330	463	971	1,640	4.4	19	9.6	1,610	5.7	3.8	4.4
27	18	5,210	345	592	1,640	5.0	19	9.3	378	5.7	3.9	4.3
28	20	5,100	343	471	1,630	4.0	18	312	241	5.7	4.0	4.3
29	592	3,050	340	353	-----	4.0	18	576	240	5.6	4.0	4.3
30	1,870	209	339	90	-----	3.9	18	814	179	5.4	4.1	4.3
31	1,300	-----	344	90	-----	1,470	-----	1,050	-----	5.0	4.3	-----
TOTAL	8,240.1	110,480	22,617	22,440	46,736	28,904.3	25,600	15,207.8	45,043.5	744.5	145.0	127.4
MEAN	266	3,683	730	724	1,669	932	853	491	1,501	24.0	4.68	4.25
MAX	1,870	6,270	1,870	1,720	6,210	2,640	3,300	2,560	4,530	93	9.5	4.4
MIN	6.3	15	208	78	85	3.9	18	3.7	2.5	5.0	3.4	4.0
AC-FT	16,340	219,100	44,860	44,510	92,700	57,330	50,780	30,160	89,340	1,480	288	253

CAL YR 1974 TOTAL 390,762.10 MEAN 1,071 MAX 6,720 MIN .60 AC-FT 775,100
WTR YR 1975 TOTAL 326,285.60 MEAN 894 MAX 6,270 MIN 2.5 AC-FT 647,200

07170500 VERDIGRIS RIVER AT INDEPENDENCE, KS

LOCATION.--Lat 37°13'26", long 95°40'43", in NW¼NE¼NE¼ sec.32, T.32 S., R.16 E., Montgomery County, near right bank at downstream side of bridge on U.S. Highway 160, 1.0 mi (1.6 km) east of Independence, 3.6 mi (5.8 km) downstream from Elk River, and at mile 194.3 (312.6 km).

DRAINAGE AREA.--2,892 mi² (7,490 km²).

PERIOD OF RECORD.--August 1895 to September 1904 (monthly figures only, published in WSP 1311), October 1921 to current year.

GAGE.--Water-stage recorder. Datum of gage is 716.63 ft (218.429 m) above mean sea level. Aug. 2, 1895, to Nov. 30, 1903, nonrecording gage at former milldam 5.0 mi (8.0 km) downstream and 2.5 mi (4.0 km) northwest of Liberty, at datum about 4.00 ft (1.219 m) lower. Apr. 20 to Sept. 25, 1904, nonrecording gage at Myrtle Street highway bridge 0.8 mi (1.3 km) upstream at different datum. Nov. 14, 1921, to Sept. 30, 1929, nonrecording gage at Myrtle Street bridge at datum 0.87 ft (0.265 m) higher than present datum. Oct. 1, 1929, to Dec. 25, 1933, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--63 years, 1,689 ft³/s (47.83 m³/s), 1,224,000 acre-ft/yr (1.51 km³/yr).

EXTREMES.--Current year: Maximum discharge, 38,600 ft³/s (1,090 m³/s) Nov. 4, gage height, 40.13 ft (12.232 m); minimum, 28 ft³/s (0.79 m³/s) Aug. 13, 14.

Period of record: Maximum discharge, 117,000 ft³/s (3,310 m³/s) Apr. 17, 1945, gage height, 47.28 ft (14.411 m); maximum gage height, 47.60 ft (14.508 m) May 19, 1943; no flow at times in 1932, 1934, 1936, 1939-40, 1953-55.

Maximum stage known since at least 1885, that of May 19, 1943.

REMARKS.--Records good. Flow regulated since 1949 by Fall River Lake (see sta 07168000) and since 1960 by Toronto Lake (see sta 07165900). Since 1966, some regulation by Elk City Lake (see sta 07170050). Records of chemical analyses for the current year are published in Part 2 of this report.

COOPERATION.--Gage-height record and 24 discharge measurements furnished by Corps of Engineers; records computed by Geological Survey.

REVISIONS (WATER YEARS).--WSP 977: 1922, 1927-29. WSP 1117: Drainage area. WSP 1341: 1923-25(M), 1939.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,160	19,400	3,600	3,070	14,500	6,060	6,170	1,050	5,630	2,720	47	274
2	960	17,300	3,460	2,130	3,570	5,310	8,030	1,090	5,530	2,330	44	155
3	736	26,900	3,390	2,210	2,500	4,390	7,970	1,510	7,640	1,000	43	119
4	318	36,000	3,350	2,260	5,510	3,880	7,490	1,190	8,890	652	44	102
5	282	33,800	3,390	1,910	13,300	3,610	6,270	978	6,970	503	44	92
6	268	24,900	2,640	2,500	12,900	2,640	5,210	884	7,450	476	41	113
7	258	6,150	2,400	3,920	10,700	1,740	4,620	727	5,600	472	37	128
8	245	4,820	1,540	4,380	8,510	1,540	4,880	602	4,590	374	34	98
9	240	5,350	1,290	4,200	8,190	1,310	5,870	661	3,940	331	31	88
10	232	5,500	1,170	3,970	7,000	1,560	5,120	1,280	3,970	217	30	83
11	228	6,070	3,440	3,320	4,900	2,220	3,670	872	3,820	163	30	108
12	230	7,790	7,090	2,470	4,600	3,520	1,970	641	2,990	154	29	147
13	3,530	11,100	5,560	2,190	4,580	4,610	1,440	1,010	1,570	148	28	150
14	2,390	13,200	4,930	2,040	4,580	4,140	1,440	5,910	3,550	141	2,260	119
15	1,370	13,400	4,680	1,820	4,010	4,390	1,620	8,910	6,530	139	2,590	96
16	1,570	13,200	4,500	1,700	2,720	6,690	1,990	4,280	6,680	136	921	89
17	1,870	13,000	4,370	1,500	3,830	8,410	2,410	4,330	13,000	130	729	88
18	1,630	12,900	4,300	1,480	4,040	7,710	2,130	4,180	19,100	113	2,970	86
19	968	12,700	4,020	1,250	4,530	12,000	1,540	4,050	10,100	107	987	83
20	596	12,500	3,010	1,520	5,080	8,330	1,130	2,980	7,380	103	256	76
21	462	12,300	2,720	2,840	4,970	6,250	1,060	1,070	11,100	105	148	73
22	375	12,200	1,970	2,760	3,910	4,760	991	635	11,700	112	126	63
23	328	12,000	1,910	2,580	3,630	4,560	865	1,780	14,100	101	110	50
24	248	11,800	1,880	2,470	3,570	4,250	809	2,500	12,700	91	98	43
25	255	11,500	1,830	1,880	4,940	3,660	1,880	1,040	9,850	71	80	39
26	480	10,500	1,520	1,770	7,590	2,840	1,370	922	7,950	58	69	37
27	616	6,440	1,280	1,470	8,140	5,860	1,560	1,630	5,510	52	63	37
28	756	6,560	1,240	1,040	6,900	13,000	1,620	1,620	3,940	50	115	49
29	3,220	9,230	1,060	1,170	-----	8,510	1,630	3,870	3,110	44	416	67
30	3,930	5,290	1,040	2,740	-----	3,910	1,510	4,050	2,930	41	1,820	54
31	16,800	-----	1,670	16,400	-----	3,750	-----	4,730	-----	41	925	-----
TOTAL	46,551	393,800	90,250	86,960	173,200	155,410	94,265	70,982	217,820	11,175	15,165	2,806
MEAN	1,502	13,130	2,911	2,805	6,186	5,013	3,142	2,290	7,261	360	489	93.5
MAX	16,800	36,000	7,090	16,400	14,500	13,000	8,030	8,910	19,100	2,720	2,970	274
MIN	228	4,820	1,040	1,040	2,500	1,310	809	602	1,570	41	28	37
AC-FT	92,330	781,100	179,000	172,500	343,500	308,300	187,000	140,800	432,000	22,170	30,080	5,570

CAL YR 1974 TOTAL 1,507,448 MEAN 4,130 MAX 36,000 MIN 44 AC-FT 2,990,000
WTR YR 1975 TOTAL 1,358,384 MEAN 3,722 MAX 36,000 MIN 28 AC-FT 2,694,000

PEAK DISCHARGE (REGULATED) ABOVE 14,000 CFS

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-01	1900	28.68	19,800	03-28	2000	22.89	14,000
11-04	1400	40.13	38,600	06-18	1200	27.91	19,000
01-31	0815	26.03	17,100	06-23	1945	23.08	14,200
02-05	1900	23.04	14,100				

07170700 BIG HILL CREEK NEAR CHERRYVALE, KS

LOCATION.--Lat 37°16'00", long 95°28'05", in SE¼SE¼ sec.7, T.32 S., R.18 E., Labette County, on right downstream abutment of bridge on county road, 4.3 mi (6.9 km) east of Cherryvale, and at mile 32.5 (52.3 km).

DRAINAGE AREA.--37 mi² (96 km²).

PERIOD OF RECORD.--October 1957 to current year.

GAGE.--Water-stage recorder. Datum of gage is 795.93 ft (242.599 m) above mean sea level (levels by Corps of Engineers). Prior to May 6, 1958, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--18 years, 26.8 ft³/s (0.759 m³/s), 19,420 acre-ft/yr (23.9 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,180 ft³/s (118 m³/s) Nov. 3, gage height, 17.59 ft (5.361 m); no flow at times in August and September.

Period of record: Maximum discharge, 13,000 ft³/s (368 m³/s) Mar. 10, 1974, gage height, 19.87 ft (6.056 m), from rating curve extended above 4,800 ft³/s (136 m³/s); no flow at times in most years.

A flood in 1951 reached a stage of 18.92 ft (5.767 m), from information by local residents.

REMARKS.--Records fair.

COOPERATION.--Gage-height record, 30 discharge measurements furnished by Corps of Engineers; records computed by Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.7	60	2.5	72	94	38	29	9.3	7.6	1.5	.09	.45
2	3.3	588	2.5	71	54	26	21	10	6.4	1.3	.08	.22
3	2.2	2,280	2.5	183	37	20	17	104	213	1.1	.04	.03
4	1.6	670	2.4	107	116	17	15	28	37	1.5	.01	.01
5	.87	84	2.3	48	124	16	14	14	183	1.0	.01	.01
6	.64	40	6.7	40	38	15	12	52	45	.82	.01	0
7	.73	28	51	25	23	14	13	88	47	.67	0	0
8	.75	21	25	18	21	12	61	20	22	.56	0	0
9	1.6	17	11	15	16	12	41	14	12	.44	0	0
10	1.4	48	7.7	14	14	16	26	19	75	.55	0	0
11	1.4	63	328	13	14	22	15	12	492	.52	0	.01
12	6.8	30	121	9.6	14	56	12	8.9	34	.40	0	.01
13	194	20	42	7.2	14	114	11	75	15	.37	0	.02
14	44	14	26	6.5	15	34	13	90	9.8	.34	.07	.03
15	29	11	20	6.5	15	68	13	25	7.0	.29	.15	.02
16	12	10	15	6.5	42	225	12	14	7.5	.19	.07	.02
17	7.0	9.2	11	6.5	121	90	11	9.9	1,180	.19	.45	.02
18	4.5	8.2	10	6.5	50	127	9.6	7.7	60	.19	320	.02
19	2.9	8.3	9.3	7.0	45	92	8.5	6.0	22	.15	12	.01
20	2.3	7.9	8.2	7.6	36	43	7.6	4.9	13	.19	3.7	.01
21	1.6	6.7	7.5	6.8	25	31	6.9	4.0	9.4	.27	1.9	.01
22	1.1	6.1	7.0	6.5	48	23	6.5	4.3	7.1	.51	.79	.01
23	.85	5.8	6.8	5.7	101	18	7.9	420	6.2	.48	.47	0
24	.75	5.2	6.4	5.6	49	13	8.1	50	5.4	.34	.29	0
25	.40	4.3	6.2	6.3	82	11	8.2	119	4.3	.26	.11	0
26	.43	3.5	5.9	6.3	186	11	7.6	63	3.4	.29	.09	0
27	1.8	3.2	6.0	5.7	160	391	7.0	42	2.9	1.8	.09	0
28	31	2.7	6.6	5.3	65	201	15	17	2.3	1.7	9.0	0
29	112	2.5	6.7	5.1	-----	142	11	27	1.8	.40	5.1	.04
30	36	2.5	6.7	376	-----	94	8.5	19	1.7	.20	1.7	.01
31	597	-----	102	1,210	-----	44	-----	11	-----	.16	.64	-----
TOTAL	1,105.62	4,060.1	871.9	2,309.2	1,619	2,036	448.4	1,388.0	2,532.8	18.68	356.86	.96
MEAN	35.7	135	28.1	74.5	57.8	65.7	14.9	44.8	84.4	.60	11.5	.032
MAX	597	2,280	328	1,210	186	391	61	420	1,180	1.8	320	.45
MIN	.40	2.5	2.3	5.1	14	11	6.5	4.0	1.7	.15	0	0
AC-FT	2,190	8,050	1,730	4,580	3,210	4,040	889	2,750	5,020	37	708	1.9

CAL YR 1974 TOTAL 21,858.58 MEAN 59.9 MAX 4,690 MIN 0 AC-FT 43,360
WTR YR 1975 TOTAL 16,747.52 MEAN 45.9 MAX 2,280 MIN 0 AC-FT 33,220

PEAK DISCHARGE (BASE, 1,200 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-03	1100	17.59	4,180	06-17	0815	16.72	2,920
01-31	0130	16.84	3,040				

ARKANSAS RIVER BASIN

183

07172000 CANEY RIVER NEAR ELGIN, KS

LOCATION.--Lat 37°00'13", long 96°18'54", in NW¼NW¼SE¼ sec.16, T.35 S., R.10 E., Chautauqua County, at county highway bridge, 2 mi (3 km) west of Elgin, and at mile 117.8 (189.5 km).

DRAINAGE AREA.--445 mi² (1,153 km²).

PERIOD OF RECORD.--October 1938 to current year. Monthly discharge only for some periods, published in WSP 1311.

GAGE.--Water-stage recorder. Datum of gage is 763.32 ft (232.660 m) above mean sea level (levels by Corps of Engineers). Prior to Sept. 13, 1961, at site 300 ft (91.4 m) downstream at same datum.

AVERAGE DISCHARGE.--37 years, 242 ft³/s (6.853 m³/s), 175,300 acre-ft/yr (216 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 20,900 ft³/s (592 m³/s) Nov. 3, gage height, 21.36 ft (6.510 m); minimum, 3.5 ft³/s (0.099 m³/s) Sept. 26-28.

Period of record: Maximum discharge, 62,000 ft³/s (1,760 m³/s) Sept. 13, 1961, gage height, 34.70 ft (10.577 m), from floodmarks; no flow at times.

REMARKS.--Records good.

COOPERATION.--Gage-height record and 22 discharge measurements furnished by Corps of Engineers; records computed by Geological Survey.

REVISIONS.--WSP 1117: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	80	1,790	129	633	2,790	794	768	131	420	109	8.9	11
2	59	7,490	124	592	1,640	655	616	138	404	95	8.7	9.2
3	45	16,600	120	700	1,250	557	512	380	1,580	86	9.3	8.3
4	35	8,640	116	567	2,760	508	463	244	1,000	77	8.4	7.8
5	29	4,590	116	554	2,060	487	415	180	810	71	7.5	7.0
6	23	3,650	131	710	1,190	453	370	211	785	63	6.0	6.7
7	21	3,110	241	582	926	419	607	229	559	56	6.3	6.0
8	20	2,100	211	501	826	374	1,950	147	435	50	6.8	5.5
9	19	1,670	178	431	640	363	842	129	381	45	7.1	5.3
10	15	1,410	166	523	558	464	572	370	422	42	7.0	5.3
11	13	1,070	1,620	459	542	656	450	235	473	38	6.4	5.0
12	11	826	1,610	347	493	1,310	375	182	332	33	5.7	4.4
13	13	640	849	278	464	1,270	350	2,480	250	29	5.3	5.6
14	13	484	627	284	450	794	440	6,880	217	28	32	7.7
15	19	401	497	276	424	687	400	2,620	180	26	485	8.0
16	15	352	418	268	407	741	329	1,330	152	26	361	7.8
17	11	324	369	250	481	805	290	886	1,710	24	62	7.7
18	17	304	338	244	704	2,660	271	685	1,050	22	67	8.4
19	21	290	312	238	755	1,740	247	532	593	20	1,110	9.5
20	21	266	288	219	854	1,040	217	417	413	19	149	8.6
21	21	244	265	206	1,510	822	199	337	308	16	55	8.1
22	20	230	248	193	1,270	705	185	297	546	14	34	7.6
23	18	219	229	178	1,070	605	190	2,240	458	13	24	6.7
24	18	203	211	175	889	501	196	1,590	540	13	19	5.5
25	20	188	195	175	952	431	185	1,130	364	22	15	5.2
26	56	178	182	168	1,650	397	169	1,170	270	21	13	4.0
27	81	171	183	158	1,140	2,680	154	1,480	216	19	13	3.5
28	118	161	185	150	950	2,180	164	839	177	16	13	3.7
29	203	148	182	142	-----	1,450	150	770	148	13	13	4.1
30	2,580	135	172	3,190	-----	1,330	142	625	127	11	13	3.8
31	6,730	-----	720	7,740	-----	997	-----	508	-----	9.9	12	-----
TOTAL	10,365	57,884	11,232	21,131	29,645	28,875	12,218	29,392	15,320	1,126.9	2,583.4	197.0
MEAN	334	1,929	362	682	1,059	931	407	948	511	36.4	83.3	6.57
MAX	6,730	16,600	1,620	7,740	2,790	2,680	1,950	6,880	1,710	109	1,110	11
MIN	11	135	116	142	407	363	142	129	127	9.9	5.3	3.5
AC-FT	20,560	114,800	22,280	41,910	58,800	57,270	24,230	58,300	30,390	2,240	5,120	391
CAL YR 1974	TOTAL	213,889.78	MEAN	586	MAX	16,700	MIN	.69	AC-FT	424,300		
WTR YR 1975	TOTAL	219,969.30	MEAN	603	MAX	16,600	MIN	3.5	AC-FT	436,300		

PEAK DISCHARGE (BASE, 6,000 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
10-31	0045	18.39	16,700	01-31	0100	16.99	14,900
11-03	1200	21.36	20,900	05-14	0430	14.26	11,500

ARKANSAS RIVER BASIN

07179400 COUNCIL GROVE LAKE NEAR COUNCIL GROVE, KS

LOCATION.--Lat 38°40'45", long 96°30'25", in NE¼NE¼ sec.10, T.16 S., R.8 E., Morris County, in control tower near right end of Council Grove Dam on Neosho River, 1.0 mi (1.6 km) northwest of Council Grove, and at mile 449.7 (723.6 km).

DRAINAGE AREA.--246 mi² (637 km²).

PERIOD OF RECORD.--October 1964 to current year. Prior to October 1971 published as "Council Grove Reservoir".

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Corps of Engineers).

EXTREMES.--Current year: Maximum elevation, 1,278.87 ft (389.800 m) June 26, contents, 67,970 acre-ft (83.8 hm³); minimum, 1,269.16 ft (386.840 m) Oct. 4, contents, 35,940 acre-ft (44.3 hm³).

Period of record: Maximum elevation, 1,283.72 ft (391.278 m) July 11, 1969, contents, 88,340 acre-ft (109 hm³); minimum since conservation pool first filled, 1,265.79 ft (385.813 m) Mar. 30, 1967, contents, 27,300 acre-ft (33.7 hm³).

REMARKS.--Reservoir is formed by compacted earthfill dam. The spillway is a limited service, uncontrolled, emergency type having a width of 500 ft (152.4 m). The outlet works consist of a cut and cover conduit 17 ft (5.2 m) in diameter. Regulated storage began October 9, 1964. Maximum pool, 376,900 acre-ft (465 hm³) at elevation 1,320.0 ft (402.34 m); top of flood control pool, 114,300 acre-ft (141 hm³) at elevation 1,289.0 ft (392.89 m); and top of conservation pool, 38,300 acre-ft (47.2 hm³) at elevation 1,270.0 ft (389.10 m). The reservoir is used for flood control, conservation, and related beneficial water uses. Figures given herein represent total contents.

COOPERATION.--Records furnished by Corps of Engineers; reviewed by Geological Survey.

Capacity table (elevation, in feet, and contents, in acre-feet)
(Based on a survey made in 1939 by Corps of Engineers)

1,265	25,470	1,275	53,920
1,270	38,310	1,280	72,420

ELEVATION, IN FEET, AT 2400, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,269.23	1,271.77	1,272.03	1,271.70	1,271.44	1,272.10	1,272.58	1,273.82	1,274.02	1,276.96	1,269.88	1,269.81
2	1,269.20	1,271.88	1,272.03	1,271.69	1,271.44	1,272.09	1,272.61	1,273.83	1,274.11	1,276.38	1,269.88	1,269.78
3	1,269.17	1,273.19	1,272.02	1,271.67	1,271.45	1,272.06	1,272.58	1,273.84	1,274.42	1,275.80	1,269.85	1,269.78
4	1,269.20	1,273.38	1,271.99	1,271.64	1,272.25	1,272.01	1,272.65	1,273.85	1,274.48	1,275.19	1,269.85	1,269.75
5	1,269.22	1,273.45	1,271.99	1,271.60	1,272.39	1,272.00	1,272.71	1,273.86	1,274.45	1,274.59	1,269.84	1,269.84
6	1,269.28	1,273.50	1,272.06	1,271.56	1,272.39	1,272.00	1,272.73	1,273.89	1,274.40	1,273.98	1,269.78	1,269.82
7	1,269.26	1,273.54	1,272.09	1,271.53	1,272.37	1,271.95	1,273.11	1,273.91	1,274.26	1,273.35	1,269.76	1,269.74
8	1,269.25	1,273.58	1,272.06	1,271.50	1,272.25	1,271.91	1,274.40	1,273.90	1,274.20	1,272.79	1,269.75	1,269.72
9	1,269.25	1,273.74	1,272.05	1,271.48	1,272.11	1,271.94	1,274.47	1,273.91	1,274.21	1,272.34	1,269.73	1,269.70
10	1,269.23	1,274.12	1,272.04	1,271.70	1,272.00	1,271.94	1,274.30	1,273.91	1,274.58	1,271.95	1,269.70	1,269.69
11	1,269.40	1,274.20	1,272.06	1,271.70	1,271.88	1,271.90	1,274.12	1,273.91	1,275.77	1,271.64	1,269.68	1,269.72
12	1,269.50	1,274.11	1,272.06	1,271.68	1,271.74	1,271.88	1,273.88	1,273.90	1,275.80	1,271.31	1,269.64	1,269.68
13	1,269.99	1,274.00	1,272.06	1,271.66	1,271.69	1,271.85	1,273.92	1,273.92	1,275.60	1,271.01	1,269.68	1,269.67
14	1,270.14	1,273.87	1,272.07	1,271.65	1,271.57	1,271.82	1,274.64	1,273.92	1,275.37	1,270.68	1,269.69	1,269.65
15	1,270.15	1,273.75	1,272.05	1,271.63	1,271.54	1,271.82	1,274.33	1,273.92	1,275.10	1,270.35	1,269.69	1,269.65
16	1,270.14	1,273.64	1,272.04	1,271.63	1,271.54	1,271.87	1,273.87	1,273.92	1,275.51	1,270.12	1,269.69	1,269.64
17	1,270.16	1,273.53	1,272.04	1,271.61	1,271.54	1,272.11	1,273.59	1,273.90	1,275.91	1,270.08	1,269.78	1,269.63
18	1,270.17	1,273.34	1,272.08	1,271.60	1,271.53	1,272.37	1,273.59	1,273.89	1,275.95	1,270.05	1,269.97	1,269.64
19	1,270.17	1,273.04	1,272.09	1,271.61	1,271.51	1,272.45	1,273.58	1,273.87	1,275.99	1,270.06	1,269.98	1,269.62
20	1,270.14	1,272.69	1,272.11	1,271.60	1,271.49	1,272.52	1,273.58	1,273.86	1,275.97	1,270.05	1,269.98	1,269.61
21	1,270.12	1,272.36	1,272.10	1,271.60	1,271.70	1,272.55	1,273.60	1,273.85	1,275.78	1,270.05	1,269.96	1,269.59
22	1,270.12	1,272.18	1,272.07	1,271.59	1,271.92	1,272.42	1,273.58	1,273.92	1,278.38	1,270.03	1,269.93	1,269.58
23	1,270.12	1,272.16	1,272.03	1,271.57	1,271.93	1,272.33	1,273.65	1,273.95	1,278.66	1,270.01	1,269.91	1,269.57
24	1,270.13	1,272.11	1,271.98	1,271.56	1,271.95	1,272.16	1,273.80	1,273.97	1,278.78	1,270.00	1,269.87	1,269.55
25	1,270.14	1,272.05	1,271.93	1,271.55	1,271.94	1,272.00	1,273.87	1,273.98	1,278.84	1,269.98	1,269.87	1,269.54
26	1,270.15	1,272.08	1,271.90	1,271.52	1,272.03	1,271.94	1,273.89	1,274.00	1,278.78	1,269.96	1,269.83	1,269.52
27	1,270.15	1,272.08	1,271.86	1,271.52	1,272.09	1,272.34	1,273.92	1,273.97	1,278.52	1,269.95	1,269.82	1,269.51
28	1,270.35	1,272.07	1,271.82	1,271.48	1,272.10	1,272.48	1,273.91	1,274.00	1,278.24	1,269.94	1,269.80	1,269.53
29	1,270.98	1,272.05	1,271.78	1,271.44	-----	1,272.51	1,273.89	1,274.02	1,277.95	1,269.92	1,269.85	1,269.53
30	1,271.17	1,272.05	1,271.74	1,271.47	-----	1,272.54	1,273.87	1,274.05	1,277.53	1,269.89	1,269.85	1,269.61
31	1,271.58	-----	1,271.73	1,271.46	-----	1,272.58	-----	1,274.02	-----	1,269.88	1,269.83	-----
MEAN	1,269.91	1,272.98	1,272.00	1,271.59	1,271.85	1,272.14	1,273.64	1,273.92	1,276.05	1,271.56	1,269.82	1,269.66
MAX	1,271.58	1,274.20	1,272.11	1,271.70	1,272.39	1,272.58	1,274.64	1,274.05	1,278.84	1,276.96	1,269.98	1,269.84
MIN	1,269.17	1,271.77	1,271.73	1,271.44	1,271.44	1,271.82	1,272.58	1,273.82	1,274.02	1,269.88	1,269.64	1,269.51
(+)	42,970	44,410	43,420	42,610	44,560	46,050	50,150	50,650	62,890	37,960	37,820	37,200
(#)	+6,720	+1,440	-990	-810	+1,950	+1,490	+4,100	+500	+12,240	-24,930	-140	-620

CAL YR 1974 (#) +5,050

WTR YR 1975 (#) +950

+ CONTENTS, IN ACRE-FEET, AT END OF MONTH.

CHANGE IN CONTENTS, IN ACRE-FEET.

07179500 NEOSHO RIVER AT COUNCIL GROVE, KS

LOCATION.--Lat 38°39'54", long 96°29'38", in NE¼ sec.14, T.16 S., R.8 E., Morris County, on downstream side of center pier of highway bridge at city water plant in north part of Council Grove, 300 ft (91 m) downstream from Mozler Creek, 1.0 mi (1.6 km) upstream from Elm Creek, 1.7 mi (2.7 km) downstream from Council Grove Lake, and at mile 448.0 (721 km).

DRAINAGE AREA.--250 mi² (650 km²).

PERIOD OF RECORD.--October 1938 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,205.63 ft (367.476 m) above mean sea level (levels by Corps of Engineers). Prior to June 7, 1940, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--37 years, 126 ft³/s (3.568 m³/s), 91,290 acre-ft/yr (113 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,100 ft³/s (31.2 m³/s) June 30, July 1, gage height, 10.69 ft (3.258 m); no flow Sept. 22, 26-29.

Period of record: Maximum discharge, 121,000 ft³/s (3,430 m³/s) July 11, 1951, gage height, 35.5 ft (10.82 m); 36.29 ft (11.061 m), top of surge in gage house; 37.97 ft (11.573 m), floodmark at water plant and in wire-weight gage box at upstream side of bridge, from rating curve extended above 36,000 ft³/s (1,020 m³/s), on basis of slope-area measurement of peak flow; maximum discharge since closure of Council Grove Dam in 1964, 6,600 ft³/s (187 m³/s) June 26, 1969; no flow at times in 1938-41, 1947-48, 1954-57, 1963-64, 1975.

Maximum stage known, that of July 11, 1951. Flood in 1903 reached a stage of 37.3 ft (11.37 m) at water plant, from information by Corps of Engineers.

REMARKS.--Records good. Flow completely regulated by Council Grove Lake since 1964 (see sta 07179400). Records of chemical analyses for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1117: Drainage area. WSP 1341: 1939-40(M), 1942.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	12	41	88	66	91	94	102	26	1080	3.5	4.1
2	11	12	41	88	64	92	96	84	27	1070	3.7	4.2
3	11	34	41	88	64	93	96	38	31	1070	3.7	4.4
4	11	13	41	88	71	92	96	38	59	1060	3.7	4.4
5	11	12	42	88	71	91	96	39	94	1050	3.6	4.9
6	12	11	42	87	69	91	96	38	136	1050	3.6	4.6
7	11	11	42	87	145	91	98	37	242	1040	3.6	68
8	12	11	43	87	267	92	106	37	234	874	3.6	4.0
9	12	12	43	88	267	92	210	36	48	735	3.4	2.0
10	12	12	42	89	267	92	442	36	54	597	3.1	1.3
11	12	90	41	87	269	92	440	36	53	469	3.0	.93
12	14	224	41	90	271	92	438	36	171	466	3.0	.44
13	16	226	41	87	176	94	439	36	465	468	3.1	.31
14	11	228	41	87	94	70	645	36	464	467	3.7	.28
15	11	232	41	86	95	6.0	945	35	463	466	3.5	.25
16	11	235	36	85	94	5.8	938	34	456	337	3.4	.43
17	11	234	3.7	85	93	6.0	686	33	54	35	3.5	.22
18	12	350	3.4	85	92	6.0	213	32	49	24	3.6	.14
19	12	555	3.2	86	92	5.8	102	32	49	8.1	3.1	.13
20	12	551	3.2	85	93	6.0	100	32	164	7.9	3.2	.12
21	11	548	48	80	94	77	101	32	451	7.7	3.3	.01
22	11	329	87	80	92	240	101	33	130	7.6	3.1	0
23	12	95	87	81	93	240	101	33	49	7.6	4.7	.06
24	11	95	88	81	92	237	102	32	47	7.6	4.7	.04
25	11	78	88	82	90	236	103	32	46	7.7	4.5	.01
26	11	32	88	82	91	133	103	32	318	7.6	4.2	0
27	11	41	88	82	92	12	103	32	608	7.6	4.3	0
28	12	40	88	81	91	9.7	102	30	607	7.2	4.3	0
29	13	41	88	82	---	9.3	102	28	606	3.8	4.5	0
30	12	41	88	75	---	9.3	102	27	831	3.6	4.4	.06
31	13	---	88	67	---	48	---	26	---	3.5	4.3	---
TOTAL	364	4405	1598.5	2614	3455	2551.9	7396	1164	7032	12445.5	114.9	105.33
MEAN	11.7	147	51.6	84.3	123	82.3	247	37.5	234	401	3.71	3.51
MAX	16	555	88	90	271	240	945	102	831	1080	4.7	68
MIN	11	11	3.2	67	64	5.8	94	26	26	3.5	3.0	0
AC-FT	722	8740	3170	5180	6850	5060	14670	2310	13950	24690	228	209
CAL YR 1974	TOTAL	50452.30	MEAN 138	MAX 1780	MIN 3.2	AC-FT 100100						
WTR YR 1975	TOTAL	43246.13	MEAN 118	MAX 1080	MIN 0	AC-FT 85780						

ARKANSAS RIVER BASIN

07179730 NEOSHO RIVER NEAR AMERICUS, KS

LOCATION.--Lat 38°28'01", Long 96°15'01", in SW 1/4 SW 1/4 NE 1/4 sec. 24, T.18 S., R.10 E., Lyon County, near right bank, 0.1 mi (0.16 km) below Ruggles Dam, 2.0 mi (3.2 km) south of Americus, 12.5 mi (20.1 km) upstream from Allen Creek, and 24.0 mi (38.6 km) upstream from Cottonwood River.

DRAINAGE AREA.--622 mi² (1,610 km²).

PERIOD OF RECORD.--June 1963 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,106.99 ft (337.411 m) above mean sea level (levels by Corps of Engineers). Prior to Aug. 8, 1963, water-stage recorder at site 0.4 mi (0.6 m) upstream at present datum.

AVERAGE DISCHARGE.--12 years, 337 ft³/s (9.544 m³/s), 244,200 acre-ft/yr (301 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 5,410 ft³/s (153 m³/s) June 23, gage height, 23.18 ft (7.065 m); minimum, 7.6 ft³/s (0.22 m³/s) Sept. 22, 23.

Period of record: Maximum discharge, 10,900 ft³/s (309 m³/s) June 27, 1969, gage height, 28.30 ft (8.626 m); no flow at times.

REMARKS.--Records good. Flow moderately regulated since 1964 by Council Grove Lake (see sta 07179400). Low flow occasionally regulated by Ruggles Dam 0.1 mi (0.16 km) upstream.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	699	111	228	430	233	215	223	135	1110	39	15
2	16	303	116	236	291	224	247	219	129	1260	29	14
3	15	2510	118	241	276	212	262	220	2190	1250	24	14
4	17	3030	116	222	1140	203	448	181	1040	1240	24	12
5	19	452	120	208	1520	199	621	177	297	1240	22	19
6	22	300	132	235	404	202	403	165	252	1260	20	29
7	21	250	169	237	315	265	307	155	267	1260	26	22
8	24	226	201	313	401	228	1750	140	407	1250	22	71
9	22	218	160	439	477	216	1310	144	2300	1050	23	29
10	21	456	147	581	514	239	706	133	711	976	20	15
11	22	443	205	767	471	231	777	128	2760	774	19	13
12	211	342	343	232	412	222	733	123	1130	674	17	10
13	689	391	261	298	400	215	731	126	559	510	18	9.8
14	978	363	199	276	295	206	1600	136	668	510	29	9.9
15	195	342	199	236	232	186	1860	129	615	510	33	9.4
16	99	341	174	218	224	181	1290	116	588	502	26	9.1
17	76	324	160	210	232	553	1200	108	1480	352	31	9.8
18	63	318	111	202	230	722	824	108	524	104	217	10
19	53	446	101	208	221	411	447	108	299	94	152	10
20	48	610	99	204	255	250	329	102	243	66	43	9.3
21	45	594	93	194	715	212	312	98	341	60	26	8.4
22	43	590	130	174	1170	258	285	113	1780	58	20	8.0
23	41	349	217	162	479	391	299	621	4170	58	19	52
24	40	206	211	166	288	381	299	278	946	59	18	67
25	43	192	199	175	266	356	321	150	512	58	17	67
26	44	188	189	172	263	345	295	215	411	59	17	63
27	43	125	219	162	273	471	278	197	681	60	16	63
28	44	123	204	155	244	1070	269	323	828	54	17	67
29	52	122	205	152	---	331	247	304	796	53	25	68
30	226	114	206	363	---	231	233	193	778	50	20	74
31	688	---	216	737	---	216	---	154	---	44	17	---
TOTAL	3936	14967	5331	8403	12438	9660	18898	5587	27837	16605	1046	877.7
MEAN	127	499	172	271	444	312	630	180	928	536	33.7	29.3
MAX	978	3030	343	767	1520	1070	1860	621	4170	1260	217	74
MIN	15	114	93	152	221	181	215	98	129	44	16	8.0
AC-FT	7810	29690	10570	16670	24670	19160	37480	11080	55210	32940	2070	1740

CAL YR 1974 TOTAL 126185.0 MEAN 346 MAX 5290 MIN 4.3 AC-FT 250300
WTR YR 1975 TOTAL 125585.7 MEAN 344 MAX 4170 MIN 8.0 AC-FT 249100

PEAK DISCHARGE (REGULATED) ABOVE 4,000 CFS

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-04	0400	21.88	4,740	06-23	1000	23.18	5,410

ARKANSAS RIVER BASIN

187

07179794 MARION LAKE NEAR MARION, KS

LOCATION.--Lat 38°22'20", long 97°04'55", in NE¼ sec.27, T.19 S., R.3 E., Marion County, on top of dam on Cottonwood River, 3.0 mi (4.8 km) northwest of Marion, and at mile 126.7 (203.9 km).

DRAINAGE AREA.--200 mi² (518 km²).

PERIOD OF RECORD.--February 1968 to current year. Prior to October 1971 published as "Marion Reservoir".

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Corps of Engineers).

EXTREMES.--Current year: Maximum elevation, 1,352.94 ft (412.376 m) June 26, contents, 102,500 acre-ft (126 hm³); minimum, 1,349.19 ft (411.233 m) Oct. 4, contents, 78,750 acre-ft (97.1 hm³).

Period of record: Maximum elevation, 1,356.66 ft (413.510 m) Oct. 13, 1973, contents, 130,600 acre-ft (161 hm³); minimum since first filled, 1,348.62 ft (411.059 m) Sept. 14, 1970, contents, 75,480 acre-ft (93.1 hm³).

REMARKS.--Reservoir is formed by compacted earthfill dam. Regulated storage began Feb. 26, 1968. Total capacity, 188,100 acre-ft (232 hm³) consisting of the following: Dead storage, 740 acre-ft (0.912 hm³) below elevation 1,320.0 ft (402.34 m); conservation, 85,860 acre-ft (106 hm³) between elevations 1,320.0 ft (402.34 m) and 1,350.5 ft (411.63 m); flood control, 59,900 acre-ft (73.9 hm³) between elevations 1,350.5 ft (411.63 m) and 1,358.5 ft (414.07 m); uncontrolled storage, 41,600 acre-ft (51.3 hm³) between elevations 1,358.5 ft (414.07 m) and 1,362.8 ft (415.38 m). Reservoir is used for flood control, water quality control, water supply, recreation, and fish and wildlife conservation. Figures given herein represent total contents.

COOPERATION.--Records furnished by Corps of Engineers.

Capacity table (elevation, in feet, and contents, in acre-feet)

1,345	56,460	1,355	117,500
1,350	83,540		

ELEVATION, IN FEET, AT 2400, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,349.30	1,350.42	1,350.53	1,350.64	1,350.55	1,350.73	1,350.59	1,350.47	1,350.39	1,351.96	1,350.07	1,349.84
2	1,349.23	1,350.42	1,350.52	1,350.66	1,350.55	1,350.73	1,350.56	1,350.48	1,350.43	1,351.61	1,350.07	1,349.81
3	1,349.20	1,350.53	1,350.52	1,350.70	1,350.55	1,350.72	1,350.51	1,350.48	1,350.49	1,351.34	1,350.03	1,349.80
4	1,349.21	1,350.65	1,350.48	1,350.70	1,350.84	1,350.67	1,350.44	1,350.46	1,350.55	1,351.21	1,350.00	1,349.80
5	1,349.26	1,350.68	1,350.48	1,350.73	1,350.85	1,350.64	1,350.42	1,350.42	1,350.57	1,351.04	1,349.98	1,349.95
6	1,349.26	1,350.66	1,350.60	1,350.69	1,350.82	1,350.65	1,350.40	1,350.45	1,350.55	1,350.89	1,349.92	1,349.95
7	1,349.24	1,350.63	1,350.60	1,350.68	1,350.81	1,350.62	1,350.47	1,350.44	1,350.54	1,350.70	1,349.90	1,349.94
8	1,349.23	1,350.63	1,350.55	1,350.69	1,350.81	1,350.60	1,350.54	1,350.45	1,350.66	1,350.63	1,349.88	1,349.92
9	1,349.24	1,350.65	1,350.55	1,350.74	1,350.77	1,350.63	1,350.60	1,350.45	1,350.80	1,350.60	1,349.85	1,349.90
10	1,349.20	1,350.70	1,350.57	1,350.83	1,350.75	1,350.67	1,350.60	1,350.44	1,350.87	1,350.55	1,349.85	1,349.87
11	1,349.22	1,350.70	1,350.57	1,350.79	1,350.73	1,350.64	1,350.58	1,350.43	1,350.93	1,350.51	1,349.80	1,349.93
12	1,349.55	1,350.67	1,350.60	1,350.79	1,350.71	1,350.70	1,350.55	1,350.40	1,350.92	1,350.45	1,349.75	1,349.89
13	1,349.74	1,350.67	1,350.58	1,350.78	1,350.71	1,350.68	1,350.56	1,350.40	1,350.86	1,350.42	1,349.83	1,349.86
14	1,349.80	1,350.66	1,350.65	1,350.79	1,350.72	A	1,350.58	1,350.40	1,350.80	1,350.38	1,349.91	1,349.82
15	1,349.80	1,350.61	1,350.64	1,350.82	1,350.72	A	A	1,350.38	1,350.70	1,350.35	1,349.91	1,349.81
16	1,349.80	1,350.60	1,350.62	1,350.80	1,350.75	A	A	1,350.36	1,350.72	1,350.33	1,349.92	1,349.81
17	1,349.80	1,350.54	1,350.58	1,350.79	1,350.73	1,350.62	A	1,350.33	1,350.99	1,350.30	1,349.85	1,349.82
18	1,349.79	1,350.50	1,350.61	1,350.79	1,350.72	1,350.72	A	1,350.30	1,350.98	1,350.30	1,349.86	1,349.81
19	1,349.77	1,350.55	1,350.58	1,350.78	1,350.69	1,350.70	A	1,350.27	1,351.00	1,350.28	1,349.83	1,349.81
20	1,349.73	1,350.56	1,350.61	1,350.73	1,350.68	1,350.72	A	1,350.25	1,351.01	1,350.26	1,349.85	1,349.80
21	1,349.68	1,350.55	1,350.60	1,350.74	1,350.67	1,350.70	A	1,350.24	1,351.38	1,350.25	1,349.82	1,349.78
22	1,349.71	1,350.55	1,350.62	1,350.70	1,350.66	1,350.68	1,350.41	1,350.25	1,352.23	1,350.24	1,349.79	1,349.79
23	1,349.71	1,350.59	1,350.62	1,350.66	1,350.65	1,350.68	1,350.42	1,350.27	1,352.73	1,350.23	1,349.71	1,349.76
24	1,349.71	1,350.57	1,350.62	1,350.63	1,350.62	1,350.64	1,350.53	1,350.25	1,352.90	1,350.20	1,349.68	1,349.75
25	1,349.75	1,350.47	1,350.60	1,350.64	1,350.60	1,350.58	1,350.52	1,350.30	1,352.90	1,350.16	1,349.68	1,349.72
26	1,349.77	1,350.55	1,350.60	1,350.58	1,350.60	1,350.43	1,350.51	1,350.26	1,352.93	1,350.13	1,349.66	1,349.68
27	1,349.77	1,350.53	1,350.60	1,350.60	1,350.63	1,350.65	1,350.51	1,350.26	1,352.89	1,350.13	1,349.63	1,349.69
28	1,349.80	1,350.56	1,350.60	1,350.53	1,350.68	1,350.63	1,350.52	1,350.31	1,352.71	1,350.10	1,349.67	1,349.67
29	1,349.94	1,350.57	1,350.63	1,350.54	-----	1,350.60	1,350.52	1,350.40	1,352.50	1,350.08	1,349.86	1,349.65
30	1,350.13	1,350.55	1,350.62	1,350.57	-----	1,350.54	1,350.49	1,350.40	1,352.29	1,350.05	1,349.86	1,349.74
31	1,350.33	-----	1,350.64	1,350.57	-----	1,350.53	-----	1,350.35	-----	1,350.04	1,349.85	-----
MEAN	1,349.60	1,350.58	1,350.59	1,350.70	1,350.70			1,350.37	1,351.34	1,350.51	1,349.85	1,349.81
MAX	1,350.33	1,350.70	1,350.65	1,350.83	1,350.85	1,350.73	1,350.60	1,350.48	1,352.93	1,351.96	1,350.07	1,349.95
MIN	1,349.20	1,350.42	1,350.48	1,350.53	1,350.55	1,350.43	1,350.40	1,350.24	1,350.39	1,350.04	1,349.63	1,349.65
(+)	85,540	86,900	87,450	87,020	87,700	86,770	86,530	85,670	98,080	83,780	82,640	81,990
(*)	+6,030	+1,360	+550	-430	+680	-930	-240	-860	+12,410	-14,300	-1,140	-650

CAL YR 1974 (*) -1,000

WTR YR 1975 (*) +2,480

+ CONTENTS, IN ACRE-FEET, AT END OF MONTH.

* CHANGE IN CONTENTS, IN ACRE-FEET.

A NO GAGE-HEIGHT RECORD.

ARKANSAS RIVER BASIN

07179795 COTTONWOOD RIVER BELOW MARION LAKE, KS

LOCATION.--Lat 38°22'00", long 97°05'00", in SE¼ sec.27, T.19 S., R.3 E., Marion County, on left bank, 0.25 mi (0.40 km) below outlet of dam, 1.6 mi (2.6 km) upstream from South Fork Cottonwood River, 3.0 mi (4.8 km) northwest of Marion, and at mile 126.5 (203.5 km).

DRAINAGE AREA.--200 mi² (520 km²).

PERIOD OF RECORD.--July 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,296.57 ft (395.195 m) above mean sea level. Prior to Oct. 1, 1972, published as "below Marion Reservoir".

AVERAGE DISCHARGE.--7 years, 93.8 ft³/s (2.656 m³/s), 67,960 acre-ft/yr (83.8 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,300 ft³/s (36.8 m³/s) June 30, gage height, 10.76 ft (3.280 m); maximum gage height, 16.47 ft (5.020 m) June 22 (backwater); minimum discharge, 2.2 ft³/s (0.062 m³/s) Feb. 6.

Period of record: Maximum discharge, 3,390 ft³/s (96.0 m³/s) June 13, 1971; no flow part of day June 15, 1973.

REMARKS.--Records good. Flow completely regulated by Marion Lake 0.25 mi (0.40 km) upstream (see sta 07179794). Records of chemical analyses for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.8	6.1	7.6	6.3	3.5	85	83	31	8.8	1270	5.7	5.7
2	7.8	6.4	7.2	6.1	3.4	85	84	32	8.8	1260	5.7	5.9
3	7.8	6.9	7.1	6.1	3.4	85	82	32	9.6	987	5.7	6.0
4	8.4	6.3	7.2	6.1	3.8	163	85	33	8.8	529	5.7	6.0
5	7.8	6.1	7.2	5.9	3.2	240	84	34	8.8	525	5.7	9.4
6	8.4	5.9	7.2	6.0	3.0	146	83	33	8.8	524	8.1	7.5
7	8.4	6.1	7.2	6.1	4.1	26	85	33	8.8	524	5.4	7.9
8	8.4	6.1	7.0	6.1	8.7	26	85	32	9.8	268	5.4	7.9
9	7.8	6.1	6.4	6.1	8.8	25	85	31	12	78	5.6	7.9
10	7.5	6.1	6.5	8.0	85	25	85	31	9.5	51	5.7	7.5
11	7.5	34	6.7	6.9	83	25	85	30	9.1	26	5.7	7.7
12	9.7	87	6.7	8.1	83	25	85	29	71	26	5.5	7.5
13	11	89	6.7	7.9	83	24	85	29	203	25	7.2	7.5
14	9.7	86	6.8	9.0	83	25	84	28	201	15	6.2	7.5
15	9.0	86	7.0	11	84	25	84	28	201	6.0	5.7	7.3
16	7.5	87	6.7	11	85	25	85	28	170	5.8	5.7	7.0
17	7.0	85	6.4	65	85	25	85	28	5.5	5.7	5.9	7.3
18	7.2	61	6.4	80	85	25	85	28	8.8	5.7	6.0	7.0
19	7.2	7.0	6.4	81	86	25	85	28	8.1	5.7	6.0	7.0
20	7.0	7.0	6.4	79	85	25	85	18	7.9	5.7	6.2	7.0
21	7.5	7.0	6.5	79	84	45	152	8.3	7.9	5.8	6.0	7.0
22	7.5	7.1	6.7	77	84	80	93	8.2	14	5.8	6.0	6.6
23	7.5	7.5	6.7	77	85	80	30	8.8	13	5.7	6.2	6.6
24	7.2	7.7	6.7	77	86	84	29	8.4	12	5.8	6.1	6.6
25	7.5	7.5	6.4	77	85	79	30	8.4	11	5.8	5.7	6.6
26	7.5	7.5	6.4	77	85	77	31	8.9	11	6.0	5.8	6.3
27	7.5	7.5	6.4	76	85	80	31	8.7	272	6.0	5.9	6.3
28	7.8	7.5	6.4	76	85	80	31	9.6	767	6.0	6.0	6.3
29	7.7	7.5	6.4	77	---	84	30	8.8	763	6.0	8.9	6.3
30	8.1	7.9	6.4	34	---	84	31	8.4	1030	5.7	5.4	6.2
31	6.6	---	6.4	3.6	---	84	---	8.4	---	5.7	5.6	---
TOTAL	245.3	765.8	208.2	1152.3	1842.3	2012	2177	690.9	3880.0	6206.9	186.4	209.3
MEAN	7.91	25.5	6.72	37.2	65.8	64.9	72.6	22.3	129	200	6.01	6.98
MAX	11	89	7.6	81	88	240	152	34	1030	1270	8.9	9.4
MIN	6.6	5.9	6.4	3.6	3.0	24	29	8.2	5.5	5.7	5.4	5.7
AC-FT	487	1520	413	2290	3650	3990	4320	1370	7700	12310	370	415
CAL YR 1974	TOTAL	38139.8	MEAN	104	MAX	1690	MIN	5.5	AC-FT	75650		
WTR YR 1975	TOTAL	19576.4	MEAN	53.6	MAX	1270	MIN	3.0	AC-FT	38830		

ARKANSAS RIVER BASIN

189

07180400 COTTONWOOD RIVER NEAR FLORENCE, KS

LOCATION.--Lat 38°14'10", Long 96°52'37", in NW¼SW¼ sec.10, T.21 S., R.5 E., Marion County, at downstream side of county highway bridge 0.4 mi (0.6 km) upstream from Martin Creek, 2.5 mi (4.0 km) east of Florence, 3.3 mi (5.3 km) downstream from Doyle Creek and at mile 102.4 (164.8 km).

DRAINAGE AREA.--754 mi² (1,950 km²).

PERIOD OF RECORD.--June 1961 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,231.49 ft (375.358 m) above mean sea level. Since Aug. 10, 1965, auxiliary water-stage recorder 2.8 mi (4.5 km) downstream at datum 1,219.49 ft (371.701 m) above mean sea level.

AVERAGE DISCHARGE.--14 years, 351 ft³/s (9,940 m³/s), 254,300 acre-ft/yr (314 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 56,000 ft³/s (1,590 m³/s) June 17, gage height, 28.03 ft (8.544 m); minimum, 42 ft³/s (1.19 m³/s) Oct. 4.

Period of record: Maximum discharge, 56,000 ft³/s (1,590 m³/s) June 17, 1975, gage height, 28.03 ft (8.544 m); minimum, 5.5 ft³/s (0.16 m³/s) Oct. 11, 1964.

Maximum stage known since at least 1872, 32.5 ft (9.91 m) July 11, 1951 from information by local residents.

REMARKS.--Records fair. Flow moderately regulated since 1968 by Marion Lake 24 mi (939 km) upstream (see sta 07179794).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	47	525	79	89	243	710	243	201	237	1580	85	150
2	47	223	79	89	154	465	248	188	209	1570	85	100
3	45	1320	77	94	134	340	243	200	1600	1520	85	90
4	45	1200	77	84	1260	291	272	196	1370	840	85	70
5	53	309	77	84	1380	405	296	189	346	750	82	960
6	58	172	87	82	278	415	271	177	250	730	78	760
7	62	125	97	89	215	243	874	169	211	715	78	186
8	60	113	97	92	240	199	4550	164	898	670	70	123
9	60	110	94	113	230	187	1200	161	2910	290	70	103
10	60	125	84	199	230	195	497	157	1230	262	70	102
11	58	219	105	282	243	195	399	158	3980	198	68	111
12	128	227	195	125	227	195	348	153	971	178	65	106
13	1090	215	150	115	223	191	342	165	556	170	65	95
14	545	195	116	110	219	183	867	183	490	170	360	88
15	147	183	105	102	215	175	1020	177	448	143	170	87
16	92	179	100	105	195	195	459	162	4190	126	100	86
17	74	179	92	110	200	410	375	143	25200	118	85	89
18	65	179	89	195	227	750	352	133	4110	109	78	91
19	58	128	89	207	207	354	332	134	704	109	75	89
20	56	92	89	215	211	243	308	128	520	109	75	83
21	56	92	87	215	211	211	294	111	472	103	72	78
22	56	89	87	199	251	243	365	105	7000	106	70	75
23	56	87	87	191	251	247	226	143	12000	97	68	73
24	56	84	84	187	227	239	342	125	6000	97	65	71
25	60	84	77	187	235	231	517	112	915	97	60	70
26	70	82	79	187	565	219	270	114	620	97	60	68
27	67	82	82	187	1050	260	244	118	510	97	60	68
28	70	82	82	183	1040	440	232	481	995	97	60	68
29	102	82	82	179	---	324	224	1680	1010	94	3000	68
30	550	79	82	239	---	260	214	501	1000	88	700	74
31	1130	---	87	490	---	247	---	293	---	85	250	---
TOTAL	5123	6861	2894	5025	10361	9262	16424	7121	80952	11415	6394	4282
MEAN	165	229	93.4	162	370	299	547	230	2698	368	206	143
MAX	1130	1320	195	490	1380	750	4550	1680	25200	1580	3000	960
MIN	45	79	77	82	134	175	214	105	209	85	60	68
AC-FT	10160	13610	5740	9970	20550	18370	32580	14120	160600	22640	12680	8490
CAL YR 1974	TOTAL	150242	MEAN 412	MAX 19000	MIN 42	AC-FT 298000						
WTR YR 1975	TOTAL	166114	MEAN 455	MAX 25200	MIN 45	AC-FT 329500						

PEAK DISCHARGE (REGULATED) ABOVE 3,300 CFS

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
04-08	0800	15.17	5,230	06-17	0100	28.03	56,000
06-09	0200	13.40	4,520	06-23	UNKNOWN	UNKNOWN	12,000
06-11	1000	13.53	4,710	08-29	UNKNOWN	13.9	4,960

ARKANSAS RIVER BASIN

07180500 CEDAR CREEK NEAR CEDAR POINT, KS

LOCATION.--Lat 38°11'55", long 96°49'22", in NE¼SE¼NE¼ sec.25, T.21 S., R.5 E., Chase County, on upstream end of right abutment of highway bridge, 4.0 mi (6.4 km) south of Cedar Point, and at mile 9.4 (15.1 km).

DRAINAGE AREA.--110 mi² (285 km²).

PERIOD OF RECORD.--October 1938 to current year. Monthly discharge only for some periods, published in WSP 1311.

GAGE.--Water-stage recorder. Datum of gage is 1,262.50 ft (384.810 m) above mean sea level (levels by Corps of Engineers). Prior to Sept. 28, 1944, nonrecording gage at downstream side of present bridge at same datum.

AVERAGE DISCHARGE.--37 years, 55.8 ft³/s (1.580 m³/s), 40,430 acre-ft/yr (49.9 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 13,100 ft³/s (371 m³/s) June 16, gage height, 21.80 ft (6.645 m); minimum, 5.3 ft³/s (0.150 m³/s) Oct. 22.

Period of record: Maximum discharge, 52,400 ft³/s (1,480 m³/s) June 29, 1951, gage height, 23.70 ft (7.224 m), from rating curve extended above 7,500 ft³/s (212 m³/s) on basis of contracted-opening and flow-over-road measurement of peak discharge; no flow at times.

Maximum stage since at least 1856, that of June 29, 1951. Flood in July 1929 reached a stage of 24.63 ft (7.507 m) from flood-marks on house on left bank where flood in 1951 reached a stage of 25.7 ft (7.83 m).

REMARKS.--Records good.

REVISIONS (WATER YEARS).--WSP 1211: 1944(M). WSP 1341: 1940-41, 1942(M), 1943, 1945(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.2	13	16	22	56	152	60	47	42	71	17	15
2	8.4	9.6	16	23	40	96	62	46	39	67	17	12
3	8.0	402	16	23	39	70	58	47	626	63	19	11
4	7.4	84	16	22	450	65	72	45	138	58	17	11
5	7.1	88	16	20	144	63	62	42	75	53	16	14
6	9.2	47	17	20	69	63	56	41	60	49	15	13
7	8.4	34	21	25	61	59	104	38	51	46	14	12
8	8.0	30	20	72	61	51	698	35	251	44	14	11
9	9.2	28	17	51	53	53	118	34	500	43	13	10
10	9.2	29	16	49	50	57	86	34	243	42	13	10
11	8.8	27	104	52	54	54	76	33	422	39	12	12
12	8.8	25	180	32	49	53	70	32	118	36	12	12
13	12	24	58	29	47	52	72	37	85	33	12	11
14	12	22	43	30	45	49	104	44	72	32	17	11
15	9.6	22	37	30	45	53	92	37	64	30	14	11
16	7.7	22	33	30	44	112	74	32	1890	28	13	12
17	8.4	22	30	28	44	132	70	30	3740	26	12	13
18	8.0	22	29	28	44	86	70	28	266	24	12	12
19	7.7	22	28	29	44	68	66	27	165	23	13	12
20	6.8	22	27	27	44	61	61	26	129	23	12	11
21	5.6	20	25	27	54	58	58	27	116	24	11	10
22	7.1	20	24	26	139	56	57	27	2830	24	9.2	9.5
23	7.1	20	24	24	72	54	60	58	490	23	8.4	8.8
24	7.4	20	23	25	62	52	62	42	225	22	7.7	8.4
25	7.4	18	22	26	80	48	63	31	143	23	7.4	8.0
26	7.7	18	21	25	226	47	58	35	116	22	8.0	7.5
27	7.4	18	21	24	314	348	57	35	104	22	9.2	7.1
28	7.7	18	21	23	256	160	57	131	93	22	8.8	7.4
29	9.2	18	21	23	---	75	53	163	83	20	192	7.4
30	10	17	20	55	---	66	50	67	77	20	63	8.7
31	16	---	22	134	---	63	---	46	---	18	22	---
TOTAL	266.5	1181.6	984	1054	2686	2476	2706	1397	13253	1070	630.7	318.8
MEAN	8.60	39.4	31.7	34.0	95.9	79.9	90.2	45.1	442	34.5	20.3	10.6
MAX	16	402	180	134	450	348	698	163	3740	71	192	15
MIN	5.6	9.6	16	20	39	47	50	26	39	18	7.4	7.1
AC-FT	529	2340	1950	2090	5330	4910	5370	2770	26290	2120	1250	632

CAL YR 1974 TOTAL 17020.8 MEAN 46.6 MAX 1000 MIN 5.4 AC-FT 33760
WTR YR 1975 TOTAL 28023.6 MEAN 76.8 MAX 3740 MIN 5.6 AC-FT 55580

PEAK DISCHARGE (BASE, 3,600 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
06-16	2200	21.80	13,100	06-22	1000	17.61	6,970

ARKANSAS RIVER BASIN

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07182250 COTTONWOOD RIVER NEAR PLYMOUTH, KS

LOCATION.--Lat 38°23'51", long 96°21'21", in NE¼NE¼SE¼ sec.13, T.19 S., R.9 E., Chase County, at downstream side of county highway bridge, 0.8 mi (1.3 km) downstream from Buckeye Creek, 1.5 mi (2.4 km) southwest of Plymouth, and at mile 39.2 (63.1 km).

DRAINAGE AREA.--1,740 mi² (4,510 km²).

PERIOD OF RECORD.--March 1963 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,109.04 ft (338.035 m) above mean sea level.

AVERAGE DISCHARGE.--12 years, 957 ft³/s (27.10 m³/s), 693,300 acre-ft/yr (855 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 20,100 ft³/s (569 m³/s) June 19, gage height, 33.64 ft (10.253 m); minimum, 117 ft³/s (3.31 m³/s) Oct. 11.

Period of record: Maximum discharge, 57,500 ft³/s (16.30 m³/s) June 5, 1965, gage height, 35.70 ft (10.881 m); minimum, 8.7 ft³/s (0.25 m³/s) Oct. 21, 1964.

Maximum stage known since at least 1903, 37.8 ft (11.52 m) July 11, 1951, from information by local residents.

REMARKS.--Records good. Flow partially regulated by Marion Lake 87.3 mi (140.5 km) upstream since 1968 (see sta 07179794). Records of chemical analyses for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	133	1350	342	432	1660	2170	927	761	647	1640	222	629
2	131	1140	336	430	1080	1660	921	719	553	1880	215	275
3	130	6490	332	440	861	1250	922	737	1710	2020	210	215
4	124	5140	326	423	3110	1010	1320	726	2770	1940	208	188
5	134	3300	323	410	4180	924	1160	680	2490	1520	204	237
6	137	1310	344	411	3150	960	1030	652	974	1170	195	712
7	138	890	434	492	1500	1050	952	617	686	1110	198	1050
8	141	750	420	631	1250	895	4400	581	904	1060	186	399
9	143	685	380	631	986	765	6290	557	4580	1010	180	253
10	135	955	363	877	1080	799	4130	534	5020	764	169	214
11	131	975	650	1100	1150	797	1670	520	7770	638	163	201
12	447	804	1250	819	962	781	1320	501	6860	572	155	206
13	1200	737	1040	688	891	762	1240	510	3670	505	155	201
14	1650	688	773	715	860	719	2320	574	1500	477	380	190
15	834	635	652	627	819	723	2690	557	1240	456	357	182
16	471	608	584	581	786	998	2290	518	1090	432	410	178
17	300	583	541	548	758	1810	1520	472	6230	396	249	179
18	244	568	520	552	780	2080	1320	438	12000	375	201	181
19	214	558	501	591	770	1930	1210	418	19300	353	184	181
20	195	528	484	626	724	1330	1090	400	11200	335	175	174
21	184	458	465	622	1600	1040	1010	384	2840	324	169	167
22	178	440	456	596	3190	937	957	381	6860	310	163	158
23	177	433	444	561	1550	898	999	698	12800	301	155	152
24	173	412	425	555	1110	875	1510	543	13800	292	148	146
25	179	389	401	555	1070	795	1770	467	15700	277	141	142
26	187	384	386	542	1490	755	1350	482	11300	267	138	137
27	189	374	387	528	1850	1410	1030	470	3230	265	136	135
28	199	366	390	509	2270	2570	1010	452	1650	257	133	135
29	224	359	392	496	---	1600	929	751	1680	249	196	133
30	527	349	380	810	---	1170	834	1900	1760	241	1110	140
31	1120	---	403	2270	---	1000	---	1100	---	231	2300	---
TOTAL	10369	32658	15124	20068	41487	36463	50121	19100	162814	21667	9205	7490
MEAN	334	1089	488	647	1482	1176	1671	616	5427	699	297	250
MAX	1650	6490	1250	2270	4180	2570	6290	1900	19300	2020	2300	1050
MIN	124	349	323	410	724	719	834	381	553	231	133	133
AC-FT	20570	64780	30000	39800	82290	72320	99420	37880	322900	42980	18260	14860
CAL YR 1974	TOTAL	388194	MEAN	1064	MAX	13900	MIN	121	AC-FT	770000		
WTR YR 1975	TOTAL	426566	MEAN	1169	MAX	19300	MIN	124	AC-FT	846100		

PEAK DISCHARGE (BASE, 4,900 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-03	1400	29.11	8,880	06-19	1200	33.64	20,100
04-09	0100	24.60	6,600	06-25	1200	33.16	16,300
06-11	2100	27.21	7,900				

ARKANSAS RIVER BASIN

07182450 JOHN REDMOND RESERVOIR NEAR BURLINGTON, KS

LOCATION.--Lat 38°14'15", long 95°46'05", in SE¼SE¼NW¼ sec.9, T.21 S., R.15 E., Coffey County, on the dam on Neosho River, 3,300 ft (1,000 m) southwest of spillway, 3.0 mi (4.8 km) north of Burlington, and at mile 343.7 (553.0 km).

DRAINAGE AREA.--3,015 mi² (7,809 km²).

PERIOD OF RECORD.--August 1963 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Corps of Engineers). Prior to Sept. 9, 1964, nonrecording gage at same site and datum.

EXTREMES.--Current year: Maximum elevation, 1,049.11 ft (319.769 m) Nov. 11, contents, 207,500 acre-ft (256 hm³); minimum, 1,035.88 ft (315.736 m) Dec. 27, contents, 55,520 acre-ft (68.5 hm³).

Period of record: Maximum elevation, 1,066.81 ft (325.164 m) Oct. 16, 1973, contents, 607,500 acre-ft (749 hm³); minimum since pool first filled, 1,035.72 ft (315.687 m) Dec. 29, 1969, contents, 54,300 acre-ft (67.0 hm³).

REMARKS.--Reservoir is formed by compacted earthfill dam. The spillway is a gate-controlled, concrete chute type structure. Filling began Sept. 7, 1963; regulated storage began Sept. 1, 1964. Maximum pool, 873,910 acre-ft (1,080 hm³) at elevation 1,074.5 ft (327.51 m); top of flood control pool, 644,600 acre-ft (795 hm³) at elevation 1,068.0 ft (325.53 m); and top of conservation pool, 56,450 acre-ft (69.6 hm³) at elevation 1,036.0 ft (315.77 m). Reservoir is designed for flood control, water quality control, recreation, fish and wildlife, and future water supply. Figures given herein represent total contents.

COOPERATION.--Records furnished by Corps of Engineers; reviewed by Geological Survey.

Capacity table (elevation, in feet, and contents, in acre-feet)
(Based on survey by Corps of Engineers, computed in 1963)

1,035	49,000	1,045	148,800
1,040	91,750	1,050	221,800

ELEVATION, IN FEET, AT 2400, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,038.77	1,040.90	1,038.99	1,036.70	1,038.51	1,039.42	1,038.55	1,037.36	1,038.71	1,043.25	1,037.97	1,039.29
2	1,038.77	1,041.28	1,038.35	1,036.80	1,038.83	1,039.41	1,038.30	1,037.18	1,038.47	1,042.22	1,037.98	1,039.32
3	1,038.76	1,043.72	1,038.11	1,036.75	1,038.86	1,039.37	1,038.04	1,037.18	1,039.48	1,041.43	1,037.97	1,039.23
4	1,038.73	1,045.90	1,037.85	1,036.60	1,038.91	1,038.95	1,037.90	1,037.11	1,040.40	1,040.90	1,037.96	1,039.10
5	1,038.75	1,047.46	1,037.67	1,036.58	1,039.58	1,038.38	1,037.88	1,037.10	1,040.40	1,040.38	1,037.94	1,039.03
6	1,038.77	1,048.07	1,037.59	1,036.57	1,039.96	1,037.89	1,037.78	1,037.22	1,040.03	1,039.78	1,037.90	1,038.99
7	1,038.74	1,048.32	1,037.46	1,036.52	1,039.56	1,037.37	1,037.60	1,037.29	1,039.60	1,039.18	1,037.88	1,039.01
8	1,038.73	1,048.52	1,037.27	1,036.35	1,038.98	1,037.07	1,037.45	1,037.32	1,039.26	1,038.66	1,037.89	1,039.14
9	1,038.73	1,048.67	1,037.15	1,036.22	1,038.26	1,036.82	1,038.00	1,037.39	1,040.69	1,038.41	1,037.90	1,039.19
10	1,038.70	1,048.88	1,037.03	1,036.43	1,037.60	1,036.47	1,038.42	1,037.42	1,042.23	1,038.20	1,037.90	1,039.15
11	1,038.70	1,049.08	1,037.09	1,037.00	1,036.92	1,036.29	1,038.48	1,037.47	1,043.31	1,038.14	1,037.90	1,039.19
12	1,038.72	1,048.96	1,037.38	1,037.44	1,036.52	1,036.22	1,038.14	1,037.48	1,043.99	1,038.21	1,037.89	1,039.10
13	1,038.94	1,048.92	1,037.48	1,037.70	1,036.30	1,036.09	1,037.70	1,037.52	1,043.84	1,038.23	1,038.07	1,039.04
14	1,039.45	1,048.85	1,037.40	1,037.92	1,036.29	1,035.98	1,037.50	1,037.57	1,043.08	1,038.23	1,038.26	1,038.97
15	1,039.93	1,048.83	1,037.02	1,038.20	1,036.20	1,036.10	1,037.91	1,037.59	1,041.90	1,038.21	1,038.30	1,038.92
16	1,040.02	1,048.79	1,036.70	1,038.36	1,036.17	1,036.23	1,038.19	1,037.60	1,041.21	1,038.22	1,038.40	1,038.86
17	1,039.87	1,048.75	1,036.33	1,038.56	1,036.12	1,036.33	1,038.10	1,037.61	1,043.29	1,038.20	1,038.47	1,038.81
18	1,039.63	1,048.45	1,036.16	1,038.75	1,036.06	1,036.23	1,038.02	1,037.60	1,044.81	1,038.20	1,038.50	1,038.80
19	1,039.40	1,047.88	1,036.08	1,038.94	1,036.03	1,036.20	1,037.77	1,037.60	1,045.89	1,038.23	1,038.54	1,038.80
20	1,039.13	1,047.26	1,036.07	1,038.85	1,036.14	1,036.16	1,037.45	1,037.57	1,046.37	1,038.24	1,038.60	1,038.78
21	1,039.00	1,046.68	1,036.02	1,038.66	1,036.66	1,036.24	1,037.30	1,037.56	1,046.62	1,038.23	1,038.60	1,038.76
22	1,039.01	1,046.07	1,036.01	1,038.20	1,038.03	1,036.20	1,037.17	1,037.63	1,046.90	1,038.22	1,038.60	1,038.73
23	1,039.01	1,045.52	1,035.98	1,037.70	1,038.98	1,036.30	1,037.14	1,037.79	1,046.81	1,038.20	1,038.59	1,038.72
24	1,039.01	1,044.82	1,035.99	1,037.23	1,039.16	1,036.25	1,037.29	1,038.09	1,047.21	1,038.18	1,038.54	1,038.70
25	1,039.03	1,044.03	1,035.91	1,036.75	1,039.31	1,036.12	1,037.40	1,038.18	1,047.36	1,038.14	1,038.65	1,038.70
26	1,039.04	1,043.30	1,035.89	1,036.23	1,039.40	1,036.11	1,037.63	1,038.27	1,047.30	1,038.09	1,038.63	1,038.70
27	1,039.05	1,042.45	1,035.88	1,036.10	1,039.36	1,036.88	1,037.73	1,038.33	1,047.23	1,038.08	1,038.61	1,038.70
28	1,039.09	1,041.58	1,035.95	1,036.12	1,039.37	1,037.78	1,037.78	1,038.74	1,046.60	1,038.03	1,038.69	1,038.70
29	1,039.11	1,040.75	1,036.08	1,036.14	-----	1,038.47	1,037.78	1,038.90	1,045.25	1,038.02	1,038.97	1,038.71
30	1,039.40	1,039.85	1,036.36	1,036.52	-----	1,038.73	1,037.65	1,038.81	1,044.37	1,038.01	1,038.90	1,038.81
31	1,040.45	-----	1,036.49	1,037.75	-----	1,038.77	-----	1,038.84	-----	1,037.97	1,038.95	-----
MEAN	1,039.11	1,046.08	1,036.83	1,037.25	1,037.93	1,037.12	1,037.80	1,037.72	1,043.42	1,038.83	1,038.32	1,038.93
MAX	1,040.45	1,049.08	1,038.99	1,038.94	1,039.96	1,039.42	1,038.55	1,038.90	1,047.36	1,043.25	1,038.97	1,039.32
MIN	1,038.70	1,039.85	1,035.88	1,036.10	1,036.03	1,035.98	1,037.14	1,037.10	1,038.47	1,037.97	1,037.88	1,038.70
(+)	96,270	90,270	60,320	70,840	85,620	79,980	69,980	80,630	140,700	72,770	81,650	80,350
(#)	+16,380	-6,000	-29,950	+10,520	+14,780	-5,640	-10,000	+10,650	+60,070	-67,930	+8,880	-1,300
CAL YR 1974	..... (#)											-5,330
WTR YR 1975	..... (#)											+460

+ CONTENTS, IN ACRE-FEET, AT END OF MONTH.

CHANGE IN CONTENTS, IN ACRE-FEET.

ARKANSAS RIVER BASIN

193

07182510 NEOSHO RIVER AT BURLINGTON, KS

LOCATION.--Lat 38°11'40", long 95°44'10", in SE¼NW¼ sec.26, T.21 S., R.15 E., Coffey County, at downstream side of highway bridge at Burlington, 0.3 mi (0.5 km) upstream from Rock Creek, and at mile 338.4 (554.5 km). Records include flow of Rock Creek.

DRAINAGE AREA.--3,042 mi² (7,879 km²), includes that of Rock Creek.

PERIOD OF RECORD.--June 1961 to current year.

GAGE.--Water-stage recorder. Datum of gage is 983.56 ft (299.789 m) above mean sea level.

AVERAGE DISCHARGE.--14 years, 1,689 ft³/s (47.83 m³/s), 1,224,000 acre-ft/yr (1.51 km³/yr).

EXTREMES.--Current year: Maximum discharge, 12,900 ft³/s (365 m³/s) June 27, gage height, 22.81 ft (6.952 m); minimum, 2.8 ft³/s (0.079 m³/s) Oct. 2.

Period of record: Maximum discharge, 26,200 ft³/s (742 m³/s) Sept. 13, 1961, gage height, 31.53 ft (9.610 m); minimum daily, 1.1 ft³/s (0.031 m³/s) Sept. 16, 17, 19, 20, 1963.

REMARKS.--Records good. Flow completely regulated by John Redmond Reservoir 5.3 mi (8.5 km) upstream since 1963 (see sta 07182450). Records of chemical analyses for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.5	614	4,600	56	826	2,630	2,520	2,180	2,030	9,610	287	661
2	2.8	1,470	3,560	437	847	2,620	2,500	1,840	2,000	9,120	197	671
3	30	773	1,680	1,120	1,590	2,270	2,430	1,120	2,150	8,020	194	671
4	204	290	1,650	1,110	3,610	3,290	2,380	1,110	3,300	6,140	193	667
5	206	225	1,510	1,100	5,020	4,130	2,340	964	4,660	5,850	191	644
6	212	167	1,330	1,110	4,280	3,860	2,340	495	4,580	5,610	191	392
7	206	160	1,320	1,490	4,570	3,420	2,300	483	4,480	5,350	191	390
8	206	158	1,290	2,030	4,940	2,770	2,390	489	4,380	4,640	181	391
9	205	158	1,260	1,970	3,690	2,680	4,370	489	332	3,110	131	395
10	203	153	1,240	1,410	4,390	2,600	5,450	494	1,010	2,660	130	398
11	205	841	1,320	59	4,060	2,060	5,280	497	1,930	1,600	130	403
12	210	2,230	1,310	51	3,780	1,620	4,000	499	6,570	899	128	391
13	212	2,010	1,850	50	2,540	1,850	3,820	500	9,810	902	132	390
14	213	1,610	2,460	47	1,610	1,560	3,680	501	9,650	902	145	390
15	222	1,590	2,410	47	1,600	1,010	3,680	500	9,180	902	132	390
16	814	1,580	2,250	47	1,590	2,190	3,840	502	8,750	902	131	390
17	1,530	1,530	2,160	47	1,580	4,040	3,820	506	5,840	911	130	384
18	1,520	2,990	1,710	47	1,580	4,610	3,540	500	111	691	133	378
19	1,500	5,850	1,000	48	1,360	3,770	2,940	500	1,900	392	130	220
20	1,470	5,700	819	1,140	1,040	2,850	2,820	494	7,050	390	130	214
21	870	5,530	819	2,080	1,180	1,840	2,220	496	10,800	390	130	214
22	212	5,380	812	2,670	1,230	1,410	1,660	499	11,200	390	130	213
23	214	5,260	808	3,090	1,340	1,430	1,560	515	11,100	389	130	192
24	213	5,110	805	2,940	1,390	1,410	1,410	515	10,900	385	132	128
25	216	5,210	805	2,790	1,430	1,360	1,320	524	11,300	385	133	128
26	217	5,390	799	2,600	2,080	1,080	1,340	538	12,500	385	137	128
27	217	5,290	711	1,590	2,650	874	1,370	536	12,900	385	133	126
28	221	5,470	448	688	2,630	818	1,380	551	12,900	366	136	126
29	218	5,200	253	681	-----	878	1,380	1,280	12,500	307	195	128
30	292	4,930	48	750	-----	910	1,620	1,760	8,350	307	656	131
31	549	-----	61	855	-----	1,650	-----	2,030	-----	307	657	-----
TOTAL	12,814.3	82,869	43,098	34,150	68,433	69,490	81,700	23,907	204,163	72,597	5,776	10,344
MEAN	413	2,762	1,390	1,102	2,444	2,242	2,723	771	6,805	2,342	186	345
MAX	1,530	5,850	4,600	3,090	5,020	4,610	5,450	2,180	12,900	9,610	657	671
MIN	2.8	153	48	47	826	818	1,320	483	111	307	128	126
AC-FT	25,420	164,400	85,480	67,740	135,700	137,800	162,100	47,420	405,000	144,000	11,460	20,520

CAL YR 1974 TOTAL 653,409.2 MEAN 1,790 MAX 10,900 MIN 2.8 AC-FT 1,296,000
WTR YR 1975 TOTAL 709,341.3 MEAN 1,943 MAX 12,900 MIN 2.8 AC-FT 1,407,000

ARKANSAS RIVER BASIN

07183000 NEOSHO RIVER NEAR IOLA, KS

LOCATION.--Lat 37°53'27", long 95°25'50", in SW¼NE¼ sec.9, T.25 S., R.18 E., Allen County, on left bank 1.0 mi (1.6 km) downstream from Elm Creek, 3.0 mi (4.8 km) southwest of Iola, and at mile 284.4 (457.6 km).

DRAINAGE AREA.--3,818 mi² (9,889 km²).

PERIOD OF RECORD.--August 1895 to December 1903 (published as "at Iola"), October 1917 to current year. Monthly discharge only for some periods, published in WSP 1311. Figures of daily discharge for August 1895 to January 1898, published in previous reports, have been found to be unreliable and should not be used.

GAGE.--Water-stage recorder. Datum of gage is 914.77 ft (278.822 m) above mean sea level (levels by Corps of Engineers). Prior to Oct. 1, 1917, nonrecording gage at tailgate of flume at milldam, 4.8 mi (7.7 km) upstream at datum 12.2 ft (3.72 m) higher.

AVERAGE DISCHARGE.--66 years, 1,732 ft³/s (49.05 m³/s), 1,255,000 acre-ft/yr (1,550 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 25,500 ft³/s (722 m³/s) Nov. 4, gage height, 24.68 ft (7.522 m); minimum, 48 ft³/s (1.36 m³/s) Oct. 5.

Period of record: Maximum discharge, 436,000 ft³/s (12,300 m³/s) July 13, 1951, gage height, 43.0 ft (13.11 m), from floodmark, from rating curve extended above 84,000 ft³/s (2,380 m³/s) on basis of slope-area measurement of peak flow; no flow at times in 1936, 1956.

Maximum stage known since at least 1855, 43.0 ft (13.11 m) July 13, 1951, from information by local newspaper.

REMARKS.--Records good. Considerable regulation since 1963 by John Redmond Reservoir 59.3 mi (95.4 km) upstream (see sta 07182450).

REVISIONS (WATER YEARS).--WSP 1037: 1918-24, 1926-29, 1935(M). WSP 1117: Drainage area. WSP 1311: 1895-98. WSP 1391: 1896(M), 1899, 1901-2(M), 1903-4. See also PERIOD OF RECORD.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	96	9460	4620	1630	4560	3320	2400	1910	2600	8550	328	646
2	71	4830	4310	757	1890	3090	2860	2260	2600	8980	319	637
3	59	21800	2920	841	1490	2880	2960	1740	3650	8470	241	637
4	52	24900	1690	1420	3530	2550	2750	1190	4500	6880	218	636
5	80	12500	1630	1420	6710	3790	2700	1170	4300	5820	216	629
6	200	2270	1530	2560	5360	4110	2570	938	4200	5590	209	565
7	215	1060	1710	2300	4720	3910	2500	610	4200	5350	209	408
8	220	732	1660	2440	5470	3290	2530	585	5000	5090	209	394
9	220	594	1440	2400	5110	2910	3190	625	10500	4010	203	395
10	220	588	1330	2220	5050	2850	5060	600	10200	3190	159	406
11	223	799	2490	1480	4460	2750	5660	595	8000	2560	142	414
12	249	1570	4920	430	4130	2170	4700	580	6000	1400	138	408
13	330	2430	2600	278	3830	2000	4020	590	6000	912	138	395
14	348	2040	2510	243	2360	1900	3910	640	9340	892	288	397
15	311	1720	2680	215	1880	1700	3960	680	9080	881	253	399
16	313	1680	2550	209	1880	1500	3980	620	8820	873	213	399
17	810	1640	2340	203	2480	7800	4040	590	21100	866	165	395
18	1390	1600	2230	200	2940	6480	4020	580	20100	868	151	395
19	1370	3860	1640	215	2540	5360	3440	570	3170	655	175	369
20	1350	5490	1070	215	2240	3830	3090	561	3700	435	173	255
21	1320	5390	904	1390	3640	2860	2960	557	8340	426	153	233
22	755	5270	883	2080	4260	1930	2140	566	10700	418	140	229
23	288	5160	869	2900	2550	1570	1780	4980	13300	414	134	230
24	258	5040	855	3010	1850	1530	2510	2610	11800	421	130	221
25	254	4880	848	2890	2010	1450	3530	1150	10800	416	129	158
26	251	5110	827	2760	3790	1380	1860	861	11200	408	130	135
27	250	5060	820	2570	4360	2150	1590	889	12200	408	133	134
28	259	5130	726	1330	3730	6070	1590	854	12700	409	202	132
29	275	5120	510	738	---	2590	1530	1770	12700	438	290	134
30	338	4890	396	2000	---	2380	1470	2650	11200	345	371	161
31	10900	---	841	10800	---	1670	---	2700	---	333	688	---
TOTAL	23275	152613	56349	54144	98820	93770	91300	37221	262000	76708	6647	10946
MEAN	751	5087	1818	1747	3529	3025	3043	1201	8733	2474	214	365
MAX	10900	24900	4920	10800	6710	7800	5660	4980	21100	8980	688	646
MIN	52	588	396	200	1490	1380	1470	557	2600	333	129	132
AC-FT	46170	302700	111800	107400	196000	186000	181100	73830	519700	152200	13180	21710

CAL YR 1974 TOTAL 957476 MEAN 2623 MAX 24900 MIN 52 AC-FT 1899000
WTR YR 1975 TOTAL 963793 MEAN 2641 MAX 24900 MIN 52 AC-FT 1912000

PEAK DISCHARGE (REGULATED) ABOVE 10,000 CFS

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
10-31	2300	16.70	15,000	06-09	1500	15.76	13,400
11-04	1300	24.68	25,500	06-18	0300	23.07	23,200
01-31	UNKNOWN	UNKNOWN	12,000	06-23	1600	16.08	13,800

ARKANSAS RIVER BASIN

195

07183500 NEOSHO RIVER NEAR PARSONS, KS

LOCATION.--Lat 37°18'30", long 95°06'40", in NW¼NE¼ sec.33, T.31 S., R.21 E., Labette County, on right bank 150 ft (46 m) downstream from dam of Kansas Army Ammunition Plant, 8 mi (13 km) southeast of Parsons, and at mile 201.4 (324.1 km).

DRAINAGE AREA.--4,905 mi² (12,704 km²).

PERIOD OF RECORD.--October 1921 to current year. Monthly discharge only October 1921, published in WSP 1311.

GAGE.--Water-stage recorder. Datum of gage is 810.25 ft (246.964 m) above mean sea level (levels by Corps of Engineers). Prior to Oct. 1, 1929, nonrecording gage at bridge 2.2 mi (3.5 km) upstream at datum 0.04 ft (0.012 m) lower. Oct. 1, 1929, to Feb. 7, 1935, nonrecording gage, and Feb. 8, 1935, to Dec. 7, 1966, water-stage recorder at bridge 2.7 mi (4.3 km) upstream at present datum.

AVERAGE DISCHARGE.--54 years, 2,585 ft³/s (73.21 m³/s), 1,873,000 acre-ft/yr (2.31 km³/yr).

EXTREMES.--Current year: Maximum discharge, 41,200 ft³/s (1,170 m³/s) Nov. 5, gage height, 23.52 ft (7.169 m); minimum, 143 ft³/s (4.05 m³/s) Aug. 25-26.

Period of record: Maximum discharge, 410,000 ft³/s (11,600 m³/s) July 14, 1951, gage height, 40.20 ft (12.25 m), from floodmark in gage well at site 2.7 mi (4.3 km) upstream; no flow at times in 1934, 1936, 1939, 1955-57.

REMARKS.--Records good. Flow moderately regulated by John Redmond Reservoir 142.3 mi (229.0 km) upstream since 1963 (see sta 07182450). Small diversion by the Kansas Army Ammunition Plant. Records of chemical analyses for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 807: 1922-23. WSP 1391: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	921	17,500	5,320	3,610	23,600	5,800	3,000	2,180	2,920	12,300	427	977
2	546	20,100	5,080	3,700	16,600	4,680	3,080	2,270	2,610	9,340	404	881
3	367	28,400	4,760	2,920	4,650	4,070	3,560	3,550	3,880	9,320	397	796
4	272	36,800	3,450	2,800	3,240	3,660	3,620	2,770	6,490	8,800	371	765
5	219	39,700	2,050	2,760	7,630	3,240	3,380	1,780	7,430	7,330	299	749
6	203	36,400	1,980	2,830	9,820	4,330	3,270	2,080	7,230	6,220	269	740
7	196	33,400	2,510	4,240	7,100	4,790	3,090	3,190	6,780	5,960	251	713
8	316	20,400	2,670	3,500	5,580	4,550	3,140	1,450	6,670	5,730	246	559
9	343	4,970	2,310	3,140	6,160	4,000	3,630	1,260	6,370	5,450	237	449
10	343	3,620	1,880	3,090	5,830	3,630	4,480	1,760	12,000	4,520	237	455
11	328	3,900	3,350	2,890	5,730	3,560	5,660	1,220	14,500	3,570	231	485
12	432	3,010	7,480	2,240	5,370	3,790	6,200	971	12,800	2,910	193	483
13	7,070	2,780	7,380	1,070	4,990	3,100	5,450	1,070	8,120	1,910	165	469
14	5,670	3,460	4,080	671	4,650	2,500	4,730	1,870	8,220	1,190	268	455
15	2,480	2,950	3,240	562	3,450	2,100	4,640	2,450	9,720	1,100	2,730	444
16	1,140	2,400	3,350	514	2,620	6,920	4,640	1,490	9,600	1,070	959	443
17	800	2,200	3,120	470	3,590	12,000	4,610	1,060	18,600	1,050	452	440
18	832	2,110	2,830	458	4,470	13,000	4,680	892	24,900	1,040	1,100	435
19	1,590	2,090	2,670	456	4,910	10,400	4,610	814	25,500	1,040	1,250	445
20	1,640	4,510	2,160	465	4,220	7,000	4,080	768	19,500	951	399	433
21	1,590	5,980	1,580	482	3,740	5,000	3,620	744	5,170	634	268	378
22	1,550	5,900	1,300	875	5,570	3,500	3,420	742	8,380	534	227	285
23	1,250	5,770	1,240	2,260	6,560	2,500	2,700	2,220	11,200	511	192	254
24	652	5,620	1,210	3,010	4,090	2,000	3,550	10,000	13,600	500	164	246
25	446	5,470	1,170	3,400	3,050	1,900	10,200	5,000	13,300	504	150	243
26	426	5,320	1,130	3,280	4,840	1,890	6,740	2,200	11,700	514	146	236
27	426	5,460	1,110	3,130	8,050	3,980	3,100	1,550	11,600	506	150	200
28	557	5,480	1,090	2,920	7,580	12,100	2,560	1,450	12,500	491	159	167
29	1,120	5,480	1,080	2,010	-----	11,600	2,880	1,520	13,100	506	345	170
30	1,140	5,540	898	2,430	-----	6,020	2,340	3,000	13,400	582	2,500	155
31	8,240	-----	1,270	17,400	-----	4,470	-----	4,030	-----	522	1,660	-----
TOTAL	43,105	326,720	84,748	83,583	177,690	162,080	124,660	67,351	327,790	96,605	16,846	13,950
MEAN	1,390	10,890	2,734	2,696	6,346	5,228	4,155	2,173	10,930	3,116	543	465
MAX	8,240	39,700	7,480	17,400	23,600	13,000	10,200	10,000	25,500	12,300	2,730	977
MIN	196	2,090	898	456	2,620	1,890	2,340	742	2,610	491	146	155
AC-FT	85,500	648,000	168,100	165,800	352,400	321,500	247,300	133,600	650,200	191,600	33,410	27,670

CAL YR 1974 TOTAL 1,577,517 MEAN 4,322 MAX 40,200 MIN 72 AC-FT 3,129,000
WTR YR 1975 TOTAL 1,525,128 MEAN 4,178 MAX 39,700 MIN 146 AC-FT 3,025,000

PEAK DISCHARGE (REGULATED) ABOVE 15,000 CFS

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-05	1200	23.52	41,200	06-11	2000	15.37	15,700
02-01	1100	20.02	24,400	06-19	0100	20.84	26,400

ARKANSAS RIVER BASIN

07184000 LIGHTNING CREEK NEAR MCCUNE, KS

LOCATION.--Lat 37°16'54", long 95°01'56", in NE¼NE¼ sec.7, T.32 S., R.22 E., Cherokee County, at downstream side of highway bridge, 5.0 mi (8.0 km) south of McCune, 13.0 mi (20.9 km) southeast of Parsons, and at mile 12.6 (20.3 km).

DRAINAGE AREA.--197 mi² (510 km²).

PERIOD OF RECORD.--October 1938 to September 1946, October 1959 to current year.

GAGE.--Water-stage recorder. Datum of gage is 818.10 ft (249.357 m) above mean sea level (levels by Corps of Engineers). Prior to Mar. 10, 1945, nonrecording gage and Mar. 10, 1945, to Sept. 30, 1946, water-stage recorder at present site and datum. Oct. 1, 1959, to May 26, 1960, water-stage recorder 100 ft (30 m) downstream at present datum.

AVERAGE DISCHARGE.--24 years, 148 ft³/s (4.191 m³/s), 107,200 acre-ft/yr (132 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 11,000 ft³/s (312 m³/s) Nov. 4, gage height, 16.79 ft (5.118 m); minimum, 0.11 ft³/s (0.003 m³/s) Sept. 9.

Period of record: Maximum discharge, 23,000 ft³/s (651 m³/s) May 19, 1943, gage height, 17.81 ft (5.428 m), from rating curve extended above 15,000 ft³/s (425 m³/s); no flow at times in most years.

REMARKS.--Records fair.

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	118	2090	25	800	2590	253	102	56	185	8.0	4.3	.19
2	51	1320	24	400	940	131	73	46	84	6.4	2.6	.17
3	30	5250	24	500	266	80	60	68	265	5.5	1.6	.17
4	20	8910	23	400	256	59	52	173	521	4.9	1.2	.17
5	14	4770	21	350	738	52	46	74	965	4.5	.89	.15
6	12	1550	135	600	432	48	40	42	929	3.9	.68	.15
7	9.8	294	817	400	150	44	36	421	568	3.4	.46	.13
8	9.0	162	453	300	97	38	37	541	513	3.0	.33	.13
9	8.5	116	145	250	74	34	40	211	159	2.4	.32	.11
10	8.5	288	72	300	65	47	38	72	168	2.1	.21	.15
11	7.5	1070	650	200	52	72	33	45	627	1.8	.19	.30
12	28	492	1340	100	52	301	28	36	287	1.5	.18	.45
13	1230	178	460	80	51	667	25	31	118	1.2	.15	.35
14	2420	101	169	65	54	331	25	59	64	1.1	.61	.25
15	1810	71	107	55	57	290	27	123	80	.88	9.0	.23
16	371	58	80	50	80	1360	28	66	55	.74	12	.22
17	120	51	62	45	357	1190	26	39	3100	.67	5.0	.20
18	71	47	50	43	284	466	24	25	7070	.44	3.1	.88
19	49	44	44	45	147	366	21	18	1740	.17	2.1	2.1
20	36	42	39	50	106	185	17	14	197	.18	1.6	5.5
21	28	38	36	40	76	105	15	11	92	1.2	1.1	2.4
22	21	34	32	35	485	73	13	9.0	71	1.7	.85	1.2
23	19	33	30	28	1300	58	13	9.4	49	1.8	.60	.90
24	16	31	28	26	455	47	23	77	37	1.1	.49	.81
25	13	30	26	28	219	38	642	1070	28	1.0	.32	.76
26	12	29	24	32	448	32	270	539	21	1.2	.24	.56
27	12	28	23	31	992	666	82	158	17	1.0	.24	.50
28	24	27	22	26	549	2240	51	71	14	1.0	.23	.67
29	328	26	23	23	---	1300	43	588	11	.76	.18	3.8
30	425	26	24	436	---	410	44	867	9.9	.73	.18	4.8
31	1460	---	300	4700	---	171	---	306	---	1.9	.19	---
TOTAL	8781.3	27206	5308	10438	11372	11154	1974	5865.4	18044.9	66.17	51.14	28.40
MEAN	283	907	171	337	406	360	65.8	189	601	2.13	1.65	.95
MAX	2420	8910	1340	4700	2590	2240	642	1070	7070	8.0	12	5.5
MIN	7.5	26	21	23	51	32	13	9.0	9.9	.17	.15	.11
AC-FT	17420	53960	10530	20700	22560	22120	3920	11630	35790	131	101	56

CAL YR 1974 TOTAL 113720.36 MEAN 312 MAX 15100 MIN 0 AC-FT 225600
WTR YR 1975 TOTAL 100289.31 MEAN 275 MAX 8910 MIN .11 AC-FT 198900

PEAK DISCHARGE (BASE, 1,800 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
10-14	1800	14.24	2,550	02-01	1800	15.31	3,030
11-01	0700	13.58	2,320	03-28	1600	13.80	2,390
11-04	0300	16.79	11,000	06-18	0200	16.58	9,140
01-31	1800	16.30	7,100				

As the number of streams on which streamflow information is likely to be desired far exceeds the number of stream-gaging stations feasible to operate at one time, the Geological Survey collects limited streamflow data at sites other than stream-gaging stations. When limited streamflow data are collected on a systematic basis over a period of years for use in hydrologic analyses, the site at which the data are collected is called a partial-record station. Data collected at these partial-record stations are usable in low-flow or flood-flow analyses, depending on the type of data collected.

Records collected at partial-record stations are presented in three tables. The first is a table of discharge measurements at low-flow partial-record stations, the second is a table of annual maximum stage and discharge at crest-stage stations, and the third is a table of stage and discharge for indicated times at flood hydrograph stations.

Low-flow partial-record stations

Measurements of streamflow in the area covered by this report made at low-flow, partial-record stations are given in the following table. Most of these measurements were made during periods of base flow when streamflow is primarily from ground-water storage. These measurements, when correlated with the simultaneous discharge of a nearby stream where continuous records are available, will give a picture of the low-flow potentiality of the stream. The column headed "Period of record" shows the water years in which measurements were made at the same, or practically the same, site.

Discharge measurements made at low-flow partial-record stations during water year 1975

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
Arkansas River basin						
07141240	Pickereel Creek near Larned, Kans.	Lat 38°11'15", long 98°59'04", in NW $\frac{1}{4}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec.33, T.21 S., R.15 W., Pawnee County, at bridge on county highway, 6 miles east of Larned, and at mile 2.0.	139	1971-75	10- 4-74 2- 3-75 5- 1-75 8-11-75	0 0 0 0
07142200	Rattlesnake Creek near Haviland, Kans.	Lat 37°42'52", long 99°10'29", in SW $\frac{1}{4}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec.10, T.27 S., R.17 W., Kiowa County, at county bridge, 4 miles west and 7 miles north of Haviland.	363	1967-75	10- 4-74 2- 5-75 5- 1-75 8-12-75	8.05 6.2 6.18 4.85
07142270	Rattlesnake Creek tributary near Hopewell, Kans.	Lat 37°50'33", long 98°59'09", in SE $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.29, T.25 S., R.15 W., Stafford County, at bridge on county highway, 2.5 miles northeast of Hopewell, and at mile 0.2.	163	1971-75	10- 4-74 2- 3-75 5- 1-75 8-12-75	.06 .05 .43 0
07142540	Wild Horse Creek near St. John, Kans.	Lat 38°03'39", long 98°45'52", in SW $\frac{1}{4}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.9, T.23 S., R.13 W., Stafford County, at bridge on county highway, 1 mile west of U.S. Highway 281, 3.5 miles north of St. John, and at mile 2.2.	125	1971-75	10- 4-74 2- 4-75 5- 1-75 8-11-75	.25 4.5 1.97 .008
07142570	Rattlesnake Creek above Little Salt Marsh near Hudson, Kans.	Lat 38°05'13", long 98°34'52", in SW $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.31, T.22 S., R.11 W., Stafford County, at bridge on county highway, 4 miles southeast of Hudson, and at mile 30.5.	1,032	1971-75	10- 4-74 5- 1-75 8-11-75	42.6 60.4 30.1
07142650	Peace Creek near Sylvia, Kans.	Lat 38°04'34", long 98°26'18", in SW $\frac{1}{4}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.4, T.23 S., R.10 W., Reno County, at bridge on county highway, 8.5 miles north-west of Sylvia, and at mile 17.2	92.0	1971-75	10- 4-74 2- 4-75 5- 1-75 8-11-75	.73 3.2 1.13 0.15
07142670	Peace Creek near Sterling, Kans.	Lat 38°08'43", long 98°15'13", in SW $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.7, T.22 S., R.8 W., Reno County, at bridge on county highway, 4.5 miles south-west of Sterling, and at mile 2.8.	136	1971-75	10- 4-74 2- 4-75 5- 1-75 8-11-75	4.13 13.3 4.80 1.71
07142740	Salt Creek near Hutchinson, Kans.	Lat 38°04'23", long 98°02'11", in SW $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.1, T.23 S., R.7 W., Reno County, at bridge on county road, 6 miles west of Hutchinson, and at mile 6.5.	103	1971-75	10- 4-74 2- 7-75 5- 1-75 8-12-75	4.40 8.7 5.49 2.19
07144590	North Fork Ninnescah River near Sylvia, Kans.	Lat 37°55'59", long 98°24'36", in NW $\frac{1}{4}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec.27, T.24 S., R.10 W., Reno County, at county bridge, 1 mile south of Sylvia.	208	1968-75	10- 4-74 2- 7-75 5- 1-75 8-11-75	12.2 29.9 14.8 4.88
07144620	North Fork Ninnescah River above Silver Creek near Arlington, Kans.	Lat 37°51'09", long 98°09'30", in NW $\frac{1}{4}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec.25, T.25 S., R.8 W., Reno County, at bridge on county highway, 3 miles south-east of Arlington, and at mile 44.7.	504	1971-75	10- 4-74 2-12-75 5- 1-75 8-12-75	28.0 67.6 41.5 9.70
07144640	Silver Creek near Langdon, Kans.	Lat 37°47'54", long 98°19'59", in SW $\frac{1}{4}$ SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec.8, T.26 S., R.9 W., Reno County, at bridge on county highway, 4 miles south-west of Langdon, and at mile 15.7.	103	1971-75	10- 4-74 2-10-75 5- 1-75 8-12-75	3.07 15.4 5.75 .27
07144660	Silver Creek near Arlington, Kans.	Lat 37°50'30", long 98°11'47", in NE $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.28, T.25 S., R.8 W., Reno County, at bridge on State Highway 14, 4 miles south of Arlington, and at mile 3.9.	194	1971-75	10- 4-74 2-12-75 5- 1-75 8-12-75	4.90 37.5 15.1 .43

Discharge measurements made at low-flow partial-record stations during water year 1975--continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
Arkansas River basin--continued						
07144680	Goose Creek near Arlington, Kans.	Lat 37°49'24", long 98°11'32", in NE¼NE¼ sec.4, T.26 S., R.8 W., Reno County, at bridge on State Highway 14, 5 miles south of Arlington, and at mile 0.8.	46.6	1971-75	10- 4-74 2-11-75 5- 1-75 8-12-75	2.18 8.3 4.96 .93
07144740	Red Rock Creek near Castleton, Kans.	Lat 37°53'55", long 98°00'35", in SE¼SW¼ sec.5, T.25 S., R.6 W., Reno County, at bridge on county highway, 3 miles northwest of Castleton, and at mile 2.8.	61.2	1971-75	10- 4-74 2- 7-75 5- 1-75 8-12-75	.93 4.7 2.65 .49
07144890	South Fork Ninnescah River at Pratt, Kans.	Lat 37°38'03", long 98°44'15", in NW¼SW¼ sec.3, T.28 S., R.13 W., Pratt County, at bridge on U.S. Highway 281, at Pratt, and at mile 136.4.	97.1	1971-75	10- 4-74 2-10-75 5- 1-75 8-11-75	12.8 16.5 12.7 11.2
07145130	South Fork Ninnescah River near Calista, Kans.	Lat 37°38'45", long 98°17'12", in SW¼SE¼ sec.34, T.27 S., R.9 W., Kingman County, at bridge on U.S. Highway 54, 0.5 mile northwest of Calista, and at mile 103.2.	374	1971-75	10- 4-74 2-11-75 5- 1-75 8-11-75	97.5 172 116 60.9
07145220	Smoots Creek near Murdock, Kans.	Lat 37°38'13", long 97°54'06", in SE¼SE¼ sec.6, T.28 S., R.5 W., Kingman County, at bridge on county highway, 2.5 miles northeast of Murdock, and at mile 6.6.	142	1971-75	10- 4-74 2-12-75 5- 1-75 8-12-75	1.57 19.5 12.8 .30
07148200	Mule Creek near Wilmore, Kans.	Lat 37°16'55", long 99°02'34", in SE¼SW¼ sec.3, T.32 S., R.16 W., Comanche County, at bridge on U.S. Highway 160, 10 miles southeast of Wilmore.	129	1954-75	10- 4-74 2- 6-75 5- 1-75 8-11-75	8.73 17.5 15.4 6.38
07148580	Turkey Creek near Croft, Kans.	Lat 37°29'52", long 98°56'56", in NE¼NE¼ sec.27, T.29 S., R.15 W., Pratt County, at bridge on county highway, 2.5 miles east on Croft, and at mile 9.6.	26.7	1971-75	10- 4-74 2- 5-75 5- 1-75 8-11-75	3.84 3.8 4.01 2.70
07148600	Medicine Lodge River at Sun City, Kans.	Lat 37°22'13", long 98°54'53", in NW¼SE¼ sec.2, T.31 S., R.15 W., Barber County, at bridge, 0.5 mile south of Sun City.	335	1954-75	10- 4-74 2- 6-75 5- 1-75 8-11-75	34.3 46.3 52.3 17.2
07148900	Elm Creek at Medicine Lodge, Kans.	Lat 37°16'25", long 98°34'28", in NW¼NW¼ sec.12, T.32 S., R.12 W., at bridge on U.S. Highway 160 at Medicine Lodge.	167	1955-75	10- 4-74 2- 6-75 5- 1-75 8-11-75	27.3 56.6 39.8 6.01
07151200	Chikaskia River near Zenda, Kans.	Lat 37°28'23", long 98°16'55", in NE¼SE¼ sec.34, T.29 S., R.9 W., Kingman County, at bridge on county highway, 2 miles north of Zenda, and at mile 127.7.	89.9	1971-75	10- 4-74 2-11-75 5- 1-75 8-12-75	17.7 30.3 23.4 5.76
07151290	Sand Creek near Zenda, Kans.	Lat 37°24'41", long 98°16'55", in NE¼NE¼ sec.27, T.30 S., R.9 W., Kingman County, at bridge on county highway, 2 miles south of Zenda, and at mile 5.9.	136	1971-75	10- 4-74 2-11-75 5- 1-75 8-12-75	8.41 15.8 12.3 1.73

Crest-stage partial-record stations

The following table contains annual maximum discharges for crest-stage stations. A crest-stage gage is a device which will register the peak stage occurring between inspections of the gage. A stage-discharge relation for each gage is developed from discharge measurements made by indirect measurements of peak flow or by current meter. The date of the maximum discharge is not always certain but is usually determined by comparison with nearby continuous-record stations, weather records, or local inquiry. Only the maximum discharge for each water year is given. Information on some lower floods may have been obtained but is not published herein. The years given in the period of record represent water years for which the annual maximum has been determined.

Annual maximum discharge at crest-stage partial-record stations

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Dis-charge (cfs)
Big Nemaha River basin							
06813700	Tennessee Creek tributary near Seneca, Kans.	Lat 39°48'46", long 96°02'44", in SE¼SW¼ sec.2, T.3 S., R.12 E., Nemaha County, above culvert on county highway, 1.8 mi (2.9 km) southeast of Seneca.	0.90	1957-75	6-18-75	11.00	42
Wolf River basin							
06815700	Buttermilk Creek near Willis, Kans.	Lat 39°45'16", long 95°27'02", in SW¼SW¼ sec.30, T.3 S., R.18 E., Brown County, at downstream side of county highway bridge, 3.6 mi (5.8 km) northeast of Willis. Published as "South Branch Wolf Creek tributary" 1957-60, as "South Fork Wolf River tributary" 1961.	3.74	1957-75	5-30-75	17.11	2,500
White Clay Creek basin							
06818260	White Clay Creek at Atchison, Kans.	Lat 39°33'33", long 95°07'38", in SW¼NE¼ sec.1, T.6 S., R.20 E., Atchison County, on right bank at center of highway bridge, on 10th Street in Atchison and at 0.15 mi (0.24 km) downstream from Brewery Creek.	13.1	1972-75	6- 9-75	9.95	550
Kansas River basin							
06844800	South Fork Sappa Creek tributary near Goodland, Kans.	Lat 39°19'14", long 101°37'57", in NW¼NW¼ sec.36, T.8 S., R.39 W., Sherman County, below culvert on county highway, 4.5 mi (7.2 km) southeast of Goodland.	4.98	1957-75	6-18-75	12.75	360
06845100	Long Branch Draw near Norcatur, Kans.	Lat 39°54'06", long 100°10'43", in SW¼SW¼ sec.6, T.2 S., R.25 W., Decatur-Norton County line, on downstream side of county highway bridge, 4.7 mi (7.6 km) north of Norcatur.	31.7	1957-75	6- 8-75	17.72	390
06846000	Beaver Creek at Ludell, Kans.	Lat 39°50'50", long 100°57'30", in NW¼SW¼ sec.30, T.2 S., R.32 W., Rawlins County, at downstream side of bridge on county highway, 120 ft (37 m) downstream from Chicago, Burlington, and Quincy Railway Co. bridge, 0.5 mi (0.8 km) south of Ludell and 9.6 mi (15.4 km) downstream from Little Beaver Creek. Prior to June 30, 1932, at site 120 ft (37 m) upstream and at datum 1.7 ft (0.5 m) higher.	1,460	1930-32*, 1946-53*, 1961-75	7- 8-75	10.04	680
06846200	Beaver Creek tributary near Ludell, Kans.	Lat 39°48'53", long 100°52'19", in SE¼SE¼ sec.2, T.3 S., R.32 W., Rawlins County, at downstream end of culvert on U.S. Highway 36, 5.4 mi (8.7 km) southeast of Ludell.	10.2	1957-75	6-18-75	15.54	880
06847600	Prairie Dog Creek tributary at Colby, Kans.	Lat 39°23'28", long 101°02'43", in SW¼NW¼NE¼ sec.6, T.8 S., R.33 W., Thomas County, at downstream side of bridge on Franklin Avenue in Colby. Prior to Mar. 31, 1971, at site 0.3 mi (0.5 km) upstream and at same datum.	7.53	1957-75	6-18-75	h27.44	d4,300

* Operated as a continuous-record gaging station.

d Discharge determined one mile upstream at Highway K-25 with approximate drainage area of 6.1 mi².

h Gage height from floodmark was affected by backwater.

Annual maximum discharge at crest-stage partial-record stations--continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (cfs)
Kansas River basin--continued							
06848200	Prairie Dog Creek tributary near Norton, Kans.	Lat 39°51'15", long 99°53'17", in NW¼NW¼ sec.26, T.2 S., R.23 W., Norton County, at downstream side of bridge on U.S. Highway 283, 1.6 mi (2.6 km) north of Norton.	1.02	1957-75	6- 8-75	12.22	160
06856100	West Creek near Talmo, Kans.	Lat 39°40'00", long 97°36'48", in NW¼NW¼ sec.36, T.4 S., R.3 W., Republic County, at downstream side of county highway bridge, 2.5 mi (4.0 km) southwest of Talmo. Published as "West Salt Creek" 1957-71.	42.0	1957-75	6-22-75	13.72	220
06856320	Elk Creek at Clyde, Kans.	Lat 39°35'40", long 97°23'49", in NW¼NE¼ sec.26, T.5 S., R.1 W., Cloud County, at downstream side of Chicago, Rock Island Railroad bridge in Clyde and 2.8 mi (4.5 km) upstream from mouth.	73	1970-75	6-24-75	5.82	250
06856800	Moll Creek near Green, Kans.	Lat 39°22'48", long 97°00'28", in NE¼NW¼ sec.8, T.8 S., R.4 E., Clay County, at downstream side of bridge on U.S. Highway 24, 3.3 mi (5.3 km) southwest of Green. Prior to July 15, 1965, at site 60 ft (18 m) upstream at same datum.	3.60	1957-75	6-18-75	13.07	84
06858700	North Fork Smoky Hill River tributary near Winona, Kans.	Lat 39°01'51", long 101°17'07", in NE¼NW¼ sec.11, T.12 S., R.36 W., Logan County, 600 ft (183 m) downstream from culvert on U.S. Highway 40, 3.0 mi (4.8 km) southwest of Winona. Prior to Apr. 15, 1958, at site 700 ft (213 m) upstream and datum 11.00 ft (3.35 m) higher. Apr. 15, 1958, to July 31, 1963, at culvert on U.S. Highway 40 at datum 10.0 ft (3.05 m) higher. Records for 1957-61 discredited.	1.13	1957-75	5-29-75	11.00	200
06860500	Hackberry Creek near Gove, Kans.	Lat 38°57'15", long 100°29'05", in SW¼NE¼ sec.1, T.13 S., R.29 W., Gove County, near right bank at downstream side of bridge on State Highway 23, 0.5 mi (0.8 km) south of Gove.	426	1948-53 [†] , 1960-75	5-29-75	13.82	6,870
06863000	Smoky Hill River at Pfeifer, Kans.	Lat 38°42'51", long 99°09'10", in SW¼SW¼ sec.30, T.15 S., R.16 W., Ellis County, near right bank on downstream side of county highway bridge, 1.0 mi (1.6 km) northeast of Pfeifer.	6,033	1929-32 [†] , 1970-75	6-23-75	6.80	2,000
06863400	Big Creek tributary near Ogallah, Kans.	Lat 38°56'00", long 99°44'33", in NW¼SW¼ sec.11, T.13 S., R.22 W., Trego County, at downstream side of bridge on State Highway 147, 4.0 mi (6.4 km) southwest of Ogallah.	4.81	1957-75	6- 8-75	14.16	1,400
06863700	Big Creek tributary near Hays, Kans.	Lat 38°51'08", long 99°14'48", in SE¼NE¼ sec.7, T.14 S., R.17 W., Ellis County, at downstream side of culvert on old U.S. Highway 40 at Toulon, 4.7 mi (7.6 km) southeast of Hays.	6.19	1957-75	6- 8-75	11.00	85
06864300	Smoky Hill River tributary at Dorrance, Kans.	Lat 38°50'52", long 98°35'44", in NW¼SE¼ sec.12, T.14 S., R.12 W., Russell County, at downstream end of culvert on old U.S. Highway 40 at Dorrance.	5.39	1957-75	9- 3-75	14.62	2,400

[†] Operated as a continuous-record gaging station.

Annual maximum discharge at crest-stage partial-record stations--continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Dis-charge (cfs)
Kansas River basin--continued							
06864700	Spring Creek near Kanopolis, Kans.	Lat 38°44'23", long 98°10'07", in NW¼NW¼ sec.24, T.15 S., R.8 W., Ellsworth County, at downstream end of culvert on old U.S. Highway 40, 2.2 mi (3.5 km) northwest of Kanopolis.	9.84	1957-75	6- 8-75	13.16	520
06866490	Dry Creek at Mentor, Kans.	Lat 38°44'11", long 97°36'46", in SW¼NW¼ sec.24, T.15 S., R.3 W., Saline County, near right bank at downstream side of bridge on U.S. Highway 81, 0.6 mi (1.0 km) southwest of Mentor and 1.7 mi (2.7 km) upstream from mouth.	37	1970-75	6-28-75	19.82	(+)
06866800	Saline River tributary at Collyer, Kans.	Lat 39°02'46", long 100°07'36", in SW¼SW¼ sec.32, T.11 S., R.25 W., Trego County, at downstream side of county highway bridge, 0.7 mi (1.1 km) northwest of Collyer.	3.13	1957-75	f9-27-73 7-31-75	fc9.7 13.21	f12 520
06867800	Cedar Creek tributary near Bunker Hill, Kans.	Lat 38°56'03", long 98°42'45", in NW¼SE¼ sec.12, T.13 S., R.13 W., Russell County, above culvert on county highway, 4.5 mi (7.2 km) northwest of Bunker Hill.	0.99	1957-75	9- 3-75	11.64	450
06868300	Coon Creek tributary near Luray, Kans.	Lat 39°10'30", long 98°42'02", in NW¼NE¼ sec.19, T.10 S., R.12 W., Osborne County, at downstream side of county highway bridge, 4.4 mi (7.1 km) northwest of Luray.	6.53	1957-75	5-27-75	13.80	58
06868400	Wolf Creek near Lucas, Kans.	Lat 39°03'30", long 98°33'10", in NW¼NW¼ sec.33, T.11 S., R.11 W., Russell County, at downstream side of highway bridge, 1.2 mi (1.9 km) west of Lucas, 4.0 mi (6.4 km) upstream from East Fork, and 15 mi (24 km) upstream from mouth.	163	1960-71 [‡] , 1972-75	6-21-75	13.80	620
06868700	North Branch Spillman Creek near Ash Grove, Kans.	Lat 39°09'08", long 98°23'45", in NE¼SE¼ sec.26, T.10 S., R.10 W., Lincoln County, at downstream side of bridge on State Highway 181, 2.0 mi (3.2 km) upstream from mouth and 2.2 mi (3.5 km) west of Ash Grove.	26.1	1962-71 [‡] , 1972-75	6-22-75	10.72	900
06868900	Bullfoot Creek tributary near Lincoln, Kans.	Lat 38°58'27", long 98°09'03", in SW¼SW¼ sec.30, T.12 S., R.7 W., Lincoln County, at downstream side of bridge on State Highway 14, 4.6 mi (7.4 km) south of Lincoln. Published as "Elkhorn Creek tributary" 1957-70.	2.64	1957-75	8-13-75	12.82	94
06869950	Mulberry Creek near Salina, Kans.	Lat 38°50'40", long 97°40'05", in SE¼SE¼ sec.8, T.14 S., R.3 W., Saline County, at left downstream pier of bridge on county highway, 2.0 mi (3.2 km) downstream from Spring Creek, 2.0 mi (3.2 km) west of Salina and 9.0 mi (14 km) upstream from mouth.	250	1961-75	6-23-75	18.30	1,500
06872100	Middle Cedar Creek at Kensington, Kans.	Lat 39°45'21", long 99°02'04", in NE¼NE¼ sec.32, T.3 S., R.15 W., Smith County, at downstream side of bridge on old U.S. Highway 36, 0.5 mi (0.8 km) south of Kensington.	58.9	1957-75	6- 8-75	11.29	160
06872600	Oak Creek at Bellaire, Kans.	Lat 39°47'54", long 98°40'00", in NW¼NW¼ sec.15, T.3 S., R.12 W., Smith County, at downstream side of bridge at Bellaire. Prior to Sept. 8, 1965, at same site at datum 2.18 ft (0.66 m) lower.	4.75	1957-75	6- 8-75	14.67	140

* Operated as a continuous-record gaging station.

(+) Discharge not determined.

c From floodmark.

f Corrected.

Annual maximum discharge at crest-stage partial-record stations--continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (cfs)
Kansas River basin--continued							
06873300	Ash Creek tributary near Stockton, Kans.	Lat 39°26'15", long 99°22'16", in SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.18, T.7 S., R.18 W., Rooks County, at upstream end of culvert on old U.S. Highway 24, 5.3 mi (8.5 km) west of Stockton.	0.89	1957-75	6-17-75	10.52	34
06873800	Kill Creek tributary near Bloomington, Kans.	Lat 39°23'58", long 98°50'26", in NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.35, T.7 S., R.14 W., Osborne County, at upstream end of culvert on county highway, 4.8 mi (7.7 km) southwest of Bloomington.	1.45	1957-75	6-17-75	13.65	150
06874500	East Limestone Creek near Ionia, Kans.	Lat 39°41'52", long 98°20'19", in NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec.21, T.4 S., R.9 W., Jewell County, at downstream side of county highway bridge, 2.5 mi (4.0 km) northeast of Ionia. Prior to Oct. 1, 1956, at same site and datum 6.2 ft (1.9 m) higher.	25.6	1934-38†, 1957-75	6-23-75	17.60	920
06875800	Limestone Creek near Glen Elder, Kans.	Lat 39°32'18", long 98°18'58", in NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec.15, T.6 S., R.9 W., Mitchell County, 150 ft (46 m) downstream from highway bridge, 2.0 mi (3.2 km) north of Glen Elder, and 7.4 mi (11.9 km) upstream from mouth.	210	1965-71†, 1972-75	6-23-75	19.20	1,700
06876200	Middle Pipe Creek near Miltonvale, Kans.	Lat 39°21'00", long 97°34'08", in NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec.20, T.8 S., R.2 W., Cloud County, at downstream side of county highway bridge, 6.0 mi (9.6 km) west of Miltonvale.	10.2	1957-75	6-22-75	16.52	360
06877120	Mud Creek at Abilene, Kans.	Lat 38°55'47", long 97°13'39", in NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.17, T.13 S., R.2 E., Dickinson County, at downstream side of bridge on old U.S. Highway 40 on north edge of Abilene.	87	1970-75	--	<10.00	<1,500
06877200	West Turkey Creek near Elmo, Kans.	Lat 38°40'04", long 97°10'18", in SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.11, T.16 S., R.2 E., Dickinson County, at downstream end of county highway bridge, 3.0 mi (4.8 km) southeast of Elmo. Published as "East Turkey Creek" 1957-70.	26.6	1957-75	10-12-74	19.93	2,000
06877400	Turkey Creek tributary near Elmo, Kans.	Lat 38°40'57", long 97°11'04", in SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.2, T.16 S., R.2 E., Dickinson County, at downstream end of bridge on State Highway 4, 2.3 mi (3.7 km) east of Elmo. Published as "East Turkey Creek tributary" 1957-70.	2.48	1957-75	4-23-75	12.52	250
06877500	Turkey Creek near Abilene, Kans.	Lat 38°48'22", long 97°10'53", in W $\frac{1}{2}$ sec.26, T.14 S., R.2 E., Dickinson County, at downstream side of bridge immediately below mouth of West Branch Turkey Creek, 8.0 mi (13 km) south of Abilene.	143	1958-65†, 1966-74	4-24-75	21.64	2,800
06879200	Clark Creek near Junction City, Kans.	Lat 39°00'28", long 96°44'20", in W $\frac{1}{2}$ sec.14, T.12 S., R.6 E., Geary County, at upstream side of bridge on State Highway 57, 5.0 mi (8.0 km) southeast of Junction City, 7.5 mi (12.1 km) upstream from Humboldt Creek.	200	1957-65†, 1966-75	6- 9-75	16.80	6,600
06879700	Wildcat Creek at Riley, Kans.	Lat 39°17'34", long 96°49'50", in SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.1, T.9 S., R.5 E., Riley County, at downstream side of bridge on U.S. Highway 77 at Riley. Published as "Wild Cat Creek" 1957-64.	14.0	1957-75	6-22-75	14.60	580
06879815	Wildcat Creek at Manhattan, Kans.	Lat 39°11'05", long 96°36'37", in NW $\frac{1}{4}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.14, T.10 S., R.7 E., Riley County, on downstream side of bridge on State Highway 113 in Manhattan, and 5.5 miles above mouth.	74	1974-75	6-24-75	15.90	(+)

† Operated as a continuous-record gaging station.

(+) Not determined.

Annual maximum discharge at crest-stage partial-record stations--continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Dis-charge (cfs)
Kansas River basin--continued							
06884100	Mulberry Creek tributary near Haddam, Kans.	Lat 39°48'49", long 97°17'56", in NE¼NE¼ sec.10, T.3 S., R.1 E., Washington County, above culvert on U.S. Highway 36, 3.0 mi (4.8 km) south of Haddam. Published as "Mill Creek tributary" 1957-71.	1.64	1957-75	6- 8-75	12.03	96
06884300	Mill Creek tributary near Washington, Kans.	Lat 39°48'48", long 97°00'30", in SW¼SW¼ sec.5, T.3 S., R.4 E., Washington County, at downstream end of culvert on U.S. Highway 36, 2.2 mi (3.5 km) east of Washington.	3.20	1957-75	5-29-75	15.61	650
06884900	Robidoux Creek at Beattie, Kans.	Lat 39°51'48", long 96°25'47", in SW¼NE¼ sec.20, T.2 S., R.9 E., Marshall County, at downstream side of county highway bridge, 0.8 mi (1.3 km) northwest of Beattie.	40.0	1957-75	6- 2-75	19.38	(+)
06886500	Fancy Creek at Winkler, Kans.	Lat 39°28'20", long 96°49'55", in NW¼NE¼SE¼ sec.2, T.7 S., R.5 E., Riley County, at downstream side of county highway bridge, 0.2 mi (0.3 km) downstream from Otter Creek, 0.4 mi (0.6 km) south of Winkler, and at mile 13.2 (21.2 km).	174	1953-71*, 1972-75	6-18-75	18.20	9,000
06887200	Cedar Creek near Manhattan, Kans.	Lat 39°15'31", long 96°33'48", in NE¼NE¼ sec.19, T.9 S., R.8 E., Pottawatomie County, at downstream side of county highway bridge, 5.5 mi (8.8 km) north of Manhattan.	13.4	1957-75	6-22-75	11.37	420
06887600	Kansas River tributary near Wamego, Kans.	Lat 39°10'28", long 96°15'45", in SE¼SE¼ sec.14, T.10 S., R.10 E., Wabaunsee County, at upstream end of culvert on county highway, 3.0 mi (4.8 km) southeast of Wamego.	0.83	1951, 1957-75	6-22-75	10.82	170
06888000	Vermillion Creek near Wamego, Kans.	Lat 39°21'00", long 96°13'10", in NE¼NW¼NW¼ sec.20, T.8 S., R.11 E., Pottawatomie County, at highway bridge, 1.0 mi (1.6 km) upstream from Indian Creek, 14 mi (23 km) northeast of Wamego, and at mile 15.8 (25.4 km).	243	1936-46*, 1954-72*, 1972-75	6-24-75	26.64	6,400
06888030	Vermillion Creek near Louisville, Kans.	Lat 39°16'42", long 96°14'34", in NW¼SE¼SE¼ sec.12, T.9 S., R.10 E., Pottawatomie County, on left bank 1.3 mi (2.1 km) upstream from Adams Creek, 4.0 mi (6.4 km) northeast of Louisville.	297	1970-75	6- 9-75	23.85	7,000
06888300	Rock Creek near Louisville, Kans.	Lat 39°15'53", long 96°22'47", on west line of SE¼ sec.14, T.9 S., R.9 E., Pottawatomie County, at downstream side of highway bridge, 4.0 mi (6.0 km) west of Louisville.	128	1958-65*, 1966-75	7-20-73 10-11-73 6-24-75	f31.35 f32.99 25.09	9,000 12,000 3,200
06888600	Dry Creek near Maple Hill, Kans.	Lat 39°03'06", long 96°01'14", in SE¼NE¼ sec.36, T.11 S., R.12 E., Wabaunsee County, at downstream side of county highway bridge, 2.1 mi (3.4 km) southeast of Maple Hill.	15.6	1957-75	5- 1-72 9-26-73 6- 9-75 6-18-75	f13.47 f19.80 f13.87 13.14	f1,700 f5,200 f1,800 1,500
06888900	Blacksmith Creek tributary near Valencia, Kans.	Lat 39°01'20", long 95°50'06", in SW¼NW¼ sec.11, T.12 S., R.14 E., Shawnee County, at downstream side of county highway bridge, 4.3 mi (6.9 km) southeast of Valencia.	1.31	1957-75	6- 8-75	12.29	640
06889550	Indian Creek near Topeka, Kans.	Lat 39°07'27", long 95°39'05", in SE¼SE¼NE¼ sec.5, T.11 S., R.16 E., Shawnee County, 3.0 mi (5.0 km) north of Topeka and 2.7 mi (4.3 km) upstream from Soldier Creek (new channel).	9.72	1970-75	6- 8-75	16.07	1,800

‡ Operated as a continuous-record gaging station.

(+) Not determined.

f Corrected.

DISCHARGE AT PARTIAL-RECORD STATIONS

Annual maximum discharge at crest-stage partial-record stations--continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Dis-charge (cfs)
Kansas River basin--continued							
06889600	South Branch Shunganunga Creek near Pauline, Kans.	Lat 38°58'44", long 95°42'35", in SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.26, T.12 S., R.15 E., Shawnee County, at downstream side of county highway bridge, 1.7 mi (2.7 km) northwest of Pauline.	3.84	1957-75	10-13-74	11.49	430
06889630	Shunganunga Creek at Topeka, Kans.	Lat 39°01'54", long 95°40'57", in SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.6, T.12 S., R.16 E., Shawnee County, on downstream side of bridge on U.S. Highway 75, 700 ft (213 m) north of 21st Street in Topeka.	34	1970-75	6- 8-75	11.44	1,900
06890300	Spring Creek near Wetmore, Kans.	Lat 39°38'12", long 95°50'43", in NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.9, T.5 S., R.14 E., Nemaha County, at upstream side of county highway bridge, 1.8 mi (2.9 km) northwest of Wetmore.	21.0	1957-75	6-18-75	21.48	4,900
06890560	Rock Creek 6 miles north Meriden, Kans.	Lat 39°17'19", long 95°34'57", in SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.1, T.9 S., R.16 E., Jefferson County, at downstream side of stone arch bridge on county road, 7.0 mi (11.3 km) northwest of Meriden.	1.89	1964-75	5-23-75	11.26	250
06890700	Slough Creek tributary near Oskaloosa, Kans.	Lat 39°12'05", long 95°18'09", in NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec.9, T.10 S., R.19 E., Jefferson County, above culvert on State Highway 16, 1.1 mi (1.8 km) southeast of Oskaloosa.	0.83	1957-75	10-31-74	11.32	28
06890800	Slough Creek near Oskaloosa, Kans.	Lat 39°13'25", long 95°20'12", in SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec.31, T.9 S., R.19 E., Jefferson County, at downstream side of bridge on State Highway 92, 1.3 mi (2.1 km) northwest of Oskaloosa.	31.0	1957-75	4-24-75	12.53	2,600
06891050	Stone House Creek at Williamstown, Kans.	Lat 39°04'00", long 95°20'09", on east line sec.30, T.11 S., R.19 E., Jefferson County, at downstream side of bridge on U.S. Highway 24, 0.1 mi (0.2 km) north of Williamstown.	12.9	1963-75	12- 7-74	1.37	360
06891650	Naismith Creek at Lawrence, Kans.	Lat 38°56'03", long 95°15'08", in NE $\frac{1}{4}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.12, T.13 S., R.19 E., Douglas County, at downstream side of 27th Street bridge in Lawrence, and 6.0 mi (9.7 km) above mouth.	1.54	1974-75	10-11-73 9-11-75	14.20 13.55	e350 240
06892800	Turkey Creek at Merriam, Kans.	Lat 39°00'28", long 94°41'56", in SW $\frac{1}{4}$ SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec.13, T.12 S., R.24 E., Johnson County, on downstream side of bridge on 67th Street, at Merriam.	6.76	1974-75	10-11-73 8-26-75	e17.09 17.11	(+) (+)
06892940	Turkey Creek at Kansas City, Kans.	Lat 39°03'31", long 94°37'33", in SE $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.27, T.11 S., R.25 E., Wyandotte County, on downstream side of bridge on State Highway 10, at Kansas City.	22.3	1974-75	6- 9-74 8-26-75	e16.28 15.68	(+) (+)
06893250	Indian Creek near Overland Park, Kans.	Lat 38°54'45", long 94°43'24", in NW $\frac{1}{4}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec.23, T.13 S., R.24 E., Johnson County, at right bank, on downstream side of bridge on Morse Road, 2.5 mi (4.0 km) southwest of Overland Park.	14.8	1970-75	10-31-74	16.78	680
Osage River basin							
06912300	Dragoon Creek tributary near Lyndon, Kans.	Lat 38°41'33", long 95°41'06", in NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec.6, T.16 S., R.16 E., Osage County, at downstream side of bridge on U.S. Highway 75, 5.8 mi (9.3 km) north of Lyndon.	3.76	1957-75	6-16-75	17.44	2,760
06913600	Rock Creek near Ottawa, Kans.	Lat 38°33'15", long 95°16'02", in SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.24, T.17 S., R.19 E., Franklin County, at downstream side of bridge on U.S. Highway 59, 3.7 mi (6.0 km) south of Ottawa.	10.2	1957-75	5-29-75	17.48	840

(+) Not determined.

e Not previously published.

DISCHARGE AT PARTIAL-RECORD STATIONS

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Annual maximum discharge at crest-stage partial-record stations--continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Dis-charge (cfs)
Osage River basin--continued							
06913700	Middle Creek near Princeton, Kans.	Lat 38°28'39", long 95°15'08", in SE¼SE¼ sec.13, T.18 S., R.19 E., Franklin County, at downstream side of bridge on U.S. Highway 59, 1.3 mi (2.1 km) southeast of Princeton.	52.0	1957-75	5-29-75	22.12	4,200
06914250	South Fork Pottawatomie Creek tributary near Garnett, Kans.	Lat 38°14'00", long 95°14'52", in NW¼SE¼ sec.7, T.21 S., R.20 E., Anderson County, above culvert on U.S. Highway 59, 3.1 mi (5.0 km) south of Garnett.	0.35	1963-75	6-17-75	13.13	350
06914500	Pottawatomie Creek at Lane, Kans.	Lat 38°26'38", long 95°05'02", in SW¼NW¼ sec.34, T.18 S., R.21 E., Franklin County, at downstream side of highway bridge at Lane.	513	1929-32*, 1961-75	6-17-75	28.71	20,000
06915100	Big Bull Creek at Paola, Kans.	Lat 38°34'36", long 94°53'44", in NW¼NE¼NW¼ sec.17, T.17 S., R.23 E., Miami County, on downstream side of bridge on county highway (extension of Peoria St.), 0.5 mi (0.8 km) west of Paola and 9.0 mi (14.5 km) upstream from mouth.	230	1970-75	10-31-74	15.36	4,700
06916700	Middle Creek near Kincaid, Kans.	Lat 38°03'24", long 95°11'15", in W¼SW¼ sec.11, T.23 S., R.20 E., Anderson County, at downstream side of county highway bridge, 2.5 mi (4.0 km) southwest of Kincaid.	2.02	1957-75	11- 3-74	14.50	650
06917100	Marmaton River tributary near Bronson, Kans.	Lat 37°54'20", long 95°05'43", in NW¼NW¼ sec.3, T.25 S., R.21 E., Allen County, at downstream side of culvert on U.S. Highway 54 and 1.5 mi (2.4 km) northwest of Bronson. Prior to Oct. 1, 1967, at site 50 ft (15 m) downstream at same datum.	0.88	1957-75	11- 3-74	13.70	260
06917400	Marmaton River tributary near Fort Scott, Kans.	Lat 37°47'26", long 94°47'47", in SW¼SW¼ sec.9, T.26 S., R.24 E., Bourbon County, at downstream side of county highway bridge, 6.0 mi (10 km) southwest of Fort Scott.	2.80	1957-75	6- 5-75	14.87	1,300
Arkansas River basin							
07138600	Whitewoman Creek tributary near Selkirk, Kans.	Lat 38°31'30", long 101°37'16", in SW¼SW¼ sec.34, T.17 S., R.39 W., Greeley County, at downstream side of county highway bridge, 5.6 mi (9.0 km) northwest of Selkirk.	38.0 (7.59)	1957-75	7-23-75	11.02	150
07138800	Lion Creek tributary near Modoc, Kans.	Lat 38°28'48", long 101°01'00", in NW¼NE¼ sec.22, T.18 S., R.34 W., Scott County, below culvert on State Highway 96, 1.2 mi (1.9 km) southeast of Modoc.	7.00 (1.19)	1957-75	1975	--	0
07139700	Arkansas River tributary near Dodge City, Kans.	Lat 37°42'52", long 100°00'53", in SE¼NE¼ sec.11, T.27 S., R.25 W., Ford County, at downstream side of culvert on U.S. Highway 283, 2.6 mi (4.2 km) south of Dodge City. Prior to Mar. 1, 1959, above culvert 175 ft (53 m) north of present site and at same datum. Records for 1957-58 discredited.	8.66	1957-75	4- 7-75	12.09	90
07140300	Whitewoman Creek near Bellefont, Kans.	Lat 37°55'26", long 99°38'31", in SW¼NW¼ sec.33, T.24 S., R.21 W., Hodgeman County, at downstream side of county highway bridge, 3.5 mi (5.6 km) northeast of Bellefont.	14.0	1957-75	6-23-75	12.13	130

* Operated as a continuous-record gaging station.

Note.--Figures of drainage area in parentheses show approximate contributing area included in total area.

DISCHARGE AT PARTIAL-RECORD STATIONS

Annual maximum discharge at crest-stage partial-record stations--continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Dis-charge (cfs)
Arkansas River basin--continued							
07140600	Pawnee River tribu- tary near Kalvesta, Kans.	Lat 38°03'42", long 100°21'00", in S½SW¼ sec.12, T.23 S., R.28 W., Finney County, at downstream side of bridge on U.S. Highway 156, 3.4 mi (5.5 km) west of Kalvesta.	6.89	1957-75	6-23-75	10.45	190
07141400	South Fork Walnut Creek tributary near Dighton, Kans.	Lat 38°28'58", long 100°24'54", in SE¼SE¼ sec.16, T.18 S., R.28 W., Lane County, at culvert on State Highway 96, 2.8 mi (4.5 km) east of Dighton. Until Sept. 5, 1958, at downstream side of existing culvert at same site and datum 0.42 ft (0.13 m) higher. Until Sept. 30, 1965, at downstream side of present culvert and same datum. Presently 10 ft (3 m) upstream from present retaining wall upstream from present culvert.	0.81	1957-75	1975	--	0
07141600	Long Branch Creek near Ness City, Kans.	Lat 38°27'01", long 99°52'50", in NE¼NE¼ sec.32, T.18 S., R.23 W., Ness County, below bridge on State Highway 96, 1.2 mi (1.9 km) east of Ness City.	28.0	1957-75	6-23-75	10.03	5
07141800	Otter Creek near Rush Center, Kans.	Lat 38°24'16", long 99°18'26", in NW¼NW¼ sec.15, T.19 S., R.18 W., Rush County, at downstream side of bridge on U.S. Highway 183, 4.3 mi (6.9 km) south of Rush Center. Prior to Oct. 1, 1965, at site 100 ft (30 m) downstream at present datum.	17.0	1957-75	10-12-75	17.56	1,200
07142100	Rattlesnake Creek tributary near Mullinville, Kans.	Lat 37°35'11", long 99°25'17", in SE¼SW¼ sec.20, T.28 S., R.19 W., Kiowa County, at downstream end of culvert on U.S. Highway 54, 2.9 mi (4.7 km) east of Mullinville.	10.3	1957-75	6-23-75	13.43	2,400
07142500	Spring Creek near Dillwyn, Kans.	Lat 37°57'24", long 98°50'27", in SE¼SE¼ sec.15, T.24 S., R.14 W., Stafford County, at downstream side of bridge on U.S. Highway 50, 2.2 mi (3.5 km) southeast of Dillwyn.	14.3	1957-75	8-19-75	14.61	1,200
07142700	Salt Creek near Partridge, Kans.	Lat 38°02'22", long 98°05'13", in SW¼NW¼ sec.22, T.23 S., R.7 W., Reno County, at downstream side of county highway bridge, 5.0 mi (8.0 km) north of Partridge.	85.0 (72.0)	1957-75	6- 8-75	12.62	200
07143100	Little Cheyenne Creek tributary near Claflin, Kans.	Lat 38°27'25", long 98°32'08", in NE¼SE¼ sec.28, T.18 S., R.11 W., Barton County, at culvert on county highway, 4.7 mi (7.7 km) south of Claflin. Published as "Cheyenne Creek tributary" 1957-70.	1.48	1957-75	8-28-75	11.96	180
07143200	Plum Creek near Holyrood, Kans.	Lat 38°35'53", long 98°25'27", in SW¼SW¼ sec.3, T.17 S., R.10 W., Ellsworth County, at downstream side of county highway bridge, 1.2 mi (1.9 km) northwest of Holyrood.	19.0	1957-75	8-28-75	18.68	(+)
07143500	Little Arkansas River near Geneseo, Kans.	Lat 38°27'24", long 98°05'24", in NW¼SW¼ sec.27, T.18 S., R.7 W., Rice County, at downstream side of county highway bridge, 5.5 mi (8.8 km) southeast of Geneseo.	25.0	1957-75	5-30-75	21.57	1,200
07143600	Little Arkansas River near Little River, Kans.	Lat 38°24'50", long 98°01'00", in NW¼SW¼ sec.8, T.19 S., R.6 W., Rice County, at downstream side of county highway bridge, and 1.0 mi (1.6 km) northwest of Little River.	71	1960-71†, 1972-75	6-28-75	16.50	900
07144900	South Fork Ninnescah River tributary near Pratt, Kans.	Lat 38°40'30", long 98°43'23", NE¼NE¼ sec.27, T.27 S., R.13 W., Pratt County, at downstream end of culvert on county highway, 2.4 mi (3.9 km) northeast of Pratt.	1.48	1957-75	6-22-75	14.39	660

* Operated as a continuous-record gaging station.

(+) Discharge not determined.

Note.--Figures of drainage area in parentheses show approximate contributing area included in total area.

Annual maximum discharge at crest-stage partial-record stations--continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Dis-charge (cfs)
Arkansas River basin--continued							
07145300	Clear Creek near Garden Plain, Kans.	Lat 37°39'48", long 97°39'22", in NE¼NW¼ sec.33, T.27 S., R.3 W., Sedgwick County, at downstream side of bridge on U.S. Highway 54, 1.5 mi (2.4 km) northeast of Garden Plain.	5.03	1957-75	6-27-75	12.68	460
07145800	Antelope Creek tributary near Dalton, Kans.	Lat 37°16'34", long 97°17'01", in SW¼SE¼ sec.11, T.32 S., R.1 E., Sumner County, upstream from culvert on U.S. Highway 160, 0.8 mi (1.3 km) northwest of Dalton. Published as "Avon Creek tributary" 1957-70.	0.41	1957-75	11- 3-74	13.93	140
07146700	West Branch Walnut River tributary near DeGraff, Kans.	Lat 37°57'19", long 96°51'04", in NE¼NW¼ sec.23, T.24 S., R.5 E., Butler County, at downstream side of county highway bridge, 2.0 mi (3.2 km) southeast of DeGraff.	11.0	1957-75	6- 8-75	16.81	1,600
07147020	Whitewater River tributary near Towanda, Kans.	Lat 37°51'03", long 97°03'37", in NE¼NE¼ sec.26, T.25 S., R.3 E., Butler County, at culvert on county highway, 5.0 mi (8.0 km) northwest of Towanda.	0.17	1963-75	6- 8-75	15.42	200
07147200	Dry Creek tributary near Augusta, Kans.	Lat 37°40'47", long 97°01'50", in S¼SE¼ sec.19, T.27 S., R.4 E., Butler County, at downstream end of culvert on U.S. Highway 54, 2.8 mi (4.5 km) west of Augusta. Published as "Indianola Creek tributary" 1957-63.	0.90	1957-75	6-10-75	10.66	160
07147990	Cedar Creek tributary near Cambridge, Kans.	Lat 37°19'19", long 96°37'33", on east line sec.26, T.31 S., R.7 E., Cowley County, at downstream side of bridge on U.S. Highway 160, 0.5 mi (0.8 km) upstream from Cedar Creek and 2.1 mi (3.4 km) northeast of Cambridge. Published as "Grouse Creek tributary" 1961-63.	2.41	1961-75	11- 3-74	12.92	900
07148100	Grouse Creek near Dexter, Kans.	Lat 37°13'38", long 96°42'44", in NW¼NW¼ sec.31, T.32 S., R.7 E., Cowley County, on right bank at downstream side of county highway bridge, 3.2 mi (5.1 km) north of Dexter.	170	1960-75	11- 3-74	25.63	12,000
07148700	Dog Creek near Deerhead, Kans.	Lat 37°16'50", long 98°52'24", in NW¼NW¼ sec.8, T.32 S., R.14 W., Barber County, above culvert on U.S. Highway 160, 3.5 mi (5.6 km) northeast of Deerhead.	5.31	1957-75	6-23-75	11.99	110
07148800	Medicine Lodge River tributary near Medicine Lodge, Kans.	Lat 37°18'42", long 98°35'20", in N¼NE¼ sec.35, T.31 S., R.12 W., Barber County, on right bank at downstream side of county highway bridge, 2.8 mi (4.5 km) northwest of Medicine Lodge. Prior to June 23, 1960, at site 0.5 mi (0.8 km) downstream and at datum 3.86 ft (1.18 m) lower.	2.04	1957-75	6-16-75	14.14	300
07151600	Rush Creek near Harper, Kans.	Lat 37°15'12", long 98°04'47", in NE¼NE¼ sec.21, T.32 S., R.7 W., Harper County, at downstream side of county highway bridge, 3.5 mi (5.6 km) southwest of Harper.	12.0	1957-75	6-16-75	15.42	2,200
07155900	North Fork Cimarron River tributary near Elkhart, Kans.	Lat 37°11'27", long 101°53'54", in NW¼SW¼ sec.9, T.33 S., R.42 W., Morton County, at downstream side of culvert on State Highway 27, 13.0 mi (20.9 km) north of Elkhart.	75 (10.0)	1957-75	1975	--	0

Note.--Figures of drainage area in parentheses show approximate contributing area included in total area.

Annual maximum discharge at crest-stage partial-record stations--continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Dis-charge (cfs)
Arkansas River basin--continued							
07156000	North Fork Cimarron River tributary near Richfield, Kans.	Lat 37°18'36", long 101°46'18", in SW¼NW¼ sec.34, T.31 S., R.41 W., Morton County, at downstream side of bridge on State Highway 27, 3.3 mi (5.3 km) northeast of Richfield.	103 (58.9)	1957-75	8- 1-75	10.18	110
07156600	Cimarron River tributary near Moscow, Kans.	Lat 37°20'07", long 101°03'00", in NW¼SW¼ sec.20, T.31 S., R.34 W., Seward County, at downstream side of county highway bridge, 8.8 mi (14.2 km) northeast of Moscow.	13.0 (8.00)	1957-75	7-31-75	c15.0	2,000
07156700	Cimarron River tributary near Satanta, Kans.	Lat 37°16'15", long 100°55'36", in NW¼NE¼ sec.17, T.32 S., R.33 W., Seward County, at downstream side of bridge on county highway, 12.0 mi (19.3 km) southeast of Satanta.	2.41	1957-75	7-31-75	12.26	390
07157100	Crooked Creek near Copeland, Kans.	Lat 37°33'55", long 100°33'15", in SE¼SW¼ sec.36, T.28 S., R.30 W., Gray County, at downstream side of culvert on U.S. Highway 56, 4.4 mi (7.1 km) northeast of Copeland. Prior to Sept. 15, 1960, at downstream side of bridge, just downstream of present site and at same datum.	44.0	1957-75	5-28-75	16.55	1,800
07157400	Crooked Creek tributary at Meade, Kans.	Lat 37°17'47", long 100°20'22", in NE¼NW¼ sec.2, T.32 S., R.28 W., Meade County, at downstream side of culvert on State Highway 23, 0.8 mi (1.3 km) north of Meade.	6.57	1957-75	5-28-75	10.52	40
07157700	Kiger Creek near Ashland, Kans.	Lat 37°11'36", long 99°54'48", in SW¼SE¼ sec.3, T.33 S., R.24 W., Clark County, above bridge on U.S. Highway 160, 8.2 mi (13.2 km) west of Ashland.	34.0	1957-75	5-28-75	12.14	250
07166200	Sandy Creek near Yates Center, Kans.	Lat 37°50'47", long 95°50'07", in SE¼NE¼ sec.26, T.25 S., R.14 E., Woodson County, at downstream side of bridge on U.S. Highway 54, 6.0 mi (9.7 km) southwest of Yates Center.	6.80	1957-75	10-31-74	17.80	1,700
07169200	Salt Creek near Severy, Kans.	Lat 37°37'12", long 96°15'07", in NW¼NW¼ sec.18, T.28 S., R.11 E., Greenwood County, at downstream side of bridge on State Highway 99, 1.5 mi (2.4 km) west of Severy.	7.59	1957-75	10-31-74	18.51	4,300
07169700	Snake Creek near Howard, Kans.	Lat 37°32'28", long 96°14'24", in NW¼SE¼ sec.7, T.29 S., R.11 E., Elk County, at downstream end of culvert on county highway, 5.0 mi (8.0 km) northeast of Howard.	1.84	1957-75	10-31-74	14.97	510
07170600	Cherry Creek near Cherryvale, Kans.	Lat 37°17'46", long 95°32'51", in SE¼SW¼ sec.33, T.31 S., R.17 E., Montgomery County, at downstream side of bridge on U.S. Highway 169, 2.0 mi (3.2 km) northeast of Cherryvale.	15.0	1957-75	11- 3-75	17.61	3,200
07170800	Mud Creek near Mound Valley, Kans.	Lat 37°11'38", long 95°26'52", in NW¼NW¼ sec.9, T.33 S., R.18 E., Labette County, at downstream side of bridge on State Highway 96, 2.6 mi (4.2 km) southwest of Mound Valley.	4.22	1957-75	6-17-75	15.39	910
07171700	Spring Branch near Cedar Vale, Kans.	Lat 37°06'48", long 96°27'29", in NW¼NE¼ sec.7, T.34 S., R.9 E., Chautauqua County, at downstream side of bridge on U.S. Highway 166, 2.3 mi (3.7 km) northeast of Cedar Vale. Published as "Spring Creek tributary near Cedar Vale, Kans." 1957-60, "Spring Creek near Cedar Vale" 1961-65.	3.10	1957-75	11- 3-74	14.31	1,700

c From floodmark.

Note.--Figures of drainage area in parentheses show approximate contributing area included in total area.

DISCHARGE AT PARTIAL-RECORD STATIONS

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Annual maximum discharge at crest-stage partial-record stations--continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Dis-charge (cfs)
Arkansas River basin--continued							
07171800	Cedar Creek tributary near Hooser, Kans.	Lat 37°06'27", long 96°34'27", in SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec.7, T.34 S., R.8 E., Cowley County, above culvert on U.S. Highway 166, 3.9 mi (6.3 km) southeast of Hooser.	0.56	1957-75	11- 3-74	14.48	470
07171900	Grant Creek near Wauneta, Kans.	Lat 37°06'34", long 96°23'55", in SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.10, T.34 S., R.9 E., Chautauqua County, at upstream side of county highway bridge, 1.1 mi (1.8 km) southwest of Wauneta.	20.0	1957-75	11- 3-74	18.18	4,700
07179600	Four Mile Creek near Council Grove, Kans.	Lat 38°35'59", long 96°29'54", in NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.2, T.17 S., R.8 E., Morris County, at downstream side of bridge on State Highways 13 and 57, 3.3 mi (5.3 km) south of Council Grove and at mile 4.4 (7.1 km).	55.0	1963-71 $\frac{1}{2}$, 1972-75	6-23-75	12.75	3,400
07180300	Spring Creek tributary near Florence, Kans.	Lat 38°11'00", long 96°54'49", in W $\frac{1}{2}$ NW $\frac{1}{4}$ sec.32, T.21 S., R.5 E., Marion County, above culvert on U.S. Highway 77, 4.1 mi (6.6 km) southeast of Florence.	0.55	1957-75	6-16-75	18.36	710
07181500	Middle Creek near Elmdale, Kans.	Lat 38°23'36", long 96°43'04", in SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.13, T.19 S., R.6 E., Chase County, at downstream side of county highway bridge, 4.0 mi (6.4 km) northwest of Elmdale and at mile 8.2 (13.2 km).	92.0	1939-50 $\frac{1}{2}$, 1960-75	6-19-75	17.95	15,000
07182520	Rock Creek at Burlington, Kans.	Lat 38°11'46", long 95°45'24", in NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec.27, T.21 S., R.15 E., Coffey County, at downstream side of culvert on county highway at west city limit of Burlington. Prior to Mar. 18, 1960, at downstream side of county highway bridge (now removed) at the same site and datum.	8.27	1957-75	10-31-74	18.34	1,100
07182600	North Big Creek near Burlington, Kans.	Lat 38°06'37", long 95°45'26", in NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec.27, T.22 S., R.15 E., Coffey County, at downstream side of county highway bridge, 5.9 mi (9.5 km) southwest of Burlington.	46.0	1957-75	11- 1-74	18.95	3,100
07183800	Limestone Creek near Beulah, Kans.	Lat 37°24'12", long 94°53'16", in NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.28, T.30 S., R.23 E., Crawford County, at downstream side of county highway bridge, 4.0 mi (6.4 km) southwest of Beulah.	12.0	1957-75	6-16-75	20.41	6,690
07184500	Labette Creek near Oswego, Kans.	Lat 37°11'30", long 95°11'30", in NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec.11, T.33 S., R.20 E., Labette County, at downstream side of bridge on U.S. Highway 96, 2.0 mi (3.2 km) upstream from St. Louis - San Francisco Railway bridge, 5.0 mi (8.0 km) northwest of Oswego and at mile 18.8 (30.2 km).	211	1939-45 $\frac{1}{2}$, 1961-75	11- 4-74	18.44	8,600
07184600	Fly Creek near Faulkner, Kans.	Lat 37°06'15", long 94°56'21", in NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec.7, T.34 S., R.23 E., Cherokee County, at upstream side of county highway bridge, 3.8 mi (6.1 km) east of Faulkner.	27.0	1957-75	1-31-75	21.89	3,000

‡ Operated as a continuous-record gaging station.

DISCHARGE AT PARTIAL-RECORD STATIONS

Flood hydrograph stations

The following table contains stage and discharge for indicated times at flood hydrograph stations. Records of stage above the elevation of the base discharge are obtained from a water-stage recorder. The base is selected so that an average of about three floods a year can be presented. A stage-discharge relation for each gage is developed from discharge measurements made by indirect measurements of peak discharge or by current meter. The maximum discharge for each water year is given although it may not be above the base.

KANSAS RIVER BASIN

06870300 GYPSUM CREEK NEAR GYPSUM, KS

LOCATION.--Lat 38°39'11", long 97°25'10", in SE¼SE¼SW¼ sec.15, T.16 S., R.1 W., Saline County, 3.5 mi (5.6 km) south of Gypsum, and 22.7 mi (36.5 km) upstream from mouth. DRAINAGE AREA.--120 mi² (311 km²), approximately. PERIOD OF RECORD.--October 1954 to September 1971, continuous record. October 1971 to current year, flood hydrograph record.

GAGE HEIGHT, IN FEET, AND DISCHARGE, IN CUBIC FEET PER SECOND, AT INDICATED TIME, 1975 WATER YEAR

DATE	HOUR	GAGE HEIGHT	DIS- CHARGE	DATE	HOUR	GAGE HEIGHT	DIS- CHARGE
OCT. 12	0700	12.30	446	JUNE 22	2400	16.46	1,280
	0800	13.17	507				
	1000	14.13	593	JUNE 23	0300	15.14	772
	1200	14.55	652		0600	13.17	507
	1300	14.58	657		0700	13.03	497
	1400	14.43	634		0900	14.41	632
	1600	13.20	509		1200	15.58	904
	1700	12.09	431		1500	16.29	1,200
					1800	16.61	1,360
JUNE 22	0500	12.26	443		2100	16.78	1,440
	0600	13.35	520	JUNE 24	2300	16.85	1,480
	0900	14.79	688		2400	16.83	1,460
	1200	15.56	898				
	1500	16.06	1,080		0300	16.37	1,240
	1800	16.42	1,260		0600	14.88	706
	2100	16.72	1,410		0900	12.07	430

PEAK DISCHARGE (BASE, 650 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
10-12	1300	14.58	657	06-23	2300	16.85	1,480
06-22	2100	16.72	1,410				

ARKANSAS RIVER BASIN

07139000 ARKANSAS RIVER AT GARDEN CITY, KS

LOCATION.--Lat 37°57'21", long 100°52'37", in NW¼SE¼NW¼ sec.19, T.24 S., R.32 W., Finney County, at downstream side of bridge on U.S. Highway 83, 0.5 mi (0.8 km) south of Garden City, and at mile 1,024.2 (1,647.9 km). DRAINAGE AREA.--27,071 mi² (70,114 km²), of which about 2,368 mi² (6,133 km²) is probably noncontributing. PERIOD OF RECORD.--June 1922 to June 1970, continuous record. July 1970 to current year, flood hydrograph record. CURRENT YEAR MAXIMUM.--Discharge, 53 ft³/s (1.50 m³/s) May 28, gage height, 1.28 ft (0.390 m).

PEAK DISCHARGE (BASE, 600 CFS).--NO PEAK ABOVE BASE.

SECTION 2. WATER-QUALITY RECORDS

WATER QUALITY RECORDS
PART 6. MISSOURI RIVER BASIN

KANSAS RIVER BASIN

06846500 BEAVER CREEK AT CEDAR BLUFFS, KS

LOCATION.--Lat 39°59'06", long 100°33'35", in NW¼ sec.10, T.1 S., R.29 W., Decatur County, at gaging station at bridge on U.S. Highway 83, 0.2 mi (0.3 km) north of Cedar Bluffs, and 1.0 mi (1.6 km) south of Kansas-Nebraska State line at mile 107.4 (172.8 km).

DRAINAGE AREA.--1,618 mi² (4,191 km²), of which 294 mi² (761 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: October 1961 to September 1962, October 1963 to September 1970.

Water temperatures: October 1961 to September 1965.

Sediment records: October 1961 to September 1974.

WATER QUALITY DATA: WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	SUS- PENDE SEDIM- ENT CHARGE (MG/L)	SUS- PENDE SEDIM- ENT CHARGE (T/DAY)									
JUNE													
03...	1440	33	688	61									
09...	1950	138	1780	663									
11...	1640	80	701	151									
19...	1850	172	2350	1090									
JULY													
09...	1505	16	234	10									
AUG.													
02...	0910	124	760	254									

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	SUS- PENDE SEDIM- ENT (MG/L)	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .062 MM	SUS. SED. FALL DIAM. % FINER THAN .125 MM	SUS. SED. FALL DIAM. % FINER THAN .250 MM	SUS. SED. FALL DIAM. % FINER THAN .500 MM	SUS. SED. FALL DIAM. % FINER THAN 1.00 MM	SUS. SED. FALL DIAM. % FINER THAN 2.00 MM
JUNE												
03...	1440	33	688	94	96	98	99	100	--	--	--	--
09...	1950	138	1780	75	88	97	99	100	--	--	--	--
11...	1640	80	701	81	86	91	96	100	--	--	--	--
19...	1850	172	2350	78	88	96	99	100	--	--	--	--

KANSAS RIVER BASIN

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06847950 NORTON RESERVOIR NEAR NORTON, KS

LOCATION.--Lat 39°48'27", Long 99°56'04", in SW¼NW¼ sec.8, T.3 S., R.23 W., Norton County, 3.0 mi (4.8 km) southwest of Norton.

DRAINAGE AREA.--683 mi² (1,769 km²).

PERIOD OF RECORD.--Chemical analyses: July 1970 to September 1975.

REMARKS.--Samples are collected at outlet to Norton water supply conduit.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	RESER- VOIR STORAGE (AC-FT)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)
APR. 16...	4330	8.9	10	0	61	21	21	18	290	0
JULY 15...	10820	11	90	0	42	8.9	8.0	17	177	0

DATE	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT) (MG/L)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO
APR. 16...	44	21	.4	.06	80	351	.48	240	2	.6
JULY 15...	15	7.7	.2	.21	50	204	.28	140	0	.3

DATE	RESER- VOIR STORAGE (AC-FT)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)	TUR- BID- ITY (JTU)
OCT. 24...	3450	15.5	--	542	7.4	2	1	15
JAN. 16...	3370	5.5	--	637	7.9	49	4	6
APR. 16...	4330	11.0	10.8	752	8.3	<3	1	10
MAY 13...	4360	16.0	7.0	565	7.4	--	--	17
JUNE 12...	7840	22.0	6.8	475	7.8	--	--	20
JULY 15...	10820	24.5	--	362	7.7	11	7	10
AUG. 28...	10360	26.0	6.8	374	7.8	--	--	30
SEP. 15...	10030	20.0	7.4	356	7.3	--	--	40

LOCATION.--Lat 39°48'36", long 99°55'18", in NW¼NW¼ sec.9, T.3 S., R.23 W., Norton County, 0.9 mi (1.4 km) downstream from Norton Dam, 2.0 mi (3.2 km) southwest of Norton, and at mile 74.0 (119.1 km).

DRAINAGE AREA.--684 mi² (1,772 km²).

PERIOD OF RECORD.--Chemical analyses: October 1948 to September 1949, September 1957 to June 1958, October 1961 to September 1963, February 1970 to September 1975 (discontinued).

REMARKS.--Chemical analyses by Kansas Department of Health and Environment, Topeka, Ks.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)
NOV. 20...	.04	4.0	35	67	19	25	8.8	310	0	30	18	.4
DEC. 13...	.06	2.5	24	62	20	22	13	290	0	33	19	.5
MAR. 18...	.07	6.0	25	45	11	14	4.5	190	0	16	11	.3
APR. 09...	.04	8.5	32	64	16	25	8.8	300	0	25	16	.5
MAY 06...	.01	18.5	5.4	40	18	31	11	250	0	20	18	.7
JULY 09...	141	25.0	9.8	40	12	8.0	14	170	0	18	12	.4
AUG. 02...	12	25.0	14	45	10	8.5	16	200	0	13	11	.4
29...	67	24.0	14	45	6.7	8.0	15	180	0	19	8.0	.4
SEP. 17...	44	17.0	31	64	14	20	9.8	290	0	17	13	.3

DATE	DIS- SOLVED NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER DAY)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	TUR- BID- ITY (JTU)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)
NOV. 20...	.02	.04	140	367	.04	.50	2	250	0	.7	550
DEC. 13...	.07	.07	150	348	.06	.47	6	236	0	.6	550
MAR. 18...	.02	.08	110	226	.04	.31	3	160	0	.5	350
APR. 09...	.07	.10	150	336	.04	.46	8	230	0	.7	530
MAY 06...	.02	.10	150	274	.01	.37	4	170	0	1.0	470
JULY 09...	.34	.36	60	216	82.2	.29	25	150	8	.3	360
AUG. 02...	.27	.25	60	205	6.97	.28	45	150	0	.3	390
29...	.38	.29	30	205	37.5	.28	35	140	0	.3	370
SEP. 17...	.11	.15	110	324	38.5	.44	29	220	0	.6	520

DATE	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)
APR. 09...	60	0

KANSAS RIVER BASIN

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06848500 PRAIRIE DOG CREEK NEAR WOODRUFF, KS

LOCATION.--Lat 39°59'09", long 99°28'39", in NW¼ sec. 9, T.1 S., R.19 W., Phillips County, at bridge on U.S. Highway 383, 1.0 mi (1.6 km) south of Kansas-Nebraska State line, 2.5 mi (4.0 km) west of Woodruff, and at mile 26.5 (42.6 km).

DRAINAGE AREA.--1,007 mi² (2,608 km²).

PERIOD OF RECORD.--Chemical analyses: October 1967 to September 1975 (discontinued).

REMARKS.--Chemical analyses by Kansas Department of Health and Environment, Topeka, Ks.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)
OCT.												
11...	.27	15.0	20	180	42	79	26	460	0	360	43	.3
NOV.												
26...	1.9	4.0	31	140	26	40	17	460	0	130	36	.3
DEC.												
11...	1.6	.0	26	150	31	49	18	490	0	170	42	.2
JAN.												
16...	1.1	.0	32	160	29	45	16	520	0	130	41	.3
FEB.												
25...	6.8	.0	31	130	27	36	15	430	0	93	35	.3
MAR.												
20...	7.5	2.0	17	80	15	26	10	280	0	54	27	.3
APR.												
17...	3.1	12.0	9.4	120	22	34	15	420	0	82	31	.2
MAY												
28...	20	15.0	21	120	29	32	17	420	9	84	29	.4
JUNE												
25...	6.8	24.0	22	54	5.2	7.0	15	190	0	19	9.0	.4
JULY												
16...	5.7	22.0	18	61	8.8	12	17	220	0	30	14	.4
AUG.												
06...	4.9	23.0	17	59	11	13	18	220	0	34	14	.4
SEP.												
10...	.70	22.0	23	120	25	44	23	410	0	140	32	.3

DATE	DIS- SOLVED NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER DAY)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	TUR- BID- ITY (JTU)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)
OCT.											
11...	.90	.13	230	1000	.73	1.36	8	620	250	1.4	1410
NOV.											
26...	1.6	.46	180	680	3.49	.92	1	466	88	.8	1030
DEC.											
11...	2.5	.39	170	762	3.29	1.04	7	510	104	1.0	1120
JAN.											
16...	2.9	.68	230	736	2.19	1.00	1	510	86	.9	1120
FEB.											
25...	2.5	.78	140	611	11.2	.83	65	430	74	.8	920
MAR.											
20...	.50	.68	170	390	7.90	.53	3	260	31	.7	620
APR.											
17...	.07	.42	210	518	4.34	.70	8	380	38	.7	850
MAY											
28...	.54	.72	110	550	30.4	.75	65	410	53	.7	850
JUNE											
25...	.79	.68	60	246	4.52	.33	750	160	2	.2	400
JULY											
16...	.59	.46	120	286	4.40	.39	200	190	10	.4	480
AUG.											
06...	.68	.46	120	277	3.66	.38	250	190	14	.4	480
SEP.											
10...	1.1	.38	180	644	1.22	.88	37	400	66	1.0	960

DATE	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)
OCT.		
11...	110	50
APR.		
17...	80	260

06853000 REPUBLICAN RIVER NEAR GUIDE ROCK, NEBR.

LOCATION.--Lat 40°04'05", long 98°22'25", in SW¼NE¼ sec.7, T.1 N., R.9 W., Webster County, at gaging station, 300 feet (91 m) upstream from Willow Creek, 0.2 mi (0.3 km) downstream from Courtland diversion dam, and 2.0 mi (3.2 km) southwest of Guide Rock.

DRAINAGE AREA.--22,060 mi² (57,140 km²), approximately, of which a large area does not contribute directly to surface runoff.

PERIOD OF RECORD.--Chemical analyses: November 1961 to September 1975.

REMARKS.--Additional chemical analyses by Kansas Department of Health and Environment, Topeka, Ks.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975¹

DATE	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)
OCT.												
10...	91	21.5	24	78	17	31	11	260	0	90	20	.3
NOV.												
18...	108	8.0	28	88	16	28	9.2	290	0	85	20	.3
DEC.												
16...	114	.5	31	88	13	28	8.5	280	0	78	19	.3
JAN.												
20...	140	1.0	29	78	13	25	7.5	260	0	70	17	.3
FEB.												
19...	115	.5	31	83	16	26	8.0	280	0	69	18	.3
MAR.												
31...	122	11.5	28	88	18	29	9.0	290	0	90	23	.3
APR.												
21...	145	18.5	23	80	16	29	8.8	270	0	84	20	.3
MAY												
21...	1.0	29.0	29	77	13	25	8.5	260	0	58	22	.3
JUNE												
16...	271	26.5	26	85	15	31	12	280	0	92	22	.4
JULY												
23...	497	27.5	12	43	14	25	15	180	0	52	18	.6
AUG.												
18...	205	29.0	15	61	14	34	15	240	0	79	19	.7
SEP.												
22...	159	21.0	27	70	17	33	12	250	0	88	22	.3

DATE	DIS- SOLVED NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER DAY)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	TUR- BID- ITY (JTU)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)
OCT.											
10...	4.1	.14	110	630	155	.86	85	264	50	.8	630
NOV.											
18...	.56	.19	140	438	128	.60	35	290	48	.7	660
DEC.											
16...	.95	.25	170	424	131	.58	15	270	41	.7	640
JAN.											
20...	.79	.21	110	382	144	.52	45	250	36	.7	580
FEB.											
19...	1.0	.19	90	415	129	.56	7	270	43	.7	630
MAR.											
31...	.34	.17	140	436	144	.59	15	290	58	.7	660
APR.											
21...	.50	.16	140	400	157	.54	7	260	48	.8	620
MAY											
21...	.14	.16	80	375	1.01	.51	7	250	34	.7	570
JUNE											
16...	.54	.28	90	424	310	.58	65	270	46	.8	690
JULY											
23...	.79	.23	150	283	380	.38	900	170	15	.8	480
AUG.											
18...	.29	.20	90	346	192	.47	45	210	13	1.0	600
SEP.											
22...	.54	.25	150	415	178	.56	60	250	40	.9	630

DATE	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)
OCT.		
10...	70	--
APR.		
21...	60	0

¹KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT.

06853000 REPUBLICAN RIVER NEAR GUIDE ROCK, NE.--Continued

WATER QUALITY DATA: WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)
OCT.										
29...	112	31	20	50	79	15	31	11	280	--
NOV.										
25...	103	--	--	--	--	--	--	--	--	--
DEC.										
23...	128	--	--	--	--	--	--	--	--	--
JAN.										
20...	139	28	30	20	77	14	25	9.1	265	--
FEB.										
18...	109	--	--	--	--	--	--	--	--	--
MAR.										
12...	142	--	--	--	--	--	--	--	--	--
APR.										
14...	171	20	10	0	75	14	28	9.4	254	0
MAY										
27...	45	--	--	--	--	--	--	--	--	--
JUNE										
24...	1200	--	--	--	--	--	--	--	--	--
JULY										
22...	345	10	90	20	45	15	31	16	201	0
AUG.										
20...	171	--	--	--	--	--	--	--	--	--
SEP.										
16...	30	--	--	--	--	--	--	--	--	--

DATE	ALKA- LITY AS CAC03 (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)
OCT.										
29...	230	80	17	.4	.56	.55	.09	.46	.55	1.1
NOV.										
25...	--	--	17	--	1.1	1.1	.06	.37	.43	1.5
DEC.										
23...	--	--	16	--	1.3	1.3	.09	.36	.45	1.8
JAN.										
20...	217	74	16	.3	1.2	1.2	.10	.53	.63	1.8
FEB.										
18...	--	--	16	--	1.4	1.3	.09	.32	.41	1.8
MAR.										
12...	--	--	19	--	1.3	1.3	.09	.44	.53	1.8
APR.										
14...	208	78	18	.3	.47	.46	.06	.26	.32	.79
MAY										
27...	--	--	18	--	.27	.27	.04	1.4	1.4	1.7
JUNE										
24...	--	--	7.3	--	.91	.91	.13	6.3	6.4	7.3
JULY										
22...	165	66	17	.7	.42	--	.00	1.1	1.1	1.5
AUG.										
20...	--	--	17	--	.65	--	.00	.67	.67	1.3
SEP.										
16...	--	--	18	--	.78	--	.00	.47	.47	1.3

DATE	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOL- VED- PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO
OCT.									
29...	.16	.16	--	405	.55	122	260	29	.8
NOV.									
25...	.22	.17	424	--	.58	118	--	--	--
DEC.									
23...	.25	.13	413	--	.56	143	--	--	--
JAN.									
20...	.21	.15	--	380	.52	143	250	33	.7
FEB.									
18...	.16	.12	398	--	.54	117	--	--	--
MAR.									
12...	.55	.30	437	--	.59	168	--	--	--
APR.									
14...	.14	.09	--	370	.50	171	250	37	.8
MAY									
27...	.20	.09	401	--	.55	48.7	--	--	--
JUNE									
24...	.81	.30	201	--	.27	651	--	--	--
JULY									
22...	.32	.12	--	300	.41	279	170	9	1.0
AUG.									
20...	.24	.15	356	--	.48	164	--	--	--
SEP.									
16...	.18	.19	431	--	.59	34.9	--	--	--

KANSAS RIVER BASIN

06853000 REPUBLICAN RIVER NEAR GUIDE ROCK, NE.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLIFORM (COL. PER 100 ML)	STREPTOCOCCI (COLONIES PER 100 ML)
OCT. 29...	647	8.1	15.0	10	--	--	2.0	--	--
NOV. 25...	653	8.0	4.5	--	15	12.9	1.8	<3	160
DEC. 23...	600	8.1	2.0	--	15	14.5	1.3	4	120
JAN. 20...	591	7.7	1.0	0	--	--	2.6	--	--
FEB. 18...	623	8.0	.0	--	8	13.8	2.1	44	41
MAR. 12...	641	8.1	3.0	--	20	13.8	1.9	<3	16
APR. 14...	597	8.1	9.0	2	10	12.4	.9	490	240
MAY 27...	596	8.2	21.0	--	20	9.8	3.6	370	420
JUNE 24...	307	7.5	22.0	--	180	7.0	5.3	>50000	29000
JULY 22...	497	7.5	27.0	35	70	7.6	2.2	>12000	20400
AUG. 20...	580	7.9	25.0	--	30	8.1	4.8	580	600
SEP. 16...	630	8.0	16.0	--	10	9.6	--	7600	380

DATE	DISSOLVED ARSENIC (AS) (UG/L)	DISSOLVED BORON (B) (UG/L)	DISSOLVED CADMIUM (CD) (UG/L)	DISSOLVED CHROMIUM (CR) (UG/L)	DISSOLVED COPPER (CU) (UG/L)	DISSOLVED LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DISSOLVED MERCURY (HG) (UG/L)	DISSOLVED SELENIUM (SE) (UG/L)	DISSOLVED SILVER (AG) (UG/L)	DISSOLVED ZINC (ZN) (UG/L)
JAN. 20...	7	40	0	10	3	2	--	--	3	0	50
JULY 22...	6	100	3	0	10	3	3.1	3.1	2	0	100

06856000 REPUBLICAN RIVER AT CONCORDIA, KS

LOCATION.--Lat 39°35'25", long 97°39'32", in SW $\frac{1}{4}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec.28, T.5 S., R.3 W., Cloud County, at gaging station at bridge on U.S. Highway 81, 1.0 mi (1.6 km) north of Concordia, 3.4 mi (5.5 km) downstream from Buffalo Creek, and at mile 98.5 (158.5 km).

DRAINAGE AREA.--23,560 mi² (61,020 km²), of which about 7,500 mi² (19,400 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: October 1961 to September 1975 (discontinued).

REMARKS.--Chemical analyses by Kansas Department of Health and Environment, Topeka, Ks.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)
OCT. 22...	136	14.0	23	100	18	62	11	320	0	130	49	.4
NOV. 15...	174	4.0	28	110	18	68	10	350	0	130	60	.3
DEC. 10...	169	.0	27	110	19	67	9.5	350	0	140	59	.3
JAN. 15...	132	.0	30	120	20	70	11	380	0	130	63	.3
FEB. 25...	256	1.5	26	100	17	63	8.8	310	0	120	65	.2
MAR. 26...	288	1.0	23	110	16	75	10	300	0	150	79	.3
APR. 15...	252	12.0	20	100	16	67	9.8	290	0	160	58	.3
MAY 16...	130	24.0	19	93	24	92	13	280	0	170	93	.4
JUNE 11...	2020	18.0	14	48	5.8	29	10	140	0	58	34	.4
24...	4440	24.0	14	43	3.0	13	10	130	0	34	14	.4
JULY 21...	376	25.0	14	75	17	52	15	250	0	120	40	.6
AUG. 19...	394	27.0	14	70	14	51	15	240	0	110	37	.6
SEP. 12...	150	20.0	23	90	20	55	15	310	0	130	38	.5

DATE	DIS- SOLVED NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER DAY)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	TUR- BID- ITY (JTU)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)
OCT. 22...	.45	.30	140	580	213	.79	8	330	60	1.5	870
NOV. 15...	.61	.32	150	630	296	.86	7	350	62	1.6	950
DEC. 10...	1.3	.26	170	638	291	.87	7	360	76	1.6	960
JAN. 15...	1.6	.28	170	660	235	.90	3	390	79	1.6	1010
FEB. 25...	1.5	.24	120	570	394	.78	2	320	74	1.5	900
MAR. 26...	.75	.32	140	620	482	.84	65	340	94	1.8	970
APR. 15...	.47	.29	170	580	395	.79	15	330	90	1.6	900
MAY 16...	.20	.24	150	666	234	.91	25	330	96	2.2	1030
JUNE 11...	.95	.39	30	285	1550	.39	2000	140	32	1.1	470
24...	.95	.36	40	220	2640	.30	2000	120	14	.5	360
JULY 21...	.23	.23	180	458	465	.62	95	260	55	1.4	760
AUG. 19...	.61	.32	90	412	438	.56	200	230	36	1.5	720
SEP. 12...	.68	.96	240	550	223	.75	35	310	53	1.4	840

DATE	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)
OCT. 22...	110	0
APR. 15...	240	140

KANSAS RIVER BASIN

06856600 REPUBLICAN RIVER AT CLAY CENTER, KS
(National stream-quality accounting network station)

LOCATION.--Lat 39°21'20", long 97°07'34", in SW 1/4 sec. 17, T.8 S., R.3 E., Clay County at gaging station at bridge on State Highway 15, 1.0 mi (1.6 km) south of Clay Center, 4.0 mi (6.4 km) downstream from Five Creeks, and at mile 38.2 (61.5 km).

DRAINAGE AREA.--24,542 mi² (63,564 km²), of which about 7,500 mi² (19,400 km²) is noncontributing.

PERIOD OF RECORD.--Chemical analyses: January 1973 to September 1975.

Water temperatures: February 1973 to September 1975.

EXTREMES.--1974-75:

Specific conductance: Maximum daily, 1,180 micromhos May 12, 13; minimum daily, 220 micromhos June 22.

Water temperatures: Maximum, 31°C July 6; minimum, 3.0°C on many days during winter months.

Period of record:

Specific conductance: Maximum daily, 1,380 micromhos February 21, 1973; minimum daily, 124 micromhos September 27, 1973.

Water temperatures: Maximum, 32°C July 8, 9, 1974; 1.0°C on several days during February 1973.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HC03) (MG/L)	CAR- BONATE (C03) (MG/L)	DIS- SOLVED SULFATE (S04) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT.										
10...	140	21	110	22	70	13	303	3	140	66
NOV.										
13...	228	25	100	18	63	6.9	320	2	130	60
DEC.										
10...	222	24	110	19	74	10	330	0	140	62
JAN.										
15...	288	27	120	20	81	11	390	0	160	74
FEB.										
12...	360	22	120	29	82	13	340	0	170	93
MAR.										
12...	365	21	94	18	62	9.6	281	0	130	61
APR.										
11...	345	16	98	18	64	10	290	0	130	57
MAY										
13...	195	16	72	23	83	13	293	0	160	77
JUNE										
10...	1740	10	32	6.1	18	9.3	114	0	42	16
JULY										
01...	1210	20	85	13	45	12	237	0	110	39
AUG.										
06...	375	12	56	17	70	15	182	0	130	62
SEP.										
10...	198	13	64	18	67	14	208	0	120	58

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO
OCT.										
10...	.5	.00	1.2	.40	594	.81	225	370	110	1.6
NOV.										
13...	.4	.86	.43	.36	586	.80	361	320	59	1.5
DEC.										
10...	.3	1.1	.63	.31	618	.84	370	350	81	1.7
JAN.										
15...	.4	1.3	.81	.28	715	.97	556	380	60	1.8
FEB.										
12...	.4	1.9	.98	.30	702	.95	682	420	140	1.7
MAR.										
12...	.4	1.2	.80	.33	549	.75	541	310	78	1.5
APR.										
11...	.3	.02	1.2	.29	532	.72	496	320	79	1.6
MAY										
13...	.4	.01	2.7	.26	637	.87	335	270	34	2.2
JUNE										
10...	.3	1.2	4.7	.53	208	.28	977	110	12	.8
JULY										
01...	.4	.59	1.9	.53	438	.60	1430	270	71	1.2
AUG.										
06...	.5	.00	2.0	.25	451	.61	457	210	61	2.1
SEP.										
10...	.5	.03	2.4	.40	477	.65	255	230	63	1.9

06856600 REPUBLICAN RIVER AT CLAY CENTER, KS.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS- SOLVED ARSENIC (AS) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	TOTAL CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	TOTAL COBALT (CO) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)	TOTAL COPPER (CU) (UG/L)	DIS- SOLVED IRON (FE) (UG/L)
OCT. 10...	6	7	2	10	0	0	0	50	3	10	10
JAN. 15...	6	4	1	10	0	20	1	50	4	200	20
APR. 11...	8	7	4	10	0	0	0	50	3	10	20
JULY 01...	8	15	1	<10	0	10	0	<50	5	<10	30

DATE	TOTAL IRON (FE) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	TOTAL LEAD (PB) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DIS- SOLVED SELF- NIUM (SE) (UG/L)	TOTAL SELF- NIUM (SE) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)	TOTAL ZINC (ZN) (UG/L)
OCT. 10...	860	4	100	20	180	.2	.4	2	3	20	110
JAN. 15...	360	10	100	50	70	.0	.3	3	2	20	40
APR. 11...	2500	14	100	0	110	.0	--	3	3	20	20
JULY 01...	5700	4	<100	0	180	2.0	.0	2	3	10	110

DATE	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	PH (UNITS)	DIS- SOLVED OXYGEN (MG/L)	TUR- BID- ITY (JTU)
OCT. 10...	8220	150	1040	19.5	8.5	--	10
NOV. 13...	550	20	936	7.5	8.6	11.2	15
DEC. 10...	<30	<10	1110	3.5	8.1	12.0	4
JAN. 15...	2700	83	1240	1.0	7.9	11.8	15
FEB. 12...	1000	340	1420	1.5	7.7	12.1	40
MAR. 12...	930	280	1050	5.5	8.0	12.6	25
APR. 11...	380	1600	848	8.0	8.0	11.2	25
MAY 13...	87	170	1000	17.5	8.5	9.5	25
JUNE 10...	22000	36000	292	19.0	7.8	8.3	170
JULY 01...	1400	660	705	28.0	8.4	7.9	110
AUG. 06...	1200	540	784	27.0	8.1	8.7	40
SEP. 10...	13	170	780	23.0	7.8	8.1	45

DATE	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL PHYTO- PLANK- TON (CELLS PER ML)	PERI- PHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M	UNCOR- RECTED PERI- PHYTON CHLORO- PHYLL A MG/SQ M	UNCOR- RECTED PERI- PHYTON CHLORO- PHYLL B MG/SQ M	PERI- PHYTON BIOMASS ASH WEIGHT G/SQ M
OCT. 10...	9.8	55000	--	--	--	--
NOV. 13...	--	7400	--	--	--	--
DEC. 10...	--	4300	--	--	--	--
JAN. 15...	3.8	550	--	--	--	--
FEB. 12...	--	4600	--	--	--	--
MAR. 12...	--	3800	--	--	--	--
APR. 11...	8.2	21000	--	--	--	--
MAY 13...	--	94000	--	--	--	--
JUNE 10...	--	9300	--	--	--	--
JULY 01...	14	26000	2.3	.1	.0	1.8
AUG. 06...	--	220000	--	--	--	--
SEP. 10...	--	84000	24	5.2	1.0	21

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C) , WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1050	1020	1020	997	888	616	956	993	487	732	702	727
2	1040	1060	996	961	932	477	897	1140	511	700	764	729
3	1030	958	1010	968	928	397	900	1110	464	662	620	743
4	1050	952	997	1000	914	468	943	1070	384	662	617	758
5	1060	937	1040	1020	940	553	980	979	457	661	662	678
6	1020	913	1020	982	722	673	956	984	404	664	649	615
7	1020	936	999	1000	718	731	910	1000	458	657	622	622
8	1020	970	961	975	860	761	931	1050	445	655	606	736
9	979	913	998	967	1000	772	800	1080	241	641	627	747
10	1020	915	970	1020	1080	799	837	1060	333	630	648	756
11	1050	917	985	1080	1040	819	875	1060	384	635	640	710
12	1010	924	1020	1050	1120	855	896	1080	369	639	653	707
13	993	948	984	1030	1160	832	866	1080	434	661	646	751
14	1010	975	924	1040	1160	912	796	1070	517	667	575	777
15	983	994	908	1080	1110	924	617	1070	562	666	575	795
16	979	995	906	1080	1110	932	737	1100	616	671	499	805
17	1010	1010	912	1100	1120	913	839	1090	669	682	540	814
18	1020	1030	919	1070	1090	854	788	1100	557	651	625	814
19	1030	1010	956	1010	1070	653	501	1180	265	678	665	822
20	1010	995	977	1050	1060	486	711	1180	504	669	657	833
21	1000	988	919	1060	1030	546	846	1160	350	679	649	848
22	1020	982	961	1060	1010	709	1020	1170	220	692	666	866
23	1020	991	948	1040	1000	785	1030	1160	221	648	682	881
24	1010	989	878	972	994	821	953	1160	286	614	692	895
25	1010	999	997	907	963	889	937	1160	318	521	694	920
26	996	999	1010	835	933	902	936	1150	292	569	703	914
27	1010	997	988	838	832	915	940	1160	413	590	724	905
28	991	1010	1000	855	661	895	945	1030	554	630	748	898
29	984	996	998	891	---	796	939	1020	590	646	749	869
30	958	1000	1020	899	---	855	921	812	643	641	719	798
31	949	---	992	885	---	940	---	478	---	665	734	---
AVERAGE	1010	977	975	991	980	757	873	1060	432	651	657	791

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14.0	13.5	3.0	3.5	3.0	4.0	6.0	17.0	17.5	29.5	27.5	27.5
2	13.0	11.5	3.0	4.0	3.0	4.0	4.0	17.5	19.0	28.5	27.5	27.0
3	15.0	10.0	3.0	4.0	3.0	3.0	6.0	18.5	21.0	29.0	28.0	26.0
4	18.0	9.0	3.5	4.0	3.0	3.5	9.0	20.5	22.0	30.0	28.0	25.5
5	18.5	8.0	4.5	4.5	3.0	5.0	12.0	21.0	23.0	30.5	28.5	24.0
6	15.0	7.5	6.0	4.5	3.0	4.5	12.5	23.0	24.5	31.0	27.5	23.0
7	12.5	8.5	5.0	4.5	3.0	5.0	10.0	21.0	25.0	30.0	26.0	23.5
8	13.5	9.5	3.0	4.5	3.0	4.5	11.0	20.5	23.5	30.5	26.5	24.0
9	15.5	10.0	3.0	4.5	3.0	3.5	12.5	21.5	19.5	29.5	27.5	24.0
10	19.5	10.5	3.0	4.0	3.0	3.5	11.0	22.0	19.5	29.0	28.0	23.5
11	18.0	8.5	4.0	4.0	3.0	4.0	10.0	21.0	19.5	26.5	28.0	20.5
12	15.5	7.0	4.0	4.0	3.0	4.5	11.0	20.5	21.0	25.0	26.5	18.0
13	13.5	7.0	4.0	3.5	3.0	4.0	10.5	17.5	24.0	25.0	25.0	19.0
14	12.5	5.5	4.0	3.5	3.0	4.0	10.0	19.5	25.0	26.0	25.0	16.5
15	11.5	5.5	3.0	3.5	3.0	5.0	12.0	21.5	23.5	26.0	26.0	16.0
16	13.5	7.5	3.0	3.0	3.0	8.0	16.0	22.0	23.5	26.5	26.5	18.5
17	15.0	8.0	3.5	3.0	3.0	8.5	19.5	22.5	25.5	26.5	27.5	20.5
18	15.0	9.0	3.0	3.0	3.0	10.0	14.5	24.0	24.0	27.0	27.5	19.0
19	13.5	9.5	3.0	3.0	3.0	10.0	12.0	25.0	22.0	28.0	28.0	18.0
20	13.5	8.0	3.0	3.0	3.0	11.5	14.0	23.0	24.0	29.0	29.0	16.5
21	13.0	8.0	3.0	3.0	3.0	12.5	16.5	24.5	24.5	29.0	29.0	16.5
22	14.5	9.0	4.0	3.0	3.0	11.5	16.5	25.5	23.0	28.5	29.0	16.5
23	16.5	8.0	3.5	3.0	3.0	11.0	20.5	23.5	22.5	28.0	28.5	17.0
24	17.0	5.5	3.0	3.0	3.0	6.5	21.5	24.0	23.5	28.0	28.0	15.0
25	16.5	5.5	3.0	3.0	3.0	5.5	21.0	24.5	24.5	26.5	25.0	15.5
26	15.5	6.0	3.0	3.0	3.0	5.0	21.0	22.5	25.0	27.0	23.0	16.0
27	16.0	5.5	3.0	3.0	3.5	8.5	20.0	21.5	25.5	29.0	26.0	15.5
28	15.5	4.5	3.0	3.0	3.5	7.0	18.0	20.5	26.0	30.0	25.5	14.5
29	15.5	3.0	3.0	3.0	---	5.5	19.0	19.0	26.5	29.5	27.0	15.0
30	16.0	3.0	3.5	3.0	---	7.0	18.0	17.5	27.0	28.5	28.5	15.5
31	15.0	---	3.5	3.0	---	9.5	---	17.0	---	28.5	28.0	---
AVERAGE	15.0	7.5	3.5	3.5	3.0	6.5	14.0	21.5	23.0	28.5	27.0	19.5

06857100 REPUBLICAN RIVER BELOW MILFORD DAM, KS

LOCATION.--Lat 39°04'15", long 96°52'00", Geary County, at gaging station at bridge on U.S. Highway 77, 1.7 mi (2.7 km) below Milford Dam, 2.5 mi (4.0 km) northwest of Junction City, and at mile 6.0 (9.7 km).

DRAINAGE AREA.--24,890 mi² (64,470 km²), of which a large area is noncontributing.

PERIOD OF RECORD.--Chemical analyses: July 1964 to September 1975 (discontinued).

REMARKS.--Chemical analyses by Kansas Department of Health and Environment, Topeka, Ks.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)
OCT.												
08...	453	16.5	1.8	67	18	57	10	210	0	120	56	.5
NOV.												
13...	68	12.0	1.8	69	18	58	10	210	0	130	54	.4
DEC.												
12...	46	6.0	2.0	69	20	58	11	220	0	120	54	.4
JAN.												
08...	43	2.5	2.4	70	20	58	10	220	0	120	55	.5
FEB.												
14...	189	1.0	2.4	74	18	57	10	220	0	130	56	.4
MAR.												
24...	375	4.5	4.0	74	21	61	9.8	230	0	130	57	.3
APR.												
15...	300	7.5	3.1	70	20	59	9.5	220	0	130	55	.4
MAY												
15...	69	15.0	1.6	72	18	57	10	220	0	120	55	.4
JUNE												
09...	1490	21.0	1.8	67	20	56	9.8	220	0	120	56	.4
JULY												
15...	4410	25.0	3.4	62	14	48	9.8	200	0	100	47	.4
AUG.												
13...	178	25.0	4.6	58	13	44	11	180	0	92	43	.4
SEP.												
09...	724	25.0	5.4	56	14	44	11	180	0	95	42	.5

DATE	DIS- SOLVED NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER DAY)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	TUR- BID- ITY (JTU)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)
OCT.											
08...	.07	.10	90	450	550	.61	8	240	67	1.6	760
NOV.											
13...	.23	.07	120	464	85.2	.63	8	250	74	1.6	740
DEC.											
12...	.27	.07	120	465	57.8	.63	7	250	74	1.6	750
JAN.											
08...	.27	.11	120	463	53.8	.63	1	260	76	1.6	760
FEB.											
14...	.14	.08	120	470	240	.64	1	260	74	1.5	770
MAR.											
24...	.32	.10	170	495	501	.67	6	270	79	1.6	770
APR.											
15...	.09	.05	140	473	383	.64	3	260	76	1.6	750
MAY											
15...	.20	.08	110	465	86.6	.63	3	250	76	1.6	750
JUNE											
09...	.20	.07	80	460	1850	.63	1	250	73	1.5	760
JULY											
15...	.32	.11	120	394	4690	.54	3	210	52	1.4	670
AUG.											
13...	.18	.11	120	357	172	.49	8	200	50	1.4	630
SEP.											
09...	.20	.06	170	380	743	.52	12	200	50	1.4	610

DATE	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)
OCT.		
08...	60	0
APR.		
15...	40	0

LOCATION.--Lat 38°47'30", long 99°43'20", in NW¼NE¼ sec.1, T.15 S., R.22 W., Trego County, at gaging station, 0.2 mi (0.3 km) downstream from Cedar Bluff Dam, 14 mi (23 km) southwest of Ellis, and at mile 333.4 (536.4 km).

DRAINAGE AREA.--5,530 mi² (14,320 km²), approximately.

PERIOD OF RECORD.--Chemical analyses: October 1961 to September 1975.

REMARKS.--Samples are collected 500 feet (152 m) downstream from gaging station and downstream from fish hatchery wasteway. Chemical analyses by Kansas Department of Health and Environment, Topeka, Ks. Flow regulated by Cedar Bluff Reservoir. Field analyses by U.S. Geological Survey are for samples collected at outlet to the fish hatchery. Chemical analyses by Kansas Department of Health and Environment were discontinued September 1975.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)
OCT. 16...	1.2	14.5	8.2	160	32	46	18	140	0	460	36	.8
NOV. 11...	.19	10.5	10	160	34	56	15	160	0	490	37	.8
DEC. 10...	1.8	4.0	8.0	160	33	52	16	140	0	460	36	.8
JAN. 08...	2.3	4.0	9.4	160	31	50	16	140	0	460	37	.8
FEB. 18...	1.9	4.0	9.4	160	33	51	17	150	0	460	37	.8
MAR. 19...	3.0	16.0	8.6	160	33	54	15	150	0	480	38	.8
APR. 08...	1.3	17.5	8.4	160	32	54	16	140	0	490	37	.8
MAY 13...	1.1	16.0	9.2	160	36	54	17	150	0	480	36	.8
JUNE 16...	7.9	28.0	6.6	140	30	51	17	100	0	430	38	.9
JULY 16...	2.9	28.0	10	150	37	48	17	140	0	450	36	.8
AUG. 12...	1.1	27.0	14	170	35	52	17	170	0	490	37	.9
SEP. 16...	1.7	18.0	11	160	29	48	17	150	0	440	37	.7

DATE	DIS- SOLVED NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER DAY)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	TUR- BID- ITY (JTU)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)
OCT. 16...	.09	.03	150	848	2.75	1.15	1	530	420	.9	1150
NOV. 11...	.05	.05	240	900	.48	1.22	2	550	420	1.0	1230
DEC. 10...	.07	.07	200	860	4.18	1.17	1	530	410	1.0	1180
JAN. 08...	.05	.09	200	854	5.30	1.16	1	520	400	.9	1180
FEB. 18...	.05	.05	170	862	4.42	1.17	1	530	410	1.0	1170
MAR. 19...	.05	.04	180	890	7.21	1.21	1	540	410	1.0	1180
APR. 08...	.05	.04	200	900	3.16	1.22	6	540	420	1.0	1210
MAY 13...	.02	.03	180	898	2.67	1.22	2	550	430	1.0	1230
JUNE 16...	.05	.04	140	780	16.6	1.06	3	470	380	1.0	1120
JULY 16...	.02	.04	180	828	6.48	1.13	1	520	410	.9	1160
AUG. 12...	.05	.04	140	936	2.78	1.27	2	570	430	.9	1270
SEP. 16...	.02	.04	200	870	3.99	1.18	8	520	400	.9	1180

06862000 SMOKY HILL RIVER AT CEDAR BLUFF DAM, KS.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MANGANESE (MN) (UG/L)
OCT. 16...	150	0
APR. 08...	40	0

DATE	TEMPER- ATURE (DEG C)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TUR- BID- ITY (JTU)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)
OCT. 24...	18.5	1170	8.3	3	7	4
JAN. 16...	2.5	1390	8.1	8	67	4
APR. 17...	23.0	1050	8.1	4	<7	4
JULY 16...	23.5	1110	7.9	10	43	24

LOCATION.--Lat 38°43'30", long 99°23'30", in NW¼ sec.25, T.15 S., R.19 W., Ellis County, at gaging station, 3.0 mi (4.8 km) northwest of Schoenchen, and at mile 312.3 (502.5 km).

DRAINAGE AREA.--5,750 mi² (14,890 km²).

PERIOD OF RECORD.--Chemical analyses: August 1965 to September 1975 (discontinued).

REMARKS.--Chemical analyses by Kansas Department of Health and Environment, Topeka, Ks.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)
OCT. 16...	21	10.0	19	180	27	84	9.5	260	0	390	90	.4
NOV. 11...	24	11.0	20	160	25	85	9.0	190	0	400	88	.4
DEC. 10...	22	2.0	19	170	25	80	8.2	230	0	380	83	.4
JAN. 08...	22	3.5	19	180	25	81	8.6	260	0	380	84	.4
FEB. 18...	25	3.0	21	180	25	75	8.0	260	0	370	80	.4
MAR. 19...	24	11.0	17	170	27	80	8.5	230	0	400	87	.4
APR. 08...	22	13.0	19	180	23	81	8.5	250	0	370	86	.4
MAY 13...	22	14.5	17	160	24	73	8.2	230	0	330	80	.4
JUNE 16...	26	24.0	21	180	30	76	10	250	0	400	83	.7
JULY 16...	21	24.5	18	160	28	70	11	220	0	380	76	.6
AUG. 12...	16	24.0	19	170	22	71	11	210	0	400	73	.6
SEP. 16...	21	25.0	20	160	25	73	12	210	0	390	75	.5

DATE	DIS- SOLVED NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER DAY)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	TUR- BID- ITY (JTU)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)
OCT. 16...	.77	.03	210	975	55.3	1.33	3	560	350	1.5	1360
NOV. 11...	1.1	.04	240	920	59.6	1.25	2	510	350	1.7	1360
DEC. 10...	1.4	.05	200	914	54.3	1.24	2	530	350	1.5	1330
JAN. 08...	1.4	.08	180	940	55.8	1.28	1	560	350	1.5	1340
FEB. 18...	1.4	.04	170	910	61.4	1.24	6	540	330	1.4	1310
MAR. 19...	.81	.04	180	940	60.9	1.28	1	540	350	1.5	1340
APR. 08...	.99	.04	200	930	55.2	1.26	3	550	340	1.5	1340
MAY 13...	.68	.06	180	840	49.9	1.14	25	500	310	1.4	1230
JUNE 16...	.52	.04	150	960	68.9	1.31	25	580	370	1.4	1340
JULY 16...	.32	.04	200	890	52.1	1.21	4	520	340	1.3	1270
AUG. 12...	.29	.00	120	876	37.8	1.19	4	520	340	1.4	1300
SEP. 16...	.54	.04	230	920	52.7	1.25	25	500	330	1.4	1280

DATE	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)
OCT. 16...	90	0
APR. 08...	60	0

KANSAS RIVER BASIN

227

06864050 SMOKY HILL RIVER NEAR BUNKER HILL, KS
(Formerly published as 06864000 Smoky Hill River near Russell)

LOCATION.--Lat 38°47'38", long 98°46'50", in NW¼SW¼NW¼ sec.33, T.14 S., R.13 W., Russell County, at gaging station at highway bridge, 0.5 mi (0.8 km) upstream from Sellens Creek, 6.5 mi (10.5 km) southwest of Bunker Hill, and at mile 261.6 (420.9 km).

DRAINAGE AREA.--7,075 mi² (18,320 km²).

PERIOD OF RECORD.--Chemical analyses: October 1950 to September 1951, October 1961 to September 1975 (discontinued).

REMARKS.--Chemical analyses by Kansas Department of Health and Environment, Topeka, Ks.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)
OCT. 24...	37	18.0	16	190	35	300	13	270	0	340	470	.6
NOV. 20...	46	7.0	16	180	33	240	10	260	0	320	400	.6
DEC. 18...	49	1.0	17	200	32	260	11	280	0	330	430	.4
JAN. 15...	66	.5	17	190	32	210	10	280	0	330	350	.5
FEB. 20...	51	1.0	16	180	28	240	10	290	0	320	390	.4
MAR. 20...	55	19.0	11	170	29	240	10	240	0	320	390	.4
APR. 22...	50	16.5	13	170	25	230	10	250	0	290	380	.4
MAY 20...	36	23.5	18	180	33	290	13	270	0	340	480	.6
JUNE 23...	3710	22.0	15	59	3.2	19	7.8	160	0	33	33	.4
JULY 22...	46	28.5	22	130	58	340	13	270	0	330	520	.5
AUG. 26...	55	23.0	23	120	18	120	13	240	0	170	200	.5
SEP. 24...	32	18.0	17	170	28	270	12	250	0	280	450	.5

DATE	DIS- SOLVED NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DIS- SOLVED SOLIDS (TONS PER DAY)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	TUR- BID- ITY (JTU)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)
OCT. 24...	.14	.29	320	1500	154	2.09	8	620	400	5.2	2490
NOV. 20...	.52	.39	270	1340	170	1.86	1	590	370	4.3	2240
DEC. 18...	1.1	.46	260	1410	192	1.97	3	620	390	4.5	2360
JAN. 15...	1.4	.52	230	1290	239	1.82	7	600	370	3.7	2110
FEB. 20...	1.0	.46	240	1330	189	1.86	--	570	340	4.4	2110
MAR. 20...	.47	.39	260	1284	193	1.77	4	550	350	4.5	2150
APR. 22...	.20	.36	300	1240	173	1.74	4	520	320	4.4	2050
MAY 20...	.14	.22	300	1490	151	2.11	--	590	370	5.2	2490
JUNE 23...	.32	.29	80	252	2760	.37	3000	160	28	.7	430
JULY 22...	.07	.19	270	1540	201	2.18	25	550	330	6.2	2670
AUG. 26...	.43	.48	240	785	121	1.10	90	370	180	2.7	1470
SEP. 24...	.09	.35	290	1350	128	1.99	12	540	340	5.1	2330

DATE	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)
OCT. 24...	180	0
APR. 22...	60	0

LOCATION.--Lat 38°43'36", long 98°14'00", in SW¼SW¼SE¼ sec.20, T.15 S., R.8 W., Ellsworth County, at gaging station at bridge on State Highway 14 in Ellsworth, 2.0 mi (3.2 km) downstream from Turkey Creek, and at mile 213.7 (343.8 km).

DRAINAGE AREA.--7,580 mi² (19,600 km²), approximately.

PERIOD OF RECORD.--Chemical analyses: September 1957 to September 1959, October 1961 to September 1975 (discontinued).

REMARKS.--Chemical analyses by Kansas Department of Health and Environment, Topeka, Ks.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)
OCT. 22...	64	13.5	15	150	29	230	10	230	0	270	370	.4
NOV. 14...	81	7.0	16	170	24	220	8.8	270	0	280	340	.4
DEC. 17...	60	.0	15	180	27	210	9.0	300	0	290	330	.5
JAN. 13...	47	.0	18	200	31	200	9.5	340	0	310	320	.4
FEB. 24...	100	.0	16	180	24	170	8.2	290	0	280	290	.4
MAR. 26...	77	8.0	10	170	21	220	8.5	260	0	280	360	.3
APR. 14...	118	10.0	9.2	140	23	160	7.2	240	0	230	260	.4
MAY 19...	65	22.0	16	160	29	210	11	240	0	260	350	.5
JUNE 19...	187	27.0	18	110	12	92	10	200	0	130	150	.4
JULY 21...	80	27.0	18	150	25	240	12	240	0	240	390	.4
AUG. 18...	201	27.0	18	110	11	95	12	210	0	150	160	.4
SEP. 22...	77	18.0	15	130	35	180	10	250	0	210	320	.3

DATE	DIS- SOLVED NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DIS- SOLVED SOLIDS (TONS PER DAY)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	TUR- BID- ITY (JTU)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)
OCT. 22...	.11	.04	260	1190	213	1.67	110	500	320	4.5	2020
NOV. 14...	.50	.09	270	1190	265	1.65	65	520	300	4.2	1980
DEC. 17...	.68	.13	210	1210	194	1.63	2	560	320	3.9	2030
JAN. 13...	1.3	.21	290	1260	164	1.75	3	620	340	3.5	2070
FEB. 24...	1.1	.26	170	1120	310	1.56	25	540	310	3.2	1840
MAR. 26...	.14	.10	230	1190	252	1.65	3	520	310	4.2	2020
APR. 14...	.09	.10	200	963	312	1.33	8	450	250	3.3	1620
MAY 19...	.05	.11	230	1150	211	1.63	7	510	310	4.0	1980
JUNE 19...	.54	.30	110	620	328	.88	250	310	150	2.2	1100
JULY 21...	.05	.09	230	1190	265	1.66	65	470	270	4.8	2080
AUG. 18...	.20	.26	110	661	358	.90	450	320	150	2.3	1120
SEP. 22...	.07	.12	210	1020	230	1.50	23	470	260	3.6	1820

DATE	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)
OCT. 22...	170	0
APR. 14...	50	0

06865500 SMOKY HILL RIVER NEAR LANGLEY, KS

LOCATION.--Lat 38°36'38", long 97°57'04", in SW¼SW¼SE¼ sec.35, T.16 S., R.6 W., Ellsworth County, at gaging station at county highway bridge, 0.8 mi (1.3 km) downstream from Kanopolis Dam, 5.0 mi (8.0 km) north of Langley, and at mile 182.9 (294.3 km).

DRAINAGE AREA.--7,857 mi² (20,350 km²).

PERIOD OF RECORD.--Chemical analyses: October 1961 to September 1975 (discontinued).

REMARKS.--Chemical analyses by Kansas Department of Health and Environment, Topeka, Ks.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)
OCT. 10...	55	15.5	6.8	110	17	120	8.0	190	0	160	200	.5
NOV. 07...	346	11.5	5.8	110	17	130	9.2	180	0	180	220	.4
DEC. 09...	49	2.0	5.5	120	19	140	8.0	200	0	180	230	.4
JAN. 07...	51	1.0	3.4	120	19	150	8.8	200	0	200	240	.4
FEB. 13...	52	2.0	4.2	130	24	150	8.4	210	0	210	250	.4
MAR. 06...	54	3.0	5.8	130	21	150	8.8	220	0	220	250	.4
APR. 07...	54	7.5	5.2	120	21	150	7.0	190	0	220	240	.3
MAY 12...	53	19.5	3.2	110	22	140	8.0	180	0	200	240	.4
JUNE 12...	916	22.0	3.4	100	13	117	7.8	160	0	160	190	.4
JULY 15...	807	25.0	8.3	82	12	76	8.5	160	0	110	130	.4
AUG. 11...	104	25.5	6.2	83	10	84	10	150	0	123	135	.4
SEP. 16...	407	21.0	7.7	69	9.7	61	8.8	140	0	88	100	.4

DATE	DIS- SOLVED NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER DAY)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	TUR- BID- ITY (JTU)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)
OCT. 10...	.32	.07	140	760	113	1.03	65	340	190	2.8	1290
NOV. 07...	.25	.10	120	776	725	1.06	65	340	190	3.0	1320
DEC. 09...	.27	.06	170	836	111	1.14	25	370	210	3.1	1410
JAN. 07...	.27	.08	180	860	118	1.17	1	390	220	3.4	1450
FEB. 13...	.25	.06	170	902	127	1.23	1	410	240	3.2	1540
MAR. 06...	.38	.06	140	944	138	1.28	1	420	230	3.2	1530
APR. 07...	.23	.05	140	888	129	1.21	1	390	230	3.3	1480
MAY 12...	.14	.04	120	860	123	1.17	15	370	224	3.2	1430
JUNE 12...	.14	.04	90	686	1700	.93	7	310	180	2.9	1200
JULY 15...	.27	.05	120	526	1150	.72	25	250	130	2.1	900
AUG. 11...	.11	.05	120	534	150	.73	25	250	120	2.3	940
SEP. 16...	.38	.09	140	435	478	.59	60	210	97	1.8	750

DATE	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)
OCT. 10...	50	20
APR. 07...	50	0

LOCATION.--Lat 38°47'54", long 97°34'28", in SW¼SW¼SW¼ sec.29, T.14 S., R.2 W., Saline County, at gaging station at highway bridge, 4.0 mi (6.4 km) north of Mentor, and at mile 101.7 (163.6 km).

DRAINAGE AREA.--8,358 mi² (21,650 km²).

PERIOD OF RECORD.--Chemical analyses: October 1963 to September 1975 (discontinued).

REMARKS.--Chemical analyses by Kansas Department of Health and Environment, Topeka, Ks.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)
OCT.												
09...	184	17.0	10	77	14	48	7.6	180	0	97	75	.4
NOV.												
08...	369	11.0	7.8	110	20	110	8.0	200	0	170	200	.4
DEC.												
09...	115	1.0	12	140	25	85	6.5	320	0	170	130	.2
JAN.												
08...	114	2.0	12	140	20	93	7.1	310	0	180	150	.4
FEB.												
12...	126	.5	12	130	27	100	7.5	300	0	200	160	.4
MAR.												
05...	123	6.0	13	120	24	79	6.5	270	0	160	120	.4
APR.												
10...	109	12.0	6.4	120	28	100	6.8	270	0	200	150	.3
MAY												
27...	98	22.0	15	130	25	110	8.2	280	0	190	170	.4
JUNE												
13...	873	24.0	7.6	100	18	112	8.2	160	0	170	180	.3
24...	4990	23.5	10	50	2.7	16	8.5	140	0	32	27	.3
JULY												
15...	902	24.5	8.9	77	11	70	8.8	150	0	120	120	.2
AUG.												
08...	81	26.0	15	98	23	73	9.5	220	0	150	110	.4
SEP.												
22...	477	17.0	8.4	72	9.8	63	9.0	160	0	92	100	.4

DATE	DIS- SOLVED NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER DAY)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	TUR- BID- ITY (JTU)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)
OCT.											
09...	.97	.16	140	444	221	.60	900	250	100	1.3	740
NOV.											
08...	.38	.11	200	746	743	1.01	200	360	190	2.5	1260
DEC.											
09...	.86	.09	200	752	233	1.02	3	440	180	1.7	1220
JAN.											
08...	.75	.06	200	766	236	1.04	3	430	180	1.9	1280
FEB.											
12...	.79	.08	210	818	278	1.11	7	450	200	2.1	1310
MAR.											
05...	.97	.10	120	670	223	.91	25	390	160	1.7	1100
APR.											
10...	.16	.07	140	776	228	1.06	8	420	200	2.1	1240
MAY											
27...	.63	.01	180	810	214	1.10	200	430	200	2.3	1310
JUNE											
13...	.32	.08	170	710	1670	.97	250	330	190	2.7	1210
24...	.41	.26	60	230	3100	.31	1500	140	24	.6	370
JULY											
15...	.20	.12	150	490	1190	.67	200	240	110	2.0	840
AUG.											
08...	.02	.05	150	600	131	.82	8	340	160	1.7	1010
SEP.											
22...	.56	.09	150	458	590	.62	140	220	89	1.8	780

DATE	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)
OCT.		
09...	130	0
APR.		
10...	60	0

06867000 SALINE RIVER NEAR RUSSELL, KS

LOCATION.--Lat 38°58'00", long 98°51'20", in SW¼SW¼NW¼ sec.35, T.12 S., R.14 W., Russell County, at gaging station at bridge on U.S. Highway 281, 2.0 mi (3.2 km) downstream from Salt Creek, and 5.0 mi (8.0 km) north of Russell, and at mile 190.6 (306.7 km).

DRAINAGE AREA.--1,502 mi² (3,890 km²).

PERIOD OF RECORD.--Chemical analyses: January 1946 to September 1949, October 1961 to September 1975 (discontinued).

Specific Conductance: January 1946 to September 1951, October 1964 to July 1970.

Water temperatures: January 1946 to September 1951, October 1964 to July 1970.

Sediment records: May 1946 to September 1951.

REMARKS.--Chemical analyses by Kansas Department of Health and Environment, Topeka, Ks.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)
OCT. 24...	23	21.0	14	210	60	560	12	270	0	590	840	.6
NOV. 20...	35	10.0	17	210	56	380	11	270	0	500	580	.6
DEC. 18...	32	2.0	18	230	50	510	12	310	0	530	760	.6
JAN. 15...	48	.5	18	220	57	380	12	300	0	510	590	.6
FEB. 20...	38	.0	18	210	47	380	11	280	0	480	590	.6
MAR. 20...	51	13.5	17	190	42	280	10	250	0	420	440	.6
APR. 22...	40	19.0	14	190	44	300	11	230	0	450	480	.6
MAY 20...	25	27.5	16	200	51	430	15	230	0	530	670	.6
JUNE 24...	321	23.0	15	86	13	38	8.8	140	0	160	58	.6
JULY 22...	22	33.0	21	190	54	550	16	240	0	550	820	.7
AUG. 22...	95	24.0	22	110	19	120	13	220	0	200	180	.6
SEP. 23...	23	18.0	16	180	52	500	15	270	0	490	730	.5

DATE	DIS- SOLVED NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L)	DIS- SOLVED SOLIDS (TONS PER DAY)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	TUR- BID- ITY (JTU)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)
OCT. 24...	.14	.05	350	2420	152	3.33	7	780	560	8.8	3890
NOV. 20...	.29	.04	300	1890	182	2.62	2	740	530	6.0	3070
DEC. 18...	.66	.07	450	2250	199	3.13	25	770	520	7.9	3700
JAN. 15...	.66	.08	320	1930	257	2.69	25	790	550	5.9	3210
FEB. 20...	.61	.05	240	1870	197	2.61	35	720	490	6.2	3150
MAR. 20...	.14	.04	300	1520	213	2.11	65	640	440	4.8	2440
APR. 22...	.05	.05	260	1600	179	2.26	25	650	460	5.1	2610
MAY 20...	.14	.04	300	2030	142	2.86	35	710	520	7.0	3330
JUNE 24...	.41	.09	90	447	407	.64	1500	270	150	1.0	720
JULY 22...	.05	.04	390	2320	142	3.18	7	700	500	9.1	3800
AUG. 22...	.09	.12	80	773	202	1.06	190	350	170	2.8	1300
SEP. 23...	.02	.17	320	2120	140	3.06	7	660	440	8.4	3640

DATE	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)
OCT. 24...	80	0
APR. 22...	110	0

KANSAS RIVER BASIN

06868100 WILSON LAKE NEAR WILSON, KS

LOCATION.--Lat 38°58'00", long 98°29'35", in NE¼NW¼SE¼ sec.36, T.12 S., R.11 W., Russell County, at Wilson Dam on the Saline River 10 mi (16 km) north of Wilson, and at mile 153.9 (247.6 km).

DRAINAGE AREA.--1,917 mi² (4,965 km²).

PERIOD OF RECORD.--Chemical analyses: August 1966 to September 1975 (discontinued).

REMARKS.--Chemical analyses by Kansas Department of Health and Environment, Topeka, Ks. Samples are collected at the reservoir outlet.

WATER QUALITY DATA: WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	RESER- VOIR STORAGE (AC-FT)	TEMPER- ATURE (DEG C)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT. 16...	241000	16.0	4.3	130	40	310	12	160	0	360	470
NOV. 14...	242000	11.0	3.8	130	35	330	13	160	0	380	480
DEC. 17...	241000	3.0	3.8	140	34	340	13	170	0	380	480
FEB. 12...	247000	1.0	5.1	140	39	340	14	170	0	390	500
MAR. 20...	249000	4.0	7.7	160	49	420	14	220	0	440	620
APR. 21...	249000	7.0	5.2	140	39	350	13	180	0	400	520
MAY 23...	251000	19.0	5.4	140	35	360	14	180	0	400	540
JULY 18...	241600	24.0	6.4	150	32	340	14	160	0	390	520

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L)	TUR- BID- ITY (JTU)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)
OCT. 16...	.5	.07	.04	230	1410	8	490	360	6.1	2490
NOV. 14...	.4	.20	.04	240	1450	8	480	350	6.6	2460
DEC. 17...	.6	.14	.05	260	1480	2	490	350	6.7	2500
FEB. 12...	.5	.09	.08	230	1520	1	520	380	6.6	2550
MAR. 20...	.6	.16	.04	410	1810	1	600	420	7.5	3040
APR. 21...	.6	.09	.04	240	1540	1	510	360	6.7	2640
MAY 23...	.5	.07	.05	200	1580	2	500	360	7.1	2640
JULY 18...	.5	.05	.04	260	1530	3	500	360	6.6	2670

06869500 SALINE RIVER AT TESCOTT, KS

LOCATION.--Lat 39°00'15", long 97°52'26", in NE¼SE¼SE¼ sec.16, T.12 S., R.5 W., Ottawa County, at gaging station at highway bridge, 0.5 mi (0.8 km) south of Tescott, 0.5 mi (0.8 km) upstream from Dry Creek, and at mile 68.5 (110.2 km).

DRAINAGE AREA.--2,820 mi² (7,300 km²).

PERIOD OF RECORD.--Chemical analyses: December 1949 to September 1953, October 1961 to September 1975 (discontinued).

Water temperatures: April 1950 to September 1953, August 1959 to September 1975 (discontinued).

Sediment records: August 1959 to September 1975.

EXTREMES.--1974-75:

Specific conductance: Maximum daily, 2,640 micromhos July 29, minimum daily, 449 micromhos June 25.

Water temperatures: Maximum, 29.5°C July 30; minimum, freezing point on several days in December and January.

Period of record:

Specific conductance: Maximum daily, 6,560 micromhos Dec. 28, 1964; minimum daily, 234 micromhos June 15, 1972.

Water temperatures: Maximum, 37°C on Sept. 7, 1972; minimum, freezing point on many days during winter period.

REMARKS.--Chemical analyses by Kansas Department of Health and Environment, Topeka, Ks.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)
OCT. 08...	53	14.0	9.6	140	34	310	9.8	270	0	320	420	.5
NOV. 06...	67	7.0	16	150	31	260	8.5	370	0	290	350	.3
DEC. 03...	45	1.0	15	150	31	270	7.5	320	0	310	350	.4
JAN. 09...	62	2.0	13	170	31	250	7.6	340	0	310	320	.4
FEB. 21...	66	.0	14	170	27	230	7.0	360	0	310	300	.3
MAR. 27...	65	8.0	11	160	31	290	9.0	300	0	340	380	.3
APR. 28...	68	19.0	8.8	130	33	260	9.2	230	0	330	340	.5
MAY 16...	69	20.0	16	160	31	270	11	320	0	330	370	.5
JUNE 11...	329	20.0	13	110	22	200	11	180	0	250	290	.4
25...	1070	23.5	15	67	5.1	23	9.5	200	0	49	28	.4
JULY 18...	739	26.0	7.5	140	34	350	15	150	0	394	520	.5
AUG. 08...	465	26.0	13	130	32	320	12	230	0	330	456	.4
SEP. 12...	598	20.0	15	110	16	150	12	250	0	160	210	.5

DATE	DIS- SOLVED NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	DIS- SOLVED SOLIDS (TONS PER DAY)	DIS- SOLVED SOLIDS (TONS AC-FT)	TUR- BID- ITY (JTU)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)
OCT. 08...	.50	.12	240	1370	202	1.92	15	480	270	6.1	2380
NOV. 06...	.52	.10	260	1290	235	1.77	8	510	210	5.0	2150
DEC. 03...	1.2	.08	240	1300	163	1.82	3	500	240	5.2	2190
JAN. 09...	1.7	.11	230	1280	221	1.80	4	540	260	4.6	2110
FEB. 21...	1.6	.07	170	1230	226	1.73	3	520	230	4.3	2040
MAR. 27...	.70	.13	350	1370	246	1.90	15	520	270	5.5	2270
APR. 28...	.56	.17	270	1230	233	1.73	65	460	270	5.3	2050
MAY 16...	1.3	.11	210	1350	259	1.89	200	520	260	5.1	2240
JUNE 11...	.77	.11	140	992	915	1.40	650	370	220	4.6	1650
25...	.25	.09	60	297	861	.41	3000	190	24	.7	480
JULY 18...	.16	.08	240	1540	3110	2.12	250	480	360	6.9	2670
AUG. 08...	.14	.11	300	1420	1810	1.96	65	460	274	6.5	2400
SEP. 12...	.97	.12	210	801	1390	1.17	320	340	140	3.5	1410

DATE	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)
OCT. 08...	50	0
APR. 28...	60	80

KANSAS RIVER BASIN

06869500 SALINE RIVER AT TESCOTT, KS.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C) , WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2270	2200	2190	2060	1860	1800	2250	1210	983	2490	2530	2440
2	2310	2210	2160	2090	1860	1750	2250	1210	1070	2540	2460	1790
3	2310	2100	2160	2060	1860	1750	2250	1230	1070	2540	2440	1790
4	2300	2090	2130	2060	1860	1760	2140	1230	1070	2550	2430	1790
5	2310	2130	2130	2080	1860	1760	2160	1320	1000	2560	2290	642
6	2270	2100	2190	2010	1860	1780	2180	1550	973	2560	2330	450
7	2310	2090	2190	1970	1900	1780	2160	1830	1350	2560	2410	538
8	2270	2150	2180	2020	1900	1800	2160	1950	1470	2560	2350	685
9	2240	2070	2190	2010	1910	1850	2160	2030	1560	2560	2380	974
10	2210	2060	2160	2020	1910	1880	2180	2080	1030	2560	2740	986
11	2110	2060	2160	2010	1920	1900	2200	2120	1240	2580	2600	1250
12	2100	2120	2050	2010	1920	1950	2180	2120	1430	2570	2580	1450
13	2100	2120	2090	2080	1950	2000	2180	2140	2280	2580	2560	1650
14	2180	2090	2140	2100	1950	2000	1140	2160	2450	2580	1030	1890
15	2180	2110	2140	2150	1950	2050	1600	2170	2480	2580	497	2260
16	2160	2130	2130	2150	1950	2100	1560	2200	2520	2600	748	2260
17	2190	2140	2130	2160	2000	2150	1850	2230	2480	2600	992	2260
18	2160	2130	2040	2160	2010	2240	1860	2170	2530	2600	1620	2300
19	2130	2140	2090	2170	2020	2280	1880	2180	2520	2580	2100	2300
20	2230	2150	2050	2150	2040	2260	1960	2220	2540	2600	2240	2330
21	2130	2160	2060	2020	2040	2220	2060	2220	2550	2520	2480	2340
22	2240	2170	2080	2030	2040	2220	2040	2260	1640	2580	2490	2500
23	2260	2170	2070	1960	2060	2230	2030	2280	1640	2580	2530	1740
24	2240	2160	2120	1920	2060	2250	2050	2300	1160	2580	2530	1730
25	2240	2160	2060	1950	2080	2260	2040	2310	449	2580	2550	1740
26	2260	2170	2130	1950	2080	2270	2020	2310	960	2580	2550	1740
27	2240	2160	2050	1900	2100	2270	2060	2230	1010	2560	2550	1740
28	2130	2160	2040	1980	2100	2300	2050	2230	1140	2490	2550	1900
29	2240	2180	2070	1920	---	2320	2120	2230	2430	2640	2510	2200
30	2130	2170	2180	1870	---	2300	2120	2000	2470	2610	2480	2240
31	2140	---	2100	1970	---	2250	---	1670	---	2580	2480	---
AVERAGE	2210	2140	2120	2030	1970	2060	2030	1980	1650	2570	2230	1730

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16.0	15.0	1.0	0.0	2.0	---	---	18.0	16.5	28.0	28.0	28.0
2	15.0	12.0	2.0	1.0	---	---	---	19.0	18.0	29.0	28.0	28.0
3	17.0	11.0	2.0	1.0	---	---	---	20.0	20.0	29.0	25.0	28.0
4	18.0	11.0	3.0	1.0	---	---	10.0	22.0	22.5	28.0	28.5	28.0
5	20.0	10.0	4.0	1.0	---	4.0	11.0	23.0	23.0	29.0	29.0	28.0
6	15.0	10.0	4.0	1.0	---	5.0	13.0	23.0	24.0	29.0	28.5	27.5
7	15.0	10.0	5.0	2.0	---	5.0	13.0	22.0	26.0	28.5	29.0	22.0
8	17.0	10.0	3.0	3.0	---	5.0	15.0	22.5	23.0	29.0	30.0	24.5
9	17.0	10.0	3.0	5.0	---	---	15.5	23.0	22.0	27.5	29.0	25.0
10	18.0	10.0	3.0	4.0	---	---	13.0	23.0	20.0	27.0	28.0	25.0
11	18.0	10.0	4.0	3.5	---	---	12.0	21.5	21.0	26.0	29.0	24.0
12	17.0	9.0	4.0	3.0	---	---	10.0	21.0	22.0	25.0	29.0	24.0
13	15.0	9.0	4.0	2.5	---	---	10.5	21.5	24.0	24.0	27.5	20.0
14	15.0	9.0	3.0	1.5	---	---	11.5	22.0	23.0	25.5	23.5	17.0
15	15.0	9.0	3.0	1.5	---	---	18.0	23.0	24.0	26.0	23.0	20.0
16	15.0	9.0	2.0	1.5	---	---	17.0	23.5	24.5	27.0	25.0	20.0
17	16.0	9.0	2.0	1.0	---	---	14.5	23.5	25.0	27.0	25.0	20.0
18	15.0	9.0	2.0	1.0	---	---	15.0	26.0	25.0	27.0	27.0	20.0
19	15.0	9.0	2.0	1.0	---	7.0	16.0	26.5	25.0	27.5	28.0	20.0
20	15.0	9.0	2.0	2.0	---	---	13.0	25.0	26.0	27.0	29.0	20.0
21	15.0	9.0	2.0	2.0	---	14.0	19.0	27.0	26.0	28.0	29.0	16.0
22	15.0	9.0	3.0	3.0	---	---	18.0	24.5	23.0	29.0	29.0	19.0
23	17.0	8.0	3.0	3.0	---	---	21.0	25.0	25.0	26.0	29.0	19.0
24	18.0	6.0	3.0	3.0	---	---	22.0	25.0	23.0	27.0	27.0	19.0
25	17.0	7.0	2.0	3.0	---	---	24.0	22.0	24.0	27.0	27.0	19.0
26	17.0	8.0	1.0	3.0	---	---	22.0	21.0	25.0	27.0	27.0	19.0
27	17.0	7.0	0.0	2.0	---	---	21.0	21.0	25.0	28.0	27.0	17.0
28	17.0	5.0	2.0	2.0	---	---	21.0	21.0	27.0	29.0	27.0	15.0
29	17.0	4.0	1.0	2.0	---	10.0	21.0	20.0	27.0	30.0	27.5	16.0
30	17.0	2.0	0.0	2.0	---	---	20.0	19.5	28.0	29.5	29.0	16.0
31	16.0	---	2.0	2.0	---	---	---	17.0	---	29.0	29.0	---
AVERAGE	16.5	9.0	2.5	2.0	---	---	16.0	22.5	23.5	27.5	27.5	21.5

KANSAS RIVER BASIN

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06869500 SALINE RIVER AT TESCOTT, KS.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	SUS- PENDE SEDIM- ENT DIS- CHARGE (MG/L)	SUS- PENDE SEDIM- ENT DIS- CHARGE (T/DAY)
OCT.				
08...	1130	53	150	21
NOV.				
06...	1030	67	46	8.3
DEC.				
03...	1045	45	15	1.8
JAN.				
09...	1130	62	24	4.0
FEB.				
21...	1140	66	15	2.7
MAR.				
27...	1100	66	92	16
APR.				
28...	1120	68	157	29
MAY				
16...	1045	69	447	83
JUNE				
11...	1245	329	747	664
25...	1345	1070	2890	8350
JULY				
18...	1145	739	414	826
AUG.				
08...	1130	46	1910	237
SEP.				
12...	1225	60	339	55

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	SUS- PENDE SEDIM- ENT (MG/L)	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .062 MM	SUS. SED. FALL DIAM. % FINER THAN .125 MM	SUS. SED. FALL DIAM. % FINER THAN .250 MM	SUS. SED. FALL DIAM. % FINER THAN .500 MM	SUS. SED. FALL DIAM. % FINER THAN 1.00 MM	SUS. SED. FALL DIAM. % FINER THAN 2.00 MM
JUNE												
11...	1245	329	747	64	75	--	99	100	--	--	--	--
25...	1345	1070	2890	76	89	97	99	100	--	--	--	--
JULY												
18...	1145	739	414	56	65	83	97	100	--	--	--	--

LOCATION.--Lat 38°51'13", long 97°27'52", in SW 1/4 sec. 8, T.14 S., R.1 W., Saline County, at gaging station at county highway bridge, 3.0 mi (4.8 km) southeast of New Cambria, 7.4 mi (11.9 km) upstream from Gypsum Creek, about 15.4 mi (24.8 km) upstream from Solomon River, and at mile 83.9 (135.0 km).

DRAINAGE AREA.--11,730 mi² (30,380 km²), approximately.

PERIOD OF RECORD.--Chemical analyses: October 1962 to September 1970, October 1973 to September 1975.
Water temperatures: October 1973 to September 1975.

EXTREMES.--1974-75:

Specific conductance: Maximum daily, 2,320 micromhos July 28; minimum daily, 476 micromhos Aug. 17.
Water temperatures: Maximum, 29.5°C July 22; minimum, 1.0°C on several days during January and February.

REMARKS.--Chemical analyses by Kansas Department of Health and Environment, Topeka, Ks.

WATER QUALITY DATA: WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)
OCT. 07...	593	16.0	12	130	20	120	8.5	270	0	170	180	.4
NOV. 08...	503	10.0	10	120	24	140	8.0	240	0	180	210	.3
DEC. 09...	228	2.0	14	140	25	150	7.2	340	0	200	200	.4
JAN. 08...	220	2.5	13	140	28	140	7.5	32	0	200	200	.3
FEB. 12...	228	1.0	14	130	28	130	7.9	310	0	220	180	.3
MAR. 05...	385	5.0	10	130	30	220	8.8	230	0	280	320	.4
APR. 10...	221	12.0	8.4	120	27	160	7.2	280	0	230	220	.4
MAY 19...	204	24.0	12	110	30	160	9.0	230	0	230	220	.4
JUNE 13...	1410	22.5	10	90	18	94	8.2	170	0	160	140	.4
24...	7080	22.5	10	53	4.9	27	8.0	150	0	44	39	.3
JULY 15...	1390	25.0	8.8	98	18	150	10	160	0	200	230	.4
AUG. 08...	158	24.0	12	120	31	190	12	260	0	220	280	.5
SEP. 18...	646	19.0	9.4	82	7.7	71	8.8	180	0	100	110	.4

DATE	DIS- SOLVED NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER DAY)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	TUR- BID- ITY (JTU)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)
OCT. 07...	.52	.16	170	800	1280	1.09	130	390	170	2.6	1320
NOV. 08...	.56	.17	170	824	1120	1.12	350	400	200	3.1	138
DEC. 09...	1.4	.39	230	950	585	1.29	6	460	180	3.1	1510
JAN. 08...	1.4	.32	180	934	555	1.27	3	450	190	2.8	1530
FEB. 12...	1.4	.68	200	900	554	1.22	6	450	200	2.7	1450
MAR. 05...	1.1	.23	170	1140	1190	1.55	7	440	250	4.5	1870
APR. 10...	.66	.39	210	944	563	1.28	3	420	192	3.4	1550
MAY 19...	.93	.33	170	930	512	1.26	65	400	210	3.5	1520
JUNE 13...	.36	.13	110	646	2460	.88	550	300	160	2.4	1030
24...	.27	.18	60	281	5370	.38	2000	150	28	1.0	450
JULY 15...	.23	.13	170	810	3040	1.10	200	320	190	3.7	1390
AUG. 08...	.02	.42	200	992	423	1.35	45	430	220	4.0	1720
SEP. 18...	.63	.15	180	490	855	.67	210	240	89	2.0	840

DATE	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)
OCT. 07...	90	0
APR. 10...	50	0

KANSAS RIVER BASIN

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06870200 SMOKY HILL RIVER AT NEW CAMBRIA, KS.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
RANDOM (INSTANTANEOUS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1390	995	1470	1500	1430	992	1430	1320	800	1000	1950	1480
2	1390	995	1500	1500	1450	1080	1480	1420	770	1050	1910	1260
3	1520	1130	1500	1500	1450	1180	1540	1320	764	1380	1800	1060
4	1540	1130	1530	1490	1260	1340	1530	1470	610	1370	1690	1110
5	1550	1100	1520	1480	1160	1820	1470	1500	758	1350	1690	1150
6	1480	1090	1510	1500	1160	1880	1480	1620	802	1340	1720	1200
7	1170	1010	1510	1510	1280	1920	1510	1560	975	1360	1700	1410
8	869	1370	1380	1510	1290	1950	1450	1250	675	1370	1680	1380
9	1300	1360	1480	1480	1440	1910	1510	1300	524	1290	1620	688
10	1130	1360	1510	1530	1430	1910	1500	1320	450	1290	1570	724
11	1300	1390	1510	1520	1410	1920	1480	1320	537	1300	1610	745
12	1320	1420	1510	1500	1420	1910	1500	1370	869	1260	1560	783
13	1320	1410	1530	1540	1410	1780	1390	1400	1040	1350	1770	771
14	608	1420	1540	1580	1460	1650	1380	1410	1400	1380	1580	790
15	666	1460	1560	1490	1460	1640	1340	1420	1400	1390	1640	805
16	1090	1440	1560	1480	1460	1630	1340	1410	1590	1430	1940	814
17	929	1440	1420	1480	1480	1530	1330	1440	1110	1910	476	814
18	1020	1450	1520	1460	1480	1440	1160	1450	1300	1910	733	827
19	1330	1440	1340	1400	1530	1340	1160	1520	1500	2140	885	845
20	1430	1440	1380	1440	1410	1380	1360	1540	1530	2180	922	875
21	1430	1440	1310	1400	1410	1410	1350	1570	1580	2190	1050	889
22	1440	1450	1490	1440	1440	1460	1320	1480	1010	2220	1220	900
23	1450	1490	1500	1500	1420	1420	1410	1470	628	2230	1370	982
24	1480	1490	1500	1500	1480	1520	1410	1540	460	2230	1430	1020
25	1450	1510	1500	1510	1480	1510	710	1500	598	2250	1490	1010
26	1360	1500	1510	1480	1430	1540	894	1260	812	2250	1500	1030
27	1350	1500	1510	1480	992	1510	980	1120	653	2300	1500	1160
28	1110	1510	1520	1470	1300	1490	1058	1230	750	2320	1480	1200
29	1100	1510	1520	1470	---	1500	1200	1010	845	2220	1380	1210
30	1180	1490	1500	1450	---	1460	1370	1010	939	2120	1610	1200
31	844	---	1500	1430	---	1460	---	829	---	2010	1890	---
AVERAGE	1240	1360	1490	1480	1390	1560	1340	1370	923	1720	1500	1000

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
RANDOM (INSTANTANEOUS)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15.0	16.0	3.0	4.0	3.0	6.0	7.0	17.0	21.0	28.0	26.0	28.0
2	14.0	16.0	4.0	4.0	3.5	5.5	6.0	19.0	22.0	27.0	25.0	27.0
3	16.0	11.0	4.0	5.0	5.0	4.5	8.0	20.0	24.0	28.0	28.0	28.0
4	19.0	12.0	7.0	4.0	1.0	5.0	11.0	21.0	22.0	28.0	26.0	28.0
5	19.0	9.0	7.0	2.0	1.0	7.0	12.0	21.0	25.0	29.0	25.0	25.0
6	16.0	9.0	7.0	3.0	1.0	8.0	14.0	23.0	25.0	29.0	28.0	24.0
7	15.0	9.0	6.0	4.0	1.0	7.0	12.0	22.0	26.0	29.0	28.0	25.0
8	17.0	11.0	4.0	4.0	1.0	6.0	14.0	22.0	22.0	29.0	28.0	25.0
9	17.0	11.0	4.0	6.0	1.0	6.0	14.0	23.0	23.0	28.0	27.0	24.0
10	17.0	11.5	4.0	1.0	2.0	6.0	12.0	23.0	19.0	26.0	28.0	24.0
11	15.0	11.0	6.0	1.0	2.0	6.0	12.0	22.0	20.0	26.0	28.0	20.0
12	15.0	10.0	6.0	1.0	2.0	5.0	14.0	21.0	22.0	25.0	27.0	24.0
13	15.0	9.0	5.0	2.0	1.0	5.0	14.0	19.0	24.0	26.0	27.0	19.0
14	13.0	7.0	5.0	3.0	1.0	6.0	12.0	21.0	30.0	26.0	27.0	17.0
15	13.0	8.0	3.0	2.0	1.0	6.0	15.0	22.0	31.0	26.0	28.0	18.0
16	15.0	10.0	3.0	2.0	2.0	7.0	17.0	23.0	25.0	27.0	27.0	20.0
17	15.0	9.0	3.0	4.0	2.0	9.0	19.0	22.0	24.0	28.0	25.0	21.0
18	15.0	10.0	2.0	4.0	2.0	11.0	18.0	25.0	26.0	28.0	26.0	19.0
19	14.0	11.0	3.0	4.0	4.0	13.0	16.0	24.0	26.0	29.0	26.0	18.0
20	15.0	11.0	3.0	3.0	4.0	13.0	17.0	23.0	22.0	29.0	28.0	18.0
21	15.0	11.0	4.0	4.0	5.0	14.0	17.0	27.0	26.0	29.0	28.0	16.0
22	15.0	11.0	5.0	3.0	4.0	14.0	17.0	24.0	24.0	29.5	29.0	18.0
23	17.0	8.0	4.0	4.0	4.0	14.0	19.0	24.0	24.0	28.0	26.0	16.0
24	18.0	8.0	2.0	4.0	4.0	10.0	19.0	24.0	23.0	29.0	26.0	17.0
25	18.0	8.0	2.0	6.0	5.0	9.0	17.0	25.0	26.0	28.0	25.0	18.0
26	15.0	9.0	3.0	6.0	6.0	8.0	21.0	22.0	27.0	28.0	26.0	18.0
27	16.0	8.0	3.0	5.0	6.5	12.0	21.0	23.0	26.0	28.0	26.0	16.0
28	16.0	8.0	4.0	4.0	6.0	10.0	18.0	22.0	26.0	28.0	26.0	17.0
29	16.0	8.0	4.0	4.0	---	7.5	19.0	22.0	27.0	27.0	26.0	19.0
30	17.0	4.0	2.0	4.0	---	7.0	18.0	19.0	27.0	27.0	28.0	17.0
31	16.0	---	4.0	2.0	---	11.0	---	19.0	---	26.0	28.0	---
AVERAGE	16.0	10.0	4.0	3.5	3.0	8.5	15.0	22.0	24.5	27.5	27.0	21.0

KANSAS RIVER BASIN

06871000 NORTH FORK SOLOMON RIVER AT GLADE, KS

LOCATION.--Lat 39°40'40", long 99°18'30", in NW¼SW¼ sec.25, T.4 S., R.18 W., Phillips County, at gaging station at bridge on U.S. Highway 183, 0.5 mi (0.8 km) south of Glade.

DRAINAGE AREA.--849 mi² (2,200 km²).

PERIOD OF RECORD.--Chemical analyses: October 1963 to September 1975 (discontinued).

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)
NOV. 13...	3.2	34	40	30	140	20	40	15	310	--	170
JAN. 15...	35	27	20	50	120	22	36	12	290	--	170
FEB. 19...	36	26	60	60	120	21	32	11	300	0	160
APR. 16...	13	18	--	--	100	19	26	10	295	0	97
MAY 13...	9.8	28	90	20	110	20	30	10	303	0	120
JUNE 12...	110	19	100	10	43	5.7	6.4	14	159	0	22

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO
NOV. 13...	62	.4	--	.58	90	664	.90	430	180	.8
JAN. 15...	56	.4	.22	.52	80	626	.85	390	150	.8
FEB. 19...	45	.4	.20	.09	90	584	.79	390	140	.7
APR. 16...	34	.5	.05	.14	80	441	.60	330	86	.6
MAY 13...	40	.4	.02	.20	100	526	.72	360	110	.7
JUNE 12...	8.1	.4	1.4	.16	70	209	.28	130	0	.2

DATE	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	TUR- BID- ITY (JTU)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)
NOV. 13...	6.0	10.4	5	950	7.4
JAN. 15...	1.5	12.7	20	1060	8.0
FEB. 19...	.0	14.8	10	980	7.6
APR. 16...	22.5	10.3	15	842	7.9
MAY 13...	17.0	11.2	5	774	7.7
JUNE 12...	22.0	9.2	85	8	7.8

06871790 KIRWIN MAIN CANAL BELOW KIRWIN RESERVOIR, KS

LOCATION.--Lat 39°39'30", long 99°07'18", Phillips County, at U.S. Bureau of Reclamation gage 0.2 mi (0.3 km), approximately, downstream from Kirwin Dam.

PERIOD OF RECORD.--Chemical analyses: August 1969 to September 1975.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)
JULY 15...	196	6.3	30	0	55	12	18	16	156	0	71
AUG. 28...	118	6.8	30	0	59	11	18	17	171	0	66

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT) (MG/L)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO
JULY 15...	24	.3	.26	.04	60	296	.40	190	59	.6
AUG. 28...	26	.4	.31	.00	60	315	.43	190	52	.6

DATE	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	TUR- BID- ITY (JTU)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)
JULY 15...	25.0	8.9	25	474	7.9
AUG. 28...	25.5	8.6	15	552	7.6

06871800 NORTH FORK SOLOMON RIVER AT KIRWIN, KS

LOCATION.--Lat 39°39'36", Long 99°06'55", in SE¼ sec.33, T.4 S., R.16 W., Phillips County, at gaging station 200 ft (61 m) downstream from toe of Kirwin Dam, 0.5 mi (0.8 km) south of Kirwin, 1.3 mi (2.1 km) upstream from Deer Creek, and at mile 62.2 (108 km).

DRAINAGE AREA.--1,367 mi² (3,541 km²).

PERIOD OF RECORD.--Chemical analyses: October 1970 to September 1975 (discontinued).

REMARKS.--Chemical analyses by Kansas Department of Health and Environment, Topeka, Ks. Field analyses by U.S. Geological Survey.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)
AUG. 05...	.12	29.0	40	93	14	22	17	230	0	120	36	.5

DATE	DIS- SOLVED NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER DAY)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	TUR- BID- ITY (JTU)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)
AUG. 05...	.02	.21	120	465	.15	.63	15	290	100	.6	710

06872500 NORTH FORK SOLOMON RIVER AT PORTIS, KS

LOCATION.--Lat 39°33'15", long 98°41'31", in SW $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.5, T.6 S., R.12 W., Osborne County, at gaging station at bridge on U.S. Highway 281, 0.5 mi (0.8 km) south of Portis, and at mile 27.0 (43.4 km).

DRAINAGE AREA.--2,315 mi² (5,996 km²), approximately.

PERIOD OF RECORD.--Chemical analyses: October 1961 to September 1975.

REMARKS.--Chemical analyses by Kansas Department of Health and Environment, Topeka, Ks. Field analyses by U.S. Geological Survey. Chemical analyses by Kansas Department of Health and Environment were discontinued September 1975.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)
OCT. 23...	35	18.0	28	150	19	66	13	370	0	220	49	.4
NOV. 13...	45	9.0	28	140	20	73	13	320	0	240	59	.3
DEC. 05...	43	3.0	29	150	25	69	12	350	0	260	57	.3
05...	43	3.0	29	150	25	69	12	350	0	260	57	.3
JAN. 15...	49	--	31	160	25	66	12	370	0	250	55	.2
FEB. 19...	107	.0	33	170	24	70	12	400	0	250	59	.3
MAR. 19...	109	11.0	26	180	23	64	15	360	0	290	62	.4
APR. 16...	51	20.0	19	140	24	69	14	310	0	250	60	.4
MAY 13...	41	15.0	25	150	20	64	14	350	0	230	53	.4
JUNE 12...	133	19.0	22	83	11	25	16	220	0	100	26	.4
JULY 15...	53	27.5	22	130	16	55	15	290	0	200	49	.3
AUG. 28...	42	24.0	24	110	15	51	14	270	0	170	39	.4
SEP. 16...	30	18.0	30	140	21	64	13	340	0	210	46	.2

DATE	DIS- SOLVED NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER DAY)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	TUR- BID- ITY (JTU)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)
OCT. 23...	1.8	.18	180	750	70.9	1.02	6	450	150	1.3	1120
NOV. 13...	2.5	.22	240	760	92.3	1.03	3	440	180	1.5	1170
DEC. 05...	3.2	.16	210	804	93.3	1.09	8	490	200	1.4	1260
05...	3.2	.16	210	804	93.3	1.09	8	490	200	1.4	1190
JAN. 15...	3.4	.18	170	800	106	1.09	8	490	190	1.3	1170
FEB. 19...	3.4	.16	210	858	248	1.17	1	530	200	1.3	1220
MAR. 19...	2.7	.39	200	870	256	1.18	25	540	250	1.2	1240
APR. 16...	1.6	.22	180	760	105	1.03	25	450	200	1.4	1100
MAY 13...	1.7	.32	200	750	83.0	1.02	95	450	170	1.3	1110
JUNE 12...	1.1	.36	120	406	146	.55	1300	250	76	.7	650
JULY 15...	1.5	.17	150	658	95.8	.89	65	390	150	1.2	990
AUG. 28...	.16	.18	140	570	64.6	.78	25	340	120	1.2	900
SEP. 16...	2.1	.19	260	728	59.0	.99	27	440	160	1.3	1070

DATE	DIS- SOLVED IRON (FE) (UG/L)	LOSS ON IGNI- TION (MG/L)	TOTAL RESI- DUE (MG/L)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TUR- BID- ITY (JTU)	PH (UNITS)
OCT. 23...	30	184	793	18.0	10.2	1150	15	7.4
NOV. 13...	40	193	837	8.5	9.0	1100	6	7.2
FEB. 19...	40	206	888	.0	13.2	1350	15	7.3
MAR. 19...	20	118	700	11.0	9.6	1300	20	7.8
APR. 16...	10	91	806	20.0	11.1	1100	20	7.8
MAY 13...	30	205	854	15.0	10.0	1070	30	7.5
JUNE 12...	70	247	1530	19.0	8.4	600	60	7.5
JULY 15...	40	165	754	27.5	7.8	1090	30	7.9
SEP. 16...	30	168	761	17.5	10.6	1060	20	7.7

06873000 SOUTH FORK SOLOMON RIVER ABOVE WEBSTER RESERVOIR, KS

LOCATION.--Lat 39°22'26", long 99°34'54", in SW 1/4 sec. 8, T. 8 S., R. 20 W., Rooks County, at gaging station at highway bridge, 4.0 mi (6.4 km) north of Damar, 7.0 mi (11.3 km) downstream from Wild Horse Creek, and 11 mi (18 km) upstream from Webster Dam.

DRAINAGE AREA.--1,040 mi² (2,690 km²), approximately.

PERIOD OF RECORD.--Chemical analyses: October 1963 to September 1975 (discontinued).

WATER QUALITY DATA: WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)
OCT. 24...	9.0	22	10	20	150	19	47	8.4	260	--	240
JAN. 16...	3.8	26	10	100	160	20	50	9.1	280	--	260
FEB. 20...	8.0	25	30	60	130	22	46	9.2	290	0	230
APR. 17...	20	13	10	40	120	23	44	10	280	0	170
MAY 14...	18	27	270	40	120	21	45	9.3	294	0	170
JUNE 13...	74	35	50	40	100	17	28	12	279	0	97

DATE	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	TUR- BID- ITY (JTU)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)
OCT. 24...	14.0	10.2	10	1070	7.5
NOV. 14...	4.0	10.0	5	1140	7.4
JAN. 16...	2.0	13.0	10	1250	8.0
FEB. 20...	1.0	15.0	10	1100	7.4
APR. 17...	13.0	10.1	5	1020	8.2
MAY 14...	15.0	10.8	2	976	7.7
JUNE 13...	19.0	10.4	15	715	7.6

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT) (MG/L)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO
OCT. 24...	71	.4	.03	.04	70	732	1.00	450	240	1.0
JAN. 16...	77	.4	.69	.03	70	775	1.10	480	250	1.0
FEB. 20...	60	.6	.53	.10	90	667	.91	420	180	1.0
APR. 17...	61	.7	.09	.13	100	630	.86	390	160	1.0
MAY 14...	59	.6	.09	.10	110	639	.87	390	150	1.0
JUNE 13...	34	.6	.39	.23	100	482	.66	320	91	.7

KANSAS RIVER BASIN

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06873200 SOUTH FORK SOLOMON RIVER BELOW WEBSTER RESERVOIR, KS

LOCATION.--Lat 39°24'34", long 99°24'53", in SW $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.26, T.7 S., R.19 W., Rooks County, at gaging station 0.4 mi (0.6 km) downstream from Webster Dam, 1.1 mi (1.8 km) upstream from Sand Creek, 8.0 mi (13 km) west of Stockton, and at mile 92.0 (148 km).

DRAINAGE AREA.--1,150 mi² (2,980 km²).

PERIOD OF RECORD.--Chemical analyses: August 1969 to September 1975 (discontinued).

REMARKS.--Chemical analyses by Kansas Department of Health and Environment, Topeka, Ks. Field analyses by U.S. Geological Survey.

WATER QUALITY DATA: WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HC03) (MG/L)	CAR- BONATE (C03) (MG/L)	DIS- SOLVED SULFATE (S04) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)
AUG. 06...	141	26.0	12	88	15	36	15	190	0	150	48	.4
29...	136	24.0	11	96	13	37	13	200	0	160	49	.5

DATE	DIS- SOLVED NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER DAY)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	TUR- BID- ITY (JTU)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)
AUG. 06...	.14	.12	110	454	173	.62	25	280	130	.9	760
29...	.11	.14	80	500	184	.68	25	290	130	.9	770

06873450 SOUTH FORK SOLOMON RIVER ABOVE WOODSTON, KS

LOCATION.--Lat 39°25'57", long 99°10'28", in SW¼NW¼ sec.24, T.7 S., R.17 W., Rooks County, on county line bridge 4.0 mi (6.4 km) upstream from Woodston Diversion.

PERIOD OF RECORD.--Chemical analyses: July 1971 to September 1975.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HC03) (MG/L)	CAR- BONATE (C03) (MG/L)	DIS- SOLVED SULFATE (S04) (MG/L)
OCT. 24...	1.6	22	40	140	150	25	75	12	280	--	270
NOV. 14...	2.2	21	50	100	160	25	82	13	300	--	280
JAN. 16...	.50	21	10	110	160	22	75	11	300	--	270
FEB. 20...	4.8	19	40	90	160	24	82	11	290	0	280
APR. 17...	9.4	6.8	10	150	170	31	110	13	230	0	350
MAY 14...	4.8	22	210	70	160	27	90	10	261	0	290
JUNE 13...	13	24	40	60	170	25	110	14	239	0	330
JULY 15...	205	12	20	20	85	16	37	14	170	0	150
AUG. 29...	166	11	120	10	88	17	38	15	197	0	140
SEP. 15...	3.4	15	10	110	120	28	63	13	224	0	240

DATE	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L)	DIS- SOLVED ORTHO- PHOS- PHORUS (P) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT) (MG/L)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO
OCT. 24...	99	.4	.03	.04	120	852	1.20	480	250	1.5
NOV. 14...	110	.4	1.0	.16	120	895	1.22	500	260	1.6
JAN. 16...	110	.3	1.4	.35	110	847	1.15	490	250	1.5
FEB. 20...	110	.4	1.2	.32	130	887	1.21	500	260	1.6
APR. 17...	180	.4	.03	.13	120	1060	1.44	550	370	2.0
MAY 14...	130	.4	.04	.20	140	905	1.23	510	300	1.7
JUNE 13...	150	.4	.38	.19	120	999	1.36	530	330	2.1
JULY 15...	48	.3	.10	.10	70	477	.65	280	140	1.0
AUG. 29...	48	.4	.14	.05	90	492	.67	290	130	1.0
SEP. 15...	84	.4	.08	.04	100	672	.91	420	230	1.3

DATE	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	TUR- BID- ITY (JTU)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)
OCT. 24...	15.0	12.4	10	1270	8.1
NOV. 14...	4.0	10.8	10	1300	7.3
JAN. 16...	1.0	12.9	10	1380	7.9
FEB. 20...	1.0	12.6	8	1460	7.8
APR. 17...	18.0	12.8	5	1530	8.4
MAY 14...	21.0	14.2	0	1380	7.8
JUNE 13...	26.0	12.4	10	1500	7.6
JULY 15...	26.5	8.6	35	763	8.0
AUG. 29...	23.5	8.4	40	768	7.7
SEP. 15...	19.0	10.2	2	1120	7.8

KANSAS RIVER BASIN

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06874000 SOUTH FORK SOLOMON RIVER AT OSBORNE, KS

LOCATION.--Lat 39°25'43", long 98°41'40", in SW 1/4 SW 1/4 sec. 20, T.7 S., R.12 W., Osborne County, at gaging station at bridge on U.S. Highway 281, 0.5 mi (0.8 km) south of Osborne, 0.6 mi (1.0 km) downstream from Covert Creek, and at mile 27.6 (44.4 km).

DRAINAGE AREA.--2,012 mi² (5,211 km²).

PERIOD OF RECORD.--Chemical analyses: October 1961 to September 1975.

REMARKS.--Chemical analyses by Kansas Department of Health and Environment, Topeka, Ks. Field analyses by U.S. Geological Survey. Chemical analyses by Kansas Department of Health and Environment were discontinued September 1975.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)
OCT. 23...	22	17.0	23	150	20	71	10	330	0	220	78	.5
NOV. 14...	25	7.0	24	160	20	74	9.8	350	0	240	85	.3
DEC. 05...	29	2.0	23	160	23	74	9.0	320	0	250	87	.3
JAN. 15...	27	--	24	160	21	72	9.1	330	0	240	82	.4
FEB. 20...	35	1.0	26	160	22	74	9.2	340	0	240	87	.3
MAR. 21...	33	15.0	17	150	28	84	10	270	0	290	96	.3
APR. 16...	36	15.0	18	130	34	81	11	280	0	260	100	.4
MAY 14...	25	21.0	24	150	22	78	11	320	0	240	89	.4
JUNE 13...	36	23.0	25	140	14	75	13	250	0	220	100	.4
JULY 15...	31	26.0	24	130	23	64	12	300	0	210	72	.4
AUG. 28...	22	23.0	25	140	19	65	12	320	0	200	71	.4
SEP. 15...	24	15.0	24	140	17	67	11	300	0	210	73	.2

DATE	DIS- SOLVED NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER DAY)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	TUR- BID- ITY (JTU)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)
OCT. 23...	1.5	.20	170	770	45.7	1.05	8	450	180	1.4	1150
NOV. 14...	1.9	.23	240	824	55.6	1.12	2	490	200	1.5	1230
DEC. 05...	2.3	.14	210	810	63.4	1.10	1	490	220	1.4	1250
JAN. 15...	2.5	.20	210	820	59.8	1.12	1	480	210	1.4	1210
FEB. 20...	2.5	.17	180	836	79.0	1.14	2	500	220	1.5	1210
MAR. 21...	1.4	.22	230	826	73.6	1.12	7	490	260	1.7	1210
APR. 16...	1.4	.22	180	816	79.3	1.11	8	470	240	1.6	1210
MAY 14...	1.6	.30	230	810	54.7	1.10	35	460	200	1.6	1200
JUNE 13...	.97	.24	140	740	71.9	1.01	200	400	200	1.6	1100
JULY 15...	1.3	.25	170	700	58.6	.95	65	420	170	1.4	1090
AUG. 28...	.23	.35	140	720	42.8	.98	85	430	170	1.4	1090
SEP. 15...	1.4	.21	240	714	46.3	.97	37	420	170	1.4	1070

KANSAS RIVER BASIN

06874000 SOUTH FORK SOLOMON RIVER AT OSBORNE, KS.--Continued

WATER QUALITY DATA: WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)
OCT. 23...	80	0
APR. 16...	60	170

DATE	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	TUR- BID- ITY (JTU)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)
OCT. 23...	17.0	10.4	25	1160	8.1
NOV. 14...	7.0	10.4	10	1300	7.5
JAN. 15...	3.0	12.2	25	1260	7.9
FEB. 20...	1.0	13.8	8	1320	7.7
APR. 16...	15.0	8.8	15	1210	7.9
JUNE 13...	23.0	9.8	35	1120	7.8
JULY 15...	26.0	7.9	30	1100	7.8
SEP. 15...	15.0	9.2	25	1130	7.2

KANSAS RIVER BASIN

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06875900 SOLOMON RIVER NEAR GLEN ELDER, KS

LOCATION.--Lat 39°28'27", long 98°16'58", in SE¼SE¼NE¼ sec.2, T.7 S., R.9 W., Mitchell County, at gaging station, 3.6 mi (5.8 km) downstream from Glen Elder Dam, 2.0 mi (3.2 km) southeast of Glen Elder, and at mile 168.8 (271.6 km).

DRAINAGE AREA.--5,340 mi² (13,830 km²).

PERIOD OF RECORD.--Chemical analyses: October 1965 to September 1975.

REMARKS.--Chemical analyses by Kansas State Department of Health, Topeka, Ks. Field analyses by U.S. Geological Survey. Chemical analyses by Kansas Department of Health and Environment were discontinued September 1975.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)
OCT. 23...	28	15.0	6.4	110	19	79	14	170	0	240	92	.3
NOV. 13...	21	8.0	10	120	21	85	14	230	0	240	96	.3
DEC. 10...	24	2.0	9.5	130	23	88	13	260	0	250	98	.4
JAN. 15...	17	--	10	130	22	85	13	250	0	250	96	.4
FEB. 19...	168	2.0	7.0	100	21	75	14	170	0	250	86	.4
MAR. 19...	161	6.0	8.0	110	26	74	13	200	0	270	84	.3
APR. 16...	235	9.0	6.7	100	19	77	14	170	0	240	83	.4
MAY 13...	23	16.0	5.8	100	18	72	14	170	0	240	81	.4
JUNE 12...	499	20.0	6.3	99	19	69	14	160	0	230	79	.3
JULY 15...	29	24.5	11	100	25	73	14	200	0	240	83	.3
AUG. 28...	28	24.0	9.6	93	14	65	14	160	0	210	74	.4
SEP. 16...	2.0	20.0	10	100	19	71	15	200	0	210	85	.4

DATE	DIS- SOLVED NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER DAY)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	TUR- BID- ITY (JTU)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)
OCT. 23...	.25	.06	150	674	51.0	.92	8	340	210	1.8	1030
NOV. 13...	.45	.16	200	722	40.9	.98	8	380	190	1.9	1120
DEC. 10...	.63	.09	200	768	49.8	1.04	3	410	200	1.9	1150
JAN. 15...	1.1	.07	150	760	34.9	1.03	6	410	210	1.8	1170
FEB. 19...	.11	.04	110	660	299	.90	3	350	200	1.8	1010
MAR. 19...	.34	.04	170	692	301	.94	1	390	230	1.6	1030
APR. 16...	.20	.05	140	658	417	.89	7	340	200	1.9	1010
MAY 13...	.20	.05	150	652	40.5	.89	2	330	190	1.7	990
JUNE 12...	.05	.04	120	610	822	.83	35	330	190	1.7	950
JULY 15...	.41	.11	150	656	51.4	.89	25	360	200	1.7	1030
AUG. 28...	.09	.07	110	570	43.1	.78	35	290	160	1.7	920
SEP. 16...	.29	.08	200	640	3.46	.87	25	330	160	1.7	990

KANSAS RIVER BASIN

06875900 SOLOMON RIVER NEAR GLEN ELDER, KS.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)
OCT. 23...	30	140
APR. 16...	60	0

DATE	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	TUR- BID- ITY (JTU)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)
OCT. 23...	15.0	9.8	40	1080	7.8
NOV. 13...	8.0	10.0	9	1190	7.6
JAN. 15...	2.0	12.6	20	1240	7.7
FEB. 19...	20.0	12.8	15	1040	7.5
APR. 16...	9.0	12.9	10	1020	7.6
JUNE 12...	20.0	9.8	25	1000	7.8
JULY 15...	24.5	8.4	40	1020	7.7
AUG. 28...	24.0	8.7	25	930	7.9
SEP. 16...	20.0	9.4	15	1040	7.2

06876900 SOLOMON RIVER AT NILES, KS

LOCATION.--Lat 38°58'08", long 97°28'34", in NW¼SE¼NW¼ sec.31, T.12 S., R.1 W., Ottawa County, at gaging station at county highway bridge, 0.8 mi (1.3 km) west of Niles, and at mile 21.6 (34.8 km).

DRAINAGE AREA.--6,770 mi² (17,530 km²), approximately.

PERIOD OF RECORD.--Chemical analyses: October 1958 to September 1975.

Water temperatures: October 1961 to September 1975.

Sediment records: June 1957 to September 1975.

EXTREMES.--1974-75:

Specific conductance: Maximum daily, 2,480 micromhos Feb. 24; minimum daily, 339 micromhos Aug. 17.

Water temperatures: Maximum, 27.0°C on several days during summer months; minimum, freezing point on many days during winter period.

Period of record:

Specific conductance: Maximum daily, 3,260 micromhos Jan. 8, 1968; minimum daily, 137 micromhos Aug. 22, 1966.

Water temperatures: Maximum, 32.0°C July 5, 1966; minimum, freezing point on many days during winter period.

REMARKS.--Chemical analyses by Kansas Department of Health and Environment, Topeka, Ks.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)
OCT. 09...	102	15.0	18	120	30	290	12	380	0	240	380	.2
NOV. 20...	110	7.0	19	130	26	310	9.5	410	0	230	370	.2
DEC. 11...	105	3.0	15	120	31	300	8.0	370	0	240	370	.3
JAN. 08...	115	1.5	14	120	30	270	8.8	380	0	230	330	.3
FEB. 27...	299	2.5	10	100	21	140	11	240	0	230	170	.3
MAR. 24...	267	9.0	9.2	110	26	200	12	260	0	260	240	.4
APR. 24...	269	20.0	12	110	22	140	12	240	0	240	180	.3
MAY 19...	108	22.0	17	100	26	190	12	290	0	210	230	.3
JUNE 10...	1460	2.0	10	59	13	46	10	140	0	110	53	.3
25...	6160	22.5	12	43	5.0	16	10	130	0	35	20	.4
JULY 22...	129	27.0	19	110	20	130	12	300	0	184	150	.4
AUG. 20...	765	26.0	14	69	8.8	97	11	170	0	110	130	.5
SEP. 17...	963	18.0	18	120	25	260	12	370	0	210	320	.4

DATE	DIS- SOLVED NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER DAY)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	TUR- BID- ITY (JTU)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)
OCT. 09...	.41	.10	240	1350	372	1.84	15	420	110	6.1	2240
NOV. 20...	.63	.17	270	1320	392	1.80	8	440	100	6.5	2220
DEC. 11...	.50	.11	270	1280	363	1.74	3	410	110	6.3	2150
JAN. 08...	.34	.08	230	1240	385	1.69	1	420	110	5.7	2070
FEB. 27...	.54	.12	140	826	667	1.12	25	340	150	3.3	1310
MAR. 24...	.45	.14	210	1030	743	1.40	8	390	180	4.5	1650
APR. 24...	.75	.18	170	862	626	1.17	65	360	160	3.2	1370
MAY 19...	.11	.13	210	960	280	1.31	130	360	120	4.4	1590
JUNE 10...	.41	.18	90	372	1470	.51	650	200	84	1.4	630
25...	.77	.75	80	221	3680	.30	2200	130	24	.6	370
JULY 22...	.05	.26	200	780	272	1.06	200	360	110	3.0	1270
AUG. 20...	.14	.20	110	516	1070	.70	3300	210	69	2.9	920
SEP. 17...	.45	.27	300	1160	3020	1.58	90	400	99	5.6	1990

DATE	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)
OCT. 09...	70	50
APR. 24...	70	0

KANSAS RIVER BASIN

06876900 SOLOMON RIVER AT NILES, KS.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C) , WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2040	1950	2190	2100	1980	1280	1390	1480	1030	741	1450	1820
2	2210	1830	2180	2220	1980	1330	1290	1460	1210	989	1510	1820
3	2190	2030	2190	2130	1960	1400	1400	1320	1440	989	1580	1520
4	2210	2030	2190	1910	1720	1440	1390	1350	1260	962	1630	1640
5	2210	1940	2160	2090	1770	1420	1430	1370	1060	933	1660	1720
6	2070	2000	2150	1970	1780	1450	1450	1410	1110	968	1820	1890
7	2230	2030	2120	2050	1850	1410	1460	1430	677	965	1830	1800
8	2180	2060	2100	1950	2060	1410	1440	1440	722	955	1770	2120
9	2190	2080	2100	2120	2000	1440	1420	1460	665	945	1770	2020
10	2200	1970	2120	2040	1890	1380	1440	1460	527	942	1780	1670
11	2200	1970	2110	2020	2020	1350	1410	1460	661	930	1780	1400
12	2260	1980	2100	2020	2080	1310	1430	1450	666	940	1800	1360
13	2150	2010	2100	2020	2080	1350	1440	1460	629	923	1800	1600
14	2070	2060	2080	2020	2310	1370	1320	1460	849	973	1720	1550
15	1870	2030	2080	2020	2160	1360	1180	1540	965	992	1510	1840
16	1910	2110	2100	2050	2270	1360	1390	1610	947	1030	415	1910
17	1960	2140	2090	2090	2180	1260	1270	1600	1010	1060	339	1920
18	2070	2130	2160	2000	2170	1290	1270	1570	1060	1100	411	1940
19	2120	2130	2110	2140	2150	1330	1370	1580	1070	1150	513	1990
20	2170	2150	2110	2070	1990	1440	1460	1540	1060	1200	787	2020
21	2180	2190	2090	2170	2050	1410	1390	1580	761	1240	516	2010
22	2150	2220	2090	2090	1920	1450	1380	1660	500	1260	523	1990
23	2160	2210	2070	2050	1990	1360	1380	1810	358	1320	609	1980
24	2140	2190	2110	2020	2480	1680	1420	1830	257	1380	783	1960
25	2130	2160	2060	2020	2290	1570	1450	1910	333	1510	891	1960
26	2130	2180	2130	2020	1600	1550	1450	1920	395	1500	955	1960
27	2110	2210	2080	2180	1350	1420	1460	1980	357	1600	1100	1960
28	2100	2180	1960	2050	1260	1360	1450	1940	404	1670	1270	1960
29	2030	2130	2060	2210	---	1320	1470	1980	504	2150	1390	1960
30	1840	2210	2100	2090	---	1410	1490	1590	731	1440	1470	1960
31	1720	---	2110	2080	---	1340	---	1500	---	1380	1610	---
AVERAGE	2100	2080	2110	2060	1980	1400	1400	1590	774	1170	1260	1840

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13.5	13.5	3.0	1.5	0.5	5.0	7.0	17.0	16.0	25.0	26.0	26.0
2	13.0	10.0	2.0	1.0	1.5	5.0	4.0	19.0	16.0	26.0	25.0	26.0
3	13.0	10.5	1.5	1.0	2.0	3.5	4.0	16.0	19.0	27.0	24.0	26.0
4	15.5	9.0	2.0	1.0	4.5	3.0	7.0	18.0	20.0	27.0	24.0	25.0
5	17.0	8.0	2.0	0.0	0.0	4.5	9.0	19.0	21.0	26.5	25.0	25.0
6	16.0	8.0	1.0	0.5	0.0	6.0	12.0	21.0	22.0	27.0	24.0	22.0
7	13.5	8.0	1.5	1.0	0.0	4.5	11.0	19.0	21.0	27.0	24.0	22.0
8	13.5	8.5	1.0	2.0	0.0	4.0	10.0	19.0	22.0	27.0	24.0	23.0
9	14.0	10.0	0.5	5.0	0.0	4.0	11.0	20.0	21.0	27.0	24.0	22.0
10	13.5	7.0	0.5	3.5	0.0	2.5	11.0	21.0	20.0	27.0	24.0	23.0
11	17.0	5.0	3.0	0.0	0.0	3.0	10.0	20.0	19.0	25.0	24.5	23.0
12	16.5	8.5	2.0	0.0	0.0	3.0	9.0	21.0	19.0	24.0	24.5	17.0
13	14.5	7.0	2.0	0.0	0.0	2.0	11.0	19.5	21.0	24.0	24.5	17.0
14	13.5	5.5	3.5	0.0	0.0	1.0	10.0	17.0	23.0	25.0	25.0	12.0
15	11.0	4.5	2.0	0.5	0.0	3.0	11.0	19.0	22.0	25.0	25.0	16.0
16	11.5	6.5	1.5	1.0	0.0	4.0	12.0	20.0	23.0	25.0	23.0	17.0
17	13.5	6.5	1.0	1.5	0.0	6.0	15.0	19.0	23.0	26.0	23.0	19.0
18	14.0	8.0	1.0	2.0	0.0	7.0	16.0	21.0	24.0	26.0	23.0	19.0
19	13.0	9.0	1.0	1.0	0.0	8.0	12.0	22.0	24.0	27.0	25.0	18.0
20	13.5	6.5	1.0	1.5	0.0	11.0	17.0	23.0	25.0	27.0	26.0	17.0
21	12.0	6.0	5.0	0.5	1.5	12.0	14.5	22.0	25.0	26.0	26.0	17.0
22	13.0	7.0	1.0	1.0	0.5	11.0	15.0	24.0	23.5	26.0	27.0	18.0
23	15.0	8.0	2.0	3.0	0.5	17.0	17.0	22.0	22.0	26.0	26.0	16.0
24	15.5	5.0	1.0	3.5	0.5	9.5	19.0	21.0	22.0	24.0	26.0	16.0
25	16.5	4.0	1.0	4.0	1.5	6.0	19.0	22.0	22.0	24.0	25.0	17.0
26	15.5	4.5	0.5	5.0	3.0	6.0	21.0	21.5	23.0	24.0	22.0	18.0
27	15.5	4.5	1.5	3.5	2.0	8.0	21.0	20.0	24.0	26.0	24.0	18.0
28	15.5	4.5	2.0	2.0	4.5	7.0	18.0	21.0	24.0	27.0	25.0	15.0
29	15.0	1.5	1.5	2.0	---	5.0	18.0	20.0	25.0	27.0	24.0	17.0
30	15.5	1.0	3.0	0.0	---	5.0	17.0	17.5	25.0	26.0	25.0	17.0
31	15.5	---	---	1.0	---	9.0	---	17.0	---	26.0	26.0	---
AVERAGE	14.5	7.0	1.5	1.5	1.0	6.0	13.0	20.0	22.0	26.0	24.5	19.5

KANSAS RIVER BASIN

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06876900 SOLOMON RIVER AT NILES, KS.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	SUS- PENDE SEDIM- ENT DIS- CHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .062 MM	SUS. SED. FALL DIAM. % FINER THAN .125 MM	SUS. SED. FALL DIAM. % FINER THAN .250 MM	SUS. SED. FALL DIAM. % FINER THAN .500 MM	SUS. SED. FALL DIAM. % FINER THAN 1.00 MM	SUS. SED. FALL DIAM. % FINER THAN 2.00 MM
OCT. 09...	1015	102	80	22								
NOV. 20...	1030	110	40	12								
DEC. 11...	1130	105	14	4.0								
JAN. 08...	1530	115	30	9.3								
FEB. 27...	1030	299	988	798								
MAR. 24...	1525	267	70	50								
APR. 24...	1310	269	197	143								
MAY 19...	0915	108	262	76								
JUNE 10...	1140	1430	1060	4090								
25...	1055	6120	1740	28800								
JULY 22...	1310	129	276	96								
AUG. 20...	1115	764	2650	5470								
SEP. 17...	1045	96	145	38								

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	SUS- PENDE SEDIM- ENT DIS- CHARGE (MG/L)	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .062 MM	SUS. SED. FALL DIAM. % FINER THAN .125 MM	SUS. SED. FALL DIAM. % FINER THAN .250 MM	SUS. SED. FALL DIAM. % FINER THAN .500 MM	SUS. SED. FALL DIAM. % FINER THAN 1.00 MM	SUS. SED. FALL DIAM. % FINER THAN 2.00 MM
JUNE 10...	1140	1430	1060	60	69	83	94	100	--	--	--	--
25...	1055	6120	1740	74	88	98	99	100	--	--	--	--
AUG. 20...	1115	764	2650	70	83	96	99	100	--	--	--	--

DATE	TIME	NUMBER OF SAM- PLING POINTS	INSTAN- TANEOUS DIS- CHARGE (CFS)	BED MAT. FALL DIAM. % FINER THAN .062 MM	BED MAT. FALL DIAM. % FINER THAN .125 MM	BED MAT. FALL DIAM. % FINER THAN .250 MM	BED MAT. FALL DIAM. % FINER THAN .500 MM	BED MAT. FALL DIAM. % FINER THAN 1.00 MM	BED MAT. FALL DIAM. % FINER THAN 2.00 MM	BED MAT. FALL DIAM. % FINER THAN 4.00 MM	BED MAT. FALL DIAM. % FINER THAN 8.00 MM	BED MAT. FALL DIAM. % FINER THAN 16.0 MM
OCT. 09...	1015	10	102	12	16	27	61	77	88	97	100	--
MAY 19...	0915	10	108	24	26	39	84	99	100	--	--	--
SEP. 17...	1045	10	96	14	19	30	75	93	97	99	100	--

LOCATION.--Lat 38°54'24", long 97°07'12", in NW¼NE¼SE¼ sec.20, T.13 S., R.3 E., Dickinson County, at gaging station at bridge on State Highway 43 in Enterprise, 18.6 mi (29.9 km) upstream from Chapman Creek, and at mile 43.3 (69.7 km).

DRAINAGE AREA.--19,260 mi² (49,880 km²).

PERIOD OF RECORD.--Chemical analyses: October 1955 to September 1958, October 1961 to September 1975.

Water temperatures: October 1955 to September 1975.

Sediment records: October 1957 to September 1975.

EXTREMES.--1974-75:

Specific conductance: Maximum daily, 2,950 micromhos Oct. 7; minimum daily, 416 micromhos June 25.

Water temperatures: Maximum, 33.0°C Aug. 19; minimum, 0.0°C Jan. 12.

Sediment concentrations: Maximum daily, 3,730 mg/l Apr. 25; minimum daily, 6 mg/l Jan. 1.

Sediment discharge: Maximum daily, 81,700 tons (74,100 tonnes) June 24; minimum daily, 7.6 tons (6.9 tonnes) Jan. 1.

Period of record:

Specific conductance: Maximum daily, 5,340 micromhos Jan. 24, 1957; minimum daily, 254 micromhos Sept. 22, 1967.

Water temperatures (1957-73): Maximum, 33.0°C July 8, 9, 11, 1973, July 26, 27, 1974, Aug. 19, 1975; minimum, freezing point on many days during winter period.

Sediment concentrations: Maximum daily, 11,000 mg/l Sept. 4, 1967; minimum daily, 3 mg/l July 9, 1966.

Sediment discharge: Maximum daily, 350,000 tons (318,000 tonnes) Sept. 4, 1967; minimum daily, 1 ton (0.91 tonnes) July 9, 1966.

REMARKS.--Chemical analyses by Kansas Department of Health and Environment, Topeka, Ks. Pesticide analyses by U.S. Geological Survey.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975¹

DATE	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)
OCT.												
07...	649	16.0	13	190	41	370	8.8	290	0	410	560	.5
10...	622	16.0	11	110	20	220	8.2	220	0	180	340	.4
NOV.												
08...	710	10.5	14	140	29	290	8.0	290	0	270	410	.3
DEC.												
10...	485	2.5	14	140	36	340	4.5	240	0	340	500	.4
JAN.												
08...	477	2.0	12	180	33	350	7.8	340	0	330	510	.4
FEB.												
14...	533	1.0	15	170	37	270	7.5	340	0	330	380	.4
MAR.												
12...	788	5.0	9.0	150	38	230	8.8	270	0	340	330	.3
APR.												
11...	622	12.5	9.0	140	31	210	8.0	280	0	300	290	.3
MAY												
13...	537	20.0	13	150	35	230	10	270	0	340	330	.4
JUNE												
10...	5650	20.5	13	64	12	37	6.5	150	0	97	47	.4
26...	13100	25.0	12	54	7.2	32	9.2	150	0	63	44	.4
JULY												
14...	2780	26.0	9.6	100	19	110	11	170	0	220	150	.3
AUG.												
06...	387	26.5	14	150	33	340	12	260	0	310	510	.4
SEP.												
10...	932	24.0	11	85	18	140	9.5	190	0	150	200	.4

DATE	DIS- SOLVED NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L)	DIS- SOLVED SOLIDS (TONS PER DAY)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	TUR- BID- ITY (JTU)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)
OCT.											
07...	.45	.17	260	1740	3120	2.42	45	640	400	6.3	2950
10...	.84	.23	140	1000	1750	1.41	300	350	160	5.1	1810
NOV.											
08...	.63	.22	260	1300	2530	1.80	45	470	240	5.8	2190
DEC.											
10...	.93	.16	290	1500	2060	2.14	6	500	310	6.6	2650
JAN.											
08...	.90	.14	240	1600	2110	2.23	6	580	300	6.3	2750
FEB.											
14...	1.2	.21	170	1370	2020	1.90	3	560	290	4.9	2250
MAR.											
12...	.38	.10	230	1230	2680	1.71	2	530	310	4.3	2020
APR.											
11...	.43	.16	200	1140	1950	1.58	15	480	250	4.2	1900
MAY											
13...	.66	.16	180	1250	1870	1.75	65	520	300	4.4	2060
JUNE											
10...	.66	.16	90	356	5430	.48	1500	210	83	1.1	580
26...	.45	.19	90	298	11200	.43	1500	160	42	1.1	510
JULY											
14...	.36	.13	140	707	5430	.98	350	330	190	2.6	1180
AUG.											
06...	.34	.17	290	1500	1640	2.14	65	500	280	6.5	2600
SEP.											
10...	.63	.42	170	710	1810	.98	700	290	130	3.6	1230

¹KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT.

06877600 SMOKY HILL RIVER AT ENTERPRISE, KS.--Continued

WATER QUALITY DATA: WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	
OCT.											
10...	598	11	120	23	220	9.0	220	--	190	330	
DEC.											
10...	483	15	180	36	330	6.9	360	--	330	500	
JAN.											
08...	472	12	180	34	360	6.9	340	--	330	520	
FEB.											
12...	542	13	160	41	220	7.3	330	--	310	310	
MAR.											
12...	787	8.8	150	39	230	9.2	262	0	370	320	
APR.											
11...	622	7.0	140	35	210	8.4	280	0	290	290	
MAY											
13...	537	7.6	150	36	240	9.8	276	0	340	320	
JUNE											
10...	5680	8.9	50	13	39	7.8	130	--	95	45	
JULY											
01...	2430	11	83	16	67	8.9	159	0	140	94	
AUG.											
06...	387	13	140	34	360	11	268	0	320	520	
SEP.											
10...	915	9.3	77	16	140	9.3	172	0	140	190	
DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	
OCT.											
10...	.4	.79	1.8	.42	1030	1.40	1660	390	210	4.8	
DEC.											
10...	.3	.98	.59	.16	1670	2.27	2180	600	310	5.9	
JAN.											
08...	.3	.88	.59	.15	1640	2.23	2090	590	310	6.5	
FEB.											
12...	.3	1.6	.97	.19	1270	1.73	1860	570	300	4.0	
MAR.											
12...	.3	.67	.54	.12	1270	1.73	2700	540	320	4.3	
APR.											
11...	.3	.15	.87	.20	1170	1.59	1970	490	270	4.1	
MAY											
13...	.4	.25	3.3	.23	1300	1.77	1890	520	300	4.6	
JUNE											
10...	.3	1.1	4.1	.78	335	.46	5140	180	72	1.3	
JULY											
01...	.3	.81	2.3	.50	520	.71	3410	270	140	1.8	
AUG.											
06...	.4	.02	.93	.21	1540	2.09	1610	490	270	7.1	
SEP.											
10...	.4	.84	2.5	.49	696	.95	1720	260	120	3.8	
DATE	DIS- SOLVED ARSENIC (AS) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	TOTAL CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	TOTAL COBALT (CO) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)	TOTAL COPPER (CU) (UG/L)	DIS- SOLVED IRON (FE) (UG/L)
OCT.											
10...	2	8	8	10	0	0	0	<50	7	10	20
JAN.											
08...	1	1	2	10	10	10	1	50	7	20	20
APR.											
11...	3	4	5	10	0	0	0	50	2	10	10
JULY											
01...	3	23	5	10	0	30	0	<50	2	40	70
DATE	TOTAL IRON (FE) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	TOTAL LEAD (PB) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DIS- SOLVED SELE- NIUM (SE) (UG/L)	TOTAL SELE- NIUM (SE) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)	TOTAL ZINC (ZN) (UG/L)
OCT.											
10...	8300	4	100	10	370	.2	.4	3	3	30	50
JAN.											
08...	470	12	100	190	190	.6	.2	5	5	20	10
APR.											
11...	1000	4	100	150	270	.1	--	3	3	10	50
JULY											
01...	19000	10	<100	0	700	.0	.0	1	1	10	120

KANSAS RIVER BASIN

06877600 SMOKY HILL RIVER AT ENTERPRISE, KS.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	PH (UNITS)	DIS- SOLVED OXYGEN (MG/L)	TUR- BID- ITY (JTU)
OCT. 10...	1800	900	1770	16.0	8.0	9.1	55
DEC. 10...	1800	270	2680	2.5	7.6	12.8	8
JAN. 08...	560	70	2960	3.5	8.1	12.2	15
FEB. 12...	260	760	2100	.5	7.6	12.8	50
MAR. 12...	470	160	2310	4.5	7.7	12.8	7
APR. 11...	1300	310	2000	12.5	7.9	11.0	10
MAY 13...	711	155	2000	20.0	8.3	8.2	55
JUNE 10...	8000	29000	510	20.5	--	6.8	170
JULY 01...	1900	1600	914	26.5	7.8	7.5	200
AUG. 06...	--	230	2730	26.5	8.1	8.6	65
SEP. 10...	2200	210	1160	23.5	7.8	6.8	55

DATE	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL PHYTO- PLANK- TON (CELLS PER ML)
OCT. 10...	16	12000
DEC. 10...	--	22000
JAN. 08...	--	890
FEB. 12...	--	2200
MAR. 12...	--	3400
APR. 11...	8.4	20000
MAY 13...	--	52000
JUNE 10...	--	10000
JULY 01...	19	4400
AUG. 06...	--	32000
SEP. 10...	--	18000

06877600 SMOKY HILL RIVER AT ENTERPRISE, KS.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C) , WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2080	1140	2780	2480	2480	1100	1850	1690	1160	1060	2470	1960
2	2100	1160	2700	2550	2470	1140	1890	1830	1070	1100	2440	1870
3	2110	1380	2610	2550	2450	1280	1940	1890	1050	1150	2400	1690
4	2300	1410	2600	2560	2400	1440	1970	1870	856	1190	2420	1550
5	2500	1600	2620	2560	1930	1550	2050	1750	811	1140	2520	1450
6	2700	1680	2630	2640	1690	1710	2070	1790	894	1150	2550	1640
7	2950	1940	2630	2650	1500	1920	2030	1850	1120	1140	2550	1850
8	2680	2200	2650	2650	1840	1940	1980	1960	879	1140	2630	1960
9	1730	2100	2690	2480	1870	1970	2020	1980	491	1140	2710	1560
10	1870	1980	2680	2470	1890	1990	1940	1910	485	1120	2760	1080
11	2390	1940	2690	2450	2070	2010	1940	1910	590	1110	2820	1110
12	2750	2100	2710	2470	2020	1990	2190	2010	660	1110	2840	1140
13	1060	2240	2690	2450	2130	1980	2100	2060	809	1100	2720	1220
14	905	2380	2740	3230	2200	1970	1980	2170	902	1160	2600	1270
15	1040	2410	2760	2520	2270	1990	1960	2120	1040	1290	2480	1330
16	939	2480	2830	2410	2290	1980	1560	2080	1170	1340	2180	1390
17	1340	2530	2870	2520	2310	2000	1400	2110	1250	1420	1090	1440
18	1760	2560	2850	2420	2560	1610	1450	2140	1400	1500	571	1470
19	2260	2580	2810	2420	2250	1430	1510	2260	1130	1720	649	1410
20	1800	2600	2880	2370	2370	1510	1600	2380	1370	1960	750	1380
21	1880	2580	2820	2330	2380	1600	1640	2430	1340	2050	889	1410
22	2030	2580	2540	2440	2290	1730	1760	2420	960	2140	961	1440
23	2420	2600	2250	2440	2210	1800	1760	2590	677	2160	1190	1460
24	2500	2610	2310	2430	2200	1900	1040	2600	424	2200	1220	1510
25	2530	2580	2320	2550	2250	1970	868	2550	416	2200	1460	1550
26	2650	2660	2320	2410	2220	2040	844	2580	506	2250	1540	1570
27	2660	2760	2460	2300	1980	2040	958	2600	550	2260	1570	1750
28	2530	2750	2690	2460	1460	2080	1170	2300	594	2280	1580	1920
29	2420	2760	2530	2410	---	1990	1390	1810	781	2320	1580	2100
30	1370	2740	2500	2430	---	1870	1540	1510	749	2350	1580	2200
31	1050	---	2400	2450	---	1830	---	1560	---	2410	1530	---
AVERAGE	2040	2230	2630	2500	2140	1790	1680	2090	871	1600	1910	1560

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17.0	17.0	3.0	4.0	5.0	7.0	9.0	20.0	20.0	27.0	31.0	31.0
2	15.0	14.0	3.0	4.0	4.0	6.0	6.0	19.0	22.0	28.5	30.0	31.0
3	18.0	12.0	2.0	4.0	4.0	5.0	10.0	22.0	24.0	30.0	30.0	30.0
4	18.0	10.0	4.0	4.0	4.0	5.0	12.0	23.0	23.0	30.0	31.0	30.0
5	17.0	10.0	6.0	4.0	3.0	7.0	15.0	24.0	25.0	30.0	31.0	26.0
6	16.0	10.0	8.0	3.0	2.0	9.0	15.0	25.0	25.0	30.0	30.0	27.0
7	16.0	11.0	5.0	4.0	2.0	8.0	14.0	25.0	26.0	31.0	31.0	28.0
8	17.0	11.0	2.0	5.0	2.0	7.0	15.0	25.0	24.0	31.0	30.0	27.0
9	19.0	11.0	3.0	5.0	2.0	6.0	17.0	26.0	23.0	29.0	29.0	27.0
10	20.0	11.0	3.0	3.0	2.0	5.0	15.0	26.0	19.0	29.0	31.0	24.0
11	20.0	11.0	4.0	1.0	2.0	5.0	14.0	28.0	22.0	29.0	32.0	23.5
12	16.0	10.5	6.0	0.0	3.0	6.0	15.0	25.0	24.0	27.0	31.0	23.0
13	16.0	10.0	6.0	1.0	2.0	6.0	14.5	20.0	25.0	27.0	30.5	23.0
14	15.0	9.0	5.0	4.0	1.0	5.0	14.0	23.0	25.0	27.0	29.5	18.0
15	15.0	8.0	4.0	3.0	2.0	6.0	16.0	25.0	25.0	28.0	29.0	19.0
16	16.0	10.0	4.0	4.0	2.0	8.0	18.0	25.0	25.0	28.0	31.0	22.0
17	18.0	10.0	4.0	5.0	2.0	10.0	20.0	27.0	26.0	29.0	25.0	22.0
18	17.0	10.0	4.0	5.0	2.0	12.0	22.5	27.0	26.0	29.0	27.0	21.0
19	17.0	10.0	4.0	5.0	2.0	14.0	25.0	29.0	27.0	30.0	33.0	20.0
20	16.0	11.0	4.0	5.0	2.0	15.0	19.0	31.0	28.0	31.0	30.0	20.0
21	16.0	11.0	4.0	5.0	3.0	15.0	20.0	29.0	28.0	32.0	31.0	20.0
22	16.0	11.0	4.0	4.0	3.0	14.0	20.0	28.0	25.0	32.0	31.0	21.0
23	18.0	9.0	4.0	4.5	3.0	15.0	24.0	27.0	25.0	31.0	33.0	22.0
24	19.0	9.0	3.0	5.0	3.0	12.0	27.0	28.0	25.0	30.0	31.0	20.0
25	19.0	8.0	3.0	5.0	3.0	10.0	20.0	27.0	26.0	30.0	25.0	20.0
26	18.0	8.0	2.0	6.0	7.0	9.0	20.0	26.0	25.0	31.0	28.0	20.0
27	19.0	8.0	4.0	5.0	7.0	12.0	21.0	24.0	26.0	32.0	28.0	20.0
28	18.0	6.0	4.0	4.0	7.0	10.0	22.0	24.0	27.0	32.0	28.0	20.0
29	19.0	4.0	4.0	4.0	---	9.0	22.0	21.0	29.0	33.0	29.0	21.5
30	17.0	2.0	3.0	4.0	---	10.0	20.0	20.0	29.0	32.0	30.0	23.0
31	17.0	---	4.0	4.0	---	12.0	---	21.0	---	31.0	31.0	---
AVERAGE	17.5	10.0	4.0	4.0	3.0	9.0	17.5	25.0	25.0	30.0	30.0	23.5

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCTOBER			NOVEMBER			DECEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	825	122	272	1500	651	2640	470	59	75
2	820	121	268	1170	429	1360	480	30	39
3	745	111	223	870	302	709	485	25	33
4	569	87	134	1140	487	1500	488	25	33
5	512	74	102	984	226	600	490	25	33
6	515	62	86	805	149	324	495	25	33
7	642	101	175	670	103	186	482	25	33
8	810	152	332	715	100	193	478	25	32
9	770	259	538	800	141	305	475	25	32
10	572	262	405	855	156	360	472	25	32
11	498	176	237	845	131	299	465	22	28
12	554	177	265	710	85	163	462	24	30
13	2380	1810	11600	626	91	154	460	21	26
14	1890	1960	10000	587	55	87	455	27	33
15	1700	1160	5320	569	49	75	445	13	16
16	1230	897	2980	554	44	66	438	13	15
17	825	498	1110	542	85	124	440	24	29
18	646	272	474	536	52	75	435	7	8.2
19	785	219	464	536	56	81	428	16	18
20	900	222	539	533	51	73	425	16	18
21	830	160	359	533	70	101	448	12	15
22	658	137	243	530	58	83	524	27	38
23	590	121	193	530	70	70	533	27	39
24	572	91	141	518	42	59	533	36	52
25	542	86	126	503	46	62	518	22	31
26	536	102	148	490	59	78	498	8	11
27	542	97	142	480	58	75	480	39	51
28	545	73	107	475	62	80	482	6	7.8
29	840	151	342	472	60	76	488	36	47
30	1470	748	2970	468	80	101	488	12	16
31	1640	788	3490	--	--	--	488	10	13
TOTAL	26953	--	43785	20546	--	10159	14748	--	917.0

DAY	JANUARY			FEBRUARY			MARCH		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	470	6	7.6	458	10	12	1260	340	1160
2	472	8	10	455	7	8.6	1000	221	597
3	475	10	13	455	11	14	851	62	142
4	455	12	15	530	103	147	822	41	91
5	455	25	31	966	283	738	816	48	106
6	438	32	38	675	101	184	801	51	110
7	460	38	47	521	37	52	797	38	82
8	472	19	24	638	47	81	777	31	65
9	478	29	37	536	47	68	770	25	52
10	500	26	35	590	47	75	778	18	38
11	462	23	29	606	81	133	772	25	52
12	355	76	73	536	26	38	790	32	68
13	382	46	47	530	41	59	771	28	58
14	462	18	22	521	32	45	699	32	60
15	485	38	50	490	57	75	645	25	44
16	475	31	40	485	74	97	622	34	57
17	490	14	19	367	91	90	675	48	87
18	506	22	30	472	63	80	1180	316	1010
19	506	57	78	455	96	118	1080	187	545
20	495	15	20	478	94	121	933	60	151
21	495	29	39	533	73	105	843	56	127
22	478	26	34	522	108	152	773	86	179
23	475	24	31	519	66	92	734	84	166
24	470	22	28	504	73	99	665	80	144
25	480	23	30	557	119	179	625	63	106
26	492	33	44	684	57	105	594	72	115
27	485	22	29	884	89	212	605	68	111
28	475	11	14	1130	146	445	604	94	153
29	472	10	13	--	--	--	653	64	113
30	465	19	24	--	--	--	691	75	140
31	460	28	35	--	--	--	693	64	120
TOTAL	14540	--	986.6	16097	--	3624.6	24319	--	6049

06877600 SMOKY HILL RIVER AT ENTERPRISE, KS.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	APRIL			MAY			JUNE		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	644	58	101	784	148	313	1180	365	1160
2	614	51	85	724	132	258	1120	402	1220
3	587	22	35	730	127	250	1360	386	1420
4	572	41	63	780	146	307	2400	1010	6540
5	578	30	47	817	150	331	2210	1080	6440
6	573	48	74	782	125	264	1650	782	3480
7	582	62	97	707	87	166	1970	1040	6240
8	675	98	179	669	167	247	2020	1300	7090
9	739	48	96	626	131	221	3790	1960	20100
10	664	45	81	590	128	204	5460	2450	36100
11	625	41	69	573	87	135	5690	1890	29000
12	599	39	63	556	141	212	3790	1140	11700
13	593	40	64	537	146	212	2870	1160	8990
14	671	42	76	527	135	192	2300	1030	6400
15	977	110	290	532	150	215	1960	744	3940
16	1050	72	204	521	149	210	1840	651	3230
17	1090	85	250	521	129	181	1850	698	3490
18	1000	77	208	495	130	174	1970	691	3680
19	854	69	159	462	132	165	2220	1020	6110
20	778	68	143	438	135	160	1950	652	3430
21	756	109	222	423	152	174	2100	649	3680
22	723	101	197	402	142	154	4230	2240	25600
23	695	95	178	398	147	158	8080	3230	70500
24	2000	2910	24900	399	138	149	12100	2500	81700
25	4200	3730	42300	389	106	111	14100	1990	75800
26	2920	1910	15100	387	134	140	13200	1580	56300
27	1630	714	3140	430	138	160	9000	1590	38600
28	1160	393	1230	503	159	216	6300	1510	25700
29	948	281	719	645	229	399	4420	1360	16200
30	851	166	381	980	498	1320	3480	1300	12200
31	--	--	--	1090	473	1390	--	--	--
TOTAL	30348	--	90751	18417	--	8788	126610	--	576040

DAY	JULY			AUGUST			SEPTEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	2490	1310	8810	524	124	175	926	213	533
2	2900	1140	8930	490	116	153	1010	248	676
3	3130	887	7500	462	121	151	935	200	505
4	3540	819	7830	430	112	130	857	199	460
5	4180	940	10600	405	91	100	764	185	382
6	4380	755	8930	391	94	99	572	157	242
7	4350	734	8620	370	102	102	516	129	180
8	4310	690	8030	356	143	137	648	148	259
9	4270	716	8250	349	97	91	1090	372	1090
10	4420	587	7010	339	116	106	932	680	1710
11	4450	680	8170	336	93	84	840	384	871
12	4430	667	7980	337	100	91	855	292	674
13	4090	629	6950	372	150	151	750	214	433
14	2790	539	4060	452	150	183	695	214	402
15	1920	464	2410	597	159	256	667	174	313
16	1680	424	1920	978	303	800	653	160	282
17	1560	401	1690	2510	2310	15700	647	147	257
18	1270	368	1260	2560	3130	21600	649	136	238
19	1090	310	912	1800	2160	10500	717	134	259
20	1130	323	985	1270	1110	3810	715	136	263
21	1160	320	1000	1230	841	2790	685	121	224
22	1150	321	997	944	603	1540	680	116	213
23	1140	339	1040	858	347	804	662	110	197
24	1120	342	1030	1130	620	1890	666	116	209
25	1110	533	1600	1170	505	1600	666	121	218
26	1110	312	935	1160	438	1370	636	118	203
27	1110	313	938	1160	380	1190	573	108	167
28	1090	280	824	1180	361	1150	459	90	112
29	1080	270	787	1200	346	1120	422	80	91
30	930	226	567	1280	354	1220	405	97	106
31	646	160	279	1110	271	812	--	--	--
TOTAL	74026	--	130844	27750	--	69905	21292	--	11769

TOTAL DISCHARGE FOR YEAR (CFS-DAYS) 415646
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS) 953618.2

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	SUS- PENDE SEDIM- ENT (MG/L)	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .062 MM	SUS. SED. FALL DIAM. % FINER THAN .125 MM	SUS. SED. FALL DIAM. % FINER THAN .250 MM	SUS. SED. FALL DIAM. % FINER THAN .500 MM	SUS. SED. FALL DIAM. % FINER THAN 1.00 MM	SUS. SED. FALL DIAM. % FINER THAN 2.00 MM
JUNE 10...	1120	5680	2390	44	52	70	98	99	100	--	--	--
JULY 14...	1325	2780	523	44	56	70	94	100	--	--	--	--
SEP. 10...	1100	915	694	83	91	--	99	100	--	--	--	--

DATE	TIME	NUMBER OF SAM- PLING POINTS	INSTAN- TANEOUS DIS- CHARGE (CFS)	BED MAT. FALL DIAM. % FINER THAN .062 MM	BED MAT. FALL DIAM. % FINER THAN .125 MM	BED MAT. FALL DIAM. % FINER THAN .250 MM	BED MAT. FALL DIAM. % FINER THAN .500 MM	BED MAT. FALL DIAM. % FINER THAN 1.00 MM	BED MAT. FALL DIAM. % FINER THAN 2.00 MM	BED MAT. FALL DIAM. % FINER THAN 4.00 MM	BED MAT. FALL DIAM. % FINER THAN 8.00 MM	BED MAT. FALL DIAM. % FINER THAN 16.0 MM
OCT. 07...	1600	15	649	--	0	16	68	88	89	98	100	--
MAR. 12...	1140	9	787	--	0	6	34	62	78	94	100	--

KANSAS RIVER BASIN

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06884025 LITTLE BLUE RIVER AT HOLLENBERG, KS

LOCATION.--Lat 39°58'49", long 97°00'14", in SE¼ in sec.8, T.1 S., R.4 E., Washington County, at county highway bridge, 0.6 mi (1.0 km) west of Hollenberg.

PERIOD OF RECORD.--Chemical analyses: July 1972 to September 1975.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	TOTAL IRON (FE) (UG/L)	DIS- SOLVED IRON (FE) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)
OCT.											
23...	112	--	--	--	--	--	--	--	--	--	--
NOV.											
14...	131	--	--	--	--	--	--	--	--	--	--
DEC.											
18...	130	27	--	40	--	40	62	9.6	40	4.8	234
JAN.											
15...	130	--	--	--	--	--	--	--	--	--	--
FEB.											
27...	--	--	--	--	--	--	--	--	--	--	--
MAR.											
18...	3540	9.4	36000	60	720	20	19	2.7	5.5	8.2	61
APR.											
07...	240	--	--	--	--	--	--	--	--	--	--
MAY											
22...	166	--	--	--	--	--	--	--	--	--	--
31...	--	10	44000	120	480	10	23	3.8	7.1	7.3	83
JUNE											
03...	3150	8.2	120000	100	1900	0	18	3.1	5.7	7.1	65
JULY											
23...	9430	13	84000	30	--	0	18	1.9	6.0	9.9	53
AUG.											
12...	137	--	--	--	--	--	--	--	--	--	--
SEP.											
24...	100	--	--	--	--	--	--	--	--	--	--

DATE	CAR- BONATE (CO ₃) (MG/L)	ALKA- LITY AS CACO ₃ (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	DIS- SOLVED NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	DIS- SOLVED AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	DIS- SOLVED ORGANIC NITRO- GEN (N) (MG/L)
OCT.											
23...	--	--	--	45	--	.71	.65	.16	--	.55	--
NOV.											
14...	--	--	--	39	--	1.2	1.1	.37	--	.11	--
DEC.											
18...	--	192	44	41	.3	1.3	1.3	.23	--	.77	--
JAN.											
15...	--	--	--	46	--	1.4	1.3	.37	--	1.2	--
FEB.											
27...	--	--	--	30	--	1.5	1.3	.26	--	.48	--
MAR.											
18...	0	50	16	5.8	.5	2.5	1.6	--	.30	--	1.1
APR.											
07...	--	--	--	35	--	1.4	1.4	.21	--	.40	--
MAY											
22...	--	--	--	40	--	.00	.02	.07	--	1.3	--
31...	0	68	13	7.2	.3	1.9	1.6	1.5	.01	7.1	.92
JUNE											
03...	0	53	12	4.5	.3	1.6	1.5	.68	.01	2.4	2.5
JULY											
23...	0	43	9.7	6.0	.4	2.5	2.4	.13	.00	6.6	1.2
AUG.											
12...	--	--	--	31	--	.08	--	.04	--	1.6	--
SEP.											
24...	--	--	--	51	--	.43	--	.17	--	2.0	--

06884025 LITTLE BLUE RIVER AT HOLLENBERG, KS.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	DIS- SOLVED KJEL- NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOL- VED- PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)
OCT.											
23...	.71	--	1.4	1.2	.79	356	--	.48	108	--	--
NOV.											
14...	.48	--	1.7	.49	.34	371	--	.50	131	--	--
DEC.											
18...	1.0	--	2.3	.40	.40	--	350	.48	123	190	2
JAN.											
15...	1.6	--	3.0	.33	.26	395	--	.54	139	--	--
FEB.											
27...	.74	--	2.2	.48	.31	310	--	.42	187	--	--
MAR.											
18...	--	1.4	--	.99	.34	--	105	.14	1000	59	9
APR.											
07...	.61	--	2.0	.35	.29	342	--	.47	222	--	--
MAY											
22...	1.4	--	1.4	.18	.18	381	--	.52	171	--	--
31...	8.6	.93	11	3.9	.20	--	120	.16	531	73	5
JUNE											
03...	3.1	2.5	4.7	1.6	.17	--	98	.13	833	58	4
JULY											
23...	6.7	1.2	9.2	--	.26	--	102	.14	2600	53	9
AUG.											
12...	1.6	--	1.7	.53	.31	286	--	.39	106	--	--
SEP.											
24...	2.2	--	2.6	.53	.23	368	--	.50	99.4	--	--

DATE	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	CHEM- ICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)
OCT.											
23...	--	613	7.8	14.0	--	15	10.0	--	4.0	167	157
NOV.											
14...	--	586	7.6	4.0	--	15	12.2	--	3.8	10	114
DEC.											
18...	1.2	573	7.6	.5	5	20	13.5	--	6.8	50	120
JAN.											
15...	--	643	7.5	.5	--	20	13.0	--	2.0	67	186
FEB.											
27...	--	518	8.2	.5	--	40	11.2	--	4.5	60	5800
MAR.											
18...	.3	174	6.6	3.2	100	120	12.1	110	20	1700	47000
APR.											
07...	--	557	6.8	5.0	--	40	12.4	--	--	222	256
MAY											
22...	--	570	7.5	26.5	--	60	9.7	--	26	--	133
31...	.4	196	7.1	19.0	250	1320	7.6	--	42	73000	18600
JUNE											
03...	.3	158	--	18.5	310	1900	7.4	--	40	73000	280000
JULY											
23...	.4	151	7.4	20.0	260	900	14.5	160	9.8	83000	25000
AUG.											
12...	--	494	8.5	27.5	--	50	12.4	--	15	1500	248
SEP.											
24...	--	620	7.9	19.0	--	70	11.2	--	--	167	232

06884025 LITTLE BLUE RIVER AT HOLLENBERG, KS.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

[illegible]

DATE	DIS- SOLVED BORON (B) (UG/L)	TOTAL CAD- MIUM (CD) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)
DEC. 18...	60	--	--	--	--	--	--	--	--
MAR. 18...	50	10	2	3	0	<50	1	50	18
MAY 31...	30	10	0	60	0	<50	0	70	5
JUNE 03...	40	<10	1	120	0	50	0	120	8
JULY 23...	90	10	1	90	10	100	0	80	6

DATE	TOTAL LEAD (PB) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	TOTAL SELE- NIUM (SE) (UG/L)	DIS- SOLVED SELE- NIUM (SE) (UG/L)	DIS- SOLVED SILVER (AG) (UG/L)	TOTAL ZINC (ZN) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
DEC. 18...	--	--	--	--	--	--	--	--	--
MAR. 18...	<100	2	.1	.1	1	0	0	90	40
MAY 31...	100	2	.2	.0	1	1	0	600	10
JUNE 03...	100	4	.3	.1	1	1	0	390	0
JULY 23...	<100	1	.2	.0	1	0	0	440	8

[illegible]

LOCATION.--Lat 39°46'33", long 96°51'29", in NW¼SW¼ sec.22, T.3 S., R.5 E., Washington County, at gaging station at bridge on State Highway 15 E., 0.4 mi (0.6 km) downstream from Malone Creek, 4.5 mi (7.2 km) north of Barnes, and at mile 19.2 (30.9 km).

DRAINAGE AREA.--3,324 mi² (8,609 km²).

PERIOD OF RECORD.--Chemical analyses: October 1961 to September 1975 (discontinued).

REMARKS.--Chemical analyses by Kansas Department of Health and Environment, Topeka, Ks.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	INSTANTANEOUS DISCHARGE (CFS)	TEMPERATURE (DEG C)	DIS-SOLVED SILICA (SiO ₂) (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO ₃) (MG/L)	CARBONATE (CO ₃) (MG/L)	DIS-SOLVED SULFATE (SO ₄) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)
OCT. 23...	124	19.0	21	85	13	42	6.2	260	0	85	46	.4
NOV. 20...	170	9.0	24	82	13	40	5.2	260	0	76	44	.2
DEC. 17...	178	2.0	25	82	13	37	5.0	250	0	72	39	.2
JAN. 21...	172	.5	25	83	12	38	5.0	250	0	79	40	.2
FEB. 20...	193	.5	27	83	16	39	5.2	250	0	82	42	.2
MAR. 20...	205	8.5	14	29	6.7	5.0	7.8	83	0	24	10	.3
APR. 22...	329	16.0	17	83	9.0	37	6.5	240	0	82	34	.3
MAY 22...	204	26.5	17	75	15	40	7.0	240	0	83	42	.3
JUNE 04...	3860	20.0	13	27	3.0	6.0	7.2	85	0	16	6.0	.3
17...	532	25.0	18	48	8.8	17	9.2	150	0	40	21	.4
JULY 24...	7380	25.0	17	19	4.0	7.5	11	68	0	16	7.0	.5
AUG. 22...	248	26.0	19	70	12	35	9.8	230	0	65	37	.6
SEP. 23...	128	19.0	15	78	11	46	7.2	240	0	82	52	.3

DATE	DIS-SOLVED NITRATE (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER DAY)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	TURBIDITY (JTU)	HARDNESS (CA, MG/L)	NON-CARBONATE HARDNESS (MG/L)	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICRO-MHOS)
OCT. 23...	.56	.36	150	446	149	.61	75	270	52	1.1	690
NOV. 20...	.61	.28	140	422	194	.57	6	260	48	1.1	670
DEC. 17...	.93	.30	120	420	202	.57	25	260	56	1.0	660
JAN. 21...	.93	.26	110	424	197	.58	7	260	48	1.0	660
FEB. 20...	1.2	.28	90	440	229	.60	7	270	65	1.0	670
MAR. 20...	2.2	.49	60	155	85.8	.21	850	100	32	.2	220
APR. 22...	.50	.30	120	399	354	.54	65	240	48	1.0	630
MAY 22...	.02	.23	120	412	227	.56	15	250	52	1.1	650
JUNE 04...	1.3	.59	80	146	1520	.20	4500	80	10	.3	230
17...	.84	.39	60	254	365	.35	650	160	30	.6	420
JULY 24...	3.6	.59	120	144	2870	.20	3000	64	8	.4	200
AUG. 22...	.20	.38	90	360	241	.49	65	220	36	1.0	630
SEP. 23...	.07	.21	140	430	149	.58	50	240	43	1.3	690

DATE	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)
OCT. 23...	140	0
APR. 22...	140	0

KANSAS RIVER BASIN

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06887000 BIG BLUE RIVER NEAR MANHATTAN, KS
(National Stream-Quality Accounting Network Station)

LOCATION.--Lat 39°14'14", long 96°34'16", in SW 1/4 sec. 30, T.9 S., R.8 E., Riley County, at outlet to Tuttle Creek Reservoir, 2.5 mi (4.0 km) upstream from gaging station 4.0 mi (6.4 km) north of Manhattan.

DRAINAGE AREA.--9,640 mi² (24,970 km²), approximately, upstream from gaging station.

PERIOD OF RECORD.--Chemical analyses: October 1955 to September 1958, October 1961 to September 1975.
Water temperatures: October 1955 to September 1958, October 1974 to September 1975.

EXTREMES.--1974-75:

Specific conductance: Maximum daily, 674 micromhos Feb. 11; minimum daily, 318 micromhos July 25.
Water temperatures: Maximum, 27.0°C Aug. 21, 22, Sept. 4; minimum, 0.0°C Feb. 17, 18, 19.

REMARKS.--Chemical analyses by Kansas Department of Health and Environment, Topeka, Ks. and by U.S. Geological Survey. At discharges greater than 1,000 ft³/s (28 m³/s) samples are collected at bridge at gaging station. Chemical analyses by Kansas Department of Health and Environment were discontinued September 1975.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975¹

DATE	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MA- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)
OCT.												
09...	296	16.5	4.6	64	17	27	6.6	230	0	68	23	.5
10...	296	15.5	6.6	67	18	26	5.8	250	0	66	25	.3
11...	294	16.0	4.8	66	17	27	6.8	230	0	66	23	.4
NOV.												
14...	949	11.0	3.8	66	18	28	6.5	230	0	72	23	.3
DEC.												
10...	211	5.0	4.0	67	17	29	6.2	240	0	74	26	.4
APR.												
10...	8040	8.5	4.8	62	15	30	5.8	220	0	70	27	.3
MAY												
14...	776	15.5	3.5	59	15	25	5.8	210	0	61	23	.3
JUNE												
11...	10600	20.5	6.2	58	9.6	22	6.0	190	0	54	18	.4
JULY												
02...	8090	25.0	9.0	42	7.6	15	6.0	140	0	33	13	.3
AUG.												
07...	919	25.5	12	42	13	13	8.0	180	0	30	10	.4
SEP.												
19...	200	21.0	13	48	7.8	14	8.0	160	0	35	14	.4

DATE	DIS- SOLVED NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER DAY)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	TUR- BID- ITY (JTU)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)
OCT.											
09...	.29	.11	40	340	272	.46	25	230	41	.8	570
10...	.47	.12	90	350	280	.48	8	240	35	.7	560
11...	.34	.10	60	344	273	.47	25	230	42	.8	570
NOV.											
14...	.41	.08	110	350	897	.48	8	240	46	.8	560
DEC.											
10...	.45	.12	110	357	203	.49	8	240	43	.8	570
APR.											
10...	.63	.20	90	340	7380	.46	15	220	38	.9	550
MAY											
14...	.81	.17	80	315	660	.43	35	210	38	.8	510
JUNE											
11...	2.3	.15	110	280	8010	.38	65	180	30	.7	470
JULY											
02...	1.5	.22	60	205	4480	.28	65	140	20	.6	360
AUG.											
07...	1.0	.21	80	193	479	.26	75	160	10	.4	360
SEP.											
19...	.81	.20	90	256	138	.35	25	150	21	.5	390

¹KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT.

KANSAS RIVER BASIN

06887000 BIG BLUE RIVER NEAR MANHATTAN, KS.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT.										
11...	296	5.2	64	18	26	7.9	230	0	70	21
NOV.										
13...	965	3.8	64	16	29	5.8	230	2	64	22
DEC.										
11...	213	4.1	68	16	30	7.7	240	--	65	23
JAN.										
15...	21	9.4	81	18	25	5.9	307	--	47	24
FEB.										
13...	314	13	90	22	23	4.4	343	0	50	24
MAR.										
13...	12	13	91	24	20	4.3	340	0	58	19
APR.										
10...	804	3.3	63	16	28	6.7	220	0	71	24
MAY										
14...	773	1.9	56	15	26	7.0	207	0	64	20
JUNE										
11...	10600	5.3	52	13	22	7.2	188	0	50	16
JULY										
02...	8090	9.3	42	8.1	13	7.0	138	0	37	9.9
AUG.										
07...	919	12	39	8.8	13	8.1	142	0	32	9.9
SEP.										
11...	212	12	45	10	14	8.2	163	0	36	11

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT).	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO
OCT.										
11...	.3	.81	.76	.12	345	.47	89.4	230	45	.7
NOV.										
13...	.3	.80	.50	.11	341	.46	888	230	38	.8
DEC.										
11...	.4	.72	.64	.09	353	.48	203	240	39	.9
JAN.										
15...	.3	.25	.62	.13	377	.51	21.4	280	25	.7
FEB.										
13...	.3	.26	.70	.12	409	.56	347	320	39	.6
MAR.										
13...	.3	.01	.49	.09	397	.54	12.9	330	46	.5
APR.										
10...	.3	.62	4.0	.16	330	.45	716	220	44	.8
MAY										
14...	.3	.90	2.4	.11	303	.41	332	200	32	8.0
JUNE										
11...	.3	1.5	.76	.16	279	.38	7990	180	29	.7
JULY										
02...	.3	1.7	.78	.20	206	.28	4500	140	25	.5
AUG.										
07...	.3	1.6	.49	.21	205	.28	509	130	17	.5
SEP.										
11...	.3	1.6	.70	.22	233	.32	133	150	20	.5

DATE	DIS- SOLVED ARSENIC (AS) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	TOTAL CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	TOTAL COBALT (CO) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)	TOTAL COPPER (CU) (UG/L)	DIS- SOLVED IRON (FE) (UG/L)
OCT.											
11...	2	2	1	<10	0	0	0	<50	320	<10	20
JAN.											
15...	3	3	1	10	0	10	1	50	3	120	60
APR.											
10...	1	3	2	<10	0	0	0	<50	3	<10	10
JULY											
02...	2	5	1	<10	0	10	0	<50	3	<10	40

DATE	TOTAL IRON (FE) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	TOTAL LEAD (PB) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DIS- SOLVED SELE- NIUM (SE) (UG/L)	TOTAL SELE- NIUM (SE) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)	TOTAL ZINC (ZN) (UG/L)
OCT.											
11...	1200	3	<100	10	90	.1	.2	1	1	30	320
JAN.											
15...	730	4	100	400	490	.2	.0	1	1	20	40
APR.											
10...	560	0	<100	0	30	.2	--	1	1	10	20
JULY											
02...	3100	4	<100	0	0	.0	.0	1	1	10	120

06887000 BIG BLUE RIVER NEAR MANHATTAN, KS.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCEI (COL- ONIES PER 100 ML)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	PH (UNITS)	DIS- SOLVED OXYGEN (MG/L)	TUR- BID- ITY (JTU)
OCT. 11...	680	50	582	16.0	8.1	9.2	20
NOV. 13...	<50	<40	583	8.5	8.5	11.1	15
DEC. 11...	<30	<10	587	5.0	8.1	12.1	7
JAN. 15...	3100	20	679	1.5	7.3	11.9	30
FEB. 13...	500	220	713	.5	7.8	12.7	25
MAR. 13...	3200	620	648	2.5	7.8	10.1	5
APR. 10...	67	40	540	8.5	7.8	11.4	15
MAY 14...	100	90	538	15.5	8.4	10.1	20
JUNE 11...	152	620	510	20.5	8.2	9.2	29
JULY 02...	200	175	358	25.0	7.9	7.4	45
AUG. 07...	--	330	358	25.5	7.9	8.1	90
SEP. 11...	2900	80	382	22.5	7.7	6.1	30

DATE	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL PHYTO- PLANK- TON (CELLS PER ML)
OCT. 11...	8.2	2700
NOV. 13...	--	1200
JAN. 15...	4.9	5900
FEB. 13...	--	6000
MAR. 13...	--	6900
APR. 10...	19	--
MAY 14...	--	9000
JUNE 11...	--	290
JULY 02...	9.5	380
AUG. 07...	--	13
SEP. 11...	--	1200

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C) , WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	560	561	574	584	634	626	566	504	503	341	339	356
2	560	560	574	580	632	627	583	501	504	331	331	357
3	565	559	574	579	608	637	557	503	504	334	332	361
4	565	582	574	575	629	624	546	507	503	331	329	363
5	570	562	570	578	633	631	546	507	499	339	328	368
6	570	561	572	578	634	627	544	504	495	336	326	366
7	570	558	572	577	660	630	545	504	491	333	324	370
8	570	560	575	572	672	636	544	504	464	326	324	368
9	570	562	576	585	671	639	549	504	462	323	329	367
10	560	561	574	575	672	639	548	503	461	319	333	366
11	559	561	569	590	674	638	540	504	461	346	337	367
12	558	560	573	606	669	641	537	504	449	335	333	393
13	552	563	572	588	668	642	537	504	451	338	337	377
14	558	561	578	618	652	638	537	506	442	336	338	393
15	561	561	576	616	651	637	540	507	439	338	336	379
16	565	562	571	575	653	642	550	505	437	335	337	379
17	562	565	572	627	612	641	538	506	413	352	336	395
18	565	562	576	622	610	639	528	505	415	353	340	388
19	563	565	574	615	629	641	532	504	403	350	338	386
20	570	564	579	625	643	645	562	509	397	343	339	374
21	571	584	580	620	646	650	526	509	400	343	344	380
22	556	565	581	625	551	652	524	503	402	336	344	375
23	560	565	584	631	597	659	522	503	406	334	344	381
24	564	565	581	627	604	661	520	492	403	319	344	379
25	558	567	582	634	649	659	519	506	385	318	344	380
26	560	568	583	628	660	664	517	464	365	319	344	386
27	564	561	581	646	635	658	514	501	366	319	352	380
28	570	567	577	630	637	599	515	494	365	320	350	383
29	566	569	576	632	---	548	502	478	362	322	350	403
30	552	570	581	626	---	549	499	480	343	323	355	388
31	561	---	580	644	---	549	---	---	---	324	352	---
AVERAGE	563	564	576	607	639	631	536	501	433	333	338	377

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17.5	15.0	5.0	3.0	3.0	6.0	4.0	14.0	19.0	23.0	25.0	25.0
2	17.5	14.0	6.0	2.0	4.0	7.0	4.0	14.0	20.0	24.0	25.0	25.0
3	17.5	13.5	7.0	2.0	4.0	6.0	5.0	14.0	20.0	24.0	26.0	26.0
4	17.5	13.5	7.0	2.0	4.0	6.0	6.0	14.0	20.0	24.0	26.0	27.0
5	17.0	12.0	7.0	2.0	2.0	7.0	8.0	15.0	22.0	24.0	26.0	24.0
6	17.0	13.0	7.0	3.0	1.0	6.0	6.0	16.0	21.0	23.0	26.0	25.0
7	17.0	13.0	6.0	3.0	2.0	5.0	5.0	15.0	21.0	25.0	25.0	24.0
8	17.0	13.0	5.0	3.0	2.0	6.0	6.0	17.0	21.0	25.0	26.0	25.0
9	17.0	13.0	5.0	5.0	1.0	5.0	7.0	17.0	20.0	25.0	25.0	25.0
10	17.0	12.0	6.0	2.0	1.0	5.0	6.0	17.0	20.0	26.0	25.0	24.0
11	17.0	12.0	6.0	1.0	2.0	4.0	7.0	17.0	22.0	25.0	26.0	21.0
12	15.0	11.0	6.0	1.0	2.0	4.0	7.0	18.0	21.0	24.0	25.0	23.0
13	15.0	10.0	5.0	2.0	2.0	5.0	6.0	15.0	21.0	24.0	25.0	21.0
14	15.0	10.0	5.0	3.0	2.0	6.0	7.0	17.0	21.0	24.0	25.0	20.0
15	15.0	10.0	4.0	4.0	2.0	7.0	7.0	17.0	21.0	24.0	25.0	21.0
16	14.0	11.5	4.0	4.0	1.0	6.0	8.0	18.0	20.0	24.0	26.0	20.0
17	15.0	10.5	4.0	4.0	0.0	8.0	9.0	18.0	21.0	24.0	25.0	22.0
18	17.0	10.0	4.0	5.0	0.0	11.0	7.0	17.0	21.0	25.0	26.0	20.0
19	15.0	10.5	4.0	4.0	0.0	12.0	9.0	19.0	22.0	26.0	26.0	21.0
20	13.5	10.5	4.0	4.0	1.0	14.0	10.0	18.0	22.0	24.0	26.0	21.0
21	15.0	10.5	4.0	5.0	2.0	13.0	10.0	20.0	21.0	25.0	27.0	21.0
22	16.0	11.0	5.0	4.0	2.0	12.0	11.0	18.0	21.0	25.0	27.0	21.0
23	15.0	9.0	4.0	4.0	1.0	10.0	11.0	19.0	24.0	25.0	26.0	20.0
24	15.0	9.0	4.0	5.0	2.0	9.0	12.0	22.0	23.0	26.0	26.0	19.0
25	15.0	9.0	3.0	5.0	5.0	9.0	13.0	20.0	22.0	25.0	25.0	20.0
26	16.0	9.5	4.0	5.0	5.0	6.0	12.0	23.0	22.0	25.0	26.0	20.0
27	15.0	9.0	4.0	5.0	5.0	8.0	14.0	21.0	23.0	26.0	25.0	20.0
28	15.0	8.5	4.0	5.0	5.0	8.0	13.0	20.0	23.0	25.0	25.0	18.0
29	16.0	6.0	4.0	4.0	---	5.0	14.0	19.0	23.0	25.0	25.0	20.0
30	16.0	5.0	3.0	4.0	---	6.0	14.0	18.0	23.0	25.0	25.0	17.0
31	15.0	---	4.0	4.0	---	6.0	---	20.0	---	25.0	25.0	---
AVERAGE	16.0	11.0	5.0	3.5	2.5	7.5	8.5	17.5	21.5	24.5	25.5	22.0

06887500 KANSAS RIVER AT WAMEGO, KS

LOCATION.--Lat 39°11'52", long 96°18'16", in NW¼SW¼NE¼ sec.9, T.10 S., R.10 E., Pottawatomie County, at gaging station at bridge on State Highway 99 at Wamego, 3.0 mi (4.8 km) downstream from Antelope Creek, and at mile 126.9 (204.2 km).

DRAINAGE AREA.--55,280 mi² (143,200 km²), approximately, of which a large area is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: August 1956 to September 1958, October 1961 to September 1975 (discontinued).

Water temperatures: August 1956 to September 1975 (discontinued).

Sediment records: October 1957 to September 1975.

EXTREMES.--1974-75:

Specific conductance: Maximum daily, 1,950 micromhos Jan. 18; minimum daily, 406 micromhos June 26.

Water temperatures: Maximum, 30.5°C July 22; minimum, freezing point on many days during winter period.

Sediment concentrations: Maximum daily, 2,480 mg/l June 25; minimum daily, 6 mg/l Jan. 12.

Sediment discharge: Maximum daily, 125,000 tons (113,000 tonnes) June 26; minimum daily, 13 tons (12 tonnes) Jan. 12.

Period of record:

Specific conductance: Maximum daily, 2,100 micromhos Oct. 25, 1971; minimum daily, 123 micromhos Nov. 20, 1967.

Water temperatures: Maximum, 33.5°C July 21, 1974; minimum, freezing point on many days during winter period.

Sediment concentrations: Maximum daily, 10,000 mg/l July 5, 1959; minimum daily, 5 mg/l Jan. 28, 1972.

Sediment discharge: Maximum daily, 752,000 tons (682,000 tonnes) May 7, 1959; minimum daily, 9 tons (8.2 tonnes) Jan. 16, 1967.

REMARKS.--Chemical analyses by Kansas Department of Health and Environment, Topeka, Ks.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)
OCT. 30...	2590	19.0	9.6	110	24	130	7.2	280	0	150	190	.4
NOV. 25...	2800	8.0	7.9	93	23	86	6.8	280	0	130	120	.3
DEC. 19...	1160	--	10	120	31	140	6.8	310	0	180	200	.3
JAN. 14...	729	.0	12	140	33	170	6.0	360	0	220	240	.3
FEB. 12...	1260	.0	13	110	26	85	5.4	280	0	160	120	.3
MAR. 31...	1880	9.0	8.4	110	27	100	7.0	280	0	170	140	.3
APR. 30...	419	17.0	8.6	78	16	47	7.0	220	0	120	48	.4
MAY 27...	928	25.0	3.9	93	30	150	7.2	220	0	210	220	4.0
JULY 02...	13800	25.5	8.7	53	9.7	29	7.0	160	0	63	32	.2
AUG. 22...	3340	30.0	10	56	14	40	8.8	160	0	80	50	.5
SEP. 18...	1190	21.0	13	88	18	95	8.5	230	0	110	140	.4

DATE	DIS- SOLVED NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER DAY)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	TUR- BID- ITY (JTU)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)
OCT. 30...	.56	.21	150	800	5590	1.09	110	360	130	2.9	1320
NOV. 25...	.70	.18	140	622	4700	.85	25	330	100	2.1	1020
DEC. 19...	.75	.19	150	862	2700	1.17	3	410	160	2.9	1430
JAN. 14...	.86	.24	230	1040	2050	1.41	7	490	200	3.4	1680
FEB. 12...	1.2	.24	140	680	2310	.92	65	370	140	1.9	1100
MAR. 31...	.61	.15	200	740	3760	1.01	25	380	150	2.2	1180
APR. 30...	.95	.19	120	434	491	.59	200	260	80	1.3	710
MAY 27...	.23	.12	150	850	2130	1.16	35	360	170	3.5	1450
JULY 02...	.81	.18	90	300	11200	.41	350	170	40	1.0	510
AUG. 22...	.86	.25	80	360	3250	.49	700	200	66	1.2	620
SEP. 18...	.63	.27	170	630	2020	.86	130	290	110	2.4	1040

DATE	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)
OCT. 30...	110	0
APR. 30...	110	0

KANSAS RIVER BASIN

06887500 KANSAS RIVER AT WAMEGO, KS.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C) , WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1190	704	1390	1360	1660	1440	1140	736	783	505	669	1180
2	904	814	1400	1360	1660	1310	831	776	673	481	805	1130
3	1190	769	1500	1360	1680	1100	797	773	576	508	768	1090
4	1190	756	1630	1350	1570	956	802	788	535	511	741	1280
5	1150	654	1650	1350	1560	975	802	811	558	533	938	1100
6	1070	883	1580	1340	1210	1050	816	772	530	562	933	959
7	1070	894	1540	1340	1290	1130	814	773	530	557	906	1160
8	1190	949	1570	1340	1460	1100	707	751	492	558	915	1080
9	1410	877	1590	1190	1330	1130	656	741	508	568	960	1060
10	1600	989	1570	1460	1280	1170	706	872	513	547	984	1060
11	1560	1070	1640	1580	1200	1200	620	889	513	570	986	1290
12	1170	1030	1640	1270	1080	1210	613	880	497	724	984	1180
13	1050	1100	1620	1630	1370	1230	604	963	531	707	948	986
14	616	1090	1540	1610	1410	1190	601	1010	557	876	897	887
15	667	1070	1420	1540	1440	1250	594	994	584	711	1000	938
16	1150	1120	1420	1630	1390	1210	605	984	594	691	1070	941
17	933	1140	1410	1670	1330	1190	625	1010	590	679	1170	1020
18	896	1160	1390	1950	1420	1150	621	1030	630	929	1380	1020
19	885	1170	1410	1590	1320	1260	615	989	627	983	798	1060
20	1020	1200	1430	1670	1400	1290	781	1070	685	963	548	1070
21	1260	1170	1430	1620	1440	1110	795	1090	628	977	538	1080
22	1570	966	1420	1620	1410	1110	774	1080	570	1090	590	1080
23	1280	971	1430	1620	1260	1160	825	1090	638	1210	643	1040
24	1270	971	1520	1560	1410	1190	835	1200	614	1270	655	1040
25	1210	974	1570	1630	1400	1230	950	1360	496	697	663	1050
26	1150	971	1370	1630	1390	1260	800	1380	406	694	780	1060
27	1190	959	1340	1640	1380	1240	725	1430	468	694	855	1040
28	1180	1240	1340	1680	1350	1250	725	1460	495	707	984	1040
29	1180	1330	1320	1720	---	1260	730	1330	507	726	1110	1210
30	1060	1380	1320	1630	---	1130	730	1350	499	707	1140	1140
31	789	---	1360	1650	---	1150	---	795	---	699	1170	---
AVERAGE	1130	1010	1480	1540	1400	1180	741	1010	561	730	888	1080

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17.0	16.0	4.0	1.0	1.0	8.0	5.0	16.5	20.0	26.5	28.0	30.0
2	15.0	13.5	3.0	1.0	2.0	6.0	3.0	16.0	22.5	26.0	27.0	29.0
3	18.0	11.5	3.0	1.0	3.0	5.0	6.0	18.5	23.0	26.5	28.5	28.0
4	19.5	11.5	4.0	1.0	1.0	4.0	9.0	20.0	22.0	26.5	29.0	26.5
5	19.0	9.0	6.0	1.0	0.0	9.0	12.0	20.5	23.5	27.0	29.5	24.0
6	17.5	10.0	6.0	1.0	0.0	6.0	10.0	20.0	24.0	27.5	27.5	25.0
7	16.0	12.0	6.0	2.0	0.0	6.0	8.0	20.0	23.5	27.5	28.0	26.0
8	17.0	12.0	2.0	3.0	0.0	5.0	9.0	20.0	20.0	28.0	28.5	26.0
9	18.5	11.0	2.0	5.0	0.0	2.0	11.0	20.5	22.0	27.0	29.0	26.5
10	19.5	11.0	4.0	1.0	0.0	2.0	8.0	21.0	20.0	27.0	29.0	24.0
11	18.0	10.0	4.0	0.0	0.0	3.0	7.0	20.0	21.5	26.0	29.0	19.5
12	16.0	9.0	4.0	0.0	0.0	5.0	9.5	21.0	22.0	26.0	28.5	20.0
13	15.0	7.0	4.0	0.0	0.0	4.0	7.5	17.0	24.0	26.0	25.0	21.0
14	15.0	6.0	3.0	0.0	0.0	5.0	8.0	21.5	22.5	26.0	26.5	17.5
15	15.0	8.0	2.0	0.0	0.0	6.0	10.0	23.0	23.0	26.5	28.0	17.5
16	16.0	9.0	1.0	0.0	0.0	8.0	12.5	23.0	21.0	27.0	29.5	19.5
17	18.0	10.0	2.0	0.0	0.0	9.0	13.0	24.0	23.0	27.0	27.0	21.0
18	16.5	10.0	1.0	1.0	0.0	12.0	8.5	25.0	23.5	28.0	28.0	20.0
19	16.0	10.0	2.0	1.0	0.0	14.0	10.5	25.5	24.0	30.0	28.0	20.0
20	15.5	10.0	2.0	1.0	0.0	16.0	14.0	23.5	25.0	30.0	30.0	19.0
21	16.0	10.0	2.0	1.0	0.0	14.0	16.0	27.0	24.0	29.0	30.0	19.0
22	17.0	11.0	4.0	1.0	0.0	13.0	16.0	26.0	23.0	30.5	30.0	20.0
23	17.5	8.0	3.0	3.0	0.0	14.0	19.5	24.0	24.5	28.5	30.0	19.0
24	18.5	8.0	0.0	4.0	4.0	6.0	18.0	25.5	26.5	28.0	28.5	17.0
25	18.5	7.0	3.0	4.0	6.0	7.0	19.5	25.0	25.5	27.5	23.0	19.0
26	17.5	7.0	0.0	5.0	7.0	4.0	19.0	26.0	25.0	28.5	25.0	18.5
27	18.0	7.5	2.0	4.0	6.0	10.0	19.0	23.5	25.5	30.0	27.0	19.5
28	16.0	4.5	3.0	3.0	8.0	8.0	18.0	22.0	26.0	29.0	25.0	17.0
29	17.5	2.0	2.0	3.0	---	6.0	17.5	21.5	26.0	28.0	28.0	19.5
30	18.0	1.5	1.0	2.0	---	8.0	18.0	19.0	26.0	28.0	29.0	16.0
31	16.0	---	3.0	1.0	---	11.0	---	21.0	---	28.0	29.0	---
AVERAGE	17.0	9.0	3.0	1.5	1.5	7.5	12.0	22.0	23.5	27.5	28.0	21.5

06887500 KANSAS RIVER AT WAMEGO, KS.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCTOBER			NOVEMBER			DECEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	2400	120	778	4430	1030	12300	1430	29	112
2	2510	112	759	4300	781	9070	1400	48	181
3	2290	116	717	3420	465	4290	1200	29	94
4	2260	153	934	3120	353	2970	1090	65	191
5	2240	107	647	3480	378	3550	1080	24	70
6	2190	103	609	2850	215	1650	1080	19	55
7	2090	91	514	2510	208	1410	1130	18	55
8	2030	87	477	2270	318	1950	1090	13	38
9	1900	84	431	2200	148	879	1070	14	40
10	1800	114	554	2420	108	706	1050	20	57
11	1810	98	479	2580	193	1340	1030	12	33
12	1650	98	437	2490	160	1080	1010	12	33
13	1900	199	1020	2350	126	799	998	12	32
14	5110	1900	26200	2160	81	472	1100	25	74
15	4300	1640	19000	2030	80	438	1240	22	74
16	2650	1230	8800	1960	64	339	1230	13	43
17	2120	946	5410	1900	61	313	1220	22	72
18	1600	703	3040	1880	61	310	1210	22	72
19	1230	481	1600	1860	66	331	1190	26	84
20	1070	318	919	1820	52	256	1170	11	35
21	1070	256	740	1800	50	243	1150	16	50
22	1240	275	921	2580	110	766	1150	18	56
23	1370	175	647	2830	101	772	1140	16	49
24	1290	112	390	2800	74	559	1190	29	93
25	1330	111	399	2780	103	773	1200	27	87
26	1690	133	607	2760	80	596	1220	15	49
27	1760	100	475	2720	66	485	1230	17	56
28	1780	81	389	1900	45	231	1190	15	48
29	2000	125	675	1480	34	136	1180	15	48
30	2540	324	2220	1450	53	207	1170	17	54
31	4240	923	10600	--	--	--	1190	19	61
TOTAL	65460	--	91388	75130	--	49221	36028	--	2096

DAY	JANUARY			FEBRUARY			MARCH		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	1190	17	55	817	30	66	1690	100	456
2	1210	40	131	817	30	66	1880	100	508
3	1200	14	45	803	50	108	1930	100	521
4	1160	17	53	866	50	117	1680	100	454
5	1150	19	59	1100	91	270	1510	100	408
6	1130	18	55	2260	250	1530	1430	100	386
7	1130	12	37	1500	205	830	1480	100	400
8	1270	14	48	1200	79	256	1950	100	527
9	1820	103	506	1100	272	808	2060	77	428
10	1080	44	128	1100	200	594	2140	75	433
11	929	50	125	1200	150	486	2120	65	372
12	800	6	13	1250	128	432	2110	61	348
13	720	38	74	1300	74	260	2060	66	367
14	720	30	58	1300	100	351	2040	59	325
15	720	26	51	1300	100	351	2030	52	285
16	800	28	60	1300	68	239	2030	57	312
17	1000	26	70	1300	75	263	2030	77	422
18	1200	208	674	1300	94	330	1950	66	347
19	1100	88	261	1300	95	333	1870	123	621
20	1020	79	218	1400	100	378	2290	316	1950
21	943	28	71	1700	100	459	1930	159	829
22	894	27	65	1900	100	513	1690	93	424
23	901	34	83	1700	171	785	1570	103	437
24	866	21	49	1570	200	848	1450	88	345
25	845	23	52	1280	200	691	1360	69	253
26	845	20	46	1210	150	490	1340	70	253
27	831	14	31	1310	150	531	1400	80	302
28	831	16	36	1570	150	636	1420	76	291
29	831	12	27	--	--	--	1460	80	315
30	831	18	40	--	--	--	1800	77	374
31	831	20	45	--	--	--	1870	116	586
TOTAL	30798	--	3266	36753	--	13021	55570	--	14279

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	APRIL			MAY			JUNE		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	1870	181	914	3850	191	1990	4460	328	3950
2	2940	264	2100	3750	167	1690	4690	313	3960
3	3320	164	1470	3800	161	1650	7190	488	9470
4	3290	152	1350	3660	127	1260	11400	468	14400
5	3300	133	1190	3610	131	1280	13900	494	18500
6	3230	101	881	4370	143	1690	14500	499	19500
7	3310	115	1030	4520	121	1480	14500	347	13600
8	4850	312	4090	4470	110	1330	14900	503	20200
9	5710	425	6550	4370	102	1200	17600	881	41900
10	5720	221	3410	3140	101	856	17600	643	30600
11	10000	524	14100	2930	93	736	23000	1170	72700
12	10100	410	11200	2790	89	670	19800	1250	66800
13	10100	297	8100	2120	91	521	15400	801	33300
14	10600	322	9220	1840	98	487	12800	499	17200
15	11300	311	9490	1750	129	610	12000	473	15300
16	11100	260	7790	1720	107	497	11600	387	12100
17	10900	320	9420	1710	140	646	12200	663	21800
18	10700	208	6010	1700	110	505	11300	459	14000
19	10100	169	4610	1650	106	472	11200	223	6740
20	4800	150	1940	1490	126	507	11400	325	10000
21	4140	141	1580	1320	89	317	11500	353	11000
22	3980	116	1250	1270	115	394	16100	900	39100
23	3480	107	1010	1330	201	722	18600	1410	70800
24	3310	117	1050	1130	178	543	15200	2220	91100
25	4250	378	4340	948	496	1270	17500	2480	117000
26	6370	702	12100	941	345	877	22000	2110	125000
27	5850	1440	22700	931	128	322	22100	1650	98500
28	4790	934	12100	964	186	484	18600	1250	62800
29	4330	389	4550	1070	180	520	15400	952	39600
30	4080	251	2770	1330	259	930	13100	831	29400
31	--	--	--	3180	405	3480	--	--	--
TOTAL	181820	--	168315	73654	--	29936	431540	--	1130320

DAY	JULY			AUGUST			SEPTEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	15200	588	24100	6450	133	2320	1920	168	871
2	15000	423	17100	4280	117	1350	1790	127	614
3	18400	495	24600	3510	93	881	1620	115	503
4	19200	585	30300	3400	154	1410	1640	128	567
5	19300	410	21400	2150	103	598	2230	570	3430
6	19600	432	22900	1800	123	598	1880	297	1510
7	19800	588	31400	1750	80	378	1310	133	470
8	19600	447	23700	1710	477	2200	1160	239	749
9	19500	482	25400	1540	112	466	1080	956	2790
10	19300	389	20300	1380	186	693	1120	450	1360
11	18900	454	23200	1350	76	277	1780	307	1480
12	12300	507	16800	1310	72	255	1520	173	710
13	9750	334	8790	1430	84	324	1400	379	1430
14	8860	737	17600	1680	80	363	1340	403	1460
15	10800	401	11700	1460	80	315	1240	251	840
16	9680	456	11900	1470	96	381	1220	200	659
17	6970	260	4890	1700	101	464	1190	159	511
18	3990	255	2750	2290	237	1470	1180	154	491
19	3110	233	1960	3890	1340	14100	1150	126	391
20	2680	203	1470	4440	1950	23400	1160	113	354
21	2490	177	1190	3790	1270	13000	1220	102	336
22	2450	193	1280	3340	686	6190	1240	89	298
23	2400	207	1340	3220	437	3800	1220	76	250
24	2310	182	1140	2930	348	2750	1200	58	188
25	5870	318	5040	2900	290	2270	1190	58	186
26	6610	208	3710	3040	251	2060	1190	115	369
27	6610	191	3410	2610	244	1720	1200	58	188
28	6130	156	2580	2270	225	1380	1260	66	225
29	5320	191	2740	1910	205	1060	1040	57	160
30	6720	154	2790	1890	191	975	989	92	246
31	6620	162	2900	1890	176	898	--	--	--
TOTAL	325470	--	370380	78780	--	88346	40679	--	23636

TOTAL DISCHARGE FOR YEAR (CFS-DAYS)
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS)

1431682
1984204

KANSAS RIVER BASIN

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06887500 KANSAS RIVER AT WAMEGO, KS.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	SUS- PENDE DED SEDI- MENT (MG/L)	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .062 MM	SUS. SED. FALL DIAM. % FINER THAN .125 MM	SUS. SED. FALL DIAM. % FINER THAN .250 MM	SUS. SED. FALL DIAM. % FINER THAN .500 MM	SUS. SED. FALL DIAM. % FINER THAN 1.00 MM	SUS. SED. FALL DIAM. % FINER THAN 2.00 MM
OCT. 30...	1400	2590	336	51	68	75	96	100	--	--	--	--
JULY 02...	1415	13800	424	66	70	76	94	100	--	--	--	--
AUG. 22...	1250	3340	907	53	60	67	98	100	--	--	--	--

DATE	TIME	NUMBER OF SAM- PLING POINTS	INSTAN- TANEOUS DIS- CHARGE (CFS)	BED MAT. FALL DIAM. % FINER THAN .062 MM	BED MAT. FALL DIAM. % FINER THAN .125 MM	BED MAT. FALL DIAM. % FINER THAN .250 MM	BED MAT. FALL DIAM. % FINER THAN .500 MM	BED MAT. FALL DIAM. % FINER THAN 1.00 MM	BED MAT. FALL DIAM. % FINER THAN 2.00 MM	BED MAT. FALL DIAM. % FINER THAN 4.00 MM	BED MAT. FALL DIAM. % FINER THAN 8.00 MM	BED MAT. FALL DIAM. % FINER THAN 16.0 MM
OCT. 30...	1400	8	2590	3	4	12	45	75	87	96	99	100

06888705 KANSAS RIVER AT WILLARD, KS

LOCATION.--Lat 39°05'54", long 95°56'47", in sec.14, T.11 S., R.13 E., Shawnee County, at county highway bridge, 0.5 mi (0.8 km) north of Willard.

PERIOD OF RECORD.--Chemical analyses: March 1974 to September 1975.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TOTAL NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	CHEM- ICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L)	TOTAL RESI- DUE (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL NITRO- GEN (NO3) (MG/L)	TOTAL CAL- CIUM (CA) (MG/L)	TOTAL MAG- NE- SIUM (MG) (MG/L)	TOTAL SODIUM (NA) (MG/L)
OCT. 30...	--	--	--	--	--	--	--	--	--	--	--
NOV. 26...	--	--	--	--	--	--	--	--	--	--	--
DEC. 26...	--	--	--	--	--	--	--	--	--	--	--
JAN. 28...	--	--	--	--	--	--	--	--	--	--	--
FEB. 27...	--	--	--	--	--	--	--	--	--	--	--
MAR. 27...	--	--	--	--	--	--	--	--	--	--	--
APR. 25...	--	--	--	--	--	--	--	--	--	--	--
MAY 27...	--	--	--	--	--	--	--	--	--	--	--
JUNE 24...	--	--	--	--	--	--	--	--	--	--	--
JULY 23...	1.5	1.4	.03	.24	27	801	.11	6.7	83	21	80
AUG. 28...	1.5	.25	.03	.18	29	678	1.2	6.4	71	17	65
SEP. 23...	2.7	2.3	.27	.24	21	715	.40	12	76	6.5	40

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	PH (UNITS)	DIS- SOLVED OXYGEN (MG/L)	FECAL COLI- FORM (COL. PER 100 ML)	TUR- BID- ITY (JTU)	CAR- BONATE (CO3) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)
OCT. 30...	818	15.0	8.2	8.5	480000	230	0	220	--	--	--	--
NOV. 26...	1140	5.5	8.2	12.6	1700	30	0	310	--	--	--	--
DEC. 26...	1500	1.0	8.2	13.9	20	5	0	330	--	--	--	--
JAN. 28...	1530	2.5	8.2	11.8	130	10	0	360	--	--	--	--
FEB. 27...	998	3.0	8.0	12.1	200	45	0	220	--	--	--	--
MAR. 27...	1050	2.0	8.1	11.8	1800	35	0	280	--	--	--	--
APR. 25...	729	17.5	8.1	9.6	800	25	0	270	--	--	--	--
MAY 27...	1190	21.0	7.8	9.4	320	20	0	240	--	--	--	--
JUNE 24...	667	23.5	7.7	7.5	3100	180	0	180	--	--	--	--
JULY 23...	8	25.0	8.3	8.4	1700	60	0	230	120	140	615	1.4
AUG. 28...	862	23.5	8.0	8.8	8200	55	0	210	92	100	492	.22
SEP. 23...	1090	16.5	8.0	8.6	12600	30	0	280	150	120	624	2.0

DATE	TOTAL PO- TAS- SIUM (K) (MG/L)	FLOAT- ING ALGAE MATS (SEVER- ITY)	FLOAT- ING DEBRIS (SEVER- ITY)	DETER- GENT SUDS (SEVER- ITY)	DEAD FISH (SEVER- ITY)	FLOAT- ING GARBAGE (SEVER- ITY)	GAS BUBBLES (SEVER- ITY)	FLOAT- ING OR SOLID ICE COVER (SEVER- ITY)	ATMOS- PHERIC ODOR (SEVER- ITY)	OIL- GREASE (SEVER- ITY)	FLOAT- ING SLUDGE (SEVER- ITY)
OCT. 30...	--	0	0	0	0	0	0	0	0	0	0
NOV. 26...	--	0	0	0	0	0	0	0	0	0	0
DEC. 26...	--	0	0	0	0	0	0	2	0	0	0
JAN. 28...	--	0	0	0	0	0	0	1	0	0	0
FEB. 27...	--	0	0	0	0	0	0	0	0	0	0
MAR. 27...	--	0	0	0	0	0	0	0	0	0	0
APR. 25...	--	0	0	1	0	0	0	0	0	0	0
MAY 27...	--	0	0	1	0	0	0	0	0	0	0
JUNE 24...	--	0	0	0	0	0	0	0	0	0	0
JULY 23...	7.4	0	0	1	0	0	0	0	0	0	0
AUG. 28...	11	0	0	0	0	0	0	0	0	0	0
SEP. 23...	8.1	0	0	0	0	0	0	0	0	0	0

SEVERITY: 0-NONE, 1-MILD, 2-MODERATE, 3-SERIOUS, 4-EXTREME.

06889200 SOLDIER CREEK NEAR DELIA, KS

LOCATION.--Lat 39°12'08", long 95°52'25", in SE¼SW¼SE¼ sec.5, T.10 S., R.14 E., Shawnee County, at gaging station on highway bridge, 5.1 mi (8.2 km) upstream from Walnut Creek, and 5.5 mi (8.8 km) southeast of Delia, and at mile 21.9 (35.2 km).

DRAINAGE AREA.--157 mi² (407 km²).

PERIOD OF RECORD.--Chemical analyses: November 1965 to September 1975 (discontinued).

REMARKS.--Chemical analyses by Kansas Department of Health and Environment, Topeka, Ks. Sediment data for this station on pages 349, 351.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)
OCT. 25...	27	16.5	12	110	26	24	3.0	370	0	90	25	.3
NOV. 13...	10	7.0	11	93	24	21	2.5	320	0	82	18	.3
DEC. 18...	9.4	1.0	6.2	90	28	24	1.8	300	0	110	23	.3
JAN. 15...	6.9	.5	6.4	110	29	24	1.9	370	0	100	20	.3
FEB. 13...	14	.0	11	110	27	24	2.1	380	0	100	19	.3
MAR. 11...	23	2.0	8.4	94	20	19	1.5	300	0	80	15	.2
APR. 10...	41	10.5	6.6	56	19	18	1.5	190	0	75	12	.3
MAY 07...	32	21.0	7.2	96	22	18	1.5	330	0	68	16	.3
JUNE 04...	295	19.5	10	58	4.8	9.0	2.5	180	0	23	7.0	.4
JULY 07...	25	27.5	10	99	16	22	2.8	320	0	68	20	.3
AUG. 07...	761	23.0	8.4	94	24	26	3.2	330	0	79	29	.4
SEP. 09...	7.3	22.0	9.8	54	9.1	10	2.8	180	0	34	10	.4

DATE	DIS- SOLVED NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER DAY)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	TUR- BID- ITY (JTU)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)
OCT. 25...	.32	.13	90	488	35.6	.66	25	380	82	.5	790
NOV. 13...	.52	.11	150	425	12.3	.58	35	330	72	.5	670
DEC. 18...	.07	.04	80	460	11.7	.63	1	340	96	.6	740
JAN. 15...	.52	.05	110	496	9.24	.67	8	390	89	.5	780
FEB. 13...	.86	.08	170	496	18.7	.67	7	390	80	.5	790
MAR. 11...	.70	.07	120	403	25.0	.55	4	320	70	.5	650
APR. 10...	.32	.08	110	294	32.5	.40	65	220	60	.5	470
MAY 07...	.20	.07	140	408	35.3	.55	65	330	56	.4	670
JUNE 04...	1.0	.11	40	210	167	.29	1500	160	12	.3	360
JULY 07...	.20	.09	120	420	28.5	.57	65	310	51	.5	690
AUG. 07...	.23	.11	110	430	884	.58	75	330	65	.6	750
SEP. 09...	1.1	.19	110	253	4.99	.34	200	170	25	.3	400

DATE	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)
OCT. 25...	80	60
APR. 10...	60	80

LOCATION.--Lat 39°06'51", long 95°25'33", in NE 1/4 sec. 9, T.11 S., R.18 E., Jefferson County, at gaging station, at outlet structure of Perry Dam, 4.5 mi (7.2 km) northwest of Perry and 5.8 mi (9.3 km) above mouth.

DRAINAGE AREA.--1,117 mi² (2,893 km²).

PERIOD OF RECORD.--Chemical analyses: October 1970 to September 1975.

REMARKS.--Chemical analyses by Kansas Department of Health and Environment, Topeka, Ks.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)
OCT. 10...	26	16.0	3.8	56	8.9	12	3.2	200	0	28	8.0	.3
DEC. 30...	31	3.0	3.9	54	11	11	2.9	200	0	28	10	.3
JAN. 09...	926	2.5	3.8	53	13	11	2.9	200	0	30	9.0	.3
FEB. 12...	299	1.5	3.6	58	11	12	2.8	210	0	33	10	.3
MAR. 14...	123	3.0	4.1	58	12	12	2.5	210	0	30	10	.2
APR. 18...	65	9.0	4.5	58	13	14	2.8	220	0	31	11	.2
JUNE 20...	3700	22.5	3.8	46	12	11	2.8	180	0	30	9.0	.4
JULY 17...	204	22.0	5.7	48	11	10	3.0	180	0	28	9.0	.2
AUG. 14...	26	23.5	8.8	50	8.5	11	3.5	180	0	24	11	.3
SEP. 16...	26	22.0	6.2	48	8.8	11	3.2	180	0	26	9.0	.4

DATE	DIS- SOLVED NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER DAY)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	TUR- BID- ITY (JTU)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)
OCT. 10...	.18	.06	40	240	16.8	.33	25	180	10	.4	400
DEC. 30...	.27	.07	80	241	20.2	.33	2	180	16	.4	400
JAN. 09...	.43	.05	80	242	605	.33	1	190	22	.4	400
FEB. 12...	.32	.04	40	245	198	.33	1	190	20	.4	390
MAR. 14...	.38	.22	90	246	81.7	.33	1	190	22	.4	410
APR. 18...	.27	.03	90	254	44.6	.35	15	200	20	.4	410
JUNE 20...	.50	.08	180	215	2150	.29	25	160	18	.4	370
JULY 17...	.59	.04	80	210	116	.29	65	160	19	.3	370
AUG. 14...	.52	.14	80	192	13.5	.26	110	160	10	.4	380
SEP. 16...	.41	.10	90	211	14.8	.29	25	160	8	.4	370

DATE	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)
OCT. 10...	50	0
APR. 18...	30	0

06891000 KANSAS RIVER AT LECOMPTON, KS

LOCATION.--Lat 39°03'07", long 95°23'15", in SE¼SW¼ sec.35, T.11 S., R.18 E., Jefferson County, at gaging station at highway bridge at Lecompton, 0.8 mi (1.3 km) downstream from Delaware River, and at mile 63.8 (102.7 km).

DRAINAGE AREA.--58,460 mi² (151,410 km²), approximately, of which a large area is noncontributing.

PERIOD OF RECORD.--Chemical analyses: October 1957 to September 1958, October 1961 to September 1975.

REMARKS.--Chemical analyses by Kansas Department of Health and Environment, Topeka, Ks. and by U.S. Geological Survey. Chemical analyses by Kansas Department of Health and Environment were discontinued September 1975.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975¹

DATE	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)
OCT.												
10...	2700	17.0	8.4	80	20	120	7.9	210	0	150	150	.4
NOV.												
15...	3290	6.0	11	99	21	84	5.8	280	0	130	110	.3
DEC.												
30...	1920	2.5	9.8	120	24	120	6.4	300	0	170	150	.3
JAN.												
28...	1660	3.5	11	120	28	120	4.9	320	0	170	160	.3
FEB.												
25...	3220	5.0	12	99	29	89	3.8	290	0	150	110	.4
MAR.												
14...	3060	4.0	7.9	110	19	102	7.0	270	0	180	120	.4
APR.												
10...	6900	10.5	8.4	77	20	53	4.8	250	0	110	61	.3
MAY												
14...	3310	20.0	2.9	75	19	67	6.2	210	0	130	79	.3
JUNE												
24...	21500	11.0	11	58	9.6	29	5.2	170	0	62	36	.4
JULY												
18...	8110	26.5	7.3	70	13	55	9.5	190	0	120	62	.4
AUG.												
15...	2750	25.0	11	67	17	95	8.2	200	0	120	120	.3
SEP.												
26...	1660	19.0	6.4	69	18	100	8.5	190	0	130	130	.4

DATE	DIS- SOLVED NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER DAY)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	TUR- BID- ITY (JTU)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)
OCT.											
10...	.61	.20	110	650	4740	.88	45	280	110	3.1	1100
NOV.											
15...	.63	.32	140	620	5510	.84	65	330	100	2.0	1020
DEC.											
30...	.86	.29	150	760	3940	1.03	2	390	140	2.6	1280
JAN.											
28...	.95	.32	150	780	3500	1.06	3	410	140	2.6	1290
FEB.											
25...	1.2	.31	110	654	5690	.89	110	370	130	2.0	1040
MAR.											
14...	.68	.23	170	710	5870	.97	7	360	140	2.4	1120
APR.											
10...	.79	.16	140	470	8760	.64	200	270	72	1.4	760
MAY											
14...	.32	.17	150	506	4520	.69	25	260	95	1.8	820
JUNE											
24...	.50	.17	60	304	17600	.41	800	180	48	.9	490
JULY											
18...	.54	.10	150	434	9500	.59	150	230	76	1.6	750
AUG.											
15...	.11	.15	140	526	3910	.72	65	240	77	2.7	920
SEP.											
26...	.09	.13	170	610	2730	.83	50	250	91	2.8	990

DATE	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)
OCT.		
10...	70	0
APR.		
10...	130	0

¹KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	INSTANTANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	PH (UNITS)	DIS- SOLVED OXYGEN (MG/L)	FECAL COLI- FORM (COL. PER 100 ML)	TUR- BID- ITY (JTU)	CAR- BONATE (CO3) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)
OCT.												
30...	4590	1030	17.5	8.3	8.7	320000	130	0	280	--	--	--
NOV.												
26...	3520	1190	6.0	8.1	12.1	5800	60	0	270	--	--	--
DEC.												
20...	2100	1320	.5	8.2	13.4	4500	5	0	320	--	--	--
JAN.												
28...	1660	1540	3.5	8.1	10.8	2100	10	0	330	--	--	--
FEB.												
27...	3400	1160	4.5	8.2	11.6	44	60	0	270	--	--	--
MAR.												
27...	2220	997	6.0	8.0	12.4	3500	20	0	270	--	--	--
APR.												
25...	5910	667	18.0	8.1	9.2	12000	130	0	220	--	--	--
MAY												
27...	1880	982	22.5	8.1	10.4	1300	40	0	220	--	--	--
JUNE												
24...	21900	5550	24.5	7.5	--	7300	190	0	170	--	--	--
JULY												
23...	3750	902	30.0	7.8	9.4	8800	60	0	210	96	130	520
AUG.												
28...	3650	804	24.5	7.9	8.6	4600	40	0	190	77	110	459
SEP.												
23...	1720	1060	18.0	8.0	8.1	19600	55	0	240	140	130	631

DATE	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	CHEM- ICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L)	TOTAL RESI- DUE (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL NITRO- GEN (NO3) (MG/L)	TOTAL CAL- CIUM (CA) (MG/L)	TOTAL MAG- NE- SIUM (MG) (MG/L)	TOTAL SODIUM (NA) (MG/L)
OCT.												
30...	--	--	--	--	--	--	--	--	--	--	--	--
NOV.												
26...	--	--	--	--	--	--	--	--	--	--	--	--
DEC.												
20...	--	--	--	--	--	--	--	--	--	--	--	--
JAN.												
28...	--	--	--	--	--	--	--	--	--	--	--	--
FEB.												
27...	--	--	--	--	--	--	--	--	--	--	--	--
MAR.												
27...	--	--	--	--	--	--	--	--	--	--	--	--
APR.												
25...	--	--	--	--	--	--	--	--	--	--	--	--
MAY												
27...	--	--	--	--	--	--	--	--	--	--	--	--
JUNE												
24...	--	--	--	--	--	--	--	--	--	--	--	--
JULY												
23...	1.5	1.5	1.5	.03	.27	29	704	.00	6.6	76	19	68
AUG.												
28...	.16	1.4	.16	.00	.20	37	689	1.2	6.0	70	17	63
SEP.												
23...	2.5	3.0	2.8	.29	.39	26	726	.21	13	76	18	40

DATE	TOTAL PO- TAS- SIUM (K) (MG/L)	FLOAT- ING ALGAE MATS (SEVER- ITY)	FLOAT- ING DEBRIS (SEVER- ITY)	DETER- GENT SUDS (SEVER- ITY)	DEAD FISH (SEVER- ITY)	FLOAT- ING GARBAGE (SEVER- ITY)	GAS BUBBLES (SEVER- ITY)	FLOAT- ING OR SOLID ICE COVER (SEVER- ITY)	ATMOS- PHERIC ODOR (SEVER- ITY)	OIL- GREASE (SEVER- ITY)	FLOAT- ING SLUDGE (SEVER- ITY)
OCT.											
30...	--	0	0	1	0	0	0	0	0	0	0
NOV.											
26...	--	0	0	0	0	0	0	0	0	0	0
DEC.											
20...	--	0	0	0	0	0	0	2	0	0	0
JAN.											
28...	--	0	0	0	0	0	0	0	0	0	0
FEB.											
27...	--	0	0	0	0	0	0	0	0	0	0
MAR.											
27...	--	0	0	0	0	0	0	0	0	0	0
APR.											
25...	--	0	0	0	0	0	0	0	0	0	0
MAY											
27...	--	0	0	0	0	0	0	0	0	0	0
JUNE											
24...	--	0	0	1	0	0	0	0	0	0	0
JULY											
23...	7.3	0	0	1	0	0	0	0	0	0	0
AUG.											
28...	11	0	0	0	0	0	0	0	0	0	0
SEP.											
23...	8.3	0	0	0	0	0	0	0	0	0	0

SEVERITY: 0-NONE, 1-MILD, 2-MODERATE, 3-SERIOUS, 4-EXTREME.

06891100 KANSAS RIVER AT EUDORA, KS

LOCATION.--Lat 38°57'02", long 95°05'55", in sec.5, T.13 S., R.21 E., Douglas County, at county highway bridge approximately 1.0 mi (1.6 km) north of junction of State Highway 10 and FAS 209 at Eudora.

PERIOD OF RECORD.--Chemical analyses: March 1974 to September 1975.

WATER QUALITY DATA: WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	PH (UNITS)	DIS- SOLVED OXYGEN (MG/L)	FECAL COLI- FORM (COL. PER 100 ML)	TUR- BID- ITY (JTU)	CAR- BONATE (CO3) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)
OCT.												
30...	1120	22.5	8.6	14.4	250000	35	4	250	--	--	--	--
NOV.												
26...	1140	7.0	8.3	12.3	7600	30	0	300	--	--	--	--
DEC.												
26...	1340	1.5	8.3	13.5	1700	5	0	320	--	--	--	--
JAN.												
28...	1880	4.0	8.2	11.2	1700	10	0	320	--	--	--	--
FEB.												
27...	1170	5.0	8.1	12.4	1800	45	0	280	--	--	--	--
MAR.												
27...	1080	6.0	8.0	12.2	3900	30	0	280	--	--	--	--
APR.												
25...	602	20.5	8.4	9.2	9300	170	6	200	--	--	--	--
MAY												
27...	914	26.0	8.0	11.4	5300	25	0	220	--	--	--	--
JUNE												
24...	504	24.0	7.6	7.7	5500	210	0	150	--	--	--	--
JULY												
23...	858	30.0	8.1	8.0	7200	30	0	200	98	120	536	.97
AUG.												
28...	708	25.5	7.9	9.1	10000	75	0	200	60	95	420	.40
SEP.												
23...	1170	19.5	8.1	6.9	25000	60	0	240	130	130	612	3.4

DATE	TOTAL NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	CHEM- ICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L)	TOTAL RESI- DUE (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL NITRO- GEN (NO3) (MG/L)	TOTAL CAL- CIUM (CA) (MG/L)	TOTAL MAG- NE- SIUM (MG) (MG/L)	TOTAL SODIUM (NA) (MG/L)
OCT.											
30...	--	--	--	--	--	--	--	--	--	--	--
NOV.											
26...	--	--	--	--	--	--	--	--	--	--	--
DEC.											
26...	--	--	--	--	--	--	--	--	--	--	--
JAN.											
28...	--	--	--	--	--	--	--	--	--	--	--
FEB.											
27...	--	--	--	--	--	--	--	--	--	--	--
MAR.											
27...	--	--	--	--	--	--	--	--	--	--	--
APR.											
25...	--	--	--	--	--	--	--	--	--	--	--
MAY											
27...	--	--	--	--	--	--	--	--	--	--	--
JUNE											
24...	--	--	--	--	--	--	--	--	--	--	--
JULY											
23...	1.0	1.0	.03	.17	24	588	.02	4.5	71	19	71
AUG.											
28...	2.0	.47	.07	.21	43	660	1.5	8.7	63	16	50
SEP.											
23...	4.2	3.8	.44	.37	30	730	.41	19	80	3.5	39

DATE	TOTAL PO- TAS- SIUM (K) (MG/L)	FLOAT- ING ALGAE MATS (SEVER- ITY)	FLOAT- ING DEBRIS (SEVER- ITY)	DETER- GENT SUDS (SEVER- ITY)	DEAD FISH (SEVER- ITY)	FLOAT- ING GARBAGE (SEVER- ITY)	GAS BUBBLES (SEVER- ITY)	FLOAT- ING OR SOLID ICE COVER (SEVER- ITY)	ATMOS- PHERIC ODOR (SEVER- ITY)	OIL- GREASE (SEVER- ITY)	FLOAT- ING SLUDGE (SEVER- ITY)
OCT.											
30...	--	0	0	0	0	0	0	0	0	0	0
NOV.											
26...	--	0	0	0	0	0	0	0	0	0	0
DEC.											
26...	--	0	0	0	0	0	0	1	0	0	0
JAN.											
28...	--	0	0	0	0	0	0	0	0	0	0
FEB.											
27...	--	0	0	0	0	0	0	0	0	0	0
MAR.											
27...	--	0	0	0	0	0	0	0	0	0	0
APR.											
25...	--	0	0	1	0	0	0	0	0	0	0
MAY											
27...	--	0	0	1	0	0	0	0	0	0	0
JUNE											
24...	--	0	0	1	0	0	0	0	0	0	0
JULY											
23...	7.4	0	0	1	0	0	0	0	0	0	0
AUG.											
28...	11	0	0	0	0	0	0	0	0	0	0
SEP.											
23...	8.2	0	0	0	0	0	0	0	0	0	0

SEVERITY: 0-NONE, 1-MILD, 2-MODERATE, 3-SERIOUS, 4-EXTREME.

LOCATION.--Lat 38°59'00", long 94°57'52", in SE 1/4 NE 1/4 sec. 27, T.12 S., R.22 E., Leavenworth County, at gaging station at bridge on county road, north edge of DeSoto, 0.4 mi (0.6 km) upstream from Kill Creek and at mile 31.0 (49.9 km).

DRAINAGE AREA.--59,756 mi² (154,768 km²), of which a large area is noncontributing.

PERIOD OF RECORD.--Chemical analyses: October 1974 to September 1975.

Water temperatures: October 1974 to September 1975.

EXTREMES.--1974-75:

Specific conductance: Maximum daily, 1,600 micromhos Jan. 18; minimum daily, 400 micromhos June 4.

Water temperatures: Maximum, 27.0°C Aug. 21; minimum, 0.0°C Feb. 26, 27.

REMARKS.--Chemical analyses by Kansas Department of Health and Environment, Topeka, Ks. and by U.S. Geological Survey. Chemical analyses by Kansas Department of Health and Environment were discontinued September 1975.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975¹

DATE	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)
OCT.												
18...	3350	16.0	8.6	64	13	70	5.4	180	0	84	92	.5
NOV.												
22...	3230	10.5	10	110	21	83	5.8	300	0	140	110	.2
DEC.												
12...	2550	4.5	12	110	21	95	5.0	290	0	140	120	.3
JAN.												
16...	3100	.5	8.7	88	19	61	4.1	260	5	110	75	.3
FEB.												
04...	2690	2.5	10	100	22	82	3.2	290	0	130	100	.2
MAR.												
11...	3740	2.0	8.0	94	23	71	5.6	270	0	140	83	.4
APR.												
28...	11800	18.5	8.8	75	16	38	4.8	230	0	81	43	.4
MAY												
29...	9170	20.5	9.1	58	12	31	3.8	160	0	68	44	.3
JUNE												
13...	27900	23.5	10	54	11	20	4.8	170	0	58	20	.4
JULY												
11...	21600	25.5	8.1	62	10	39	7.5	160	0	92	45	.2
AUG.												
08...	3310	25.0	9.6	64	15	66	8.2	180	0	100	82	.5
SEP.												
12...	5280	19.0	8.3	58	6.7	47	5.5	150	0	66	65	.3

DATE	DIS- SOLVED NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER DAY)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	TUR- BID- ITY (JTU)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)
OCT.											
18...	1.5	.18	90	454	4110	.62	500	210	69	2.1	770
NOV.											
22...	1.1	.26	150	644	5620	.88	25	350	110	1.9	1040
DEC.											
12...	1.3	.28	150	670	4610	.91	25	350	120	2.2	1100
JAN.											
16...	.97	.22	120	520	4350	.71	8	300	78	1.5	830
FEB.											
04...	1.3	.20	110	614	4460	.84	25	350	110	1.9	1000
MAR.											
11...	2.5	.22	110	565	5710	.77	20	330	110	1.7	842
APR.											
28...	.79	.13	110	390	12400	.53	800	250	67	1.0	640
MAY											
29...	2.3	.16	60	316	7820	.43	2000	190	60	1.0	530
JUNE											
13...	.81	.17	60	272	20500	.37	1000	180	44	.6	450
JULY											
11...	.79	.16	120	356	20800	.48	250	200	62	1.2	600
AUG.											
08...	.52	.21	80	460	4110	.63	35	220	74	1.9	790
SEP.											
12...	1.2	1.1	110	361	5150	.49	1300	170	49	1.6	570

¹KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT.

06892350 KANSAS RIVER AT DESOTO, KS.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT. 07...	3520	4.7	75	20	95	7.7	220	0	120	120
NOV. 26...	3770	9.1	96	23	83	6.3	288	0	120	97
DEC. 26...	1950	10	110	24	120	5.6	320	0	160	150
JAN. 28...	2100	12	110	26	96	4.6	320	0	160	120
MAR. 11...	3740	8.0	94	23	71	5.6	270	0	140	83
APR. 28...	10400	5.8	66	17	40	5.2	222	0	80	44
MAY 29...	9200	6.1	49	12	38	5.6	150	0	59	41
JUNE 25...	19800	8.8	59	14	36	7.0	173	0	78	42
JULY 22...	4200	6.1	77	19	70	8.9	185	0	130	89
AUG. 29...	3630	11	62	14	56	8.3	185	0	96	64
SEP. 25...	1890	7.5	83	19	95	8.0	209	0	120	130

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO
OCT. 07...	.3	.49	1.9	.28	574	.78	5460	270	90	2.5
NOV. 26...	.3	.88	1.5	.28	597	.81	6080	330	98	2.0
DEC. 26...	.3	.85	1.1	.29	760	1.03	4000	370	110	2.7
JAN. 28...	.3	.87	1.2	.22	700	.95	3970	380	120	2.1
MAR. 11...	.4	.97	2.5	.22	565	.77	5710	330	110	1.7
APR. 28...	.3	.93	2.3	.31	377	.51	10600	230	53	1.1
MAY 29...	.3	2.2	4.9	.32	296	.40	7350	170	49	1.3
JUNE 25...	.3	.98	1.8	.44	340	.46	18200	210	63	1.1
JULY 22...	.4	.02	.37	.26	524	.71	5940	270	120	1.9
AUG. 29...	.5	1.5	1.1	.16	431	.59	4220	210	61	1.7
SEP. 25...	.3	.12	3.6	.34	585	.80	2990	290	110	2.4

DATE	DIS- SOLVED ARSENIC (AS) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	TOTAL CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	TOTAL COBALT (CO) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)	TOTAL COPPER (CU) (UG/L)	DIS- SOLVED IRON (FE) (UG/L)
OCT. 07...	4	6	1	10	0	0	0	50	2	10	70
JAN. 28...	2	2	2	10	0	0	0	50	4	50	20
APR. 28...	2	9	6	<10	0	10	0	<50	7	10	20

DATE	TOTAL IRON (FE) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	TOTAL LEAD (PB) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DIS- SOLVED SELE- NIUM (SE) (UG/L)	TOTAL SELE- NIUM (SE) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)	TOTAL ZINC (ZN) (UG/L)
OCT. 07...	2900	1	100	0	350	.3	.3	1	2	30	30
JAN. 28...	810	11	100	40	70	.0	.0	1	2	20	40
APR. 28...	14000	3	<100	0	400	.0	.1	1	1	0	100

KANSAS RIVER BASIN

06892350 KANSAS RIVER AT DESOTO, KS.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	PH (UNITS)	DIS- SOLVED OXYGEN (MG/L)	TUR- BID- ITY (JTU)
OCT. 07...	9100	590	990	16.5	8.6	11.1	45
NOV. 26...	13000	2700	1130	7.5	8.5	12.1	20
DEC. 26...	2200	1000	1310	1.5	8.3	13.0	5
JAN. 28...	3100	960	1040	4.5	8.2	11.2	10
MAR. 11...	2600	1100	842	2.0	7.9	13.4	20
APR. 28...	3100	960	642	18.5	8.3	9.0	270
MAY 29...	40000	130000	529	20.5	7.9	6.9	170
JUNE 25...	4100	2250	580	25.0	8.0	6.6	150
JULY 22...	10000	330	862	25.0	8.3	6.6	30
AUG. 29...	47000	5800	688	24.0	7.9	7.4	85
SEP. 25...	34000	1100	1070	19.0	8.0	8.1	55

DATE	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL PHYTO- PLANK- TON (CELLS PER ML)	PERI- PHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M	UNCOR- RECTED PERI- PHYTON CHLORO- PHYLL A MG/SQ M	UNCOR- RECTED PERI- PHYTON CHLORO- PHYLL B MG/SQ M	PERI- PHYTON BIOMASS ASH WEIGHT G/SQ M
OCT. 07...	--	35000	--	--	--	--
NOV. 26...	--	21000	--	--	--	--
DEC. 26...	--	3100	--	--	--	--
JAN. 28...	3.4	9600	--	--	--	--
APR. 28...	20	8400	--	--	--	--
MAY 29...	--	1200	--	--	--	--
JUNE 25...	--	1200	--	--	--	--
JULY 22...	--	20000	53	.3	.1	46
AUG. 29...	--	8600	--	--	--	--
SEP. 25...	--	82000	--	--	--	--

06892350 KANSAS RIVER AT DESOTO, KS.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C) , WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	468	1200	752	900	900	832	578	511	893	851	1000
2	---	802	1210	753	903	893	832	595	711	945	852	1040
3	---	432	1210	753	899	896	836	587	754	940	854	1010
4	---	464	1210	755	899	902	832	645	765	906	855	1040
5	---	488	1230	725	901	901	838	741	874	904	912	861
6	---	605	1190	714	903	902	834	653	882	918	910	849
7	990	668	1270	714	904	901	832	614	921	898	910	851
8	1050	648	1230	837	1010	901	830	630	921	893	912	842
9	1050	930	1220	1040	1010	906	644	543	895	906	910	840
10	1010	771	1210	844	1010	915	649	630	914	895	908	840
11	1040	899	1210	842	795	829	643	605	902	906	923	850
12	1100	749	1110	836	994	833	641	594	947	904	923	853
13	1080	677	1220	837	826	829	750	570	928	898	930	857
14	1000	892	1200	841	816	833	621	630	400	914	921	867
15	826	933	1030	1310	820	831	640	613	450	884	912	851
16	910	976	1020	844	818	829	623	629	500	895	910	844
17	729	976	1180	1330	820	831	587	730	600	891	912	842
18	975	976	1240	1600	814	831	891	713	680	891	908	844
19	960	973	1030	1320	816	829	584	695	640	904	913	846
20	951	1030	1090	871	823	831	657	698	700	880	906	861
21	919	976	1090	849	816	837	589	701	680	852	1050	842
22	914	973	1040	1160	825	829	670	699	680	858	1050	844
23	950	968	1090	1180	822	831	584	672	680	861	1050	840
24	1000	968	1090	1220	818	827	670	612	660	852	1050	845
25	1050	1150	1020	1230	820	829	662	601	580	855	1050	847
26	1050	1150	1000	1180	901	831	760	694	700	855	1050	841
27	1150	1150	1000	1180	900	831	507	696	800	857	1050	837
28	1200	1140	992	1180	900	836	523	637	820	873	1050	853
29	1140	1140	1050	1180	---	831	728	508	860	869	1050	841
30	1120	1190	1180	1190	---	829	627	515	880	865	1040	847
31	1100	---	1180	1220	---	833	---	580	---	819	977	---
AVERAGE	1010	872	1140	1010	874	854	697	633	741	886	952	871

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	16.0	11.0	11.0	5.0	5.0	7.0	21.0	22.0	23.0	23.0	26.0
2	---	15.0	11.0	11.0	4.0	5.0	7.0	23.0	23.0	22.0	24.0	26.0
3	---	12.0	12.0	11.0	4.0	4.0	7.0	24.0	23.0	23.0	23.0	26.0
4	---	11.0	12.0	12.0	5.0	4.0	8.0	23.0	22.0	24.0	23.0	25.0
5	---	8.0	10.0	12.0	5.0	4.0	8.0	23.0	24.0	25.0	22.0	25.0
6	---	11.0	10.0	10.0	5.0	4.0	9.0	24.0	24.0	25.0	21.0	25.0
7	---	10.0	11.0	10.0	4.0	5.0	8.0	24.0	23.0	23.0	22.0	24.0
8	---	10.0	12.0	12.0	5.0	5.0	8.0	23.0	23.0	24.0	22.0	23.0
9	---	11.0	10.0	12.0	5.0	4.0	9.0	23.0	24.0	24.0	23.0	23.0
10	19.0	11.0	10.0	8.0	5.0	5.0	9.0	22.0	23.0	23.0	22.0	22.0
11	19.0	11.0	11.0	9.0	4.0	5.0	8.0	23.0	24.0	23.0	22.0	22.0
12	19.0	11.0	11.0	11.0	4.0	5.0	8.0	24.0	21.0	22.0	21.0	22.0
13	16.0	11.0	12.0	12.0	4.0	5.0	10.0	24.0	23.0	20.0	22.0	22.0
14	15.0	12.0	12.0	11.0	4.0	6.0	10.0	24.0	---	21.0	23.0	22.0
15	15.0	12.0	12.0	10.0	4.0	6.0	11.0	23.0	---	22.0	25.0	22.0
16	15.0	12.0	11.0	8.0	5.0	6.0	12.0	23.0	---	22.0	26.0	23.0
17	16.0	12.0	11.0	9.0	5.0	6.0	12.0	24.0	---	22.0	25.0	23.0
18	16.0	13.0	10.0	10.0	4.0	6.0	10.0	24.0	---	23.0	26.0	23.0
19	16.0	13.0	10.0	11.0	5.0	6.0	12.0	25.0	---	23.0	28.0	23.0
20	16.0	12.0	11.0	11.0	5.0	6.0	13.0	25.0	---	24.0	28.0	23.0
21	17.0	12.0	11.0	12.0	5.0	5.0	14.0	24.0	---	22.0	27.0	23.0
22	19.0	11.0	12.0	13.0	6.0	5.0	13.0	25.0	---	22.0	26.0	23.0
23	18.0	11.0	12.0	14.0	6.0	4.0	13.0	24.0	---	23.0	26.0	23.0
24	18.0	10.0	11.0	14.0	5.0	4.0	15.0	23.0	---	22.0	26.0	23.0
25	19.0	8.0	11.0	14.0	5.0	4.0	14.0	22.0	---	22.0	25.0	23.0
26	19.0	9.0	10.0	11.0	0.0	5.0	14.0	22.0	---	23.0	26.0	22.0
27	19.0	9.0	10.0	11.0	0.0	5.0	14.0	21.0	---	21.0	26.0	22.0
28	19.0	9.0	10.0	11.0	4.0	6.0	13.0	23.0	---	21.0	25.0	21.0
29	16.0	10.0	11.0	10.0	---	6.0	13.0	23.0	---	23.0	24.0	21.0
30	18.0	10.0	11.0	8.0	---	6.0	13.0	22.0	---	23.0	24.0	20.0
31	17.0	---	11.0	6.0	---	5.0	---	21.0	---	22.0	25.0	---
AVERAGE	---	11.0	11.0	11.0	4.5	5.0	10.5	23.0	---	22.5	24.0	23.0

LOCATION.--Lat 38°37'00", long 95°15'25", in SW $\frac{1}{4}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec.36, T.16 S., R.19 E., Franklin County, at East Seventh Street Bridge, 0.9 mi (1.4 km) downstream from gaging station, 0.5 mi (0.8 km) east of Ottawa city limits, and 0.8 mi (1.3 km) downstream from Skunk Creek.

DRAINAGE AREA.--1,250 mi² (3,240 km²), approximately, upstream from gaging station.

PERIOD OF RECORD.--Chemical analyses: October 1961 to September 1975 (discontinued).

Specific conductance: October 1961 to December 1968.

Water temperatures: October 1961 to December 1968.

REMARKS.--Chemical analyses by Kansas Department of Health and Environment, Topeka, Ks.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)
OCT. 16...	187	14.5	8.4	67	13	22	5.6	200	0	72	18	.5
NOV. 01...	5460	16.0	11	38	6.1	7.2	4.0	120	0	30	7.0	.4
DEC. 16...	876	2.0	4.9	64	9.8	12	2.5	200	0	48	9.0	.4
FEB. 21...	2000	3.0	6.4	56	8.9	11	2.2	170	0	42	10	.3
MAR. 18...	1880	3.3	8.6	54	10	14	2.2	150	0	57	12	.4
APR. 16...	1410	11.0	7.6	67	11	17	2.2	190	0	69	10	.3
MAY 16...	201	20.5	5.8	75	12	18	2.5	240	0	57	17	.3
JUNE 12...	15300	20.5	8.0	48	7.8	9.5	2.5	150	0	40	9.0	.3
18...	3570	20.5	8.0	22	2.2	5.0	3.0	73	0	14	4.0	.4
JULY 15...	282	23.0	6.9	58	10	14	2.5	200	0	39	13	.2
AUG. 13...	45	26.0	9.2	77	9.7	27	3.2	260	0	35	36	.3
SEP. 17...	40	21.0	8.4	54	6.2	17	3.5	170	0	27	19	.4

DATE	DIS- SOLVED NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER DAY)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	TUR- BID- ITY (JTU)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)
OCT. 16...	1.4	.39	110	322	163	.44	25	220	58	.6	520
NOV. 01...	1.0	.19	110	180	2650	.24	380	120	26	.3	270
DEC. 16...	.50	.10	80	265	627	.36	45	200	38	.4	420
FEB. 21...	.79	.10	60	240	1300	.33	65	180	34	.4	390
MAR. 18...	1.0	.08	110	250	1270	.34	250	180	50	.5	390
APR. 16...	.86	.09	90	295	1120	.40	200	210	56	.5	460
MAY 16...	.54	.17	120	330	179	.45	25	240	38	.5	520
JUNE 12...	.84	.14	30	210	8680	.29	350	150	28	.3	330
18...	.68	.24	10	113	1090	.15	1300	64	4	.3	140
JULY 15...	.50	.16	90	250	190	.34	65	190	26	.4	430
AUG. 13...	.41	.36	120	320	38.9	.44	25	230	22	.8	590
SEP. 17...	1.1	.38	140	260	28.6	.35	60	160	21	.6	410

DATE	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)
OCT. 16...	80	0
APR. 16...	190	0

ARKANSAS RIVER BASIN

07138000 ARKANSAS RIVER AT SYRACUSE, KS

LOCATION.--Lat 37°57'58", long 101°45'23", in NW¼SE¼NW¼ sec.18, T.24 S., R.40 W., Hamilton County, at gaging station at bridge on U.S. Highway 270, 0.5 mi. (0.8 km) south of Syracuse, and at mile 1,080.9 (1,739.2 km).

DRAINAGE AREA.--25,763 mi² (66,726 km²), of which 1,857 mi² (4,810 km²) is probably noncontributing.

PERIOD OF RECORD.--Sediment records: September 1966 to September 1975.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

								SUS- PENDE SEDI- MENT DIS- CHARGE			
				INSTAN- TANEOUS DIS- CHARGE		SUS- PENDE SEDI- MENT		(MG/L)		(T/DAY)	
		DATE		TIME							
		OCT.									
		01...		1110		.14		3		.00	
		15...		1515		.31		6		.01	
		NOV.									
		18...		1255		.75		5		.01	
		DEC.									
		11...		1230		.90		6		.01	
		JAN.									
		07...		1145		1.0		4		.01	
		23...		1400		9.4		88		2.2	
		FEB.									
		11...		1520		36		205		20	
		21...		1100		24		72		4.7	
		MAR.									
		11...		1120		37		35		3.5	
		24...		1550		25		54		3.6	
		APR.									
		08...		1230		24		62		4.0	
		17...		1600		77		139		29	
		MAY									
		05...		1155		9.4		54		1.4	
		15...		1325		22		130		7.7	
		JUNE									
		03...		1340		40		56		6.0	
		26...		1450		253		1140		779	
		JULY									
		08...		1310		99		1410		377	
		21...		1655		1510		7880		32100	
		22...		1225		329		560		497	
		AUG.									
		18...		1720		260		592		416	
		SEP.									
		04...		1415		3.7		9		.09	
		17...		1210		5.6		27		.41	

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	SUS- PENDE SEDI- MENT (MG/L)	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .062 MM	SUS. SED. FALL DIAM. % FINER THAN .125 MM	SUS. SED. FALL DIAM. % FINER THAN .250 MM	SUS. SED. FALL DIAM. % FINER THAN .500 MM	SUS. SED. FALL DIAM. % FINER THAN 1.00 MM	SUS. SED. FALL DIAM. % FINER THAN 2.00 MM
JULY												
21...	1655	1510	7880	46	59	70	71	71	73	86	94	--

DATE	TIME	NUMBER OF SAM- PLING POINTS	INSTAN- TANEOUS DIS- CHARGE (CFS)	BED MAT. FALL DIAM. % FINER THAN .062 MM	BED MAT. FALL DIAM. % FINER THAN .125 MM	BED MAT. FALL DIAM. % FINER THAN .250 MM	BED MAT. FALL DIAM. % FINER THAN .500 MM	BED MAT. FALL DIAM. % FINER THAN 1.00 MM	BED MAT. FALL DIAM. % FINER THAN 2.00 MM	BED MAT. FALL DIAM. % FINER THAN 4.00 MM	BED MAT. FALL DIAM. % FINER THAN 8.00 MM	BED MAT. FALL DIAM. % FINER THAN 16.0 MM
DEC.												
11...	1230	10	.90	--	0	1	37	77	92	99	100	--
MAY												
05...	1155	10	9.4	--	0	5	35	65	82	96	100	--

LOCATION.--Lat 37°44'51", long 100°01'08", in NE¼ sec.35, T.26 S., R.25 W., Ford County, at gaging station at Second Street Bridge in Dodge City, and at mile 970.2 (1,561.1 km).

DRAINAGE AREA.--30,600 mi² (79,254 km²), of which 5,583 mi² (14,460 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: October 1961 to September 1975.

Water temperatures: October 1974 to September 1975.

Sediment records: October 1966 to September 1975.

EXTREMES.--1974-75:

Specific conductance: Maximum daily, 1,770 micromhos Sept. 14; minimum daily, 909 micromhos April 27.

Water temperatures: Maximum, 36.0°C July 20, 21; minimum, 0.0°C Dec. 8.

REMARKS.--Chemical analyses by Kansas Department of Health and Environment, Topeka, Ks. and by U.S. Geological Survey. Chemical analyses by Kansas Department of Health and Environment were discontinued September 1975.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975¹

DATE	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)
OCT.												
08...	.08	24.0	15	110	41	120	6.8	210	0	440	37	.9
17...	1.0	12.5	15	130	37	110	6.2	260	0	420	36	.9
NOV.												
20...	7.5	11.0	15	130	42	120	6.0	270	0	450	44	.9
DEC.												
13...	9.9	9.0	13	130	42	120	6.4	260	0	470	41	1.0
JAN.												
14...	19	.5	14	140	41	110	6.1	270	0	450	44	.9
FEB.												
24...	23	8.5	10	140	45	120	5.8	270	0	480	46	.8
MAR.												
05...	20	4.5	11	140	41	120	5.8	290	0	470	45	.9
APR.												
09...	24	8.0	5.8	130	42	120	7.2	270	0	460	48	.9
MAY												
06...	20	24.5	12	110	39	110	6.5	210	0	440	42	.9
JUNE												
03...	15	29.0	26	140	47	130	7.0	300	0	470	46	.9
JULY												
09...	20	32.0	27	140	46	110	7.2	310	0	440	47	1.0

DATE	DIS- SOLVED NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DIS- SOLVED SOLIDS (TONS PER DAY)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	TUR- BID- ITY (JTU)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)
OCT.											
08...	3.4	.14	200	884	.20	1.26	7	450	280	2.5	1340
17...	3.2	.06	180	899	2.52	1.27	1	480	260	2.2	1340
NOV.											
20...	2.9	.00	270	954	20.1	1.35	1	500	280	2.3	1380
DEC.											
13...	3.4	.09	240	967	26.5	1.35	1	500	280	2.3	1390
JAN.											
14...	2.5	.08	200	950	50.0	1.32	7	510	290	2.1	1350
FEB.											
24...	2.5	.09	180	992	63.3	1.39	8	520	300	2.3	1380
MAR.											
05...	2.5	.07	200	977	53.8	1.35	45	520	280	2.3	1380
APR.											
09...	1.0	.11	240	955	64.2	1.35	3	490	270	2.3	1350
MAY											
06...	.25	.09	210	863	48.3	1.22	7	420	250	2.3	1240
JUNE											
03...	.63	1.2	230	1020	42.1	1.41	8	530	290	2.4	1430
JULY											
09...	1.5	.18	180	976	53.4	1.34	25	540	280	2.1	1410

¹KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT.

07139500 ARKANSAS RIVER AT DODGE CITY, KS.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT.										
17...	1.0	16	130	39	110	6.5	263	--	430	33
NOV.										
20...	7.5	15	130	44	120	6.9	258	--	430	42
JAN.										
08...	14	10	150	40	120	6.3	296	--	490	49
FEB.										
06...	15	16	150	45	130	6.7	325	--	480	50
MAR.										
05...	22	9.8	130	43	120	6.2	282	0	410	42
APR.										
09...	24	7.3	120	45	120	7.9	233	0	440	47
MAY										
06...	19	11	110	41	120	5.6	205	0	410	40
JUNE										
03...	19	23	130	45	120	6.9	291	0	460	42
JULY										
09...	19	26	140	45	110	7.1	299	0	440	41
31...	1.3	18	91	29	76	8.0	215	0	280	27

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO
OCT.										
17...	.9	3.5	.54	.01	947	1.29	2.56	490	270	2.2
NOV.										
20...	.8	3.4	.75	.02	999	1.36	20.2	510	290	2.3
JAN.										
08...	.8	3.2	.52	.03	1020	1.39	38.6	540	300	2.2
FEB.										
06...	.8	4.2	.43	.08	1120	1.52	45.4	560	290	2.4
MAR.										
05...	1.1	2.8	.50	.10	1020	1.39	60.6	500	270	2.3
APR.										
09...	.8	1.2	.46	.03	991	1.35	64.2	490	290	2.4
MAY										
06...	.7	.14	.47	.01	883	1.20	45.3	440	280	2.5
JUNE										
03...	.9	.60	.91	.11	1030	1.40	52.8	510	270	2.3
JULY										
09...	.9	1.5	1.0	.21	1010	1.37	51.9	540	290	2.1
31...	.8	1.4	2.6	.46	673	.92	2.36	350	170	1.8

DATE	DIS- SOLVED ARSENIC (AS) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	TOTAL CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	TOTAL COBALT (CO) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)	TOTAL COPPER (CU) (UG/L)	DIS- SOLVED IRON (FE) (UG/L)
OCT.											
17...	1	1	0	<10	0	0	0	<50	2	<10	20
JAN.											
08...	0	0	1	10	0	10	1	0	4	20	30
APR.											
09...	1	1	1	<10	0	0	0	<50	1	20	20
JULY											
09...	2	2	3	<10	0	10	0	<50	2	50	30

DATE	TOTAL IRON (FE) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	TOTAL LEAD (PB) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DIS- SOLVED SELE- NIUM (SE) (UG/L)	TOTAL SELE- NIUM (SE) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)	TOTAL ZINC (ZN) (UG/L)
OCT.											
17...	110	1	<100	10	0	.0	.0	13	12	20	30
JAN.											
08...	120	3	100	10	20	.2	--	15	34	10	20
APR.											
09...	230	5	<100	0	30	.0	.1	14	15	20	20
JULY											
09...	660	6	<100	20	70	1.2	.3	10	10	0	450

ARKANSAS RIVER BASIN

07139500 ARKANSAS RIVER AT DODGE CITY, KS.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	PH (UNITS)	DIS- SOLVED OXYGEN (MG/L)	TUR- BID- ITY (JTU)
OCT. 17...	160	90	1350	12.5	8.2	--	1
NOV. 20...	43	120	1340	10.5	8.2	11.1	8
JAN. 08...	10	6	1430	2.5	7.9	12.6	5
FEB. 06...	290	73	1660	.5	7.5	13.4	5
MAR. 05...	31	95	1450	4.5	7.1	12.8	20
APR. 09...	1500	110	1350	8.0	7.0	12.0	10
MAY 06...	20	66	1300	24.5	8.7	12.8	7
JUNE 03...	130	280	1420	29.0	8.4	10.8	9
JULY 09...	7600	420	1380	32.0	8.1	9.0	20
31...	30000	28000	940	24.0	8.0	7.2	95

DATE	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL PHYTO- PLANK- TON (CELLS PER ML)	PERI- PHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M	UNCOR- RECTED PERI- PHYTON CHLORO- PHYLL A MG/SQ M	UNCOR- RECTED PERI- PHYTON CHLORO- PHYLL B MG/SQ M	PERI- PHYTON BIOMASS ASH WEIGHT G/SQ M
OCT. 17...	4.5	47	--	--	--	--
NOV. 20...	--	1700	--	--	--	--
JAN. 08...	--	570	--	--	--	--
FEB. 06...	--	770	--	--	--	--
MAR. 05...	--	390	--	--	--	--
APR. 09...	4.3	1700	--	--	--	--
MAY 06...	--	8200	16	4.2	.3	11
JUNE 03...	--	4700	--	--	--	--
JULY 09...	4.6	3200	--	--	--	--

ARKANSAS RIVER BASIN

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07139500 ARKANSAS RIVER AT DODGE CITY, KS.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C) , WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	----	1310	1400	1400	1370	1380	1360	1340	1380	1440	1000	
2	----	1350	1440	1370	1400	1360	1370	1340	1420	1440	----	
3	----	1250	1420	1390	1410	1370	1370	1320	1450	1430	----	
4	----	1390	1410	1410	1400	1380	1370	1320	1430	1420	----	
5	----	1290	1400	1380	1390	1380	1350	1340	1440	1420	----	
6	----	1400	1400	1390	1460	1380	1350	1320	1440	1420	----	
7	----	1400	1400	1400	1450	1390	1350	1340	1360	1210	----	
8	1340	1400	1420	1400	1400	1390	1350	1340	1350	1310	1050	
9	1340	1370	1440	1390	1450	1360	1350	1320	1400	1380	1020	
10	1340	1410	1410	1370	1420	1380	1360	1280	1410	1400	----	
11	1330	1410	1400	1400	1390	1390	1370	1280	1430	1390	----	
12	1330	1410	1400	1500	1400	1400	1370	1300	1440	1390	----	
13	1340	1410	1400	1390	1400	1400	1280	1210	1450	1380	1590	
14	1340	1400	1410	1390	1400	1390	1350	1320	1430	1340	1770	
15	1340	1420	1400	1380	1410	1390	1350	1320	1410	1340	1490	
16	1350	1410	1400	1390	1390	1380	1340	1380	1430	1360	----	
17	1350	1410	1400	1380	1430	1380	1330	1380	1400	1320	1280	
18	1340	1410	1390	1390	1380	1380	1340	1390	1450	1320	1620	
19	1360	1410	1380	1370	1380	1380	1340	1400	1400	1290	----	
20	1360	1410	1400	1400	1380	1370	1320	1410	1240	1270	----	
21	1360	1400	1400	1400	1390	1370	1340	1400	1180	1280	----	
22	1350	1400	1400	1390	1400	1360	1330	1390	1120	1280	----	
23	1360	1390	1400	1460	1000	1370	1310	1400	1380	1250	----	
24	1320	1400	1410	1400	1390	1390	1330	1390	1410	1310	----	
25	1350	1400	1420	1400	1390	1390	1340	1390	1430	----	----	
26	1350	1400	1390	1400	1390	1380	1320	1400	1420	----	----	
27	1320	1400	1360	1400	1390	1390	909	1370	1420	----	----	
28	1340	1400	1400	1390	1380	1370	1240	1310	1430	----	----	
29	1360	1400	1340	1390	----	1380	1310	1280	1430	----	----	
30	1360	1500	1380	1400	----	1380	1330	1110	1440	1740	----	
31	1320	----	1360	1400	----	1380	----	1340	----	940	----	
AVERAGE	----	1390	1400	1400	1390	1380	1320	1340	1390	1350	----	

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	----	10.0	0.5	2.0	5.0	8.0	4.0	13.0	20.0	31.0	31.0	
2	----	10.0	0.5	5.0	5.0	2.0	5.0	15.0	26.0	28.0	----	
3	----	8.0	4.5	2.0	4.5	4.0	8.0	18.0	26.0	28.0	----	
4	----	5.5	4.0	1.0	4.0	8.0	9.0	18.0	25.0	31.0	----	
5	----	5.5	4.0	3.0	2.0	6.0	12.0	18.0	27.0	31.0	----	
6	----	5.0	5.0	2.0	2.0	8.0	17.0	18.0	27.0	34.0	----	
7	----	5.5	5.0	5.0	2.0	5.0	15.0	14.0	30.0	26.0	----	
8	24.0	10.0	0.0	4.0	2.0	4.0	13.0	15.0	24.0	25.0	29.0	
9	23.0	10.0	3.0	5.0	2.0	4.0	11.0	18.0	26.0	27.0	25.0	
10	22.0	10.0	3.0	2.0	3.0	3.0	10.0	17.0	27.0	25.0	----	
11	21.0	5.5	6.0	2.0	7.0	2.0	8.0	18.0	25.0	31.0	----	
12	21.0	5.0	5.0	1.0	5.0	3.0	8.0	16.0	27.0	27.0	----	
13	19.5	5.5	5.0	3.0	4.0	4.0	8.0	15.0	27.0	25.0	24.0	
14	18.5	5.0	1.0	4.0	4.0	5.0	8.0	16.0	26.0	32.0	25.0	
15	18.0	5.0	4.0	4.0	2.0	7.0	13.0	25.0	31.0	31.0	22.0	
16	18.0	5.0	4.0	2.0	2.0	8.0	14.0	24.0	27.0	27.0	----	
17	17.0	5.5	5.0	6.0	2.0	8.0	16.0	20.0	27.0	29.0	25.0	
18	12.0	6.0	5.0	7.0	3.0	10.0	12.0	22.0	24.0	29.0	24.0	
19	10.0	5.5	5.0	8.0	4.0	6.0	14.0	23.0	27.0	30.0	----	
20	10.0	5.0	8.0	4.0	7.0	7.0	13.0	21.0	24.0	36.0	----	
21	12.0	5.5	3.0	2.0	6.0	9.0	15.0	29.0	25.0	36.0	----	
22	10.5	5.0	5.0	8.0	2.0	15.0	16.0	22.0	26.0	30.0	----	
23	15.0	5.0	3.0	4.0	2.0	10.0	18.0	24.0	27.0	34.0	----	
24	15.0	5.0	2.0	6.0	4.0	6.0	16.0	25.0	30.0	24.0	----	
25	11.0	5.5	2.0	6.0	6.0	4.0	17.0	24.5	27.0	23.0	----	
26	10.0	5.0	2.0	6.0	7.0	12.0	22.0	24.0	22.0	27.0	----	
27	10.5	6.0	4.0	5.0	5.0	10.0	25.0	25.0	23.0	28.0	----	
28	15.0	4.5	2.0	2.0	6.0	5.0	22.0	25.0	26.0	27.0	----	
29	10.5	2.0	3.0	2.0	----	5.0	15.0	20.0	30.0	25.0	----	
30	15.0	0.5	3.0	5.0	----	9.0	12.0	21.0	30.0	24.0	----	
31	12.0	----	3.0	2.0	----	7.0	----	21.0	----	31.0	----	
AVERAGE	----	6.0	3.5	4.0	4.0	6.5	13.0	20.0	26.5	29.0	----	

ARKANSAS RIVER BASIN

07139500 ARKANSAS RIVER AT DODGE CITY, KS.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	SUS- PENDE SEDI- MENT (MG/L)	SUS- PENDE SEDI- MENT DIS- CHARGE (T/DAY)
OCT. 08...	1530	.08	21	.00
NOV. 20...	1500	7.5	36	.73
DEC. 13...	1155	9.9	17	.45
JAN. 14...	1530	19	53	2.7
FEB. 24...	1520	23	44	2.7
MAR. 19...	1200	21	170	9.6
APR. 09...	1350	24	37	2.4
MAY 06...	1410	20	106	5.7
JUNE 04...	1440	19	48	2.5
JULY 09...	1400	20	84	4.5
AUG. 19...	1610	.17	44	.02

DATE	TIME	NUMBER OF SAM- PLING POINTS	INSTAN- TANEOUS DIS- CHARGE (CFS)	BED MAT. FALL DIAM. % FINER THAN .062 MM	BED MAT. FALL DIAM. % FINER THAN .125 MM	BED MAT. FALL DIAM. % FINER THAN .250 MM	BED MAT. FALL DIAM. % FINER THAN .500 MM	BED MAT. FALL DIAM. % FINER THAN 1.00 MM	BED MAT. FALL DIAM. % FINER THAN 2.00 MM	BED MAT. FALL DIAM. % FINER THAN 4.00 MM	BED MAT. FALL DIAM. % FINER THAN 8.00 MM	BED MAT. FALL DIAM. % FINER THAN 16.0 MM
OCT. 08...	1530	10	.08	0	1	5	30	55	76	94	99	100
MAY 06...	1410	10	20	--	0	6	30	61	80	97	100	--

07140000 ARKANSAS RIVER NEAR KINSLEY, KS

LOCATION.--Lat 37°55'33", long 99°22'31", in SW¼Sec. 26, T.24 S., R.19 W., Edwards County, at gaging station at bridge on U.S. Highway 50, 2.0 mi (3.2 km) east of Kinsley, and at mile 920.3 (1,480.8 km).

DRAINAGE AREA.--31,066 mi² (80,461 km²), of which 5,660 mi² (14,660 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: October 1963 to September 1965, October 1967 to September 1968.

Water temperatures: October 1960 to September 1967, October 1968 to September 1969.

Sediment records: October 1960 to September 1975.

EXTREMES.--1974-75:

Sediment concentrations: Maximum daily, 2,510 mg/l June 24; minimum daily, 2 mg/l Mar. 31.

Sediment discharge: Maximum daily, 1,750 tons (1,588 tonnes) June 29; minimum daily, 0.25 tons (0.23 tonnes) Mar. 31.

Period of record:

Sediment concentrations: Maximum daily, 15,000 mg/l July 14, 1965; minimum daily, 2 mg/l Mar. 9, 1961, Mar. 31, 1975.

Sediment discharge: Maximum daily, 750,000 tons (680,000 tonnes) June 21, 1965; minimum daily, 0.08 ton (0.07 tonnes) Oct. 12, 1971.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		---	4.5	3.5	3.5	8.0	6.0	14.0	19.0	26.0	24.0	28.0
2		---	4.5	4.0	4.0	7.0	5.0	15.0	25.0	25.0	24.0	27.0
3		---	4.5	4.0	5.0	5.0	6.0	17.0	18.0	24.0	21.0	27.0
4		9.5	5.0	3.0	0.0	7.5	7.0	25.0	18.0	26.0	31.0	25.0
5		9.0	6.0	2.0	0.0	11.0	17.0	24.0	25.0	27.0	27.0	23.0
6		7.5	6.0	3.0	2.0	13.0	15.0	18.0	20.0	28.0	27.0	20.0
7		13.0	5.5	4.0	2.0	7.0	12.0	16.0	22.0	27.0	26.0	18.0
8		11.5	2.5	6.0	0.0	5.5	16.0	16.0	21.0	27.0	26.0	18.0
9		11.0	6.0	5.5	0.0	---	10.0	18.0	20.0	29.0	24.0	18.0
10		11.5	5.0	3.0	4.0	3.5	10.0	17.0	18.0	26.0	20.0	20.0
11		12.0	6.0	0.0	6.0	3.0	9.0	15.0	17.0	24.0	29.0	22.0
12		9.0	3.5	0.0	6.5	3.0	10.0	18.0	20.0	22.0	23.0	15.0
13		10.5	5.0	3.0	3.0	3.0	10.0	15.0	22.0	19.0	21.0	16.0
14		6.0	4.0	4.5	1.0	8.0	8.0	17.0	23.0	20.0	21.0	16.0
15		9.0	5.0	5.0	1.0	6.0	14.0	18.0	25.0	24.0	20.0	15.0
16		10.0	2.0	2.0	0.0	8.0	15.0	18.0	24.0	24.0	21.0	17.0
17		10.5	2.0	3.5	3.0	10.0	16.0	26.0	23.0	21.0	20.0	18.0
18		13.0	3.0	8.0	2.5	14.0	11.0	19.0	24.0	20.0	24.0	18.0
19		10.5	5.0	5.0	2.5	14.0	10.0	22.0	24.0	25.0	24.0	16.0
20		9.0	5.0	5.0	6.0	15.5	14.0	19.0	25.0	31.0	23.0	14.0
21		10.5	6.5	5.0	7.0	15.5	20.0	20.0	21.0	24.0	22.0	14.0
22		10.5	6.0	4.0	1.5	12.0	17.0	20.0	28.0	23.0	22.0	10.0
23		9.0	3.5	3.5	2.0	12.0	16.0	21.0	30.0	22.0	25.0	14.0
24		6.0	2.0	6.0	6.0	12.0	19.0	18.0	23.0	22.0	31.0	13.0
25		10.0	1.5	7.0	5.0	8.0	16.0	25.0	25.0	19.0	21.0	12.0
26		10.0	2.0	8.5	7.0	9.0	17.0	22.0	25.0	23.0	20.0	14.0
27		4.5	3.0	3.5	5.0	10.0	21.0	17.0	23.0	32.0	21.0	15.0
28		4.0	4.0	3.0	5.0	5.0	15.0	18.0	24.0	26.0	22.0	12.0
29		1.5	4.0	5.0	---	5.0	21.0	19.0	23.0	29.0	26.0	14.0
30		1.0	2.0	3.5	---	5.0	13.0	15.0	30.0	31.0	20.0	15.0
31		---	4.0	2.0	---	10.0	---	21.0	---	22.0	27.0	---
AVERAGE		9.0	4.0	4.0	3.0	8.5	13.0	19.0	23.0	25.0	23.5	17.5

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .062 MM	SUS. SED. FALL DIAM. % FINER THAN .125 MM	SUS. SED. FALL DIAM. % FINER THAN .250 MM	SUS. SED. FALL DIAM. % FINER THAN .500 MM	SUS. SED. FALL DIAM. % FINER THAN 1.00 MM	SUS. SED. FALL DIAM. % FINER THAN 2.00 MM	SUS. SED. FALL DIAM. % FINER THAN 4.00 MM	SUS. SED. FALL DIAM. % FINER THAN 8.00 MM	SUS. SED. FALL DIAM. % FINER THAN 16.0 MM
JUNE 24...	1630	364	2380	84	94	99	100	--	--	--	--	--	--	--	--
OCT. 04...	1410	10	41	--	0	3	29	52	70	90	98	100			
MAY 07...	1440	10	54	--	0	6	20	40	55	76	95	100			

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCTOBER				NOVEMBER				DECEMBER			
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	37	10	1.0	42	12	1.4	30	13	1.1			
2	39	10	1.1	47	16	2.0	33	202	18			
3	39	10	1.1	51	18	2.5	44	43	5.1			
4	40	20	2.2	52	20	2.8	53	72	10			
5	42	4	.45	52	75	11	52	32	4.5			
6	41	7	.77	53	154	22	51	85	12			
7	41	7	.77	51	169	23	51	7	.96			
8	40	8	.86	50	7	.95	45	7	.85			
9	40	5	.54	50	7	.95	41	27	3.0			
10	39	8	.84	50	10	1.4	45	19	2.3			
11	37	6	.60	49	170	23	48	84	11			
12	40	10	1.1	48	97	13	47	52	6.6			
13	47	9	1.1	49	8	1.1	46	38	4.7			
14	47	7	.89	48	11	1.4	46	8	.99			
15	46	12	1.5	47	10	1.3	41	8	.89			
16	45	9	1.1	46	7	.87	42	10	1.1			
17	44	6	.71	46	6	.75	42	8	.91			
18	42	4	.45	46	14	1.7	48	17	2.2			
19	42	7	.79	46	281	35	47	7	.89			
20	40	5	.54	44	35	4.2	46	10	1.2			
21	40	6	.65	43	118	14	47	4	.51			
22	40	35	3.8	45	153	19	47	8	1.0			
23	39	13	1.4	43	8	.93	45	4	.49			
24	38	26	2.7	43	13	1.5	39	6	.63			
25	43	92	11	44	304	36	37	7	.70			
26	45	12	1.5	45	239	29	40	8	.86			
27	42	20	2.3	45	198	24	40	5	.54			
28	42	20	2.3	45	9	1.1	46	4	.50			
29	41	32	3.5	43	7	.81	50	4	.54			
30	40	18	1.9	34	12	1.1	50	3	.41			
31	42	10	1.1	---	---	---	51	64	8.8			
MONTH	1280	---	50.56	1397	---	277.76	1390	---	103.27			

DAY	JANUARY				FEBRUARY				MARCH			
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	46	5	.62	50	13	1.8	55	5	.74			
2	51	8	1.1	50	6	.81	55	4	.59			
3	47	6	.76	50	6	.81	55	5	.74			
4	44	9	1.1	50	8	1.1	55	8	1.2			
5	49	9	1.2	41	10	1.1	55	5	.74			
6	49	5	.66	31	11	.92	54	6	.87			
7	53	10	1.4	30	14	1.1	52	3	.42			
8	54	6	.87	25	12	.81	51	8	1.1			
9	55	10	1.5	26	8	.56	51	6	.83			
10	55	18	2.7	46	6	.75	51	5	.69			
11	49	20	2.6	56	8	1.2	51	6	.83			
12	25	25	1.7	62	6	1.0	54	7	1.0			
13	20	33	1.8	66	5	.89	54	10	1.5			
14	46	751	93	63	4	.68	53	87	12			
15	50	163	22	58	10	1.6	52	4	.56			
16	56	25	3.8	38	14	1.4	52	4	.56			
17	58	12	1.9	42	23	2.6	53	48	6.9			
18	58	9	1.4	50	9	1.2	53	76	11			
19	56	19	2.9	55	29	4.3	51	5	.69			
20	56	6	.91	64	11	1.9	51	46	6.3			
21	55	15	2.2	64	6	1.0	50	66	8.9			
22	50	11	1.5	61	7	1.2	50	5	.68			
23	51	6	.83	57	12	1.8	51	16	2.2			
24	52	6	.84	56	7	1.1	50	28	3.8			
25	52	6	.84	56	5	.76	49	2	.26			
26	53	21	3.0	56	7	1.1	49	10	1.3			
27	53	7	1.0	55	32	4.8	51	17	2.3			
28	52	3	.42	55	7	1.0	50	6	.81			
29	51	8	1.1	---	---	---	50	3	.41			
30	51	6	.83	---	---	---	48	3	.39			
31	51	9	1.2	---	---	---	47	2	.25			
MONTH	1548	---	157.68	1413	---	39.29	1603	---	70.56			

07140000 ARKANSAS RIVER NEAR KINSLEY, KS.--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

APRIL				MAY				JUNE	
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	47	10	1.3	54	79	12	54	20	2.9
2	46	15	1.9	56	120	18	54	21	3.1
3	45	29	3.5	57	18	2.8	52	26	3.7
4	46	8	.99	54	54	7.9	50	36	4.9
5	46	10	1.2	53	82	12	50	24	3.2
6	48	8	1.0	52	95	13	48	27	3.5
7	50	12	1.6	53	52	7.4	46	26	3.2
8	52	10	1.4	53	16	2.3	47	78	9.9
9	58	14	2.2	51	170	23	210	2150	1220
10	64	17	2.9	52	40	5.6	142	683	262
11	60	9	1.5	52	23	3.2	109	391	115
12	58	6	.94	52	62	8.7	90	278	68
13	61	13	2.1	57	24	3.7	78	176	37
14	65	7	1.2	61	66	11	69	156	29
15	66	15	2.7	62	58	9.7	62	120	20
16	66	18	3.2	63	25	4.3	55	117	17
17	64	21	3.6	62	20	3.3	52	119	17
18	62	11	1.8	58	44	6.9	49	134	18
19	61	6	.99	54	20	2.9	46	111	14
20	60	25	4.1	52	23	3.2	44	99	12
21	60	26	4.2	50	18	2.4	44	85	10
22	60	11	1.8	49	22	2.9	46	82	10
23	59	15	2.4	48	22	2.9	56	161	24
24	60	14	2.3	48	19	2.5	253	2510	1710
25	60	31	5.0	47	20	2.5	203	1160	636
26	58	21	3.3	45	21	2.6	150	889	360
27	57	32	4.9	45	19	2.3	121	474	155
28	55	27	4.0	46	19	2.4	128	517	179
29	56	108	16	50	22	3.0	347	1870	1750
30	56	60	9.1	53	19	2.7	186	463	233
31	---	---	---	54	23	3.4	---	---	---
MONTH	1706	---	93.12	1643	---	190.5	2941	---	6930.4

JULY				AUGUST				SEPTEMBER	
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	135	354	129	27	13	.95	15	72	2.9
2	111	279	84	40	127	14	14	61	2.3
3	97	229	60	34	42	3.9	14	53	2.0
4	87	156	37	31	53	4.4	13	62	2.2
5	80	100	22	29	58	4.5	13	43	1.5
6	75	75	15	27	65	4.7	13	22	.77
7	71	50	9.6	26	58	4.1	13	24	.84
8	129	500	174	25	36	2.4	12	23	.75
9	98	324	86	24	39	2.5	11	21	.62
10	82	240	53	23	57	3.5	11	22	.65
11	73	188	37	21	38	2.2	11	19	.56
12	64	134	23	20	59	3.2	11	18	.53
13	58	99	16	20	41	2.2	10	24	.65
14	54	82	12	20	28	1.5	10	28	.76
15	49	80	11	20	64	3.5	11	36	1.1
16	45	77	9.4	20	56	3.0	12	41	1.3
17	42	76	8.6	19	39	2.0	12	43	1.4
18	39	64	6.7	19	28	1.4	12	45	1.5
19	35	41	3.9	24	32	2.1	12	34	1.1
20	33	60	5.3	25	48	3.2	12	64	2.1
21	32	58	5.0	37	526	53	11	19	.56
22	29	74	5.8	34	589	54	11	19	.56
23	27	69	5.0	29	222	17	10	26	.70
24	26	48	3.4	26	107	7.5	9.8	17	.45
25	25	43	2.9	23	270	17	10	22	.59
26	23	42	2.6	21	180	10	10	15	.41
27	23	37	2.3	20	79	4.3	10	37	1.0
28	21	32	1.8	19	84	4.3	10	22	.59
29	20	33	1.8	17	140	6.4	9.8	20	.53
30	19	26	1.3	17	96	4.4	9.7	23	.60
31	20	54	2.9	16	71	3.1	---	---	---
MONTH	1722	---	837.3	753	---	250.25	343.3	---	31.52
YEAR	17740		9032.21						

ARKANSAS RIVER BASIN

07140700 GUZZLERS GULCH NEAR NESS CITY, KS

LOCATION.--Lat 38°17'40", long 99°57'10", in SW¼SW¼ sec.23, T.20 S., R.24 W., Ness County, on right bank, 30 ft downstream from highway bridge, 5 mi (8 km) upstream from mouth, and 11 mi (18 km) southwest of Ness City.

DRAINAGE AREA.--58.2 mi² (150.7 km²).

PERIOD OF RECORD.--Sediment records: October 1974 to September 1975.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	SUS- PENDE SEDIM- ENT (MG/L)	SUS- PENDE SEDIM- ENT (T/DAY)								
JUNE												
23...	1440	322	2070	1800								
23...	1925	456	2340	2880								
23...	2145	287	2030	1570								
24...	0920	110	1130	336								
26...	0920	21	885	50								
27...	0915	8.2	472	10								

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	SUS- PENDE SEDIM- ENT (MG/L)	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .062 MM	SUS. SED. FALL DIAM. % FINER THAN .125 MM	SUS. SED. FALL DIAM. % FINER THAN .250 MM	SUS. SED. FALL DIAM. % FINER THAN .500 MM	SUS. SED. FALL DIAM. % FINER THAN 1.00 MM	SUS. SED. FALL DIAM. % FINER THAN 2.00 MM
JUNE												
23...	1440	322	2070	80	89	96	98	100	--	--	--	--
23...	1925	456	2340	85	98	98	100	--	--	--	--	--

ARKANSAS RIVER BASIN

293

07141200 PAWNEE RIVER NEAR LARNED, KS

LOCATION.--Lat 38°12'00", long 99°20'50", in NW¼NW¼ sec.30, T.21 S., R.18 W., Pawnee County, at bridge on U.S. Highway 156, 0.8 mi (1.3 km) south of gaging station, 14 mi (23 km) west of Larned, and at mile 24.8 (39.9 km).

DRAINAGE AREA.--2,148 mi² (5,563 km²) upstream from gaging station, of which 138 mi² (357 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: October 1961 to September 1975 (discontinued).
Sediment records: October 1960 to September 1975.

REMARKS.--Chemical analyses by Kansas Department of Health and Environment, Topeka, Ks.

DATE	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)
OCT. 04...	.60	16.5	16	75	10	19	10	250	0	37	23	.5
NOV. 04...	1.9	10.0	12	43	5.0	4.2	8.0	160	0	6.6	7.0	.3
DEC. 12...	1.2	5.0	19	120	21	42	12	390	0	91	51	.6
JAN. 08...	1.9	3.0	26	140	24	60	12	460	0	120	68	.9
FEB. 19...	1.7	4.0	15	93	20	46	7.2	300	0	90	55	.8
APR. 03...	1.2	5.5	9.4	91	17	45	7.8	290	0	91	52	.8
MAY 06...	3.2	21.0	11	100	17	53	12	340	0	91	60	.9
JUNE 05...	1.8	23.0	11	94	19	40	11	300	0	72	53	1.0
25...	1220	23.0	15	56	5.0	8.0	10	190	0	20	10	.3

DATE	DIS- SOLVED NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER DAY)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	TUR- BID- ITY (JTU)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)
OCT. 04...	.14	.15	170	326	.53	.44	110	230	24	.5	550
NOV. 04...	.20	.12	80	180	.92	.24	180	130	0	.2	280
DEC. 12...	.14	.12	180	578	1.87	.79	7	400	76	.9	890
JAN. 08...	.07	.20	230	700	3.59	.95	3	460	78	1.2	1080
FEB. 19...	.02	.07	150	490	2.25	.67	2	310	72	1.1	790
APR. 03...	.11	.12	170	470	1.52	.64	15	300	61	1.1	760
MAY 06...	.05	.17	180	530	4.58	.72	75	330	58	1.3	840
JUNE 05...	.14	.11	140	454	2.21	.62	25	310	62	1.0	750
25...	.09	.12	60	210	692	.29	2000	160	4	.3	350

DATE	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)
OCT. 04...	90	0
APR. 03...	30	0

|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|

LOCATION.--Lat 38°21'11", long 98°45'50", in SW¼NW¼SE¼ sec.33, T.19 S., R.13 W., Barton County, at gaging station at bridge on U.S. Highway 281, 0.5 mi (0.8 km) south of Great Bend, 4.5 mi (7.2 km) upstream from Walnut Creek, and at mile 873.2 (1,405.0 km).

DRAINAGE AREA.--34,356 mi² (88,982 km²), of which 6,002 mi² (15,545 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: October 1961 to September 1975 (discontinued).
Sediment records: July 1957 to September 1975.

REMARKS.--Chemical analyses by Kansas Department of Health and Environment, Topeka, Ks.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)
OCT. 18...	46	19.0	8.0	94	34	100	6.5	220	0	320	58	.9
NOV. 13...	78	8.0	11	120	31	100	5.2	280	0	330	60	.9
DEC. 12...	78	3.0	10	130	28	100	5.2	283	0	330	61	1.0
JAN. 14...	62	.0	11	120	36	100	5.5	290	0	330	68	1.0
FEB. 25...	88	3.5	13	130	33	110	4.8	290	0	330	67	.9
MAR. 25...	50	4.0	7.3	110	36	100	5.0	280	0	320	.6	1.0
APR. 10...	32	9.5	11	110	32	99	5.5	280	0	300	60	.9
MAY 15...	32	18.0	13	110	29	100	5.8	280	0	290	69	.8
JUNE 30...	377	29.0	18	51	6.1	16	9.0	160	0	42	14	.6
JULY 18...	37	21.5	15	100	25	80	7.5	260	0	250	49	.8
AUG. 14...	12	20.5	5.0	100	20	87	6.2	240	0	240	57	.8
SEP. 18...	29	19.0	8.7	88	26	93	6.5	220	0	250	62	.9

DATE	DIS- SOLVED NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER DAY)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	TUR- BID- ITY (JTU)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)
OCT. 18...	.54	.12	210	758	94.1	1.03	3	370	190	2.2	1100
NOV. 13...	1.3	.12	210	832	175	1.13	3	430	200	2.1	1200
DEC. 12...	2.1	.05	180	840	177	1.14	25	440	210	2.1	1220
JAN. 14...	2.7	.31	200	840	141	1.14	8	450	210	2.1	1270
FEB. 25...	2.7	.29	170	854	203	1.16	6	450	210	2.2	1220
MAR. 25...	1.0	.28	200	796	107	1.08	1	420	190	2.1	1190
APR. 10...	.90	.32	200	792	68.4	1.08	1	410	180	2.1	1150
MAY 15...	.86	.13	180	784	67.7	1.07	30	390	160	2.2	1160
JUNE 30...	.81	.46	90	245	249	.33	2000	150	18	.6	410
JULY 18...	.54	1.1	230	658	65.7	.89	3	360	140	1.9	1030
AUG. 14...	.68	.11	150	690	24.0	.94	3	340	140	2.1	1050
SEP. 18...	.45	1.1	200	690	55.7	.94	30	330	150	2.2	1030

DATE	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)
OCT. 18...	30	0
APR. 10...	0	0

ARKANSAS RIVER BASIN

295

07141300 ARKANSAS RIVER AT GREAT BEND, KS.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	SUS- PENDE SEDIM- ENT DIS- CHARGE (MG/L)	SUS- PENDE SEDIM- ENT DIS- CHARGE (T/DAY)										
OCT. 18...	1400	46	12	1.5										
NOV. 13...	0945	78	18	3.8										
DEC. 12...	0950	78	72	15										
JAN. 14...	1005	62	22	3.7										
FEB. 25...	1010	88	79	19										
MAR. 25...	1000	50	17	2.3										
APR. 10...	1135	32	63	5.4										
MAY 15...	1005	32	17	1.5										
JUNE 05...	0900	49	88	12										
30...	1600	377	1380	1410										
JULY 18...	0900	37	20	2.0										
AUG. 14...	0900	12	6	.21										
SEP. 18...	0930	29	47	3.8										

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	SUS- PENDE SEDIM- ENT DIS- CHARGE (MG/L)	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .062 MM	SUS. SED. FALL DIAM. % FINER THAN .125 MM	SUS. SED. FALL DIAM. % FINER THAN .250 MM	SUS. SED. FALL DIAM. % FINER THAN .500 MM	SUS. SED. FALL DIAM. % FINER THAN 1.00 MM	SUS. SED. FALL DIAM. % FINER THAN 2.00 MM
JUNE 30...	1600	377	1380	87	94	98	100	--	--	--	--	--

DATE	TIME	NUMBER OF SAM- PLING POINTS	INSTAN- TANEOUS DIS- CHARGE (CFS)	BED MAT. FALL DIAM. % FINER THAN .062 MM	BED MAT. FALL DIAM. % FINER THAN .125 MM	BED MAT. FALL DIAM. % FINER THAN .250 MM	BED MAT. FALL DIAM. % FINER THAN .500 MM	BED MAT. FALL DIAM. % FINER THAN 1.00 MM	BED MAT. FALL DIAM. % FINER THAN 2.00 MM	BED MAT. FALL DIAM. % FINER THAN 4.00 MM	BED MAT. FALL DIAM. % FINER THAN 8.00 MM	BED MAT. FALL DIAM. % FINER THAN 16.0 MM
OCT. 18...	1400	10	46	--	0	4	28	45	64	87	98	100
APR. 10...	1135	10	32	--	0	4	25	55	74	92	99	100

ARKANSAS RIVER BASIN
 07141900 WALNUT CREEK AT ALBERT, KS

LOCATION.--Lat 38°27'40", long 99°00'50", in SW¼NW¼ sec.29, T.18 S., R.15 W., Barton County, at gaging station at highway bridge, 0.2 mi (0.3 km) north of Albert, 14 mi (22.5 km) northwest of Great Bend, and at mile 43.0 (69.2 km).

DRAINAGE AREA.--1,410 mi² (3,652 km²), approximately, of which 104 mi² (269 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: October 1961 to September 1975 (discontinued).
 Water temperatures: October 1963 to September 1969, October 1970 to September 1975.
 Sediment records: October 1963 to September 1975.

EXTREMES.--1974-75:

Water temperatures: Maximum, 26.0°C June 9; minimum, freezing point on several days during winter period.

Sediment concentrations: Maximum daily, 4,070 mg/l June 28; minimum, 12 mg/l March 11.

Sediment discharge: Maximum daily, 8,760 tons (7,950 tonnes) June 25; minimum daily, 0.01 ton (0.01 tonne) Sept. 25.

Period of record:

Water temperatures: Maximum, 33.0°C July 29, 1974; minimum, freezing point on many days during winter period.

Sediment concentrations: Maximum daily, 7,400 mg/l Aug. 13, 1968; minimum daily, no flow on many days each year.

Sediment discharge: Maximum daily, 33,900 tons (30,800 tonnes) Nov. 20, 1973; minimum daily, no flow on many days each year.

REMARKS.--Chemical analyses by Kansas Department of Health and Environment, Topeka, Ks.

WATER QUALITY DATA: WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)
OCT. 18...	6.6	12.0	14	80	5.0	26	7.2	170	0	64	47	.3
NOV. 13...	3.2	7.5	22	140	12	56	7.0	320	0	150	87	.2
DEC. 12...	2.3	2.5	20	160	18	68	6.2	350	0	170	110	.4
JAN. 14...	4.5	1.0	17	170	18	63	8.4	350	0	180	110	.2
FEB. 25...	6.9	1.5	12	130	20	64	7.8	300	0	170	95	.4
MAR. 25...	7.7	17.0	10	120	20	61	8.0	290	0	150	88	.2
APR. 10...	5.9	13.0	13	130	21	69	9.2	330	0	160	91	.4
MAY 15...	54	20.0	18	140	20	65	11	370	0	140	84	.4
JUNE 18...	8.6	24.0	18	110	15	52	13	300	0	110	69	.4
JULY 18...	4.0	24.0	24	98	13	31	12	290	0	84	41	.4
AUG. 14...	.20	24.0	13	120	18	76	8.8	260	0	170	110	.4
SEP. 18...	.20	22.0	17	110	14	51	9.5	240	0	120	93	.3

DATE	DIS- SOLVED NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER DAY)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	TUR- BID- ITY (JTU)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)
OCT. 18...	.29	.15	110	360	6.42	.49	650	220	78	.8	600
NOV. 13...	.38	.12	140	650	5.62	.88	8	390	140	1.2	1010
DEC. 12...	.50	.08	150	750	4.66	1.02	7	470	180	1.4	1170
JAN. 14...	.70	.11	120	756	9.19	1.03	7	490	200	1.2	1190
FEB. 25...	.27	.07	180	666	12.4	.91	1	410	160	1.4	1030
MAR. 25...	.11	.10	170	622	12.9	.85	25	380	140	1.4	970
APR. 10...	.20	.14	200	684	10.9	.93	65	420	140	1.5	1080
MAY 15...	.52	.18	170	692	101	.94	150	420	120	1.4	1050
JUNE 18...	.63	.27	140	560	13.0	.76	150	334	86	1.2	890
JULY 18...	.36	.24	120	464	5.01	.63	200	300	64	.8	760
AUG. 14...	.05	.18	120	682	.37	.93	25	370	160	1.7	1090
SEP. 18...	.20	.16	170	558	.30	.76	22	330	140	1.2	900

DATE	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)
OCT. 18...	110	150

ARKANSAS RIVER BASIN

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07141900 WALNUT CREEK AT ALBERT, KS.--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11.0	11.0	0.0	0.0	0.0	4.0	5.0	13.0	14.0	24.0	23.0	22.0
2	10.0	10.0	0.0	0.0	1.0	3.0	1.0	14.0	14.0	24.0	22.0	21.0
3	13.0	9.0	0.0	0.0	2.0	5.0	0.0	11.0	17.0	24.0	20.0	22.0
4	15.0	7.0	1.0	0.0	3.0	4.0	4.0	15.0	19.0	23.0	20.0	21.0
5	16.0	5.0	1.0	0.0	0.0	2.0	7.0	15.0	18.0	24.0	20.0	22.0
6	10.0	5.0	4.0	0.0	0.0	2.0	12.0	17.0	20.0	23.0	21.0	16.0
7	9.0	6.0	1.0	1.0	0.0	1.0	12.0	14.0	19.0	22.0	21.0	17.0
8	11.0	9.0	0.0	0.0	0.0	2.0	9.0	13.0	21.0	24.0	20.0	18.0
9	11.0	9.0	0.0	2.0	0.0	2.0	8.0	15.0	26.0	23.0	22.0	19.0
10	13.0	9.0	0.0	0.0	0.0	1.0	8.0	17.0	18.0	23.0	21.0	21.0
11	17.0	7.0	2.0	0.0	0.0	2.0	8.0	15.0	15.0	22.0	21.0	22.0
12	16.0	5.0	1.0	0.0	0.0	1.0	5.0	14.0	18.0	19.0	21.0	14.0
13	11.0	7.0	1.0	0.0	1.0	0.0	9.0	15.0	19.0	18.0	23.0	14.0
14	12.0	3.0	2.0	0.0	0.0	0.0	9.0	14.0	20.0	20.0	24.0	14.0
15	9.0	3.0	0.0	0.0	0.0	3.0	11.0	15.0	17.0	21.0	19.0	14.0
16	10.0	3.0	0.0	0.0	0.0	3.0	13.0	15.0	20.0	22.0	20.0	16.0
17	11.0	5.0	0.0	0.0	0.0	5.0	18.0	16.0	21.0	24.0	22.0	14.0
18	12.0	8.0	1.0	0.0	0.0	6.0	16.0	17.0	20.0	22.0	20.0	18.0
19	10.0	7.0	1.0	1.0	0.0	7.0	11.0	19.0	23.0	23.0	21.0	16.0
20	10.0	4.0	1.0	0.0	0.0	9.0	12.0	20.0	23.0	24.0	23.0	12.0
21	12.0	4.0	0.0	1.0	0.0	10.0	12.0	17.0	21.0	25.0	22.0	12.0
22	13.0	5.0	2.0	0.0	0.0	8.0	14.0	20.0	20.0	25.0	24.0	9.0
23	15.0	7.0	0.0	0.0	0.0	9.0	16.0	18.0	20.0	24.0	24.0	10.0
24	16.0	3.0	0.0	1.0	0.0	5.0	18.0	18.0	22.0	23.0	24.0	10.0
25	16.0	2.0	0.0	1.0	0.0	3.0	15.0	18.0	21.0	20.0	23.0	8.0
26	14.0	4.0	0.0	1.0	0.0	4.0	19.0	14.0	22.0	20.0	20.0	10.0
27	14.0	2.0	0.0	1.0	1.0	9.0	20.0	15.0	22.0	22.0	21.0	12.0
28	15.0	3.0	0.0	1.0	1.0	4.0	13.0	17.0	21.0	22.0	22.0	14.0
29	14.0	0.0	0.0	1.0	---	1.0	13.0	16.0	21.0	23.0	21.0	12.0
30	15.0	0.0	0.0	0.0	---	1.0	14.0	14.0	23.0	23.0	22.0	14.0
31	13.0	---	0.0	1.0	---	5.0	---	13.0	---	23.0	23.0	---
AVERAGE	12.5	5.5	0.5	0.5	0.5	4.0	11.0	15.5	20.0	22.5	21.5	15.5

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCTOBER				NOVEMBER				DECEMBER			
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	.36	188	.18	4.2	151	1.7	2.4	76	.49			
2	.90	213	.52	3.8	53	.54	2.4	60	.39			
3	1.2	203	.66	7.0	173	3.3	2.4	44	.29			
4	2.3	199	1.2	11	159	4.7	2.5	35	.24			
5	10	306	8.3	4.1	102	1.1	2.5	187	1.3			
6	881	2530	6020	3.5	76	.72	2.5	158	1.1			
7	590	3020	4810	3.5	48	.45	2.4	23	.15			
8	82	2090	463	3.5	76	.72	2.3	41	.25			
9	26	1120	79	3.5	103	.97	2.3	95	.59			
10	14	508	19	3.5	102	.96	2.4	58	.38			
11	9.5	428	11	3.5	77	.73	2.3	24	.15			
12	7.8	375	7.9	3.3	70	.62	2.2	35	.21			
13	32	961	83	3.1	63	.53	2.3	76	.47			
14	68	749	138	3.2	70	.60	2.3	66	.41			
15	52	1350	190	3.3	83	.74	2.3	20	.12			
16	23	648	40	3.2	72	.62	2.5	87	.59			
17	11	353	10	3.2	58	.50	2.7	53	.39			
18	6.4	280	4.8	3.4	152	1.4	2.9	47	.37			
19	4.3	224	2.6	3.5	252	2.4	3.0	15	.12			
20	4.1	163	1.8	3.4	73	.67	3.1	256	2.1			
21	3.8	176	1.8	3.3	45	.40	2.9	148	1.2			
22	3.8	201	2.1	3.4	46	.42	3.2	234	2.0			
23	3.5	141	1.3	3.1	43	.36	3.4	122	1.1			
24	3.7	118	1.2	2.9	95	.74	3.2	55	.48			
25	3.8	101	1.0	2.8	40	.30	3.4	56	.51			
26	4.4	83	.99	2.7	46	.34	3.6	70	.68			
27	4.3	97	1.1	2.8	50	.38	3.7	82	.82			
28	4.2	117	1.3	2.6	50	.35	3.8	49	.50			
29	4.1	102	1.1	2.4	60	.39	3.8	94	.96			
30	4.2	103	1.2	2.3	60	.37	3.7	39	.39			
31	9.5	324	8.3	---	---	---	3.8	58	.60			
MONTH	1875.16	---	11912.35	109.0	---	28.02	88.2	---	19.35			

DAY	JANUARY				FEBRUARY				MARCH			
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	3.9	66	.70	4.8	78	1.0	5.8	23	.36			
2	4.0	137	1.5	4.8	52	.67	5.7	95	1.5			
3	4.1	105	1.2	5.0	167	2.3	5.8	50	.78			
4	4.2	53	.60	5.2	150	2.1	5.8	94	1.5			
5	4.3	34	.39	5.2	116	1.6	5.8	100	1.6			
6	4.4	33	.39	5.2	100	1.4	6.8	100	1.8			
7	4.3	88	1.0	5.2	75	1.1	6.6	90	1.6			
8	4.3	163	1.9	5.2	40	.56	6.2	75	1.3			
9	4.4	160	1.9	5.2	75	1.1	6.8	34	.62			
10	4.3	213	2.5	5.1	100	1.4	7.2	95	1.8			
11	4.2	200	2.3	5.2	138	1.9	7.0	12	.23			
12	4.2	150	1.7	5.2	180	2.5	7.0	104	2.0			
13	4.3	100	1.2	5.2	52	.73	6.6	115	2.1			
14	4.6	60	.75	5.2	520	7.3	6.6	154	2.7			
15	4.6	76	.94	5.2	197	2.8	6.8	26	.48			
16	4.5	68	.83	5.4	163	2.4	9.2	72	1.8			
17	4.5	118	1.4	5.7	134	2.1	9.5	176	4.5			
18	4.6	98	1.2	5.8	105	1.6	9.5	102	2.6			
19	4.8	226	2.9	6.0	76	1.2	9.8	116	3.1			
20	5.0	96	1.3	6.2	47	.79	9.8	234	6.2			
21	5.0	152	2.1	6.4	18	.31	11	331	9.8			
22	4.6	103	1.3	6.2	19	.32	9.8	97	2.6			
23	4.6	141	1.8	6.0	190	3.1	9.5	90	2.3			
24	4.8	17	.22	6.0	84	1.4	8.3	100	2.2			
25	4.8	40	.52	7.0	250	4.7	7.8	100	2.1			
26	4.5	47	.57	6.4	454	7.8	7.8	635	13			
27	4.5	642	7.8	6.2	308	5.2	9.8	677	18			
28	4.5	144	1.8	6.0	115	1.9	8.9	322	7.7			
29	4.8	364	4.7	---	---	---	8.3	53	1.2			
30	5.0	71	.96	---	---	---	7.4	60	1.2			
31	5.0	111	1.5	---	---	---	6.8	97	1.8			
MONTH	139.6	---	49.87	156.2	---	61.28	239.7	---	100.47			

ARKANSAS RIVER BASIN

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07141900 WALNUT CREEK AT ALBERT, KS.--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	APRIL			MAY			JUNE		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	6.6	250	4.5	12	183	5.9	16	408	18
2	6.4	226	3.9	20	143	7.7	12	345	11
3	6.4	217	3.8	40	187	20	10	372	10
4	6.2	241	4.0	14	231	8.7	9.5	311	8.0
5	5.8	116	1.8	9.8	226	6.0	7.8	261	5.5
6	6.0	162	2.6	8.0	223	4.8	7.0	245	4.6
7	6.2	56	.94	7.0	237	4.5	7.4	245	4.9
8	6.2	130	2.2	6.4	215	3.7	7.6	239	4.9
9	6.2	93	1.6	6.6	188	3.4	22	226	13
10	5.8	120	1.9	6.4	214	3.7	23	380	24
11	5.7	160	2.5	5.1	204	2.8	32	375	32
12	5.6	129	2.0	4.8	203	2.6	30	385	31
13	7.4	117	2.3	5.4	245	3.6	22	286	17
14	10	117	3.2	5.4	160	2.3	17	296	14
15	10	132	3.6	5.4	171	2.5	13	237	8.3
16	11	180	5.3	5.1	258	3.6	10	248	6.7
17	13	158	5.5	4.3	313	3.6	8.3	207	4.6
18	12	185	6.0	4.1	231	2.6	8.6	224	6.2
19	9.8	134	3.5	3.9	385	4.1	10	249	6.7
20	8.3	181	4.1	3.8	210	2.2	9.5	255	6.5
21	7.4	203	4.1	3.5	226	2.1	9.5	278	7.1
22	5.2	170	2.4	3.6	188	1.8	10	300	8.1
23	5.6	187	2.8	3.8	215	2.2	17	281	13
24	5.8	198	3.1	3.4	213	2.0	674	3480	6330
25	5.8	186	2.9	9.1	479	12	1330	2440	8760
26	5.1	151	2.1	55	3000	1380	2010	1390	7540
27	5.2	131	1.8	5.0	273	3.7	823	753	1670
28	5.1	160	2.2	5.0	222	3.0	508	4070	5580
29	4.8	180	2.3	130	2760	969	207	2320	1300
30	4.3	190	2.2	98	1260	333	60	1790	290
31	---	---	---	29	899	70	---	---	---
MONTH	208.9	---	91.14	522.9	---	2877.1	5931.2	---	31734.1

DAY	JULY			AUGUST			SEPTEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	39	1020	107	.80	220	.48	.28	256	.19
2	29	787	62	1.0	267	.72	.20	165	.09
3	23	561	35	.65	162	.28	.19	179	.09
4	20	494	26	.39	204	.21	.18	226	.11
5	17	413	19	.26	562	.39	.23	174	.11
6	13	447	16	.24	118	.08	.22	121	.07
7	12	370	11	.21	134	.08	.16	115	.05
8	11	343	10	.20	130	.07	.18	87	.04
9	10	264	7.1	.20	128	.07	.30	273	.22
10	8.3	284	6.4	.20	128	.07	.75	331	.67
11	7.4	244	4.9	.18	126	.06	1.0	702	1.9
12	6.4	237	4.1	.16	94	.04	.28	612	.46
13	5.6	575	8.7	.16	110	.05	.23	88	.05
14	5.0	448	6.0	.17	108	.05	.25	101	.07
15	4.5	271	3.3	.26	149	.10	.29	264	.21
16	5.0	266	3.6	.28	191	.14	.24	536	.35
17	5.0	338	4.6	.26	159	.11	.20	162	.09
18	4.2	301	3.4	.29	247	.19	.19	250	.13
19	3.1	304	2.5	.75	258	.52	.18	83	.04
20	2.7	240	1.8	.27	269	.20	.17	165	.08
21	3.1	274	2.3	96	2030	526	.16	79	.03
22	3.0	261	2.1	66	2290	408	.16	82	.04
23	2.1	296	1.7	25	1390	94	.16	60	.03
24	2.1	299	1.7	12	945	31	.15	42	.02
25	1.6	220	.95	6.6	795	14	.15	35	.01
26	1.3	278	.98	4.4	653	7.8	.15	68	.03
27	1.0	207	.56	3.1	592	5.0	.14	57	.02
28	.80	265	.57	2.0	417	2.3	.14	59	.02
29	.65	308	.54	1.2	394	1.3	.14	65	.02
30	.45	243	.30	.80	390	.84	.13	72	.03
31	.51	177	.24	.54	377	.55	---	---	---
MONTH	247.81	---	354.34	224.57	---	1094.7	7.20	---	5.27
YEAR	9750		57360.2						

ARKANSAS RIVER BASIN

07143300 COW CREEK NEAR LYONS, KS

LOCATION.--Lat 38°18'30", long 98°11'30", in SW¼SE¼ sec.15, T.20 S., R.8 W., Rice County, at gaging station at Missouri Pacific Railroad bridge, 500 ft (152 m) downstream from Little Cow Creek, 3.0 mi (4.8 km) south of Lyons.

DRAINAGE AREA.--728 mi² (1,886 km²), includes 229 mi² (593 km²) in Cheyenne Bottoms, closed basin.

PERIOD OF RECORD.--Chemical analyses: October 1961 to September 1970.
Sediment records: October 1963 to September 1975.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	SUS- PENDE SEDIM- ENT DIS- CHARGE (MG/L)	SUS- PENDE SEDIM- ENT DIS- CHARGE (T/DAY)							
OCT. 23...	1335	16	53	2.3							
NOV. 19...	1110	22	91	5.4							
JAN. 08...	1030	23	34	2.1							
FEB. 27...	1330	119	75	24							
MAR. 27...	1250	54	62	9.0							
APR. 24...	1155	40	348	38							
MAY 27...	1010	15	166	6.7							
JUNE 30...	1230	1460	882	3480							
JULY 28...	1030	18	344	17							
AUG. 28...	0940	13	194	6.8							
SEP. 24...	1055	25	203	14							

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	SUS- PENDE SEDIM- ENT (MG/L)	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .062 MM	SUS. SED. FALL DIAM. % FINER THAN .125 MM	SUS. SED. FALL DIAM. % FINER THAN .250 MM	SUS. SED. FALL DIAM. % FINER THAN .500 MM	SUS. SED. FALL DIAM. % FINER THAN 1.00 MM	SUS. SED. FALL DIAM. % FINER THAN 2.00 MM
JUNE 30...	1230	1460	882	94	96	97	100	--	--	--	--	--

ARKANSAS RIVER BASIN

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07143330 ARKANSAS RIVER NEAR HUTCHINSON, KS

LOCATION.--Lat 37°56'47", long 97°46'29", in SW 1/4 sec. 21, T. 24 S., R. 4 W., Reno County, at gaging station at county road bridge, 3.0 mi (4.8 km) north of Haven, 4.5 mi (7.2 km) downstream from Cow Creek, 11 mi (17.7 km) southeast of Hutchinson, and at mile 800.3 (1,287.7 km).

DRAINAGE AREA.--38,910 mi² (100,780 km²), of which 7,186 mi² (18,612 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: October 1961 to September 1975.

Water temperatures: October 1960 to September 1975.

Sediment records: October 1960 to June 1975.

EXTREMES.--1974-75:

Specific conductance: Maximum daily, 4,440 micromhos Mar. 16; minimum daily, 373 micromhos Sept. 2.

Water temperatures: Maximum, 26.0°C Apr. 14, Aug. 10; minimum, freezing point on many days during winter period.

Period of record:

Specific conductance (1968-75): Maximum daily, 6,750 micromhos Jan. 5, 1971; minimum 153 micromhos Apr. 20, 1974.

Water temperatures: Maximum, 38.0°C Aug. 8, 1969; minimum, freezing point on many days during winter period.

REMARKS.--Chemical analyses by Kansas Department of Health and Environment, Topeka, Ks. and by U.S. Geological Survey. Chemical analyses by Kansas Department of Health and Environment were discontinued September 1975.

WATER QUALITY DATA: WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975¹

DATE	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)
OCT.												
10...	1460	17.5	13	53	6.8	95	8.2	140	0	43	150	.3
17...	910	18.0	11	46	10	120	7.2	120	0	61	170	.4
NOV.												
08...	401	11.0	14	96	21	340	8.2	240	0	180	480	.6
DEC.												
05...	285	5.5	13	110	30	450	6.5	270	0	210	670	.6
JAN.												
07...	305	6.0	14	120	23	470	7.0	270	0	180	700	.6
FEB.												
26...	44	6.5	14	110	26	530	6.2	270	0	200	780	.6
MAR.												
19...	409	9.5	14	110	25	500	7.0	260	0	200	750	.6
APR.												
08...	368	4.5	13	104	26	440	7.5	250	0	190	680	.6
MAY												
07...	356	21.0	8.9	93	30	440	8.0	220	0	230	650	.7
JUNE												
04...	1240	21.0	15	60	3.5	130	8.8	140	0	65	190	.4
JULY												
10...	615	28.0	19	77	15	225	10	220	0	110	330	.6
AUG.												
29...	455	26.0	15	77	12	260	8.2	220	0	94	380	.4
SEP.												
11...	270	22.5	16	91	17	300	8.0	240	0	110	450	.5

DATE	DIS- SOLVED NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DIS- SOLVED SOLIDS (TONS PER DAY)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	TUR- BID- ITY (JTU)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)
OCT.											
10...	1.9	.25	90	447	1810	.63	3400	160	46	3.3	820
17...	2.5	.32	80	498	1290	.71	130	160	54	4.2	920
NOV.											
08...	1.2	.36	240	1260	1390	1.74	600	330	130	8.2	2190
DEC.											
05...	1.8	.39	210	1640	1290	2.28	45	400	180	9.8	2900
JAN.											
07...	1.5	.31	180	1650	1390	2.30	45	380	160	10	3100
FEB.											
26...	.99	.28	200	1810	222	2.53	45	390	170	12	3240
MAR.											
19...	1.3	.39	230	1740	1990	2.45	35	380	160	11	3140
APR.											
08...	1.0	.39	210	1600	1630	2.23	65	370	160	10	2870
MAY											
07...	.09	.17	180	1570	1530	2.16	130	360	180	10	2790
JUNE											
04...	1.2	.36	110	552	1810	.73	1000	160	46	4.4	1000
JULY											
10...	.50	.39	120	896	1490	1.22	250	250	72	6.1	1550
AUG.											
29...	.90	.67	120	959	1200	1.33	450	240	61	7.3	1720
SEP.											
11...	.99	.38	150	1120	868	1.62	150	300	100	7.6	2070

DATE	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)
OCT.		
10...	190	0
APR.		
08...	20	0

¹KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	TEMPERATURE (DEG C)	PH (UNITS)	DISSOLVED OXYGEN (MG/L)	FECAL COLIFORM (COL. PER 100 ML)	TURBIDITY (JTU)	CARBONATE (CO3) (MG/L)	BICARBONATE (HCO3) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)
OCT.												
03...	194	3220	12.5	8.2	9.6	1900	9	0	240	--	--	--
17...	910	930	18.0	8.1	9.2	7500	200	0	120	--	--	--
NOV.												
08...	404	2380	11.0	8.3	10.1	36000	55	0	170	--	--	--
20...	356	2540	9.0	8.1	11.0	4200	15	0	260	--	--	--
DEC.												
05...	285	3240	5.5	7.8	11.8	780	25	0	270	--	--	--
19...	305	2970	5.5	7.8	12.3	2500	25	0	250	--	--	--
JAN.												
07...	305	3390	6.0	8.1	11.9	1500	50	0	340	--	--	--
23...	335	3640	4.5	7.7	12.6	5100	20	0	260	--	--	--
FEB.												
05...	380	2760	1.0	7.6	12.9	470	45	0	240	--	--	--
21...	468	3090	4.0	7.9	12.1	3100	30	0	270	--	--	--
MAR.												
04...	529	2440	4.5	7.8	12.0	1000	75	0	250	--	--	--
19...	410	3210	9.5	8.2	11.1	89600	30	0	260	--	--	--
APR.												
08...	368	3120	15.0	7.6	10.4	5800	52	0	260	--	--	--
23...	357	2900	23.5	8.7	10.8	330	47	0	220	--	--	--
MAY												
07...	356	2700	21.0	8.4	10.3	522	75	8	200	--	--	--
20...	282	2700	22.0	8.5	10.8	6400	60	6	200	--	--	--
JUNE												
04...	1240	940	21.0	7.5	8.0	1200	190	0	120	--	--	--
17...	473	2400	25.0	8.4	9.7	4900	60	6	240	--	--	--
JULY												
10...	615	1490	28.0	8.3	8.2	15000	70	0	240	340	110	939
AUG.												
12...	190	3190	28.0	8.0	8.4	4000	45	0	220	800	190	1800
SEP.												
03...	2200	394	28.0	7.6	6.4	4200	170	0	194	59	18	217

DATE	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL KJEL-DAHL NITROGEN (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	CHEMICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L)	TOTAL RESIDUE (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL NITROGEN (NO3) (MG/L)	TOTAL CALCIUM (CA) (MG/L)	TOTAL MAGNESIUM (MG)	TOTAL SODIUM (NA) (MG/L)
OCT.												
03...	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--
NOV.												
08...	--	--	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--	--	--
DEC.												
05...	--	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--	--
JAN.												
07...	--	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--	--	--
FEB.												
05...	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--
MAR.												
04...	--	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--	--
APR.												
08...	--	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--	--	--
MAY												
07...	--	--	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--	--	--
JUNE												
04...	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--
JULY												
10...	1.8	2.2	1.8	.03	.55	45	1170	.37	9.6	75	17	220
AUG.												
12...	1.4	1.8	1.7	.27	.46	30	1810	.07	7.8	67	23	490
SEP.												
03...	4.4	5.3	4.6	.17	.93	97	450	.66	23	31	16	36

ARKANSAS RIVER BASIN

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07143330 ARKANSAS RIVER NEAR HUTCHINSON, KS.--Continued

WATER QUALITY DATA: WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TOTAL PO- TAS- SIUM (K) (MG/L)	FLOAT- ING ALGAE MATS (SEVER- ITY)	FLOAT- ING DEBRIS (SEVER- ITY)	DETER- GENT SUDS (SEVER- ITY)	DEAD FISH (SEVER- ITY)	FLOAT- ING GARBAGE (SEVER- ITY)	GAS BUBBLES (SEVER- ITY)	FLOAT- ING OR SOLID ICE COVER (SEVER- ITY)	ATMOS- PHERIC ODOR (SEVER- ITY)	OIL- GREASE (SEVER- ITY)	FLOAT- ING SLUDGE (SEVER- ITY)
OCT.											
03...	--	0	0	0	0	0	0	0	0	0	0
17...	--	0	0	0	0	0	0	0	0	0	0
NOV.											
08...	--	0	0	0	0	0	0	0	0	0	0
20...	--	0	0	0	0	0	0	0	0	0	0
DEC.											
05...	--	0	0	0	0	0	0	0	0	0	0
19...	--	0	0	0	0	0	0	0	0	0	0
JAN.											
07...	--	0	0	0	0	0	0	0	0	0	0
23...	--	0	0	0	0	0	0	0	0	0	0
FEB.											
05...	--	0	0	0	0	0	0	1	0	0	0
21...	--	0	0	0	0	0	0	0	0	0	0
MAR.											
04...	--	0	0	0	0	0	0	0	0	0	0
19...	--	0	0	0	0	0	0	0	0	0	0
APR.											
08...	--	0	1	1	0	0	0	0	0	0	0
23...	--	--	--	--	--	--	--	--	--	--	--
MAY											
07...	--	0	0	0	0	0	0	0	0	0	0
20...	--	0	0	0	0	0	0	0	0	0	0
JUNE											
04...	--	0	0	1	0	0	0	0	0	0	0
17...	--	0	1	1	0	0	0	0	0	0	0
JULY											
10...	10	--	--	--	--	--	--	--	--	--	--
AUG.											
12...	5.5	--	--	--	--	--	--	--	--	--	--
SEP.											
03...	18	--	--	--	--	--	--	--	--	--	--

SEVERITY: 0-NONE, 1-MILD, 2-MODERATE, 3-SERIOUS, 4-EXTREME.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C) , WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3500	1760	3070	2670	2940	2220	2820	2830	2750	508	3070	675
2	3310	1720	3250	2680	2920	1740	2880	2960	1690	550	2610	373
3	3380	1460	2730	2840	2870	1950	2980	3240	1110	595	3290	415
4	3230	1930	2820	3020	2700	2220	3010	2670	1100	860	3120	642
5	3550	2480	2880	3060	2870	2430	2960	2750	1900	872	2790	1120
6	3580	2450	2590	3060	3200	2630	2840	2830	2250	1110	2970	1390
7	3170	2370	2590	3040	3520	2840	2770	2770	2280	1120	2900	1490
8	1290	2250	2630	3040	3120	2860	2820	2610	2200	1370	2810	1620
9	676	2350	2540	3070	3460	2850	2860	3110	867	1380	2710	1810
10	789	2390	2550	2910	3450	2840	3030	3280	1820	1600	2610	1960
11	1220	2710	2490	3120	2700	2980	3140	2540	1490	1700	3040	2010
12	1360	2560	2540	3120	2790	2960	3200	2540	1780	1780	3230	1980
13	1690	2610	2430	3190	2700	3110	2670	2510	2200	1900	3570	2040
14	1770	2630	2740	3160	2820	3260	2590	2610	2100	1850	2970	2350
15	981	2640	2690	2910	2860	3320	2840	2700	3230	2010	2730	2310
16	857	2940	2610	2910	2900	4440	2980	2720	2240	2160	2890	2320
17	1320	2630	2720	2980	3090	2990	3140	2740	2220	2610	2960	2150
18	1630	2660	2720	3160	2780	3150	3120	2670	2520	2540	2340	2300
19	1800	2660	2820	3040	2830	3090	3090	2500	2460	2590	1910	2690
20	1850	2680	2870	3090	2880	3110	3650	2760	2440	2300	1930	2410
21	1990	2700	2800	3100	2790	3040	3090	2800	2410	2290	1960	2410
22	2050	2660	2720	3030	2850	3020	3060	2800	2190	2790	2150	2300
23	2170	2710	2710	3200	2900	2890	2770	2640	2130	2790	2290	2470
24	2380	2620	3900	2900	2880	2870	2840	3070	2020	2560	1810	2660
25	2230	2570	2840	3160	3080	2990	2840	2690	1830	2630	2700	2680
26	2360	3320	2710	2870	3140	3300	3090	2420	1640	2710	2050	2460
27	2640	3230	2880	2870	3230	3650	2900	2500	1200	2650	1720	2720
28	1580	3410	3000	2930	2500	3390	2710	2720	542	2790	3270	2720
29	1800	2600	2840	2870	---	2910	2820	2720	579	3290	1710	2640
30	2730	2840	2830	2870	---	3040	2960	2340	450	2750	1140	2690
31	1930	---	2690	2870	---	2890	---	2480	---	2770	789	---
AVERAGE	2070	2550	2780	2990	2960	2930	2950	2730	1850	1980	2520	1990

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12.0	12.0	2.0	0.0	1.0	0.0	0.0	10.0	18.0	20.0	22.0	18.0
2	15.0	11.0	2.0	0.0	4.0	0.0	0.0	10.0	16.0	20.0	18.0	19.0
3	14.0	11.0	2.0	0.0	4.0	0.0	0.0	13.0	14.0	20.0	22.0	20.0
4	15.0	8.0	2.0	0.0	6.0	0.0	3.0	19.0	16.0	20.0	16.0	19.0
5	14.0	7.0	3.0	1.0	0.0	1.0	10.0	19.0	22.0	20.0	17.0	18.0
6	13.0	6.0	8.0	0.0	0.0	2.0	9.0	14.0	21.0	20.0	17.0	14.0
7	11.0	8.0	4.0	1.0	0.0	0.0	4.0	17.0	6.0	20.0	23.0	22.0
8	12.0	9.0	1.0	2.0	0.0	0.0	12.0	12.0	7.0	21.0	17.0	13.0
9	13.0	10.0	4.0	4.0	0.0	0.0	15.0	18.0	13.0	19.0	16.0	14.0
10	14.0	11.0	5.0	1.0	0.0	0.0	8.0	14.0	12.0	19.0	26.0	17.0
11	16.0	6.0	3.0	0.0	0.0	0.0	3.0	20.0	11.0	17.0	16.0	17.0
12	17.0	6.0	2.0	0.0	0.0	0.0	3.5	11.0	13.0	15.0	17.0	9.0
13	14.0	7.0	2.0	0.0	0.0	0.0	4.0	10.0	15.0	18.0	18.0	10.0
14	12.0	5.0	4.0	0.0	0.0	0.0	5.0	9.0	22.0	15.0	17.0	9.0
15	10.0	6.0	3.0	0.0	0.0	0.0	8.0	10.0	20.0	16.0	17.0	9.0
16	10.0	6.0	0.0	0.0	0.0	1.0	19.0	13.0	15.0	22.0	17.0	11.0
17	14.0	8.0	0.0	0.0	0.0	2.0	12.0	12.0	21.0	16.0	25.0	11.0
18	13.0	8.0	1.0	2.0	0.0	11.0	9.0	23.0	23.0	17.0	16.0	14.0
19	12.0	10.0	1.0	5.0	0.0	11.0	5.0	15.0	19.0	19.0	17.0	11.0
20	15.0	5.0	2.0	0.0	0.0	8.0	15.0	14.0	19.0	19.0	19.0	9.0
21	11.0	6.0	7.0	2.0	2.0	9.0	9.0	16.0	19.0	20.0	19.0	15.0
22	11.0	9.0	4.0	1.0	1.0	3.0	8.0	17.0	24.0	19.0	19.0	6.0
23	15.0	10.0	3.0	0.0	0.0	10.0	21.0	13.0	16.0	18.0	19.0	8.0
24	16.0	8.0	0.0	7.0	0.0	1.0	26.0	14.0	18.0	17.0	23.0	7.0
25	16.0	3.0	0.0	4.0	0.0	5.0	20.0	12.0	18.0	15.0	18.0	8.0
26	15.0	10.0	0.0	7.0	2.0	6.0	16.0	15.0	17.0	17.0	15.0	7.0
27	17.0	3.0	0.0	5.0	0.0	10.0	16.0	12.0	17.0	24.0	17.0	9.0
28	15.0	4.0	0.0	4.0	0.0	0.0	16.0	13.0	17.0	19.0	17.0	12.0
29	15.0	0.0	4.0	2.0	---	0.0	9.0	18.0	17.0	18.0	17.0	8.0
30	18.0	0.0	2.0	1.0	---	6.0	10.0	11.0	21.0	18.0	19.0	8.0
31	15.0	---	1.0	0.0	---	2.0	---	11.0	---	23.0	22.0	---
AVERAGE	14.0	7.0	2.5	1.5	0.5	3.0	10.0	14.0	17.0	18.5	18.5	12.5

ARKANSAS RIVER BASIN

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07143330 ARKANSAS RIVER NEAR HUTCHINSON, KS.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	SUS- PENDE SEDIM- ENT DIS- CHARGE (MG/L)	SUS- PENDE SEDIM- ENT DIS- CHARGE (T/DAY)								
OCT.												
10...	1345	1460		2390	9420							
NOV.												
08...	1340	401		165	179							
DEC.												
13...	1145	311		200	168							
JAN.												
09...	1250	314		43	36							
FEB.												
28...	1300	44		82	9.8							
MAR.												
20...	1250	407		94	103							
20...	1315	407		94	103							
APR.												
09...	1310	347		107	100							
MAY												
14...	1014	331		178	159							
JUNE												
16...	1140	584		342	539							
JULY												
29...	1010	245		59	39							
AUG.												
29...	1410	455		804	988							
SEP.												
11...	1355	270		154	112							

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	SUS- PENDE SEDIM- ENT (MG/L)	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SFD. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .062 MM	SUS. SED. FALL DIAM. % FINER THAN .125 MM	SUS. SED. FALL DIAM. % FINER THAN .250 MM	SUS. SED. FALL DIAM. % FINER THAN .500 MM	SUS. SED. FALL DIAM. % FINER THAN 1.00 MM	SUS. SED. FALL DIAM. % FINER THAN 2.00 MM
OCT.												
10...	1345	1460	2390	77	87	93	96	98	99	100	--	--
AUG.												
29...	1410	455	804	59	66	85	98	100	--	--	--	--

DATE	TIME	NUMBER OF SAM- PLING POINTS	INSTAN- TANEOUS DIS- CHARGE (CFS)	BED MAT. FALL DIAM. % FINER THAN .062 MM	BED MAT. FALL DIAM. % FINER THAN .125 MM	BED MAT. FALL DIAM. % FINER THAN .250 MM	BED MAT. FALL DIAM. % FINER THAN .500 MM	BED MAT. FALL DIAM. % FINER THAN 1.00 MM	BED MAT. FALL DIAM. % FINER THAN 2.00 MM	BED MAT. FALL DIAM. % FINER THAN 4.00 MM	BED MAT. FALL DIAM. % FINER THAN 8.00 MM	BED MAT. FALL DIAM. % FINER THAN 16.0 MM
NOV.												
08...	1340	10	401	--	0	5	48	71	83	94	99	100
MAR.												
20...	1250	9	407	--	0	3	28	67	81	93	99	100

LOCATION.--Lat 37°49'56", long 97°23'16", in NE 1/4 sec. 36, T.25 S., R.1 W., Sedgwick County, at gaging station at highway bridge, 0.5 mi (0.8 km) west of Valley Center.

DRAINAGE AREA.--1,327 mi² (3,437 km²), of which about 77 mi² (199 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: October 1961 to September 1975.

Water temperatures: October 1957 to September 1961.

Sediment records: October 1957 to September 1961.

REMARKS.--Chemical analyses by Kansas Department of Health and Environment, Topeka, Ks. and by U.S. Geological Survey.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)
OCT.												
10...	168	18.0	23	140	20	120	6.1	320	0	110	210	.5
17...	143	18.5	11	37	6.7	21	5.0	120	0	16	31	.5
NOV.												
13...	147	10.0	19	69	11	42	5.5	220	0	46	63	.3
DEC.												
05...	82	3.5	18	120	17	84	4.0	330	0	79	140	.3
JAN.												
07...	85	--	13	110	20	88	4.0	300	0	80	150	.3
FEB.												
13...	126	3.0	18	86	14	57	4.8	260	0	63	86	.4
MAR.												
18...	302	8.0	14	62	10	49	4.5	180	0	42	82	.4
APR.												
08...	1280	9.0	11	32	5.8	22	5.5	100	0	25	33	.4
MAY												
07...	87	22.0	16	104	19	85	4.8	320	0	72	140	.5
JUNE												
03...	1970	17.5	7.4	24	2.9	25	5.0	59	0	7.0	53	.2
04...	1040	21.5	12	35	7.9	20	6.0	110	0	26	31	.4
23...	2570	21.0	7.3	11	1.1	3.0	6.2	37	0	5.0	5.0	.5
JULY												
10...	156	--	22	88	15	64	6.2	280	0	50	100	.3
AUG.												
20...	70	27.0	8.0	85	16	60	5.2	290	0	57	87	.6
SEP.												
05...	112	23.0	14	48	8.8	35	6.0	160	0	31	50	.4

DATE	DIS- SOLVED NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER DAY)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	TUR- BID- ITY (JTU)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)
OCT.											
10...	.45	.55	140	830	376	1.13	45	430	160	2.5	1380
17...	1.7	.42	60	214	82.6	.29	2000	120	20	.8	350
NOV.											
13...	1.6	.62	140	390	155	.53	75	220	37	1.2	630
DEC.											
05...	1.2	.62	150	652	144	.89	2	360	96	1.9	1070
JAN.											
07...	.95	.62	140	632	145	.86	7	350	100	2.0	1080
FEB.											
13...	1.7	.65	90	472	161	.64	65	270	62	1.5	790
MAR.											
18...	1.5	.46	90	375	306	.51	250	200	46	1.5	630
APR.											
08...	1.2	.46	80	209	722	.28	1500	100	18	.9	320
MAY											
07...	.61	.59	230	610	143	.83	7	340	74	2.0	1050
JUNE											
03...	1.0	.33	80	179	952	.24	2000	72	24	1.3	320
04...	2.2	.49	90	204	573	.28	1000	120	32	.8	340
23...	1.0	.52	30	83	576	.11	900	32	2	.2	120
JULY											
10...	.70	.46	120	492	207	.67	150	280	49	1.7	870
AUG.											
20...	.79	.46	120	494	93.4	.67	1300	280	42	1.6	860
SEP.											
05...	.75	.77	140	302	91.3	.41	250	160	25	1.2	500

DATE	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)
OCT.		
10...	30	0
APR.		
08...	200	0

07144200 LITTLE ARKANSAS RIVER AT VALLEY CENTER, KS.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	INSTANTANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	PH (UNITS)	DIS- SOLVED OXYGEN (MG/L)	FECAL COLI- FORM (COL. PER 100 ML)	TUR- BID- ITY (JTU)	CAR- BONATE (CO3) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)
OCT.												
03...	93	934	14.0	8.1	9.9	500	15	0	320	--	--	--
17...	143	340	18.5	8.0	9.1	750	170	0	130	--	--	--
NOV.												
08...	203	548	9.2	7.5	10.6	9000	90	0	150	--	--	--
20...	111	1030	8.0	8.0	10.9	4400	70	0	270	--	--	--
DEC.												
05...	82	1300	3.5	8.1	12.3	400	30	0	260	--	--	--
19...	92	1220	6.0	7.6	12.2	830	10	0	31	--	--	--
JAN.												
07...	85	1280	5.5	7.9	11.7	1500	7	--	--	--	--	--
23...	97	1350	2.5	7.6	12.2	6800	30	0	260	--	--	--
FEB.												
05...	1350	330	2.5	7.4	11.8	430	280	0	110	--	--	--
21...	109	1040	4.0	7.8	11.8	2200	120	0	270	--	--	--
MAR.												
04...	450	348	4.0	7.8	12.1	760	160	0	160	--	--	--
19...	302	718	8.0	8.0	11.2	1600	120	0	180	--	--	--
APR.												
08...	1240	342	9.0	7.5	10.8	40000	120	--	110	--	--	--
23...	124	1160	20.0	8.0	9.7	157	50	0	320	--	--	--
MAY												
07...	87	1050	22.0	8.1	12.4	220	20	0	320	--	--	--
20...	72	850	23.0	8.7	10.7	9660	30	0	320	--	--	--
JUNE												
04...	1030	320	21.5	7.6	7.0	4000	170	0	100	--	--	--
17...	196	7300	23.0	7.8	7.5	3100	50	0	190	--	--	--
JULY												
10...	155	840	27.0	7.8	7.9	1700	40	0	290	97	50	504
AUG.												
12...	69	797	25.0	7.8	7.8	3300	120	0	210	71	64	452
SEP.												
03...	.14	402	27.5	7.8	6.5	2900	170	0	190	40	23	235

DATE	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	CHEM- ICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L)	TOTAL RESI- DUE (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL NITRO- GEN (NO3) (MG/L)	TOTAL CAL- CIUM (CA) (MG/L)	TOTAL MAG- NE- SIUM (MG) (MG/L)	TOTAL SODIUM (NA) (MG/L)
OCT.												
03...	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--
NOV.												
08...	--	--	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--	--	--
DEC.												
05...	--	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--	--
JAN.												
07...	--	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--	--	--
FEB.												
05...	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--
MAR.												
04...	--	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--	--
APR.												
08...	--	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--	--	--
MAY												
07...	--	--	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--	--	--
JUNE												
04...	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--
JULY												
10...	1.2	2.1	1.3	.07	.65	33	648	.76	9.1	79	17	60
AUG.												
12...	1.5	2.2	1.6	.08	.74	38	835	.63	9.9	71	16	51
SEP.												
03...	1.9	2.8	2.0	.08	.79	48	926	.77	12	35	12	25

ARKANSAS RIVER BASIN

07144200 LITTLE ARKANSAS RIVER AT VALLEY CENTER, KS.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TOTAL PO- TAS- SIUM (K) (MG/L)	FLOAT- ING ALGAE MATS (SEVER- ITY)	FLOAT- ING DEBRIS (SEVER- ITY)	DETER- GENT SUDS (SEVER- ITY)	DEAD FISH (SEVER- ITY)	FLOAT- ING GARBAGE (SEVER- ITY)	GAS BUBBLES (SEVER- ITY)	FLOAT- ING OR SOLID ICE COVER (SEVER- ITY)	ATMOS- PHERIC ODOR (SEVER- ITY)	OIL- GREASE (SEVER- ITY)	FLOAT- ING SLUDGE (SEVER- ITY)
OCT.											
03...	--	0	0	0	0	0	0	0	0	0	0
17...	--	0	0	0	0	0	0	0	0	0	0
NOV.											
08...	--	0	0	0	0	0	0	0	0	0	0
20...	--	0	0	0	0	0	0	0	0	0	0
DEC.											
05...	--	0	0	0	0	0	0	0	0	0	0
19...	--	0	0	0	0	0	0	0	0	0	0
JAN.											
07...	--	0	0	0	0	0	0	0	0	0	--
23...	--	0	0	0	0	0	0	0	0	0	0
FEB.											
05...	--	0	0	0	0	0	0	0	0	0	0
21...	--	0	0	0	0	0	0	0	0	0	0
MAR.											
04...	--	0	0	0	0	0	0	0	0	0	0
19...	--	0	0	0	0	0	0	0	0	0	0
APR.											
08...	--	0	2	2	0	0	0	0	0	0	0
23...	--	0	0	1	0	0	0	0	0	0	0
MAY											
07...	--	0	1	1	0	0	0	0	0	0	0
20...	--	0	0	0	0	0	0	0	0	0	0
JUNE											
04...	--	0	1	1	0	0	0	0	0	0	0
17...	--	0	1	1	0	0	0	0	0	0	0
JULY											
10...	5.7	0	0	0	0	0	0	0	0	0	0
AUG.											
12...	6.2	0	0	0	0	0	0	0	0	0	0
SEP.											
03...	11	--	--	--	--	--	--	--	--	--	--

SEVERITY: 0-NONE, 1-MILD, 2-MODERATE, 3-SERIOUS, 4-EXTREME.

07144550 ARKANSAS RIVER AT DERBY, KS

LOCATION.--Lat 37°32'34", long 97°16'31", in SE¼SW¼NW¼ sec.12, T.29 S., R.1 E., Sedgwick County, at gaging station at highway bridge on west edge of Derby, 0.9 mi (1.4 km) below mouth of bypass channel, and at mile 749.5 (1,205.9 km).

DRAINAGE AREA.--40,830 mi² (105,750 km²), of which 7,263 mi² (18,810 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: October 1961 to September 1975.

Water temperatures: Water years 1971-73, October 1974 to September 1975.

EXTREMES.--1974-75:

Specific conductance: Maximum daily, 2,800 micromhos Jan. 22; minimum daily, 272 micromhos June 24.

Water temperatures: Maximum daily, 33.0°C July 21; minimum daily, 0.0°C Jan. 12 and Feb. 6.

Period of record:

Specific conductance (1968-75): Maximum daily, 3,500 micromhos Feb. 21, 1969; minimum daily, 190 micromhos Oct. 14, 1973.

Water temperatures (1970-73, 1975): Maximum, 33.0°C July 12, 1975; minimum, freezing point on many days during winter period.

REMARKS.--Chemical analyses by Kansas Department of Health and Environment, Topeka, Ks. and U.S. Geological Survey. Chemical analyses by Kansas Department of Health and Environment were discontinued September 1975.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975¹

DATE	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)
OCT. 22...	540	17.0	14	83	14	240	9.2	210	0	130	320	.6
NOV. 14...	647	9.0	15	96	22	280	7.0	240	0	160	420	.5
DEC. 05...	554	4.0	14	120	25	320	4.0	280	0	180	470	.6
JAN. 07...	535	--	12	110	26	320	7.5	260	0	180	490	.6
FEB. 20...	859	1.0	15	110	24	360	6.2	260	0	170	550	.4
MAR. 19...	1200	8.5	12	88	22	220	6.5	220	0	130	340	.5
APR. 08...	1420	10.0	10	78	17	190	5.2	190	0	120	290	.5
MAY 07...	554	25.0	8.4	90	29	310	8.5	220	0	190	460	.6
JUNE 04...	5360	21.0	10	43	6.9	51	5.2	140	0	37	75	.3
JULY 10...	1550	29.0	19	80	13	180	10	220	0	86	260	.4
AUG. 21...	485	27.0	4.5	83	17	240	8.5	220	0	120	350	.7
SEP. 19...	456	17.0	13	85	19	250	8.2	230	0	120	360	.5

DATE	DIS- SOLVED NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DIS- SOLVED SOLIDS (TONS PER DAY)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	TUR- BID- ITY (JTU)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)
OCT. 22...	2.7	1.5	230	932	1400	1.31	200	260	92	6.4	1640
NOV. 14...	1.7	.65	170	1120	2030	1.58	65	330	130	6.7	2020
DEC. 05...	2.1	.78	200	1280	1960	1.78	8	390	160	6.9	2280
JAN. 07...	1.6	.68	180	1290	1890	1.78	25	380	170	7.1	2310
FEB. 20...	2.0	.42	150	1370	3250	1.90	110	370	160	8.1	2400
MAR. 19...	1.8	.68	150	946	3190	1.34	85	310	130	5.4	1700
APR. 08...	1.1	.55	150	813	3240	1.15	190	260	110	5.1	1450
MAY 07...	1.0	.12	200	1200	1830	1.66	65	340	170	7.3	2130
JUNE 04...	.86	.28	90	301	4260	.40	1500	140	24	1.9	520
JULY 10...	1.5	.88	150	768	3240	1.05	200	250	75	4.9	1400
AUG. 21...	.93	.31	110	936	1260	1.31	250	280	99	6.3	1740
SEP. 19...	1.8	.96	230	977	1280	1.41	40	290	100	6.4	1820

DATE	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)
OCT. 22...	270	0
APR. 08...	20	0

¹KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	INSTANTANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	PH (UNITS)	DIS- SOLVED OXYGEN (MG/L)	FECAL COLI- FORM (COL. PER 100 ML)	TUR- BID- ITY (JTU)	CAR- BONATE (CO3) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)
OCT.												
03...	345	2590	15.0	8.4	9.6	2400	10	6	270	--	--	--
17...	1440	1140	19.0	8.1	8.9	9000	190	0	180	--	--	--
NOV.												
08...	807	1480	9.0	8.1	11.1	48000	110	0	180	--	--	--
20...	586	2190	8.0	8.3	11.1	42000	20	0	280	--	--	--
DEC.												
05...	554	2360	4.0	8.2	12.5	2400	20	0	290	--	--	--
19...	488	2540	3.0	7.8	12.9	50000	25	0	290	--	--	--
JAN.												
07...	530	2670	4.5	7.8	11.8	25000	20	0	290	--	--	--
23...	546	2630	.5	7.7	12.8	110000	30	0	260	--	--	--
FEB.												
05...	1830	1360	1.5	7.8	12.2	8600	120	0	190	--	--	--
21...	810	2130	3.5	8.0	11.1	8300	55	0	260	--	--	--
MAR.												
04...	2200	862	3.5	7.8	12.2	6000	160	0	170	--	--	--
19...	1200	1620	8.5	8.1	11.0	21000	60	0	220	--	--	--
APR.												
08...	1430	1290	10.0	7.4	10.8	34000	120	0	180	--	--	--
23...	700	2600	18.0	8.0	9.0	22000	150	0	290	--	--	--
MAY												
07...	554	2150	25.0	8.4	9.7	39000	50	4	200	--	--	--
20...	510	1900	21.0	8.2	10.2	50000	60	0	200	--	--	--
JULY												
10...	1550	1400	29.0	1.9	7.1	130000	80	0	320	260	98	787
AUG.												
12...	330	2120	28.5	8.1	7.9	20000	60	0	240	440	170	1170
SEP.												
03...	3650	408	26.0	7.6	6.9	10000	140	0	200	58	20	232

DATE	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	CHEM- ICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L)	TOTAL RESI- DUE (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL NITRO- GEN (NO3) (MG/L)	TOTAL CAL- CIUM (CA) (MG/L)	TOTAL MAG- NE- SIUM (MG)	TOTAL SODIUM (NA) (MG/L)
OCT.												
03...	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--
NOV.												
08...	--	--	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--	--	--
DEC.												
05...	--	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--	--
JAN.												
07...	--	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--	--	--
FEB.												
05...	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--
MAR.												
04...	--	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--	--
APR.												
08...	--	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--	--	--
MAY												
07...	--	--	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--	--	--
JULY												
10...	2.1	3.8	3.1	1.0	1.1	42	740	.71	17	.3	16	170
AUG.												
12...	1.5	2.4	2.2	.67	.88	32	1230	.23	11	77	21	270
SEP.												
03...	7.4	8.2	7.4	.04	1.2	120	2160	.79	36	44	20	36

07144550 ARKANSAS RIVER AT DERBY, KS.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TOTAL PO- TAS- SIUM (K) (MG/L)	FLOAT- ING ALGAE MATS (SEVER- ITY)	FLOAT- ING DEBRIS (SEVER- ITY)	DETER- GENT SUDS (SEVER- ITY)	DEAD FISH (SEVER- ITY)	FLOAT- ING GARBAGE (SEVER- ITY)	GAS BUBBLES (SEVER- ITY)	FLOAT- ING OR SOLID ICE COVER (SEVER- ITY)	ATMOS- PHERIC ODOR (SEVER- ITY)	OIL- GREASE (SEVER- ITY)	FLOAT- ING SLUDGE (SEVER- ITY)
OCT.											
03...	--	0	0	0	0	0	0	0	1	0	0
17...	--	0	0	1	0	0	0	0	0	0	0
NOV.											
08...	--	0	0	1	0	0	0	0	0	0	0
20...	--	0	0	0	0	0	0	0	0	0	0
DEC.											
05...	--	0	0	0	0	0	0	0	1	0	0
19...	--	0	0	0	0	0	0	0	0	0	0
JAN.											
07...	--	0	0	0	0	0	0	0	0	0	0
23...	--	0	0	1	0	0	0	0	0	0	0
FEB.											
05...	--	0	0	0	0	0	0	0	0	0	0
21...	--	0	0	0	0	0	0	0	0	0	0
MAR.											
04...	--	0	0	0	0	0	0	0	0	0	0
19...	--	0	0	0	0	0	0	0	0	0	0
APR.											
08...	--	0	1	1	0	0	0	0	0	0	0
23...	--	0	0	1	0	0	0	0	0	0	0
MAY											
07...	--	0	--	0	0	0	0	0	0	0	0
20...	--	0	0	1	0	0	0	0	0	0	0
JULY											
10...	8.1	0	0	0	0	0	0	0	1	0	0
AUG.											
12...	5.8	0	0	0	0	0	0	0	0	0	0
SEP.											
03...	19	0	0	0	0	0	0	0	0	0	0

SEVERITY: 0-NONE, 1-MILD, 2-MODERATE, 3-SERIOUS, 4-EXTREME.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C) , WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2360	1640	2170	2230	2060	850	2380	2280	1300	346	2090	594
2	2410	1250	2110	2280	1930	647	2270	2190	1200	380	2110	618
3	2330	353	2200	2160	1930	698	2260	2150	531	552	2160	457
4	2350	388	2340	2240	1930	826	2340	2240	496	640	2120	457
5	1430	506	2270	2320	1040	1180	1770	2170	536	829	1960	571
6	2230	979	1800	2320	773	1390	2330	2190	889	866	2290	774
7	2190	1430	2030	2360	1280	786	2120	2310	1200	1020	2120	1040
8	2270	1550	2210	2240	1670	819	1770	2310	1430	1110	2090	1010
9	2270	1650	2220	2230	1810	1870	733	2110	392	1270	2200	1280
10	2270	1610	2210	2140	1910	1890	1350	2450	464	1360	2100	1340
11	887	1610	804	2060	2100	1900	1760	2450	458	1530	2050	1340
12	950	1740	1200	2100	2380	2090	2070	2230	471	1510	2120	1440
13	1020	2060	1350	1780	2120	2100	2080	707	600	1610	2120	1570
14	1270	1990	1600	2020	2230	2170	2010	1510	1000	1610	1800	1650
15	2290	1980	2050	2200	2130	2220	2050	1800	1330	1670	1990	1640
16	1670	2030	2080	2450	2280	2090	1630	2160	1350	1890	1990	1770
17	1110	2020	2160	2200	1880	2090	1930	2160	924	1800	2010	1300
18	869	2190	2350	2340	1940	1700	2110	2160	1050	1850	1740	1700
19	983	2070	2210	2330	2200	1630	2300	2230	1000	1920	2020	1810
20	1340	2090	2210	2430	2310	1840	2440	2250	1100	1860	1610	1940
21	1500	2090	2250	2390	2160	2030	2390	2200	1270	1830	1950	1950
22	1730	2250	2270	2800	1870	2230	2450	2080	1270	1810	1770	2050
23	2090	2210	2280	2470	2080	2250	2590	2480	327	1880	1890	1930
24	1880	2160	2280	2520	2190	2340	2340	1830	272	1950	1800	2010
25	1230	2130	2290	2430	2210	2280	2320	1830	300	2000	1800	1970
26	1820	2150	2280	2460	2120	2430	2320	1000	325	1910	1800	2070
27	1890	2120	2270	2580	1970	802	2320	1200	450	1960	1740	1970
28	1820	2380	2300	2470	1570	1770	2320	367	533	2020	1740	1970
29	1860	2520	2390	2550	---	1850	2350	450	527	2090	1170	2010
30	1480	2230	2320	1880	---	1990	2220	600	420	2040	450	2050
31	1230	---	2080	2170	---	2310	---	1200	---	2290	500	---
AVERAGE	1710	1780	2080	2300	1930	1710	2110	1850	781	1530	1850	1480
YEAR	MAX	2800	MIN	272	MEAN	1760						

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20.5	17.0	6.0	5.0	3.0	5.0	8.0	20.5	15.0	28.0	29.0	28.0
2	19.0	14.0	4.0	2.0	4.0	4.0	4.5	18.5	20.0	28.0	30.0	29.0
3	21.0	13.0	6.0	3.0	5.0	4.0	10.0	23.0	22.0	29.0	29.0	28.0
4	20.0	9.0	8.0	3.0	6.0	4.0	13.0	23.0	25.0	30.0	32.0	29.0
5	15.0	9.0	8.0	3.0	1.0	9.0	16.0	24.0	27.0	30.0	33.0	26.0
6	16.0	9.0	8.0	4.0	0.0	13.0	12.0	26.0	28.0	27.0	32.0	27.0
7	14.0	9.0	8.0	6.0	5.0	14.0	12.0	27.0	28.0	30.5	30.0	23.0
8	17.0	11.0	3.0	6.0	3.0	10.0	16.0	25.0	26.0	30.0	30.0	26.0
9	17.0	10.5	3.0	7.0	5.0	3.0	15.0	22.0	20.5	30.0	29.0	26.0
10	18.0	11.0	5.0	3.0	4.0	4.0	14.0	26.0	17.0	29.0	30.0	26.0
11	19.5	11.0	4.5	1.0	3.0	4.0	15.0	26.0	19.0	27.0	29.0	24.0
12	18.0	11.0	6.0	0.0	3.0	6.0	14.0	24.0	20.5	22.0	30.0	21.0
13	16.0	9.0	6.0	3.0	4.0	8.0	12.0	17.0	21.0	26.0	29.0	16.0
14	14.0	9.0	6.0	4.0	6.0	7.0	17.0	22.0	23.0	27.0	29.0	16.0
15	23.0	9.0	4.0	5.0	2.0	6.0	19.0	25.0	26.0	28.0	30.0	17.0
16	16.0	10.0	3.0	3.0	1.0	7.0	22.0	25.0	25.5	28.0	32.0	22.0
17	18.0	9.0	4.5	1.0	3.0	12.0	20.0	26.0	25.0	27.5	30.0	21.0
18	17.0	10.0	4.0	6.0	4.0	14.0	16.0	26.0	25.0	29.0	29.0	20.0
19	16.0	12.0	4.5	5.0	2.0	16.0	15.0	27.0	25.0	30.0	28.0	22.0
20	17.0	12.0	5.5	5.0	4.0	14.0	20.0	25.0	25.0	31.0	30.0	26.0
21	17.0	13.0	6.0	6.0	6.0	17.0	20.5	28.0	25.0	33.0	32.0	27.0
22	17.0	16.0	8.0	4.0	3.0	15.0	18.5	24.0	23.0	32.0	29.0	21.0
23	18.0	11.0	5.0	6.0	2.0	16.0	25.0	24.0	21.0	29.0	29.0	22.0
24	17.0	11.0	2.0	6.0	5.0	12.0	25.5	26.0	23.5	28.0	28.0	19.0
25	17.0	9.5	2.0	7.0	7.0	10.5	25.5	23.0	23.5	30.0	30.0	20.0
26	19.5	11.0	2.5	9.0	9.0	8.0	25.0	21.0	24.0	31.0	29.0	21.0
27	18.0	9.0	3.0	7.0	9.0	12.0	24.0	20.0	24.5	32.0	29.0	22.0
28	16.0	6.0	4.0	7.0	7.0	6.0	22.0	19.5	25.0	31.0	27.0	21.0
29	19.0	2.0	7.0	5.0	---	4.5	23.0	16.0	26.0	26.0	29.0	23.0
30	19.0	1.0	4.0	4.0	---	6.0	21.0	15.0	27.0	29.0	29.0	19.0
31	16.0	---	6.0	3.0	---	14.0	---	---	---	28.0	29.0	---
AVERAGE	17.5	10.0	5.0	4.5	4.0	9.0	17.5	23.0	23.5	29.0	29.5	23.0
YEAR	MAX	33.0	MIN	0.0	MEAN	16.5						

07144780 NORTH FORK MINNESCAH RIVER ABOVE CHENEY RESERVOIR, KS

LOCATION.--Lat 37°50'41", long 97°56'09", in SW¼NE¼SW¼ sec.25, T.25 S., R.6 W., Reno County, at gaging station at bridge on State Highway 17, 12 mi (19.3 km) south of Hutchinson, 12.5 mi (20.1 km) upstream from Cheney Dam at river mile 28.2 (45.4 km).

DRAINAGE AREA.--787 mi² (2,038 km²), of which 237 mi² (614 km²) is probably noncontributing.

PERIOD OF RECORD.--Sediment records: October 1965 to September 1975.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	SUS- PENDE SEDIM- ENT DIS- CHARGE (MG/L)	SUS- PENDE SEDIM- ENT DIS- CHARGE (T/DAY)								
OCT.												
10...	1100	44	179	21								
25...	1150	74	99	20								
NOV.												
08...	1110	108	61	18								
20...	1100	84	28	6.4								
DEC.												
03...	1345	123	105	35								
17...	1445	144	34	13								
JAN.												
09...	1120	144	42	16								
20...	1330	133	40	14								
FEB.												
14...	1155	134	149	54								
26...	1405	257	132	92								
MAR.												
20...	1445	144	117	45								
APR.												
08...	1330	143	75	29								
23...	1720	101	83	23								
MAY												
14...	1200	121	164	54								
JUNE												
12...	1200	154	325	135								
JULY												
10...	1030	90	90	22								
28...	1425	.90	58	.14								
AUG.												
13...	1120	16	27	1.2								
29...	1155	56	1220	184								
SEP.												
11...	1150	15	36	1.5								
26...	1135	22	39	2.3								

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	SUS- PENDE SEDIM- ENT (MG/L)	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .062 MM	SUS. SED. FALL DIAM. % FINER THAN .125 MM	SUS. SED. FALL DIAM. % FINER THAN .250 MM	SUS. SED. FALL DIAM. % FINER THAN .500 MM	SUS. SED. FALL DIAM. % FINER THAN 1.00 MM	SUS. SED. FALL DIAM. % FINER THAN 2.00 MM
AUG.												
29...	1155	56	1220	79	89	96	99	100	--	--	--	--

DATE	TIME	NUMBER OF SAM- PLING POINTS	INSTAN- TANEOUS DIS- CHARGE (CFS)	BED MAT. FALL DIAM. % FINER THAN .062 MM	BED MAT. FALL DIAM. % FINER THAN .125 MM	BED MAT. FALL DIAM. % FINER THAN .250 MM	BED MAT. FALL DIAM. % FINER THAN .500 MM	BED MAT. FALL DIAM. % FINER THAN 1.00 MM	BED MAT. FALL DIAM. % FINER THAN 2.00 MM	BED MAT. FALL DIAM. % FINER THAN 4.00 MM	BED MAT. FALL DIAM. % FINER THAN 8.00 MM	BED MAT. FALL DIAM. % FINER THAN 16.0 MM
OCT.												
10...	1100	9	44	--	0	8	58	91	96	99	100	--
MAR.												
20...	1445	9	144	--	0	2	37	84	96	100	--	--

LOCATION.--Lat 37°33'51", long 97°51'10", in SW¼SW¼SE¼ sec.34, T.28 S., R.5 W., Kingman County, at gaging station at county highway bridge, 4.0 mi (6.4 km) southeast of Murdock, and at mile 68.0 (109.4 km).

DRAINAGE AREA.--650 mi² (1,680 km²), of which 107 mi² (277 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: October 1961 to September 1975 (discontinued).
Sediment records: October 1962 to September 1975.

REMARKS.--Chemical analyses by Kansas Department of Health and Environment, Topeka, Ks.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)
OCT. 24...	157	17.0	17	77	8.8	190	3.5	220	0	41	290	.3
NOV. 20...	164	5.0	18	80	11	170	3.5	240	0	48	260	.3
DEC. 13...	314	3.0	18	74	10	120	3.4	230	0	39	180	.4
JAN. 20...	169	4.5	17	80	10	160	3.0	240	0	46	250	.3
FEB. 26...	287	9.5	17	75	10	132	2.8	240	0	40	200	.2
MAR. 21...	224	12.0	13	72	16	150	3.0	230	0	44	230	.3
APR. 09...	258	10.0	14	66	12	120	2.8	230	0	40	180	.4
JUNE 11...	700	18.0	17	48	4.9	38	3.2	170	0	11	56	.3
JULY 09...	148	31.0	18	46	8.0	172	5.0	140	0	46	270	.3
AUG. 13...	49	--	17	48	13	260	5.0	150	0	58	390	.3
SEP. 04...	62	23.0	16	46	13	250	4.8	150	0	55	380	.4

DATE	DIS- SOLVED NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER DAY)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	TUR- BID- ITY (JTU)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)
OCT. 24...	1.1	.19	120	770	326	1.05	75	230	52	5.5	1360
NOV. 20...	1.0	.18	120	734	325	1.00	65	240	200	4.7	1290
DEC. 13...	1.1	.22	110	586	497	.80	65	230	38	3.5	1010
JAN. 20...	1.2	.16	80	704	321	.96	25	240	46	4.5	1240
FEB. 26...	1.2	.15	80	620	480	.84	65	230	34	3.8	1090
MAR. 21...	.41	.08	120	658	398	.89	6	250	58	4.2	1150
APR. 09...	.68	.14	110	574	400	.78	25	210	28	3.6	1020
JUNE 11...	.84	.23	90	272	514	.37	650	140	4	1.4	480
JULY 09...	.05	.18	90	662	265	.90	55	150	30	6.2	1200
AUG. 13...	.02	.14	140	860	114	1.17	25	170	52	8.6	1630
SEP. 04...	.29	.15	140	830	141	1.13	7	170	45	8.4	1590

DATE	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)
OCT. 24...	150	0
APR. 09...	20	0

ARKANSAS RIVER BASIN

315

07145200 SOUTH FORK NINNESCAH RIVER NEAR MURDOCK, KS.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	SUS- PENDE SEDIM- ENT DIS- CHARGE (T/DAY)	SUS- PENDE SEDIM- ENT DIS- CHARGE (T/DAY)	SUS- PENDE SEDIM- ENT DIS- CHARGE (T/DAY)
OCT. 24...	1130	157	168	71	
NOV. 20...	0920	164	426	189	
DEC. 13...	0955	314	115	97	
JAN. 20...	1540	169	74	34	
FEB. 26...	1615	287	138	107	
MAR. 21...	0925	224	89	54	
APR. 09...	0955	258	71	49	
JUNE 11...	1115	700	1050	1980	
JULY 09...	1350	148	84	34	
AUG. 13...	0910	49	43	5.7	
SEP. 04...	0915	63	45	7.7	
26...	0905	74	42	8.4	

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	SUS- PENDE SEDIM- ENT (MG/L)	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .062 MM	SUS. SED. FALL DIAM. % FINER THAN .125 MM	SUS. SED. FALL DIAM. % FINER THAN .250 MM	SUS. SED. FALL DIAM. % FINER THAN .500 MM	SUS. SED. FALL DIAM. % FINER THAN 1.00 MM	SUS. SED. FALL DIAM. % FINER THAN 2.00 MM
JUNE 11...	1115	700	1050	64	68	76	91	95	98	100	--	--

DATE	TIME	NUMBER OF SAM- PLING POINTS	INSTAN- TANEOUS DIS- CHARGE (CFS)	BED MAT. FALL DIAM. % FINER THAN .062 MM	BED MAT. FALL DIAM. % FINER THAN .125 MM	BED MAT. FALL DIAM. % FINER THAN .250 MM	BED MAT. FALL DIAM. % FINER THAN .500 MM	BED MAT. FALL DIAM. % FINER THAN 1.00 MM	BED MAT. FALL DIAM. % FINER THAN 2.00 MM	BED MAT. FALL DIAM. % FINER THAN 4.00 MM	BED MAT. FALL DIAM. % FINER THAN 8.00 MM	BED MAT. FALL DIAM. % FINER THAN 16.0 MM
OCT. 24...	1130	6	157	--	0	24	77	95	98	100	--	--
MAR. 21...	0925	9	224	--	0	11	71	92	97	99	100	--

LOCATION.--Lat 37°27'34", long 97°25'20", in NW¼SW¼NW¼ sec.10, T.30 S., R.1 W., Sumner County, at gaging station at highway bridge, 3.0 mi (4.8 km) southwest of Peck, and at mile 31.6 (50.8 km).

DRAINAGE AREA.--2,129 mi² (5,514 km²), of which 344 mi² (891 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: October 1961 to September 1975 (discontinued).
Sediment records: October 1960 to September 1975.

REMARKS.--Chemical analyses by Kansas Department of Health and Environment, Topeka, Ks.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NESIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)
OCT. 22...	139	17.0	14	75	15	180	3.8	230	0	56	270	.3
NOV. 14...	278	6.0	17	78	18	110	4.5	250	0	60	180	.2
DEC. 11...	980	4.5	9.6	61	15	89	4.2	180	0	62	130	.4
JAN. 14...	416	.5	12	69	18	99	4.0	230	0	55	150	.3
FEB. 20...	410	1.0	14	75	15	120	2.8	240	0	55	180	.2
APR. 04...	328	8.5	13	77	21	110	2.5	260	0	67	160	.4
MAY 21...	220	27.0	16	59	19	120	3.5	190	0	70	190	.4
JUNE 17...	31800	20.5	6.2	14	3.2	7.5	5.8	56	0	6.0	12	.4
18...	7190	20.0	7.9	21	3.8	11	5.8	83	0	9.0	17	.4
JULY 18...	356	23.5	10	54	20	100	4.5	190	0	56	160	.4
AUG. 13...	71	30.0	17	69	20	170	5.0	220	0	79	250	.3
SEP. 02...	98	31.0	13	61	16	170	4.8	190	0	69	260	.3

DATE	DIS- SOLVED NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER DAY)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	TUR- BID- ITY (JTU)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MMOS)
OCT. 22...	.63	.14	110	748	281	1.02	8	250	56	5.0	1320
NOV. 14...	.81	.17	140	610	458	.83	45	270	60	2.9	1050
DEC. 11...	.68	.19	120	486	1290	.66	200	210	62	2.6	840
JAN. 14...	.95	.21	120	536	602	.73	25	250	58	2.7	940
FEB. 20...	1.0	.10	80	590	653	.80	35	250	52	3.3	1040
APR. 04...	.68	.12	80	616	546	.84	8	280	62	2.9	1040
MAY 21...	.02	.08	120	576	342	.78	25	230	71	3.5	1010
JUNE 17...	.38	.31	30	95	8160	.13	650	48	2	.5	170
18...	.18	.24	60	136	2640	.18	250	68	0	.6	230
JULY 18...	.05	.11	120	506	486	.69	25	220	58	3.0	940
AUG. 13...	.02	.14	120	724	140	.98	8	250	70	4.6	1320
SEP. 02...	.16	.20	140	710	189	.97	8	220	62	5.0	1290

DATE	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)
OCT. 22...	80	0
APR. 04...	50	0

07145500 NINNESCAH RIVER NEAR PECK, KS.--Continued

WATER QUALITY DATA: WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	SUS- PENDE SEDIMENT DIS- CHARGE (T/DAY)	SUS- PENDE SEDIMENT DIS- CHARGE (T/DAY)
NOV. 14...	1030	278	57	43
DEC. 11...	1455	980	236	624
JAN. 14...	1450	416	60	67
FEB. 20...	1300	410	78	86
APR. 04...	1515	328	340	301
MAY 21...	1455	208	130	73
JUNE 18...	1720	7190	703	13600
JULY 18...	1130	356	296	285
AUG. 13...	1430	71	31	6.0
SEP. 02...	1545	99	44	12

DATE	TIME	NUMBER OF SAM- PLING POINTS	INSTAN- TANEOUS DIS- CHARGE (CFS)	BED MAT. FALL DIAM. % FINER THAN .062 MM	BED MAT. FALL DIAM. % FINER THAN .125 MM	BED MAT. FALL DIAM. % FINER THAN .250 MM	BED MAT. FALL DIAM. % FINER THAN .500 MM	BED MAT. FALL DIAM. % FINER THAN 1.00 MM	BED MAT. FALL DIAM. % FINER THAN 2.00 MM	BED MAT. FALL DIAM. % FINER THAN 4.00 MM	BED MAT. FALL DIAM. % FINER THAN 8.00 MM	BED MAT. FALL DIAM. % FINER THAN 16.0 MM
APR. 04...	1515	10	328	--	0	4	56	92	98	99	100	--
SEP. 02...	1545	10	99	--	0	4	61	90	98	100	--	--

07146500 ARKANSAS RIVER AT ARKANSAS CITY, KS
(National stream-quality accounting network and radiochemical station)

LOCATION.--Lat 37°03'23", long 97°03'32", in NE¼NE¼NE¼ sec.35, T.34 S., R.3 E., Cowley County, at gaging station at bridge on U.S. Highway 166, 0.1 mi (0.2 km) downstream from St. Louis-San Francisco Railway Co. bridge, 0.5 mi (0.8 km) west of Arkansas City, 5.4 mi (8.7 km) upstream from Walnut River, and at mile 701.4 (1,128.6 km).

DRAINAGE AREA.--43,713 mi² (113,217 km²), of which 7,607 mi² (19,702 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: October 1951 to September 1975.

Water temperatures: October 1951 to September 1975.

Sediment records: September 1961 to September 1975.

EXTREMES.--1974-75:

Specific conductance: Maximum daily, 2,290 micromhos Oct. 3; minimum daily, 269 micromhos June 19.

Water temperatures: Maximum, 34.0°C July 27; minimum, freezing point on several days during January and February.

Sediment concentrations: Maximum daily, 2,260 mg/l Sept. 4; minimum daily, 18 mg/l Sept. 27.

Sediment discharge: Maximum daily, 58,200 tons (52,800 tonnes) June 4; minimum daily, 27 tons (24 tonnes) Sept. 27.

Period of record:

Specific conductance: Maximum daily, 6,530 micromhos June 2, 1967; minimum daily, 162 micromhos Nov. 17, 1964.

Water temperatures: Maximum, 38.0°C July 25, Aug. 5, 1964; minimum, freezing point on many days during winter periods.

Sediment concentrations: Maximum daily, 6,240 mg/l March 31, 1973; minimum daily, 4 mg/l Jan. 14, 1974.

Sediment discharge: Maximum daily, 426,000 tons (386,000 tonnes) March 31, 1973; minimum daily, 10 tons (9.1 tonnes) Dec. 26, 1970.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HC03) (MG/L)	CAR- BONATE (C03) (MG/L)	DIS- SOLVED SULFATE (S04) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT.										
02...	586	7.0	100	23	310	7.4	248	0	150	480
NOV.										
07...	3480	12	40	7.7	79	5.8	116	--	50	110
JAN.										
22...	1680	14	99	23	260	5.2	256	--	140	380
FEB.										
20...	1620	12	100	24	230	5.2	264	--	160	350
MAR.										
18...	3660	9.1	63	16	150	28	170	0	93	210
APH.										
22...	1850	2.8	100	23	240	5.2	242	0	120	360
MAY										
21...	1290	.6	82	25	270	6.3	210	0	150	410
JUNE										
18...	22000	5.5	17	4.2	21	5.4	74	0	16	30
19...	30500	6.2	20	5.0	22	6.1	75	0	18	32
JULY										
11...	3010	12	70	15	140	7.3	200	0	87	210
AUG.										
13...	601	5.4	94	26	320	7.0	211	0	150	500
SEP.										
03...	2100	9.8	39	8.0	90	6.8	117	0	49	130

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO
OCT.										
02...	.5	.53	2.5	1.1	1210	1.65	1910	340	140	7.3
NOV.										
07...	.2	2.4	2.0	.82	383	.52	3600	130	36	3.0
JAN.										
22...	.4	1.8	1.5	.63	1080	1.47	4900	340	130	6.1
FEB.										
20...	.4	1.9	1.7	.05	1040	1.41	4550	350	130	5.4
MAR.										
18...	.4	1.7	1.6	.53	659	.90	6510	220	80	4.4
APR.										
22...	.5	.04	1.7	.45	990	1.35	4950	340	150	5.6
MAY										
21...	.5	.02	2.5	.70	1100	1.50	3830	310	140	6.7
JUNE										
18...	.2	.28	3.3	.46	147	.20	8730	60	0	1.2
19...	.2	.18	1.9	.39	142	.19	11700	71	9	1.1
JULY										
11...	.4	.40	1.8	.56	655	.89	5320	240	73	4.0
AUG.										
13...	.5	.01	2.3	.66	1240	1.69	2010	340	170	7.5
SEP.										
03...	.4	1.7	4.1	1.3	403	.55	2290	130	34	3.4

07146500 ARKANSAS RIVER AT ARKANSAS CITY, KS.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS-SOLVED ARSENIC (AS) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	DIS-SOLVED CAD- MIUM (CD) (UG/L)	TOTAL CAD- MIUM (CD) (UG/L)	DIS-SOLVED CHRO- MIUM (CR) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	TOTAL COBALT (CO) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)	TOTAL COPPER (CU) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)
OCT. 02...	4	4	2	20	0	0	0	<50	3	<10	20
JAN. 22...	2	3	0	10	0	10	0	<50	2	40	40
APR. 22...	4	5	2	<10	0	20	0	<50	3	10	10
JUNE 19...	1	11	0	10	0	20	0	<50	5	30	50

DATE	TOTAL IRON (FE) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	TOTAL LEAD (PB) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DIS-SOLVED SELENIUM (SE) (UG/L)	TOTAL SELENIUM (SE) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)	TOTAL ZINC (ZN) (UG/L)
OCT. 02...	770	1	<100	0	140	.0	.0	1	1	10	30
JAN. 22...	1600	4	<100	20	60	.2	.1	2	3	30	40
APR. 22...	6300	8	<100	10	280	.3	.1	1	1	0	90
JUNE 19...	19000	2	<100	0	--	.0	.0	0	0	0	90

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SUSPENDED SEDIMENT (MG/L)	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .062 MM	SUS. SED. FALL DIAM. % FINER THAN .125 MM	SUS. SED. FALL DIAM. % FINER THAN .250 MM	SUS. SED. FALL DIAM. % FINER THAN .500 MM	SUS. SED. FALL DIAM. % FINER THAN 1.00 MM	SUS. SED. FALL DIAM. % FINER THAN 2.00 MM
OCT. 30...	0955	2210	1900	63	72	89	97	98	99	100	--	--
MAY 23...	1045	2390	655	54	60	73	90	93	98	100	--	--
JUNE 18...	1930	17800	1630	40	44	51	64	65	77	91	100	--
JUNE 19...	1110	29900	1270	34	36	39	46	50	75	92	100	--
SEP. 03...	1050	2080	1120	64	86	93	95	96	98	100	--	--

DATE	TIME	NUMBER OF SAMPLING POINTS	INSTANTANEOUS DISCHARGE (CFS)	BED MAT. FALL DIAM. % FINER THAN .062 MM	BED MAT. FALL DIAM. % FINER THAN .125 MM	BED MAT. FALL DIAM. % FINER THAN .250 MM	BED MAT. FALL DIAM. % FINER THAN .500 MM	BED MAT. FALL DIAM. % FINER THAN 1.00 MM	BED MAT. FALL DIAM. % FINER THAN 2.00 MM	BED MAT. FALL DIAM. % FINER THAN 4.00 MM	BED MAT. FALL DIAM. % FINER THAN 8.00 MM	BED MAT. FALL DIAM. % FINER THAN 16.0 MM
MAR. 18...	1250	3	3660	0	1	10	42	63	81	95	100	--
SEP. 03...	1100	10	2080	--	0	12	57	78	89	98	100	--

ARKANSAS RIVER BASIN

07146500 ARKANSAS RIVER AT ARKANSAS CITY, KS.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOC- CI (COL- ONIES PER 100 ML)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	PH (UNITS)	DIS- SOLVED OXYGEN (MG/L)	TUR- BID- ITY (JTU)
OCT. 02...	430	230	2280	16.5	8.8	13.3	20
NOV. 07...	46000	2700	705	9.0	8.0	--	120
JAN. 22...	1300	<20	2250	4.5	8.1	12.2	25
FEB. 20...	530	200	2310	7.5	7.9	11.7	20
MAR. 18...	3800	900	1480	11.0	8.3	12.0	130
APR. 22...	212	19	1820	17.0	8.8	12.0	40
MAY 21...	100	71	1900	20.5	9.0	9.5	45
JUNE 18...	4000	9900	280	23.0	7.7	6.0	190
19...	4800	3440	280	23.0	7.9	5.0	180
JULY 11...	16000	520	1120	24.5	8.2	8.1	70
AUG. 13...	1100	130	2190	24.0	8.2	7.4	35
SEP. 03...	5600	190	680	26.0	7.7	6.9	180

DATE	TOTAL ORGANIC CARBON (C) (MG/L)	TOTAL PHYTO- PLANK- TON (CELLS PER ML)	PERI- PHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M	UNCOR- RECTED PERI- PHYTON CHLORO- PHYLL A MG/SQ M	UNCOR- RECTED PERI- PHYTON CHLORO- PHYLL B MG/SQ M	PERI- PHYTON BIOMASS ASH WEIGHT G/SQ M
OCT. 02...	10	200000	--	--	--	--
NOV. 07...	--	4800	--	--	--	--
JAN. 22...	7.2	--	--	--	--	--
FEB. 20...	--	2300	--	--	--	--
MAR. 18...	--	3700	--	--	--	--
APR. 22...	20	90000	47	54	4.2	35
MAY 21...	--	280000	30	2.4	.3	27
JUNE 18...	--	440	--	--	--	--
19...	15	2000	--	--	--	--
JULY 11...	--	120000	--	--	--	--
AUG. 13...	--	230000	--	--	--	--
SEP. 03...	--	44000	--	--	--	--

DATE	DIS- SOLVED GROSS BETA AS CS-137 (PC/L)	SUS- PENDE D GROSS BETA AS CS-137 (PC/L)	DIS- SOLVED NATURAL URANIUM (U) (UG/L)	DIS- SOLVED GROSS ALPHA AS U-NAT. (UG/L)	SUS- PENDE D GROSS ALPHA AS U-NAT. (UG/L)	DIS- SOLVED GROSS BETA AS SR90 /Y90 (PC/L)	SUS- PENDE D GROSS BETA AS SR90 /Y90 (PC/L)	DIS- SOLVED RA-226 (RADON METHOD) (PC/L)
OCT. 02...	6.8	2.3	3.2	<14	1.8	5.5	2.0	.13
JUNE 18...	7.4	91	.4	<1.6	140	5.9	74	.04

07146500 ARKANSAS RIVER AT ARKANSAS CITY, KS.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C) , WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2160	739	2170	2000	1240	1090	1760	2000	807	553	2110	1410
2	2160	1280	2180	1900	1550	1020	1920	1960	1100	467	2160	940
3	2290	306	2120	1920	1620	724	2020	2030	994	488	2220	843
4	2250	322	2100	2000	1400	720	2030	1960	751	621	2190	622
5	2260	357	2150	1960	1190	786	2020	2000	516	754	2210	594
6	2190	432	2110	2000	1040	990	2060	1990	552	884	2200	682
7	2190	625	2090	1690	980	1150	2050	1970	815	929	2170	898
8	2160	972	1660	1630	950	1220	2060	2010	1010	975	2220	1040
9	2150	1260	1640	1520	1330	1310	1860	2060	1190	1040	2260	1260
10	2140	1440	1640	1460	1740	1370	1060	2040	513	1140	2260	1280
11	2160	1530	1620	1520	1680	1490	986	2010	399	1180	2280	1420
12	1670	1560	1530	1620	1580	1260	1340	2040	553	1200	2280	1450
13	979	1600	1060	1940	1650	1380	1580	2060	540	1280	2270	1730
14	1110	1700	979	1940	1760	1460	1730	983	737	1410	2190	1680
15	1360	1880	1120	1740	1850	1510	1900	914	928	1450	1980	1760
16	1460	1890	1270	1630	1850	1550	1810	1630	1130	1490	1840	1820
17	1460	1980	1460	1660	1950	1410	1740	1640	1220	1620	2190	1700
18	1630	1960	1490	1780	2100	1120	1560	1510	315	1780	2190	1870
19	1170	1970	1560	1750	1970	1380	1610	1640	269	1780	1920	1670
20	1080	2040	1620	1790	1800	1390	1730	1820	584	1810	1850	1860
21	1250	2010	1620	1840	1860	1470	1770	1930	813	1910	940	1940
22	1440	2040	1830	1900	1860	1580	1760	1580	928	1920	1120	2010
23	1600	2040	1920	1890	1530	1670	1770	1560	983	1950	1460	2160
24	1710	2080	1960	2030	1700	1890	1800	1060	416	1980	1540	2100
25	1790	2130	2000	1940	1800	1890	1870	1060	417	2000	1610	2110
26	1630	2110	2040	1960	1710	1930	1770	956	531	2050	1740	2040
27	1310	2070	2050	1960	1250	1880	1770	798	618	2030	1880	2100
28	1660	2080	2020	1960	1080	1860	1740	852	609	2020	1800	2100
29	1730	2060	1990	1970	---	1420	1770	622	662	2070	1820	2110
30	1380	2230	1970	1930	---	1410	1800	528	631	2120	1830	2100
31	739	---	1990	963	---	1500	---	609	---	2130	1290	---
AVERAGE	1690	1560	1770	1800	1570	1380	1750	1540	718	1450	1940	1580

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16.0	15.0	1.5	7.0	3.0	3.5	10.0	16.0	22.5	25.5	27.0	27.5
2	14.0	15.0	1.0	1.0	3.0	2.0	4.5	17.5	19.0	25.0	31.0	26.0
3	15.0	14.5	2.0	1.0	5.0	5.5	4.0	18.5	20.0	26.5	26.0	26.0
4	16.0	11.5	2.0	2.0	6.0	5.5	7.5	20.0	21.5	27.0	27.0	27.0
5	18.0	9.0	4.0	3.0	2.0	4.5	10.5	20.0	23.0	27.0	26.0	25.0
6	16.0	7.0	4.5	2.5	0.0	8.0	12.0	22.0	26.0	30.0	27.5	28.0
7	13.0	8.0	7.0	4.5	1.0	7.0	11.0	18.0	29.0	28.0	25.5	29.0
8	13.5	9.0	3.0	4.0	1.5	5.0	12.5	19.5	26.0	27.5	25.0	22.0
9	14.0	11.0	2.5	5.0	0.0	6.0	12.0	20.0	23.5	26.0	25.0	22.0
10	16.0	12.5	2.5	4.5	1.0	2.0	13.0	20.0	21.5	27.5	25.0	25.5
11	19.0	10.5	4.5	2.5	2.5	4.5	11.5	22.0	20.0	25.0	25.0	24.0
12	20.0	8.5	4.5	0.0	1.0	3.5	12.0	19.5	20.0	24.0	29.0	17.5
13	16.0	9.5	5.5	1.5	3.0	3.0	13.0	18.0	22.5	24.0	26.5	20.0
14	14.0	7.0	5.5	1.0	4.5	1.0	11.5	16.0	24.0	22.0	25.5	16.0
15	11.5	6.5	4.5	3.5	2.0	6.5	---	18.0	24.0	24.0	26.5	15.0
16	11.0	9.5	3.0	2.0	2.0	6.0	16.0	18.5	24.5	24.0	28.5	17.0
17	17.0	9.5	2.0	1.0	2.5	7.0	18.0	21.0	23.5	24.5	32.0	18.0
18	15.0	8.0	4.5	5.0	1.5	9.0	19.0	28.0	23.0	24.0	26.5	19.0
19	14.0	12.5	2.0	4.0	2.0	10.0	19.5	23.5	24.0	24.5	25.0	18.5
20	13.0	9.0	2.0	2.5	1.0	13.5	19.5	22.0	27.0	25.0	26.0	16.5
21	13.0	10.5	6.5	4.5	4.5	14.0	16.5	21.0	28.5	27.0	27.0	18.0
22	13.5	10.0	8.5	2.5	3.0	15.0	17.0	25.5	28.0	27.5	27.0	17.5
23	15.5	12.5	5.0	4.0	3.5	16.5	19.0	21.5	24.5	27.5	30.0	16.0
24	16.0	8.0	3.5	5.0	1.0	8.0	21.0	22.0	---	27.0	31.0	14.0
25	17.5	8.0	1.0	6.0	6.5	7.5	21.0	21.0	25.5	22.0	25.0	14.0
26	16.0	6.0	2.5	8.0	4.5	7.0	23.0	20.0	25.0	26.5	24.0	16.5
27	17.5	7.0	3.5	6.0	4.0	9.0	22.0	22.5	26.0	34.0	25.5	16.0
28	17.5	8.0	5.5	5.5	5.0	7.5	17.5	22.0	26.0	28.5	24.0	18.0
29	17.0	3.0	5.0	5.0	---	6.0	18.5	20.0	26.5	27.5	26.5	17.5
30	19.5	2.0	4.0	5.0	---	11.0	17.0	20.5	26.5	27.0	27.5	20.0
31	17.0	---	4.5	4.0	---	8.0	---	20.5	---	27.0	28.0	---
AVERAGE	15.5	9.5	4.0	3.5	2.5	7.0	15.0	20.5	24.0	26.0	27.0	20.0

ARKANSAS RIVER BASIN

07146500 ARKANSAS RIVER AT ARKANSAS CITY, KS.--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCTOBER			NOVEMBER			DECEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	604	37	60	2900	1530	12000	930	43	108
2	586	43	68	2100	757	4290	912	49	121
3	580	34	53	17500	639	30200	904	48	117
4	568	42	64	17100	1160	53600	912	85	209
5	568	64	98	13200	1410	50300	950	50	128
6	550	46	68	7970	1300	28000	977	214	565
7	550	46	68	3700	551	5500	1040	230	646
8	550	46	68	2370	423	2710	1250	137	462
9	556	38	57	1870	456	2300	1260	96	327
10	556	46	69	1610	179	778	1240	83	278
11	598	50	81	1520	205	841	1360	74	272
12	1230	1420	4720	1470	220	873	2870	609	4720
13	1350	2100	7650	1400	205	775	3500	445	4210
14	1210	1010	3300	1300	139	488	2780	339	2540
15	1100	501	1490	1240	110	368	2240	216	1310
16	1000	348	940	1200	92	298	2000	223	1200
17	970	262	686	1160	75	235	1890	187	954
18	1230	604	2010	1140	105	323	1870	94	475
19	1410	998	3800	1110	75	225	1820	60	295
20	1190	711	2280	1090	73	215	1820	62	305
21	1030	403	1120	1090	76	224	1750	49	232
22	960	269	697	1070	43	124	1570	44	187
23	920	241	599	1050	42	119	1500	50	203
24	920	258	641	1030	43	120	1440	46	179
25	1000	191	516	1020	77	212	1420	58	222
26	1290	374	1300	1010	64	175	1380	36	134
27	1080	258	752	960	63	163	1350	32	117
28	1020	141	388	950	48	123	1360	44	162
29	1060	326	933	950	140	359	1370	54	200
30	1980	1590	8500	950	79	203	1370	51	189
31	2140	886	5120	---	---	---	1380	47	175
MONTH	30356	---	48196	93030	---	196141	48415	---	21242

DAY	JANUARY			FEBRUARY			MARCH		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	1430	73	282	2990	571	4610	4630	609	7610
2	1480	75	300	2080	203	1140	6990	801	15100
3	1480	84	336	1980	143	764	9190	969	24000
4	1490	67	270	3470	451	4230	6420	631	10900
5	1520	66	271	5140	687	9530	4050	474	5180
6	1630	88	387	4420	729	8700	3040	378	3100
7	1830	197	973	3050	631	5200	2840	293	2250
8	2180	249	1470	2080	453	2540	2780	228	1710
9	2180	249	1470	1860	466	2340	2600	193	1350
10	2280	266	1640	1410	168	640	2460	115	764
11	2140	180	1040	1680	188	853	2710	129	944
12	1880	171	868	1960	104	550	3090	245	2040
13	1520	56	230	1930	133	693	2740	106	784
14	1380	37	138	1960	99	524	2720	126	925
15	1420	65	249	1870	193	974	2520	110	748
16	1580	109	465	1820	67	329	2550	126	868
17	1820	145	713	1630	45	198	3440	218	2020
18	1860	87	437	1410	50	190	3650	628	6190
19	1770	146	698	1380	50	186	2860	265	2050
20	1690	92	420	1590	50	215	2660	181	1300
21	1680	70	318	1830	50	247	2460	165	1100
22	1670	71	320	2250	50	304	2380	130	835
23	1680	79	358	2210	75	448	2240	117	708
24	1670	52	234	1890	75	383	1990	127	656
25	1660	59	264	1820	75	369	1890	85	434
26	1650	74	330	2480	100	670	1810	104	508
27	1630	51	224	3650	437	4310	2000	126	680
28	1590	46	197	4140	517	5780	2490	127	854
29	1590	55	236	---	---	---	3140	234	1980
30	2070	379	2120	---	---	---	2450	227	1500
31	4850	1320	17300	---	---	---	2050	167	924
MONTH	56300	---	34558	65980	---	56917	98840	---	100012

07146500 ARKANSAS RIVER AT ARKANSAS CITY, KS.--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	APRIL			MAY			JUNE		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	1870	113	571	1500	128	518	3450	452	4210
2	1810	114	557	1480	101	404	2640	301	2150
3	1790	74	358	1470	113	449	5440	556	8170
4	1760	83	394	1480	139	555	14000	1540	58200
5	1710	76	351	1420	141	541	10300	1180	32800
6	1680	88	399	1390	125	469	6660	800	14400
7	1680	85	386	1360	151	554	4450	543	6520
8	1760	68	323	1330	124	445	3470	354	3320
9	2910	280	2200	1310	110	389	3580	468	4520
10	4180	873	9850	1610	379	1650	14300	1350	52100
11	2670	645	4650	1380	200	745	11900	927	29800
12	2070	298	1670	1290	163	568	10900	683	20100
13	1840	158	785	1600	226	976	7210	501	9750
14	1770	113	540	4120	711	7910	5270	501	7130
15	1750	105	496	4010	676	7320	4010	382	4140
16	1780	98	471	2760	238	1770	3360	254	2300
17	1960	222	1170	1910	187	964	9320	1160	29200
18	2060	152	845	1570	223	945	22500	1390	84400
19	2050	143	792	1420	200	767	26200	941	66600
20	1970	125	665	1330	177	636	9500	603	15500
21	1920	127	658	1280	167	577	5500	581	8630
22	1860	106	532	1260	171	582	5520	512	7630
23	1860	100	502	2350	597	3790	5280	440	6270
24	1820	109	536	3290	759	6740	13500	1460	53200
25	1830	140	692	2920	423	3340	10400	1080	30300
26	1810	158	772	4780	711	9180	9020	802	19500
27	1790	142	686	6560	1310	23200	7580	841	17200
28	1780	129	620	3300	561	5000	6780	699	12800
29	1820	139	683	6760	1400	25600	6640	698	12500
30	1730	128	598	6340	958	16400	7680	1260	26100
31	---	---	---	5010	843	11400	---	---	---
MONTH	59290	---	33752	79590	---	134384	256360	---	649440

DAY	JULY			AUGUST			SEPTEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	7920	1330	28400	874	65	153	1700	502	2300
2	7920	1020	21800	848	52	119	2400	1610	10400
3	7250	765	15000	824	54	120	2300	1280	7950
4	5800	589	9220	800	50	108	3220	2660	23100
5	4920	482	6400	776	56	117	2710	1510	11000
6	4340	370	4340	764	60	124	2200	896	5320
7	3980	290	3120	732	60	119	1500	475	1920
8	3780	165	1680	705	45	86	1160	320	1000
9	3660	238	2350	672	48	87	1100	235	698
10	3530	236	2250	639	50	86	1030	212	590
11	3390	224	2050	601	40	65	902	167	407
12	3220	240	2090	567	39	60	964	240	625
13	2940	204	1620	556	49	74	797	130	280
14	2550	208	1430	632	76	130	766	115	238
15	2400	224	1450	968	286	747	729	89	175
16	2260	220	1340	710	108	207	704	83	158
17	1940	206	1080	613	99	164	728	98	193
18	1760	171	813	580	91	143	752	78	158
19	1680	213	966	778	165	347	782	117	247
20	1600	215	929	847	140	320	709	68	130
21	1480	145	579	2220	1260	7550	662	56	100
22	1330	138	496	1530	625	2580	629	41	70
23	1270	87	298	1070	254	734	602	38	62
24	1200	91	295	839	201	455	585	32	51
25	1140	90	277	720	158	307	570	28	43
26	1100	92	273	660	125	223	565	24	37
27	1080	129	376	639	260	449	550	18	27
28	1010	94	256	649	104	182	537	27	39
29	972	93	244	632	95	162	527	22	31
30	944	80	204	994	117	314	510	21	29
31	902	40	97	937	290	734	---	---	---
MONTH	89268	---	111723	25376	---	17066	32890	---	67378
YEAR	935695		1470809						

LOCATION.--Lat 37°39'36", Long 96°58'54", in sec.34, T.27 S., R.4 E., Butler County, at bridge on U.S. Highway 77, 1.0 mi (1.6 km) south of Augusta.

PERIOD OF RECORD.--Chemical analyses: October 1961 to September 1975 (discontinued).

REMARKS.--Chemical analyses by Kansas Department of Health and Environment, Topeka, Ks.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)
OCT. 22...	12	14.0	5.2	91	18	150	4.8	280	0	73	230	4.0
NOV. 15...	61	7.0	11	80	11	83	3.2	240	0	46	120	2.4
DEC. 11...	1120	3.5	7.8	66	8.6	78	2.8	180	0	30	130	1.6
JAN. 15...	104	1.0	10	67	12	51	2.2	220	0	30	78	.9
FEB. 19...	116	1.5	11	83	15	74	2.2	270	0	35	120	.7
MAR. 20...	293	10.5	10	54	6.2	34	2.0	180	0	21	51	.4
APR. 16...	213	15.0	10	82	11	71	2.2	250	0	29	120	.3
MAY 23...	640	20.5	13	69	13	120	3.8	200	0	33	200	.5
JULY 16...	46	25.5	14	100	17	95	3.5	320	0	54	150	1.0
AUG. 22...	16	27.0	4.7	93	17	140	4.5	290	0	81	200	1.6
SEP. 04...	25	27.0	10	53	8.8	50	3.2	190	0	31	69	.8

DATE	DIS- SOLVED NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER DAY)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	TUR- BID- ITY (JTU)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)
OCT. 22...	.75	.27	200	750	24.3	1.02	15	300	69	3.8	1340
NOV. 15...	1.4	.18	120	506	83.3	.69	8	240	50	2.3	880
DEC. 11...	.99	.14	110	435	1320	.59	650	200	50	2.4	770
JAN. 15...	1.0	.17	60	384	108	.52	65	220	36	1.5	650
FEB. 19...	.90	.12	120	488	153	.66	8	270	50	2.0	850
MAR. 20...	.36	.09	40	282	223	.38	130	160	14	1.2	480
APR. 16...	.56	.15	60	468	269	.64	65	250	48	2.0	820
MAY 23...	.75	.13	150	560	968	.76	650	230	64	3.5	1020
JULY 16...	.56	.39	140	620	77.2	.84	25	320	64	2.3	1100
AUG. 22...	.38	.54	150	712	30.8	.97	3	300	64	3.5	1270
SEP. 04...	.43	.42	90	350	24.4	.48	45	170	13	1.7	590

DATE	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)
OCT. 22...	110	0
APR. 16...	130	50

07147070 WHITEWATER RIVER AT TOWANDA, KS

LOCATION.--Lat 37°47'45", long 97°00'45", in SE¼SW¼SE¼ sec.8, T.26 S., R.4 E., Butler County, at gaging station at bridge on State Highway 254, 0.5 mi (0.8 km) west of Towanda, 2.4 mi (3.9 km) downstream from West Branch, and at mile 17.5 (28.2 km).

DRAINAGE AREA.--426 mi² (1,103 km²).

PERIOD OF RECORD.--Chemical analyses: October 1961 to September 1975 (discontinued).

REMARKS.--Chemical analyses by Kansas Department of Health and Environment, Topeka, Ks.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)
OCT. 11...	21	17.0	15	250	61	130	5.0	390	0	450	260	.4
NOV. 15...	61	7.0	16	190	47	63	4.5	330	0	340	120	.4
DEC. 17...	82	3.0	13	130	34	50	5.2	250	0	210	94	.5
JAN. 15...	77	1.0	12	140	40	54	4.2	270	0	240	97	.4
FEB. 19...	91	1.5	130	200	51	73	3.0	370	0	370	140	.4
MAR. 21...	118	13.0	10	120	37	54	3.5	250	0	220	93	.3
APR. 16...	168	14.0	11	190	48	62	4.0	350	0	350	100	.4
MAY 20...	21	22.0	14	220	58	89	4.0	400	0	400	160	.4
29...	5550	19.0	10	29	10	10	5.2	85	0	45	14	.4
JULY 23...	46	25.0	13	190	56	110	3.8	300	0	380	200	.3
AUG. 22...	20	25.0	19	220	49	140	4.0	310	0	410	250	.4
SEP. 04...	20	27.0	13	130	29	61	4.0	240	0	210	120	.5

DATE	DIS- SOLVED NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DIS- SOLVED SOLIDS (TONS PER DAY)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	TUR- BID- ITY (JTU)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)
OCT. 11...	.81	.16	270	1370	79.4	1.90	8	880	560	1.9	2110
NOV. 15...	1.6	.18	260	952	160	1.32	8	660	390	1.1	1430
DEC. 17...	2.1	.18	90	669	154	.94	25	450	250	1.0	1070
JAN. 15...	2.3	.17	120	733	156	1.02	35	510	290	1.0	1140
FEB. 19...	1.8	.11	200	1040	260	1.44	7	710	410	1.2	1550
MAR. 21...	1.9	.16	210	671	222	.95	75	450	250	1.1	1100
APR. 16...	1.4	.12	210	947	437	1.31	85	660	370	1.0	1410
MAY 20...	1.2	.17	230	1140	66.9	1.60	25	780	450	1.4	1720
29...	1.9	.13	60	174	2710	.25	1500	110	44	.4	300
JULY 23...	1.4	.12	200	1100	144	1.58	65	700	450	1.8	1720
AUG. 22...	.99	.14	210	1250	74.5	1.82	65	750	500	2.2	1940
SEP. 04...	1.1	.18	180	691	42.4	1.02	65	440	250	1.3	1120

DATE	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)
OCT. 11...	90	0
APR. 16...	70	80

LOCATION.--Lat 37°13'27", long 96°59'40", in SW¼SW¼NE¼ sec.33, T.32 S., R.4 E., Cowley County, at gaging station at bridge on U.S. Highway 77, 1.0 mi (1.6 km) south of Winfield, 1.0 mi (1.6 km) upstream from Black Creek, and at mile 24.8 (39.9 km).

DRAINAGE AREA.--1,872 mi² (4,848 km²).

PERIOD OF RECORD.--Chemical analyses: October 1959 to September 1974 (discontinued).

Specific conductance: October 1961 to September 1969.

Water temperatures: October 1961 to September 1975.

Sediment records: September 1961 to September 1975.

EXTREMES.--1974-75:

Water temperatures: Maximum, 30.0°C Aug. 23; minimum, 0.5°C Jan. 13.

Sediment concentrations: Maximum daily, 1,770 mg/l Nov. 4; minimum daily 9 mg/l Dec. 5, 30.

Sediment discharge: Maximum daily, 83,200 tons (75,500 tonnes) Nov. 3; minimum daily, 6.2 tons (5.6 tonnes) Dec. 5.

Period of record:

Water temperatures: Maximum, 34.0°C Aug. 5, 1964; minimum, freezing point on many days during winter period.

Sediment concentrations: Maximum daily, 9,630 mg/l Apr. 19, 1969; minimum daily, 2 mg/l Dec. 6, 1962, Feb. 20, 1966, Nov. 3, 1966.

Sediment discharge: Maximum daily, 351,000 tons (318,000 tonnes) Oct. 11, 1973; minimum daily, 0.41 tons (0.37 tonnes) Aug. 20, 1972.

REMARKS.--Chemical analyses by Kansas Department of Health and Environment, Topeka, Ks.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)
OCT. 29...	311	17.5	7.8	140	29	98	4.2	300	0	160	180	.7
NOV. 20...	462	10.0	13	110	17	46	2.8	280	0	85	82	.4
DEC. 12...	5990	5.0	9.6	96	18	56	3.0	210	0	120	98	.7
JAN. 16...	563	1.5	11	85	15	36	2.6	240	0	65	62	.4
FEB. 25...	1620	3.0	9.4	69	5.8	26	2.5	180	0	46	41	.4
MAR. 19...	1970	10.0	9.3	75	16	30	2.0	200	0	66	51	.3
APR. 15...	795	15.5	9.6	83	17	40	2.5	240	0	65	68	.4
MAY 22...	380	23.0	11	99	21	57	2.8	280	0	91	99	.3
JUNE 20...	5630	23.0	10	43	6.0	13	3.5	140	0	19	20	.3
AUG. 05...	133	27.5	7.8	120	33	95	3.5	270	0	170	170	.5
SEP. 04...	131	28.0	5.1	150	36	140	4.2	230	0	260	250	.8

DATE	DIS- SOLVED NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER DAY)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	TUR- BID- ITY (JTU)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)
OCT. 29...	.45	.14	150	802	673	1.09	8	460	210	2.0	1340
NOV. 20...	1.1	.12	120	510	636	.69	8	340	110	1.1	840
DEC. 12...	.79	.16	150	530	8570	.72	450	310	140	1.4	860
JAN. 16...	1.2	.13	60	418	635	.57	35	270	78	.9	690
FEB. 25...	.36	.07	120	305	1330	.41	110	200	48	.8	500
MAR. 19...	.56	.10	120	372	1980	.51	150	250	85	.8	600
APR. 15...	.79	.13	120	423	908	.58	65	280	77	1.0	700
MAY 22...	.61	.10	150	542	556	.74	35	330	110	1.4	970
JUNE 20...	.25	.14	30	195	2960	.27	250	130	14	.5	350
AUG. 05...	.25	.11	150	784	282	1.07	15	430	210	2.0	1260
SEP. 04...	.16	.15	200	1050	371	1.43	7	520	330	2.7	1610

DATE	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)
OCT. 29...	50	0
APR. 15...	50	50

ARKANSAS RIVER BASIN

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07147800 WALNUT RIVER AT WINFIELD, KS.--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19.0	16.5	3.5	3.5	4.0	5.5	9.0	20.0	---	27.0	29.5	---
2	18.5	16.0	3.5	3.0	4.5	4.5	7.0	19.0	---	27.0	29.0	---
3	18.5	14.5	3.5	2.0	5.0	4.5	7.0	19.5	---	28.0	29.0	---
4	18.5	13.0	3.5	1.5	3.5	4.5	9.5	20.0	---	28.5	29.0	---
5	19.5	11.0	4.5	2.0	3.5	5.0	14.0	20.5	---	28.5	29.0	---
6	18.0	10.5	5.0	2.0	2.0	7.0	12.0	21.5	---	29.0	28.5	---
7	16.5	10.0	5.5	3.0	1.5	7.0	11.0	22.0	---	29.5	28.5	---
8	17.0	10.5	5.0	3.5	1.0	6.5	11.5	23.0	---	29.0	29.0	---
9	19.0	10.5	4.0	4.0	1.0	5.5	13.0	22.0	---	29.0	29.5	---
10	18.5	10.5	4.0	3.0	0.5	5.0	11.5	22.0	---	28.5	29.0	---
11	19.0	10.5	4.0	1.5	1.0	4.5	11.5	22.0	---	28.0	29.0	---
12	18.0	10.5	4.0	1.0	1.5	4.5	13.0	21.0	---	26.5	28.5	---
13	16.5	9.0	4.0	0.5	3.0	3.5	13.0	19.5	---	25.5	28.5	---
14	16.0	9.0	3.5	1.0	3.0	4.0	13.0	18.5	21.5	25.5	28.5	---
15	16.5	8.5	3.5	1.5	2.0	4.5	15.0	19.0	22.0	26.5	27.0	---
16	16.5	9.0	3.5	1.0	1.5	5.5	16.5	20.0	24.0	26.5	28.5	19.5
17	16.0	9.0	3.5	1.5	1.0	6.5	18.0	21.5	20.5	26.5	28.5	19.5
18	16.0	9.0	3.5	3.0	1.5	9.5	16.5	23.5	23.0	26.5	28.5	19.5
19	16.0	10.0	3.5	3.0	2.0	10.0	16.5	23.5	20.5	27.0	28.5	19.5
20	16.0	10.0	3.0	3.0	3.0	12.0	18.0	23.5	24.5	29.5	29.0	19.5
21	16.0	10.0	3.5	3.0	4.0	13.0	18.0	24.5	24.5	29.5	29.0	19.0
22	16.0	10.5	4.0	3.0	3.0	13.5	18.0	24.0	24.5	28.5	29.5	19.0
23	16.5	10.5	4.0	3.5	2.0	13.0	19.5	23.0	24.5	28.0	30.0	19.5
24	16.5	10.0	3.5	4.0	3.0	13.0	21.0	22.0	23.0	28.0	28.0	18.5
25	16.0	9.0	3.0	4.5	4.0	11.5	21.5	21.0	24.0	28.0	28.0	18.5
26	16.0	8.5	1.0	4.5	4.0	10.0	22.0	23.0	24.5	29.0	28.0	18.0
27	16.5	8.5	3.0	4.5	4.5	10.0	21.0	21.0	25.5	29.0	26.5	19.0
28	16.5	7.0	3.5	5.0	5.5	9.0	21.0	20.5	26.0	29.0	26.5	19.0
29	17.0	5.0	4.0	5.0	---	8.0	21.0	20.5	26.0	29.0	28.0	19.5
30	18.0	4.0	4.0	5.0	---	8.0	20.5	19.0	26.5	29.0	27.5	18.5
31	18.0	---	4.0	4.5	---	9.0	---	19.0	---	29.5	28.0	---
AVERAGE	17.0	10.0	3.5	3.0	2.5	7.5	15.5	21.5	---	28.0	28.5	---

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCTOBER			NOVEMBER			DECEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	120	26	8.4	1030	127	353	284	20	15
2	110	31	9.2	1240	128	429	271	22	16
3	100	66	18	17400	1770	83200	264	12	8.6
4	93	33	8.3	17200	778	36100	258	15	10
5	90	26	6.3	13000	581	20400	257	9	6.2
6	91	30	7.4	7100	371	7110	279	12	9.0
7	91	34	8.4	4050	246	2690	316	17	15
8	92	36	8.9	3000	183	1480	328	15	13
9	93	30	7.5	2360	131	835	331	12	11
10	89	35	8.4	1910	118	609	323	17	15
11	87	27	6.3	1550	104	435	893	64	154
12	94	33	8.4	1250	145	489	5400	631	9690
13	166	39	17	1050	63	179	4510	435	5530
14	154	44	18	884	52	124	2400	273	1870
15	120	47	15	739	34	68	1540	106	469
16	109	42	12	633	21	36	1160	99	326
17	111	40	12	563	23	35	926	78	203
18	110	36	11	517	25	35	782	216	479
19	100	30	8.1	494	26	35	682	225	439
20	95	23	5.9	467	75	95	616	50	87
21	92	32	7.9	436	26	31	555	36	56
22	90	32	7.8	410	31	34	515	34	49
23	88	32	7.6	391	18	19	482	31	42
24	87	48	11	372	16	16	450	32	40
25	147	30	12	353	13	12	419	17	20
26	311	38	32	336	8	7.3	396	15	17
27	196	43	23	322	13	11	365	12	12
28	170	48	22	315	17	14	361	25	25
29	260	43	31	302	13	11	361	17	17
30	233	53	33	288	21	16	357	9	9.1
31	1410	356	1360	---	---	---	374	11	12
MONTH	5199	---	1751.8	79962	---	154908.3	26455	---	19664.9

DAY	JANUARY			FEBRUARY			MARCH		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	414	10	12	4070	799	9210	5040	663	9020
2	482	17	23	2620	371	2770	3870	574	6000
3	515	8	12	1810	208	1080	2560	341	2360
4	525	23	34	3670	597	6220	1770	216	1030
5	515	23	33	6310	808	14400	1390	140	525
6	638	23	42	5130	727	10100	1250	107	361
7	998	75	211	2060	449	2500	1160	76	238
8	1450	169	703	1550	273	1140	1100	60	178
9	1400	32	128	1310	201	711	993	51	137
10	1360	94	368	1120	152	460	982	42	111
11	1340	95	364	1210	90	294	1130	55	168
12	1200	72	245	1010	69	188	1550	112	469
13	722	48	99	912	59	145	1810	89	435
14	699	54	108	866	45	105	1630	92	405
15	655	53	99	834	41	92	1390	65	244
16	570	27	44	822	33	73	1820	143	703
17	530	29	43	807	25	54	2720	248	1820
18	496	29	40	791	25	53	2620	237	1680
19	482	28	38	786	39	83	1990	173	930
20	468	26	34	728	25	49	1540	134	557
21	450	20	25	960	38	99	1260	72	245
22	428	31	37	3270	258	2280	1090	76	224
23	410	24	27	3510	455	4310	972	63	165
24	388	40	44	2190	241	1430	866	51	119
25	374	13	14	1730	123	575	763	29	60
26	365	23	24	2490	132	887	689	33	61
27	365	32	33	3570	281	2710	1170	102	322
28	349	24	24	4590	458	5680	2830	343	2620
29	337	37	35	---	---	---	3470	354	3320
30	932	107	281	---	---	---	1920	222	1150
31	3830	1120	12200	---	---	---	1410	201	765
MONTH	23687	---	15424	60726	---	67698	54755	---	36422

07147800 WALNUT RIVER AT WINFIELD, KS.--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	APRIL			MAY			JUNE		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	1160	158	495	400	31	33	1670	604	2720
2	1000	100	270	400	36	39	1440	491	1910
3	917	65	161	404	30	33	4430	1160	13900
4	820	54	120	397	37	40	7680	1640	34000
5	757	43	88	382	43	44	8590	1310	30400
6	723	47	92	369	39	39	3250	449	3940
7	736	50	99	352	28	27	1930	298	1550
8	1020	104	286	335	26	24	1360	239	878
9	3110	478	4010	456	28	34	4230	1110	12700
10	2640	1050	7480	620	42	70	10800	1390	40500
11	1240	456	1530	393	40	42	11900	849	27300
12	953	341	877	330	43	38	9490	750	19200
13	812	133	292	635	102	175	6050	904	14800
14	772	68	142	3870	1170	12200	1860	745	3740
15	784	54	114	2340	503	3180	1300	199	698
16	829	54	121	1290	133	463	1060	107	306
17	876	53	125	911	61	150	10900	987	29000
18	732	39	77	692	43	80	19100	990	51100
19	666	33	59	558	52	78	17700	718	34300
20	610	44	72	472	48	61	6280	741	12600
21	548	50	74	413	54	60	3280	402	3560
22	504	33	45	390	56	59	3330	354	3180
23	484	53	69	1390	214	803	3310	354	3180
24	489	35	46	4040	1230	13400	6910	1240	23100
25	495	43	57	2010	526	2850	5450	1050	15500
26	480	42	54	3880	1280	13400	2100	566	3210
27	460	38	47	4860	931	12200	1370	276	1020
28	458	35	43	2640	429	3060	1120	147	445
29	463	44	55	4180	1460	16500	941	106	269
30	437	38	45	6400	1540	26600	803	64	139
31	---	---	---	4130	844	9410	---	---	---
MONTH	25975	---	17045	49939	---	115192	159634	---	389145

DAY	JULY			AUGUST			SEPTEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	701	41	78	152	39	16	330	51	45
2	622	61	102	146	43	17	215	40	23
3	557	43	65	141	40	15	161	48	21
4	508	38	52	135	42	15	130	36	13
5	467	37	47	132	36	13	111	30	9.0
6	428	40	46	125	52	18	103	31	8.6
7	394	44	47	117	36	11	100	34	9.2
8	367	48	48	111	39	12	127	38	13
9	352	44	42	105	50	14	136	32	12
10	332	54	48	102	43	12	125	27	9.1
11	319	54	47	98	36	9.5	1100	200	594
12	311	45	38	92	31	7.7	924	385	961
13	284	42	32	90	30	7.3	410	248	275
14	267	40	29	124	29	9.7	266	179	129
15	254	41	28	145	28	11	202	110	60
16	249	26	17	156	29	12	166	108	48
17	241	23	15	135	31	11	151	93	38
18	233	21	13	213	33	19	141	73	28
19	227	22	13	192	32	17	134	62	22
20	220	28	17	153	44	18	127	54	19
21	216	33	19	128	30	10	119	51	16
22	208	38	21	113	29	8.8	110	48	14
23	193	38	20	102	26	7.2	104	43	12
24	188	31	16	94	24	6.1	101	45	12
25	184	29	14	94	28	7.1	93	37	9.3
26	179	38	18	198	33	18	85	39	9.0
27	173	36	17	113	35	11	81	30	6.6
28	170	35	16	97	41	11	81	27	5.9
29	163	29	13	94	34	8.6	81	24	5.2
30	161	29	13	177	33	16	77	33	6.9
31	156	35	15	530	42	60	---	---	---
MONTH	9324	---	1006	4404	---	429	6091	---	2433.8
YEAR	506151		821119.8						

ARKANSAS RIVER BASIN

07157900 CAVALRY CREEK AT COLDWATER, KS

LOCATION.--Lat 37°16'00", long 99°20'40", in NE¼NE¼ sec.14, T.32 S., R.19 W., Comanche County, at gaging station at county highway bridge, 1.0 mi (1.6 km) west of Coldwater, and at mile 18.3 (29.4 km).

DRAINAGE AREA.--39 mi² (101 km²).

PERIOD OF RECORD.--Sediment records: September 1966 to September 1975.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

								SUS- PENDE SEDI- MENT DIS- CHARGE (T/DAY)			
		DATE	TIME	INSTAN- TANFOUS DIS- CHARGE (CFS)	SUS- PENDE SEDI- MENT CHARGE (MG/L)						
						FEB.					
						26... 1410 3.3 8 .07					
						MAR.					
						18... 1405 3.0 10 .08					
						MAY					
						08... 0940 2.2 4 .02					
						13... 1350 2.9 12 .09					
						JUNE					
						05... 1510 3.3 247 2.2					
						07... 0240 6.4 48 .83					
						07... 1040 3.9 26 .27					
						23... 1700 1180 3400 10800					
						23... 2115 760 2950 6050					
						24... 1050 117 2100 663					
						25... 0810 24 225 15					
						JULY					
						10... 1010 3.8 6 .06					
						AUG.					
						20... 1250 1.6 85 .37					
						SEP.					
						11... 1050 1.4 5 .02					

		DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	SUS- PENDE SEDI- MENT (MG/L)	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .062 MM	SUS. SED. FALL DIAM. % FINER THAN .125 MM	SUS. SED. FALL DIAM. % FINER THAN .250 MM	SUS. SED. FALL DIAM. % FINER THAN .500 MM	SUS. SED. FALL DIAM. % FINER THAN 1.00 MM	SUS. SED. FALL DIAM. % FINER THAN 2.00 MM	
		JUNE													
		23...		1700	1180	3400	47	52	57	62	63	66	75	88	100
		23...		2115	760	2950	45	49	51	59	62	70	86	96	100

		DATE	TIME	NUMBER OF SAM- PLING POINTS	INSTAN- TANEOUS DIS- CHARGE (CFS)	BED MAT. FALL DIAM. % FINER THAN .062 MM	BED MAT. FALL DIAM. % FINER THAN .125 MM	BED MAT. FALL DIAM. % FINER THAN .250 MM	BED MAT. FALL DIAM. % FINER THAN .500 MM	BED MAT. FALL DIAM. % FINER THAN 1.00 MM	BED MAT. FALL DIAM. % FINER THAN 2.00 MM	BED MAT. FALL DIAM. % FINER THAN 4.00 MM	BED MAT. FALL DIAM. % FINER THAN 8.00 MM	BED MAT. FALL DIAM. % FINER THAN 16.0 MM	
		OCT.													
		07...		1430	10	2.5	0	5	25	58	59	73	89	96	100
		MAY													
		08...		0940	10	2.2	--	0	7	39	59	74	86	94	100

ARKANSAS RIVER BASIN

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07166000 VERDIGRIS RIVER NEAR COYVILLE, KS

LOCATION.--Lat 37°42'20", long 95°54'20", in SW¼SW¼ sec.8, T.27 S., R.14 E., Wilson County, at gaging station on county highway bridge, 1.2 mi (1.9 km) upstream from Meadow Creek, 1.5 mi (2.4 km) northwest of Coyville, 2.5 mi (4.0 km) downstream from Pig Creek, and at mile 268.0 (431.2 km).

DRAINAGE AREA.--747 mi² (1,935 km²).

PERIOD OF RECORD.--Chemical analyses: October 1963 to September 1975 (discontinued).

REMARKS.--Chemical analyses by Kansas Department of Health and Environment, Topeka, Ks.

WATER QUALITY DATA: WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)
OCT.												
01...	58	15.0	9.0	40	8.8	12	2.5	140	0	15	21	.4
NOV.												
12...	3240	10.5	8.0	37	5.7	12	2.5	110	0	16	22	.3
DEC.												
03...	2650	5.0	9.7	42	6.6	14	2.5	140	0	16	25	.3
JAN.												
15...	660	2.0	8.6	74	12	29	2.0	230	0	38	48	.3
FEB.												
05...	2230	3.0	7.8	54	10	25	2.1	170	0	35	36	.4
MAR.												
05...	862	3.0	8.0	61	9.7	24	1.2	190	0	34	38	.3
APR.												
08...	1440	10.0	7.6	56	10	20	1.5	180	0	29	32	.3
MAY												
14...	189	20.5	8.0	48	5.9	18	2.8	150	0	21	25	.3
JUNE												
04...	2160	22.0	7.3	56	7.9	24	2.5	180	0	28	36	.4
JULY												
09...	29	30.0	10	48	11	15	2.5	170	0	23	23	.3
AUG.												
11...	8.1	28.0	7.6	54	10	18	3.0	190	0	18	27	.3
SEP.												
25...	9.4	14.0	6.4	59	7.0	20	2.5	200	0	22	29	.2

DATE	DIS- SOLVED NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER DAY)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	TUR- BID- ITY (JTU)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)
OCT.											
01...	.20	.09	90	196	30.9	.27	110	140	22	.4	310
NOV.											
12...	.27	.10	90	177	1550	.24	25	120	26	.5	270
DEC.											
03...	.14	.08	120	205	1470	.28	25	130	18	.5	320
JAN.											
15...	.29	.07	80	335	597	.46	7	230	48	.8	570
FEB.											
05...	.23	.11	90	268	1610	.36	75	180	36	.8	450
MAR.											
05...	.20	.00	80	285	663	.39	8	190	34	.8	480
APR.											
08...	.23	.07	40	262	1020	.36	65	180	36	.6	430
MAY											
14...	.72	.06	90	220	112	.30	100	140	22	.7	370
JUNE											
04...	.23	.04	90	255	1490	.35	100	170	24	.8	450
JULY											
09...	.23	.07	80	218	17.5	.30	65	170	25	.5	400
AUG.											
11...	.02	.05	80	236	5.21	.32	25	180	20	.6	450
SEP.											
25...	.27	.09	150	257	6.52	.35	70	180	12	.7	450

ARKANSAS RIVER BASIN
07169500 FALL RIVER AT FREDONIA, KS

LOCATION.--Lat 37°30'30", long 95°50'00", in SW¼NW¼ sec.24, T.29 S., R.14 E., Wilson County, at gaging station at bridge on State Highway 96, 0.8 mi (1.3 km) upstream from Clear Creek, 1.0 mi (1.6 km) downstream from Salt Creek, 1.0 mi (1.6 km) south of Fredonia, and at mile 25.3 (40.7 km).

DRAINAGE AREA.--827 mi² (2,142 km²).

PERIOD OF RECORD.--Chemical analyses: October 1963 to September 1975 (discontinued).

REMARKS.--Chemical analyses by Kansas Department of Health and Environment, Topeka, Ks.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)
OCT.												
01...	178	16.0	10	42	3.7	8.0	3.0	130	0	12	13	.4
NOV.												
12...	1150	10.0	8.8	51	5.1	11	2.5	160	0	15	20	.4
DEC.												
03...	306	5.0	10	77	7.8	18	2.5	240	0	24	29	.3
JAN.												
14...	492	1.0	9.0	78	13	22	1.8	250	0	31	38	.3
FEB.												
05...	2320	2.0	8.7	58	11	19	2.1	200	0	25	29	.2
MAR.												
06...	810	3.0	7.8	68	16	21	1.5	250	0	32	34	.3
APR.												
08...	2320	10.0	7.8	48	8.8	16	2.0	170	0	21	22	.4
MAY												
14...	5750	18.5	7.9	22	4.1	5.0	2.0	76	0	10	6.0	.3
JUNE												
04...	1540	22.0	7.8	51	8.0	14	2.5	160	0	21	22	.3
JULY												
07...	190	28.0	11	70	10	18	2.0	240	0	22	26	.2
AUG.												
10...	20	27.0	10	88	15	29	2.5	310	0	24	46	.2
SEP.												
25...	18	15.0	8.8	67	12	20	3.0	240	0	16	31	.4

DATE	DIS- SOLVED NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER DAY)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	TUR- BID- ITY (JTU)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)
OCT.											
01...	.20	.12	40	169	81.2	.23	150	120	14	.3	280
NOV.											
12...	.14	.07	80	205	637	.28	45	150	20	.4	330
DEC.											
03...	.25	.07	110	301	249	.41	250	220	24	.5	490
JAN.											
14...	.23	.09	60	333	442	.45	8	250	44	.6	560
FEB.											
05...	.27	.11	90	265	1660	.36	85	190	30	.6	440
MAR.											
06...	.20	.05	60	315	689	.43	7	240	34	.6	520
APR.											
08...	.20	.07	90	230	1440	.31	250	160	16	.6	370
MAY											
14...	.68	.09	30	120	1860	.16	65	72	10	.3	160
JUNE											
04...	1.1	.08	90	216	898	.29	200	160	28	.5	380
JULY											
07...	.50	.10	110	284	146	.39	25	220	18	.5	500
AUG.											
10...	.52	.27	90	350	19.4	.48	3	280	31	.8	660
SEP.											
25...	.45	.24	80	295	14.9	.40	39	220	20	.6	490

ARKANSAS RIVER BASIN

333

07170500 VERDIGRIS RIVER AT INDEPENDENCE, KS

LOCATION.--Lat 37°13'26", long 95°40'43", in NW¼NE¼NE¼ sec.32, T.32 S., R.16 E., Montgomery County, at gaging station at bridge on U.S. Highway 160, 1.0 mi (1.6 km) east of Independence, 3.6 mi (5.8 km) downstream from Elk River, and at mile 194.3 (312.6 km).

DRAINAGE AREA.--2,892 mi² (7,490 km²).

PERIOD OF RECORD.--Chemical analyses: October 1961 to September 1975 (discontinued).

Specific conductance: October 1961 to September 1968.

Water temperatures: October 1961 to September 1968.

REMARKS.--Chemical analyses by Kansas Department of Health and Environment, Topeka, Ks.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)
OCT. 01...	1140	18.0	9.3	42	4.6	11	2.8	130	0	16	15	.4
NOV. 12...	7620	10.5	8.4	38	6.1	10	2.5	120	0	17	16	.3
DEC. 02...	3530	5.0	9.5	48	6.8	13	2.5	150	0	17	24	.3
JAN. 13...	2230	2.0	8.9	67	9.0	22	1.9	210	0	35	33	.3
FEB. 05...	14000	2.0	8.2	50	3.7	17	2.0	140	0	27	22	.4
MAR. 06...	2450	4.0	7.6	72	8.9	22	1.5	220	0	35	33	.3
APR. 08...	4770	12.0	6.7	64	11	21	2.0	180	0	31	46	.2
MAY 12...	632	21.5	6.4	70	12	24	2.2	220	0	33	36	.2
JUNE 04...	9220	22.0	7.9	43	8.9	13	2.0	150	0	19	20	.3
JULY 07...	469	27.0	10	70	4.2	20	2.5	220	0	17	26	.3
AUG. 11...	302	27.0	9.6	75	12	24	2.8	260	0	24	38	.2
SEP. 25...	39	16.0	9.4	61	10	20	3.0	200	0	25	31	.3

DATE	DIS- SOLVED NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER DAY)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	TUR- BID- ITY (JTU)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)
OCT. 01...	.38	.22	80	185	569	.25	200	120	16	.4	290
NOV. 12...	.14	.09	90	175	3600	.24	110	120	20	.4	280
DEC. 02...	.20	.10	90	210	2000	.29	65	150	26	.5	350
JAN. 13...	.29	.09	60	292	1760	.40	45	200	30	.7	490
FEB. 05...	.38	.18	90	213	8050	.29	200	140	24	.6	350
MAR. 06...	.27	.05	110	303	2000	.41	65	220	34	.7	500
APR. 08...	.36	.05	60	285	3670	.39	110	200	58	.6	490
MAY 12...	1.8	.20	110	315	538	.43	85	220	44	.7	540
JUNE 04...	.45	.10	60	209	5200	.28	350	140	22	.5	340
JULY 07...	.47	.09	60	257	325	.35	65	190	16	.6	470
AUG. 11...	.05	.05	90	342	279	.47	15	240	22	.7	580
SEP. 25...	.56	.18	150	262	27.6	.36	40	190	29	.6	470

LOCATION.--Lat 38°39'54", long 96°29'38", in NE¼NW¼ sec.14, T.16 S., R.8 E., Morris County, at gaging station, on highway bridge at city water plant 300 ft (91 m) downstream from Mozler Creek, downstream from Council Grove Lake, and at mile 448.0 (721 km).

DRAINAGE AREA.--250 mi² (650 km²).

PERIOD OF RECORD.--October 1970 to September 1975 (discontinued).

REMARKS.--Chemical analyses by Kansas Department of Health and Environment, Topeka, Ks.

WATER QUALITY DATA: WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)
OCT. 23...	11	14.5	3.7	51	7.0	9.5	3.2	180	0	13	6.0	.3
NOV. 15...	238	7.5	5.2	50	6.6	8.0	3.2	170	0	16	6.0	.3
DEC. 03...	41	4.5	6.2	48	6.8	8.5	3.5	180	0	17	6.0	.4
JAN. 15...	86	2.0	6.8	56	6.9	10	3.1	200	0	20	7.0	.2
FEB. 24...	90	3.0	8.6	62	9.1	11	2.8	230	0	19	9.0	.3
MAR. 26...	236	6.0	5.0	56	7.9	10	2.5	200	0	19	8.0	.3
APR. 18...	270	11.0	4.6	53	6.8	11	2.8	190	0	16	7.0	.3
MAY 21...	32	19.0	3.4	54	9.1	11	2.8	200	0	24	8.0	.3
JUNE 19...	48	21.0	6.4	42	6.6	8.5	3.0	160	0	11	6.0	.3
JULY 17...	35	25.5	6.8	45	9.6	10	3.8	180	0	15	8.0	.3
AUG. 20...	3.4	24.0	7.4	38	4.1	9.0	3.0	130	0	18	7.0	.4

DATE	DIS- SOLVED NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER DAY)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	TUR- BID- ITY (JTU)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)
OCT. 23...	.25	.06	30	202	6.00	.27	45	160	4	.3	340
NOV. 15...	.23	.13	80	192	123	.26	45	150	12	.3	310
DEC. 03...	.32	.14	80	200	22.1	.27	25	150	2	.3	330
JAN. 15...	.45	.12	120	224	52.0	.30	7	170	6	.3	360
FEB. 24...	.45	.07	40	252	61.2	.34	3	190	4	.3	410
MAR. 26...	.29	.07	80	225	143	.31	6	170	6	.3	360
APR. 18...	.47	.08	60	215	157	.29	7	160	6	.4	350
MAY 21...	.38	.10	80	225	19.4	.31	130	170	6	.4	370
JUNE 19...	.47	.08	60	181	23.5	.25	200	130	2	.3	320
JULY 17...	.36	.08	110	199	18.8	.27	130	150	8	.4	350
AUG. 20...	.38	.19	30	150	1.38	.20	450	110	2	.4	290

DATE	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)
OCT. 23...	70	0
APR. 18...	60	0

ARKANSAS RIVER BASIN

335

07179795 COTTONWOOD RIVER BELOW MARION LAKE, KS

LOCATION.--Lat 38°22'00", long 97°05'00", in SE¼ sec.27, T.19 S., R.3 E., Marion County, at gaging station 0.25 mi (0.40 km) below outlet of dam, 1.6 mi (2.6 km) upstream from South Fork Cottonwood River, 3.0 mi (4.8 km) northwest of Marion, and at mile 126.5 (203.5 km).

DRAINAGE AREA.--200 mi² (518 km²).

PERIOD OF RECORD.--Chemical analyses: July 1968 to September 1975 (discontinued).

REMARKS.--Chemical analyses by Kansas Department of Health and Environment, Topeka, Ks.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)
OCT. 21...	7.4	14.5	.5	67	15	14	4.5	160	0	120	15	.2
NOV. 18...	85	8.0	.7	66	16	14	4.5	150	0	120	14	.4
DEC. 09...	6.4	2.5	.5	64	21	14	4.0	160	0	120	15	.4
FEB. 21...	84	2.5	1.4	74	22	16	4.2	180	0	140	17	.4
MAR. 28...	83	6.0	1.3	74	22	15	4.2	170	0	130	17	.3
APR. 16...	84	10.5	.6	72	20	17	4.8	170	0	140	16	.3
MAY 19...	28	20.0	1.0	75	23	17	4.5	180	0	140	18	.4
JUNE 16...	190	22.0	1.8	74	22	17	4.5	180	0	140	18	.4
JULY 03...	1250	25.0	1.3	67	21	16	4.5	170	0	130	16	.4
AUG. 14...	7.7	23.0	2.8	61	20	13	4.5	160	0	110	15	.4
14...	543	26.0	1.9	70	19	17	4.8	160	0	140	16	.5
SEP. 15...	742	20.0	1.2	72	16	16	5.2	160	0	120	17	.5

DATE	DIS- SOLVED NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER DAY)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	TUR- BID- ITY (JTU)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)
OCT. 21...	.23	.08	60	328	6.55	.45	8	230	100	.4	520
NOV. 18...	.14	.05	90	325	74.6	.44	8	230	110	.4	510
DEC. 09...	.09	.06	80	340	5.88	.46	7	250	120	.4	520
FEB. 21...	.20	.00	60	378	85.7	.51	1	280	130	.4	580
MAR. 28...	.14	.05	90	366	82.0	.50	2	280	140	.4	530
APR. 16...	.27	.07	80	360	81.6	.49	4	260	120	.5	570
MAY 19...	.09	.04	80	385	29.1	.52	7	280	130	.4	590
JUNE 16...	.02	.03	90	368	189	.50	15	280	130	.4	620
JULY 03...	.02	.05	90	340	1150	.46	3	250	120	.4	570
AUG. 14...	.45	.08	90	330	6.86	.45	35	230	110	.4	510
14...	.02	.05	40	350	513	.48	8	250	120	.5	600
SEP. 15...	.20	.07	110	390	781	.53	30	250	110	.4	580

DATE	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)
OCT. 21...	50	0
APR. 16...	50	0

ARKANSAS RIVER BASIN

07182250 COTTONWOOD RIVER NEAR PLYMOUTH, KS

LOCATION.--Lat 38°23'51", long 96°21'21", in NE¼NE¼SE¼ sec.13, T.19 S., R.9 E., Chase County, at gaging station at county highway bridge, 0.8 mi (1.3 km) downstream from Buckeye Creek, 1.5 mi (2.4 km) southwest of Plymouth, and at mile 39.2 (63.1 km).

DRAINAGE AREA.--1,740 mi² (4,510 km²).

PERIOD OF RECORD.--Chemical analyses: September 1963 to September 1975 (discontinued).

REMARKS.--Chemical analyses by Kansas Department of Health and Environment, Topeka, Ks.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (Ca) (MG/L)	DIS- SOLVED MAG- NE- SIUM (Mg) (MG/L)	DIS- SOLVED SODIUM (Na) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (Cl) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)
OCT. 22...	181	15.0	11	74	13	10	2.8	230	0	46	14	.2
NOV. 19...	568	9.0	11	100	21	14	2.2	310	0	90	17	.2
DEC. 04...	322	3.0	10	78	27	18	1.8	240	0	110	24	.3
JAN. 16...	581	.5	10	110	28	17	1.6	330	0	120	24	.3
FEB. 25...	1040	3.0	9.3	86	18	12	1.8	280	0	67	14	.2
MAR. 27...	864	8.0	7.8	96	20	14	1.8	300	0	82	16	.2
APR. 09...	634	10.5	11	53	11	8.0	2.8	150	0	46	11	.5
MAY 13...	480	18.5	9.4	110	20	18	1.8	330	0	99	23	2.0
JUNE 18...	12700	23.0	8.0	26	4.6	2.2	4.0	95	0	7.0	5.0	.1
JULY 11...	642	26.0	9.2	98	23	18	2.8	290	0	110	21	.4
AUG. 15...	302	27.0	12	100	27	23	1.8	290	0	130	31	.4
SEP. 16...	170	20.0	15	88	18	15	3.0	270	0	74	21	.3

DATE	DIS- SOLVED NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER DAY)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	TUR- BID- ITY (JTU)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)
OCT. 22...	.66	.16	150	305	149	.41	85	240	46	.3	490
NOV. 19...	.36	.09	110	430	659	.58	8	340	85	.3	670
DEC. 04...	.59	.10	110	410	356	.56	1	310	110	.4	620
JAN. 16...	.63	.07	110	488	766	.66	7	390	130	.4	780
FEB. 25...	.50	.08	60	366	1030	.50	25	290	58	.3	580
MAR. 27...	.45	.16	90	400	933	.54	25	320	74	.3	640
APR. 09...	.86	.21	60	237	406	.32	1700	180	53	.3	370
MAY 13...	.47	.11	140	470	609	.64	65	370	92	.4	730
JUNE 18...	1.1	.39	60	125	4290	.17	800	84	6	.1	210
JULY 11...	.66	.13	120	438	759	.60	100	340	100	.4	720
AUG. 15...	.43	.14	110	500	408	.68	75	360	120	.5	810
SEP. 16...	.95	.15	150	400	184	.54	90	290	72	.4	620

DATE	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)
OCT. 22...	80	0
APR. 09...	--	0

07183500 NEOSHO RIVER NEAR PARSONS, KS

LOCATION.--Lat 37°18'30", Long 95°06'40", in NW¼NE¼ sec.33, T.31 S., R.21 E., Labette County, at gaging station at intake structure of water filtration plant, 150 ft (46 m) downstream from dam of Kansas Army Ammunition Plant, 8.0 mi (13 km) southeast of Parsons, and at mile 201.4 (324.1 km).

DRAINAGE AREA.--4,905 mi² (12,704 km²).

PERIOD OF RECORD.--Chemical analyses: October 1961 to September 1975 (discontinued).

Specific conductance: October 1964 to September 1968.

Water temperatures: October 1963 to September 1968.

REMARKS.--Chemical analyses by Kansas Department of Health and Environment, Topeka, Ks. At discharges greater than 500 ft³/s (14 m³/s) samples are collected at railroad bridge approximately 1,800 ft (548 m) downstream from gaging station.

WATER QUALITY DATA: WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (K) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)
OCT.												
01...	888	17.0	8.6	42	1.7	12	3.1	110	0	23	16	.4
23...	1390	14.5	2.0	62	10	15	3.0	190	0	37	20	.3
NOV.												
05...	40100	11.0	7.8	19	3.0	4.0	3.2	59	0	9.0	7.0	.3
20...	3550	9.0	9.3	59	10	13	2.8	190	0	41	17	.4
DEC.												
17...	2970	3.0	10	61	8.8	13	3.1	190	0	42	16	.3
JAN.												
22...	469	1.0	7.1	85	13	19	2.2	260	0	58	24	.4
FEB.												
20...	4050	2.5	7.0	58	6.2	14	2.0	160	0	43	17	.3
MAR.												
26...	1860	10.0	5.9	74	13	17	2.0	230	0	56	18	.3
APR.												
23...	2670	17.0	7.9	66	12	15	2.2	220	0	48	13	.3
MAY												
21...	746	23.0	4.4	64	13	19	2.2	220	0	52	20	.2
JUNE												
25...	13800	24.0	9.0	35	8.9	7.0	2.8	130	0	19	8.0	.3
JULY												
23...	516	29.0	9.6	74	16	12	3.8	240	0	48	17	.4
AUG.												
20...	400	26.0	7.9	24	4.9	6.5	2.8	80	0	18	7.0	.4
SEP.												
23...	256	21.0	1.0	62	18	20	3.5	220	0	64	25	.2

DATE	DIS- SOLVED NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER DAY)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	TUR- BID- ITY (JTU)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)
OCT.											
01...	.66	.19	40	183	439	.25	130	110	20	.5	290
23...	.52	.13	120	262	983	.36	65	200	44	.5	450
NOV.											
05...	.38	.20	60	96	10400	.13	200	60	11	.2	130
20...	.45	.14	90	260	2490	.35	65	190	36	.4	420
DEC.											
17...	.52	.18	140	261	2090	.35	110	190	36	.4	430
JAN.											
22...	.52	.09	90	349	442	.47	6	270	54	.5	580
FEB.											
20...	.70	.06	40	240	2620	.33	65	170	42	.5	390
MAR.											
26...	.45	.90	90	320	1610	.44	25	240	48	.5	520
APR.											
23...	.77	.15	110	288	2080	.39	250	214	36	.4	480
MAY											
21...	.16	.08	80	283	570	.38	65	210	33	.6	480
JUNE											
25...	.61	.15	80	165	6150	.22	350	120	20	.3	290
JULY											
23...	.16	.10	140	314	437	.43	15	250	52	.3	540
AUG.											
20...	.52	.17	30	140	151	.19	450	80	14	.3	240
SEP.											
23...	.02	.05	90	320	221	.44	15	230	48	.6	540

DATE	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)
OCT.		
23...	140	0
APR.		
23...	570	0

ANALYSES OF SAMPLES COLLECTED AT WATER QUALITY PARTIAL-RECORD STATIONS

PART 7. LOWER MISSISSIPPI RIVER BASIN

ARKANSAS RIVER BASIN

07144795 NORTH FORK MINNESCAH RIVER AT CHENEY DAM, KS

LOCATION.--Lat 37°43'17", long 97°47'39", in NE¼SW¼SE¼ sec.6, T.27 S., R.4 W., Sedgwick County, 1,400 ft (427 m) downstream from Cheney Dam, 6.0 mi (9.7 km) north of Cheney, and at mile 15.5 (24.9 km).

DRAINAGE AREA.--901 mi² (2,334 km²), of which 237 mi² (614 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: October 1967 to September 1975 (discontinued).

REMARKS.--Chemical analyses by Kansas Department of Health and Environment, Topeka, Ks.

WATER QUALITY DATA: WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)
OCT. 25...	.46	16.5	8.6	110	33	48	4.5	230	0	150	120	.3
DEC. 06...	371	5.0	7.6	54	12	86	4.8	190	0	40	130	.3
JAN. 09...	188	2.0	8.6	56	11	88	5.0	190	0	41	130	.4
APR. 08...	1.0	18.0	6.6	54	18	84	3.8	160	0	68	130	.4
JULY 09...	1130	25.0	5.7	51	9.0	81	4.8	180	0	38	120	.4
AUG. 12...	.84	31.0	6.2	48	14	86	5.8	150	0	60	130	.3

DATE	DIS- SOLVED NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER DAY)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	TUR- BID- ITY (JTU)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)
OCT. 25...	.09	.05	170	596	.74	.81	1	400	210	1.0	1000
DEC. 06...	.38	.17	110	445	446	.61	25	180	30	2.8	780
JAN. 09...	.36	.16	140	454	230	.62	3	180	26	2.8	800
APR. 08...	.32	.06	120	460	1.24	.63	3	210	76	2.5	800
JULY 09...	.36	.10	60	410	1250	.56	25	160	20	2.7	750
AUG. 12...	.02	.06	90	400	.91	.54	15	180	52	2.8	800

DATE	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)
OCT. 25...	110	0
APR. 08...	90	0

ANALYSES OF SAMPLES COLLECTED AT WATER QUALITY PARTIAL RECORD STATIONS

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ARKANSAS RIVER BASIN

07182510 NEOSHO RIVER AT BURLINGTON, KS

LOCATION.--Lat 38°11'40", long 95°44'10", in SE¼NW¼ sec.26, T.21 S., R.15 E., Coffey County, at gaging station at highway bridge at Burlington, 0.3 mi (0.5 km) upstream from Rock Creek, and at mile 338.4 (554.5 km).

DRAINAGE AREA.--3,042 mi² (7,879 km²), includes that of Rock Creek.

PERIOD OF RECORD.--Chemical analyses: October 1961 to September 1964, October 1965 to September 1975 (discontinued).

REMARKS.--Chemical analyses by Kansas Department of Health and Environment, Topeka, Ks.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	INSTANTANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)
OCT. 21...	1220	14.0	6.8	61	13	14	2.8	200	0	46	17	.3
JAN. 21...	2120	1.0	6.4	74	18	17	2.2	240	0	66	19	.4
MAR. 24...	1480	11.5	7.8	77	15	17	2.2	240	0	75	18	.3
APR. 21...	2600	--	7.6	69	12	14	2.2	220	0	48	14	.2
JUNE 23...	11000	24.0	8.6	38	8.0	6.7	3.0	130	0	21	8.0	.3
JULY 21...	390	28.0	9.1	72	17	12	4.0	240	0	54	15	.2

DATE	DIS- SOLVED NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER DAY)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	TUR- BID- ITY (JTU)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)
OCT. 21...	.68	.13	80	276	909	.38	65	210	46	.4	450
JAN. 21...	.77	.10	80	337	1930	.46	7	260	62	.5	560
MAR. 24...	1.0	.14	110	342	1370	.47	350	250	60	.5	550
APR. 21...	.79	.11	80	285	2000	.39	150	220	42	.4	470
JUNE 23...	.52	.11	90	175	5200	.24	150	130	22	.3	290
JULY 21...	.56	.16	150	320	337	.44	55	250	54	.3	550

DATE	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)
OCT. 21...	160	0
APR. 21...	130	0

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)
ARKANSAS RIVER BASIN											
07142200 - RATTLESNAKE C NR HAVILAND, KS (LAT 37 42 52 LONG 099 10 29)											
OCT., 1974											
04...	8.1	20	54	2.3	7.5	2.0	170	0	8.6	7.0	.3
DEC.											
02...	6.7	17	51	4.1	8.0	2.0	170	0	4.9	8.0	.3
FEB., 1975											
05...	6.2	18	50	3.6	8.0	2.2	170	0	8.2	7.0	.3
MAY											
01...	6.2	19	51	2.2	8.7	2.0	170	0	9.0	6.0	.2
AUG.											
12...	4.8	23	46	5.1	8.0	2.8	160	0	8.2	7.0	.5
07142270 - RATTLESNAKE C TR NR HOPEWELL, KS (LAT 37 50 33 LONG 098 59 09)											
OCT., 1974											
04...	.06	45	120	13	56	8.2	490	0	27	38	.8
DEC.											
02...	.32	29	62	13	47	4.0	270	0	45	25	.7
MAY, 1975											
01...	.43	14	77	8.8	38	1.8	310	0	21	18	.7
07142540 - WILD HORSE C NR ST. JOHN, KS (LAT 38 03 39 LONG 098 45 52)											
OCT., 1974											
04...	.25	15	66	6.7	40	4.5	240	0	20	44	.5
DEC.											
02...	2.2	15	86	15	45	3.2	300	0	25	60	.4
FEB., 1975											
04...	4.5	11	78	11	42	3.2	280	0	27	52	.4
MAY											
01...	1.9	9.2	58	8.6	45	4.5	220	0	26	55	.4
AUG.											
11...	.01	26	72	9.8	33	4.8	280	0	16	30	.6
07142570 - RATTLESNAKE C AB L SALT MARSH NR HUDSON KS (LAT 38 05 13 LONG 098 34 52)											
OCT., 1974											
04...	.43	18	77	15	440	5.2	220	0	80	670	.5
MAY, 1975											
01...	.60	20	82	12	380	4.2	230	0	69	600	.3
AUG.											
11...	.30	20	51	15	450	5.5	140	0	81	700	.5
07142650 - PEACE C NR SYLVIA, KS (LAT 38 04 34 LONG 098 26 18)											
OCT., 1974											
04...	.73	7.3	120	21	730	5.8	230	0	100	1200	.5
DEC.											
03...	1.2	13	140	24	580	4.5	300	0	93	970	.4
FEB., 1975											
04...	3.2	12	110	13	510	5.2	260	0	45	840	.4
MAY											
01...	1.1	13	91	19	630	5.5	220	0	68	1000	.4
AUG.											
11...	.15	7.4	80	20	108	11	210	0	130	1660	.6
07142670 - PEACE C NR STERLING, KS (LAT 38 08 43 LONG 098 15 13)											
OCT., 1974											
04...	4.1	7.8	100	23	1000	5.0	180	0	150	1600	.3
DEC.											
03...	6.8	10	120	30	950	5.0	240	0	150	1600	.3
FEB., 1975											
04...	13	13	150	30	1300	6.0	240	0	200	2100	.3
MAY											
01...	4.8	11	100	24	1100	5.0	170	0	160	1800	.3
AUG.											
11...	1.7	6.3	94	24	1060	6.5	210	0	150	1630	.3
07142740 - SALT C NR HUTCHINSON, KS (LAT 38 04 23 LONG 098 02 11)											
OCT., 1974											
04...	4.4	11	94	26	800	6.0	260	0	150	1200	.3
DEC.											
03...	5.0	15	110	22	820	5.2	290	0	160	1300	.2
FEB., 1975											
07...	8.7	15	94	23	670	6.2	290	0	130	1000	.4
MAY											
01...	325	12	110	28	780	6.0	290	0	140	1200	.3
AUG.											
12...	2.1	11	120	28	1060	7.8	260	0	190	1650	.4

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS- SOLVED NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER DAY)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	TUR- BID- ITY (JTU)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)
ARKANSAS RIVER BASIN											
07142200 - RATTLESNAKE C NR HAVILAND, KS (LAT 37 42 52 LONG 099 10 29)											
OCT., 1974											
04...	1.5	.16	80	194	4.24	.26	--	140	8	.3	310
DEC.											
02...	1.8	.14	60	201	3.64	.27	--	140	8	.3	320
FEB., 1975											
05...	1.3	.12	140	195	3.26	.27	--	140	4	.3	290
MAY											
01...	.72	.42	60	190	3.18	.26	--	140	0	.3	290
AUG.											
12...	1.4	.18	40	204	2.64	.28	--	140	4	.3	320
07142270 - RATTLESNAKE C TR NR HOPEWELL, KS (LAT 37 50 33 LONG 098 59 09)											
OCT., 1974											
04...	.20	.23	110	562	.09	.76	--	350	0	1.3	890
DEC.											
02...	.09	.08	90	376	.32	.51	--	210	0	1.4	630
MAY, 1975											
01...	.09	.21	110	334	.39	.45	--	230	0	1.1	540
07142540 - WILD HORSE C NR ST. JOHN, KS (LAT 38 03 39 LONG 098 45 52)											
OCT., 1974											
04...	.41	.18	120	319	.22	.43	--	190	0	1.3	530
DEC.											
02...	1.8	.09	110	415	2.47	.56	--	280	28	1.2	720
FEB., 1975											
04...	.95	.10	150	370	4.50	.50	--	240	10	1.2	600
MAY											
01...	.27	.16	150	315	1.68	.43	--	180	0	1.5	550
AUG.											
11...	.23	.24	60	343	.01	.47	--	220	0	1.0	570
07142570 - RATTLESNAKE C AB L SALT MARSH NR HUDSON KS (LAT 38 05 13 LONG 098 34 52)											
OCT., 1974											
04...	1.1	.09	150	1410	164	1.92	--	250	76	12	2640
MAY, 1975											
01...	1.0	.11	200	1340	219	1.82	--	250	64	10	2420
AUG.											
11...	.20	.12	120	1410	115	1.92	--	190	70	14	2670
07142650 - PEACE C NR SYLVIA, KS (LAT 38 04 34 LONG 098 26 18)											
OCT., 1974											
04...	.29	.13	150	2360	4.65	3.21	--	390	200	16	4300
DEC.											
03...	.45	.08	140	2020	6.54	2.75	--	450	200	12	3700
FEB., 1975											
04...	.52	.12	140	1710	14.8	2.33	--	330	120	12	3100
MAY											
01...	.32	.23	180	1980	6.04	2.69	--	310	120	16	3650
AUG.											
11...	.45	.15	170	3100	1.26	4.22	--	280	110	2.8	5650
07142670 - PEACE C NR STERLING, KS (LAT 38 08 43 LONG 098 15 13)											
OCT., 1974											
04...	.86	.06	140	3050	33.8	4.15	--	350	200	23	5580
DEC.											
03...	1.9	.11	170	3020	55.4	4.11	--	430	230	20	5370
FEB., 1975											
04...	1.2	.13	120	4030	141	5.48	--	500	300	25	6890
MAY											
01...	.36	.15	200	3400	44.1	4.62	--	360	220	26	5900
AUG.											
11...	.16	.07	170	3050	14.1	4.15	--	330	160	25	5650
07142740 - SALT C NR HUTCHINSON, KS (LAT 38 04 23 LONG 098 02 11)											
OCT., 1974											
04...	.20	.09	170	2500	29.7	3.40	--	340	130	19	4650
DEC.											
03...	.45	.07	180	2600	35.1	3.54	--	380	140	19	4670
FEB., 1975											
07...	.43	.07	150	2140	50.3	2.91	--	330	91	16	3600
MAY											
01...	.11	.09	200	2480	2180	3.37	--	380	140	17	4460
AUG.											
12...	.02	.07	210	3200	18.9	4.35	--	410	190	23	5650

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	INSTANTANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)
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ARKANSAS RIVER BASIN

07144590 - NF NINNESCAH R NR SYLVIA, KS (LAT 37 55 59 LONG 098 24 36)

OCT., 1974											
04...	12	20	86	17	250	5.0	250	0	64	400	.4
DEC.											
03...	20	18	94	15	220	4.0	270	0	65	360	.4
FEB., 1975											
07...	30	18	98	14	200	3.8	290	0	63	320	.4
MAY											
01...	14	15	80	14	220	4.0	240	0	56	340	.4
AUG.											
11...	48	15	59	13	320	4.2	170	0	73	490	.4

07144620 - NF NINNESCAH R AB SILVER C NR ARLINGTON, KS (LAT 37 51 09 LONG 098 09 30)

OCT., 1974											
04...	28	15	72	8.9	170	3.2	230	0	55	260	.5
DEC.											
04...	50	18	80	8.9	170	3.2	240	0	51	250	.4
FEB., 1975											
12...	67	20	82	11	160	3.2	260	0	56	240	.4
MAY											
01...	41	14	78	6.2	160	3.0	230	0	51	230	.4
AUG.											
12...	9.7	5.6	48	5.8	180	3.5	160	0	44	250	.4

07144640 - SILVER C NR LANGDON, KS (LAT 37 47 54 LONG 098 19 59)

OCT., 1974											
04...	3.1	16	83	16	310	3.5	220	0	67	480	.5
DEC.											
04...	8.1	18	120	15	290	3.0	300	0	75	460	.4
FEB., 1975											
10...	15	18	110	20	250	3.5	290	0	66	410	.4
MAY											
01...	5.7	17	100	12	260	3.2	280	0	58	420	.4
AUG.											
12...	.27	22	82	12	260	3.2	250	0	56	400	.4

07144660 - SILVER C NR ARLINGTON, KS (LAT 37 50 30 LONG 098 11 47)

OCT., 1974											
04...	4.9	11	78	10	30	3.5	220	0	72	450	.5
DEC.											
04...	18	16	88	13	250	3.0	250	0	64	390	.5
FEB., 1975											
12...	38	16	96	16	240	3.2	290	0	70	370	.4
MAY											
01...	15	14	90	12	250	3.0	280	0	62	380	.4
AUG.											
12...	.43	18	77	14	280	4.0	280	0	90	390	.6

07144680 - GOOSE C NR ARLINGTON, KS (LAT 37 49 24 LONG 098 11 32)

OCT., 1974											
04...	2.2	14	72	7.9	100	2.2	240	0	33	150	.3
DEC.											
04...	4.7	16	85	12	110	2.0	270	0	40	160	.3
FEB., 1975											
11...	8.3	16	85	12	110	2.5	270	0	47	170	.3
MAY											
01...	4.9	16	90	9.6	140	2.8	280	0	50	190	.4
AUG.											
12...	.93	16	80	14	280	3.2	250	0	100	390	.6

07144740 - RED ROCK C NR CASTLETON, KS (LAT 37 53 55 LONG 098 00 35)

OCT., 1974											
04...	.93	16	72	13	50	3.5	290	0	56	38	.6
DEC.											
03...	2.0	16	67	15	59	2.8	280	0	53	47	.6
FEB., 1975											
07...	4.7	12	77	16	59	3.8	310	0	60	48	.5
MAY											
01...	2.6	14	72	19	61	3.8	310	0	60	48	.6
AUG.											
12...	.49	21	74	17	43	4.8	280	0	65	33	.5

07144890 - SF NINNESCAH R AT PRATT, KS (LAT 37 38 03 LONG 098 44 15)

OCT., 1974											
04...	13	22	62	4.2	33	3.1	210	0	18	36	.3
NOV.											
20...	16	22	66	6.7	28	3.0	220	0	14	32	.3
FEB., 1975											
10...	16	24	62	5.2	29	3.2	215	0	8.2	32	.3
MAY											
01...	12	22	66	3.8	29	2.5	220	0	20	35	.3
AUG.											
11...	11	14	56	4.0	32	3.2	190	0	17	37	.3

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS- SOLVED NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER DAY)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	TUR- BID- ITY (JTU)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)
ARKANSAS RIVER BASIN											
07144590 - NF MINNESCAH R NR SYLVIA, KS (LAT 37 55 59 LONG 098 24 36)											
OCT., 1974											
04...	.52	.10	90	1000	32.4	1.36	--	280	78	6.4	1840
DEC.											
03...	.70	.60	90	940	50.8	1.28	--	300	76	5.6	1680
FEB., 1975											
07...	.79	.08	110	872	70.6	1.19	--	300	68	5.0	1530
MAY											
01...	.56	.10	140	868	34.7	1.18	--	260	57	6.0	1590
AUG.											
11...	.36	.09	90	1160	153	1.58	--	200	64	9.8	2000
07144620 - NF MINNESCAH R AB SILVER C NR ARLINGTON, KS (LAT 37 51 09 LONG 098 09 30)											
OCT., 1974											
04...	1.4	.10	110	700	52.9	.95	--	220	28	5.0	1280
DEC.											
04...	1.9	.09	90	724	97.7	.98	--	240	36	4.8	1280
FEB., 1975											
12...	1.4	.11	80	732	134	1.00	--	250	38	4.4	1250
MAY											
01...	1.1	.14	150	670	75.1	.91	--	220	28	4.7	1190
AUG.											
12...	.59	.06	60	656	17.2	.89	--	140	10	6.5	1190
07144640 - SILVER C NR LANGDON, KS (LAT 37 47 54 LONG 098 19 59)											
OCT., 1974											
04...	.45	.09	170	1080	9.04	1.47	--	270	91	8.2	2020
DEC.											
04...	1.0	.12	120	1180	25.8	1.60	--	350	100	6.6	2110
FEB., 1975											
10...	.75	.10	90	1040	42.1	1.41	--	350	110	5.8	1760
MAY											
01...	.86	.14	150	1040	16.1	1.41	--	300	72	6.5	1890
AUG.											
12...	.59	.08	90	1010	.74	1.37	--	250	50	7.1	1750
07144660 - SILVER C NR ARLINGTON, KS (LAT 37 50 30 LONG 098 11 47)											
OCT., 1974											
04...	.14	.06	90	1040	13.8	1.41	--	240	60	.8	1910
DEC.											
04...	1.0	.08	120	1020	49.6	1.39	--	270	71	6.6	1800
FEB., 1975											
12...	.90	.08	110	970	99.5	1.32	--	310	72	6.0	1630
MAY											
01...	.52	.12	170	956	39.0	1.30	--	270	48	6.6	1730
AUG.											
12...	.29	.17	120	1040	1.21	1.41	--	250	24	7.7	1850
07144680 - GOOSE C NR ARLINGTON, KS (LAT 37 49 24 LONG 098 11 32)											
OCT., 1974											
04...	1.6	.08	120	510	3.03	.69	--	210	18	3.0	910
DEC.											
04...	2.1	.08	120	580	7.36	.79	--	260	44	3.0	1010
FEB., 1975											
11...	1.7	.07	110	590	13.2	.80	--	270	42	3.0	1020
MAY											
01...	1.2	.12	120	656	8.79	.89	--	260	32	3.7	1140
AUG.											
12...	.43	.09	140	1050	2.64	1.43	--	260	55	7.6	1850
07144740 - RED ROCK C NR CASTLETON, KS (LAT 37 53 55 LONG 098 00 35)											
OCT., 1974											
04...	1.8	.09	170	410	1.03	.56	--	230	0	1.4	670
DEC.											
03...	2.5	.10	140	430	2.32	.58	--	230	0	1.7	700
FEB., 1975											
07...	2.3	.10	150	460	5.84	.63	--	260	4	1.6	700
MAY											
01...	1.3	.13	210	444	3.18	.60	--	260	4	1.7	740
AUG.											
12...	2.0	.14	170	430	.57	.58	--	250	20	1.2	690
07144890 - SF MINNESCAH R AT PRATT, KS (LAT 37 38 03 LONG 098 44 15)											
OCT., 1974											
04...	1.9	.12	40	292	10.2	.40	45	170	2	1.1	480
NOV.											
20...	1.8	.12	90	305	13.2	.41	--	190	10	.9	490
FEB., 1975											
10...	1.8	.10	40	289	12.9	.39	1	176	0	1.0	470
MAY											
01...	1.0	.11	90	298	10.2	.41	85	180	4	.9	480
AUG.											
11...	1.6	.11	80	300	9.07	.41	--	160	0	1.1	480

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)
ARKANSAS RIVER BASIN											
07145130 - SF NINNESCAH R NR CALISTA, KS (LAT 37 38 45 LONG 098 17 12)											
OCT., 1974											
04... 88	20	82	7.7	240	3.2	220	0	51	360	.3	
NOV.											
20... 120	21	85	12	200	3.2	240	0	49	320	.3	
FEB., 1975											
11... 172	21	80	10	190	3.2	224	0	40	290	.2	
MAY											
01... 116	19	82	7.7	220	3.2	230	0	50	340	.3	
AUG.											
11... 60	10	88	5.0	270	4.0	220	0	53	420	.3	
07145220 - SMOOTS C NR MURDOCK, KS (LAT 37 38 13 LONG 097 54 06)											
OCT., 1974											
04... 1.6	8.0	54	25	37	2.8	210	0	98	28	.5	
NOV.											
22... 11	11	74	19	32	2.0	270	0	65	31	.2	
FEB., 1975											
12... 20	9.3	67	19	36	2.2	270	0	60	31	.4	
MAY											
01... 12	7.1	67	19	38	2.0	270	0	63	33	.3	
AUG.											
12... .30	8.0	66	27	40	3.2	260	0	110	33	.6	
07148200 - MULE C NR WILMORE, KS (LAT 37 16 55 LONG 099 02 34)											
OCT., 1974											
04... 8.7	25	110	9.6	15	2.5	250	0	110	14	.4	
NOV.											
21... 13	25	110	6.8	17	2.2	270	0	94	16	.4	
FEB., 1975											
06... 18	26	94	15	17	2.0	270	0	83	16	.4	
MAY											
01... 15	21	98	13	17	1.5	250	0	100	15	.3	
AUG.											
11... 6.3	13	100	15	15	3.0	240	0	130	13	.5	
07148580 - TURKEY C NR CROFT, KS (LAT 37 29 52 LONG 098 56 56)											
OCT., 1974											
04... 3.8	23	54	5.2	15	2.5	190	0	11	15	.2	
NOV.											
21... 4.1	21	54	4.2	15	2.0	190	0	9.1	14	.1	
FEB., 1975											
05... 3.8	27	53	5.8	15	2.8	190	0	14	12	.4	
MAY											
01... 4.0	21	56	4.0	15	2.0	190	0	14	14	.1	
AUG.											
11... 2.7	10	53	3.4	14	2.5	180	0	12	13	.1	
07148600 - MEDICINE LODGE R AT SUN CITY, KS (LAT 37 22 13 LONG 098 54 53)											
OCT., 1974											
04... 34	19	93	18	39	3.0	230	0	120	47	.4	
NOV.											
21... 47	18	110	16	47	3.2	250	0	160	56	.4	
FEB., 1975											
06... 46	22	110	20	38	3.0	250	0	180	43	.3	
MAY											
01... 52	17	96	19	35	2.5	230	0	130	38	.3	
AUG.											
11... 1720	8.0	120	18	70	4.5	240	0	200	84	.4	
07148900 - ELM C AT MEDICINE LODGE, KS (LAT 37 16 25 LONG 098 34 28)											
OCT., 1974											
04... 27	18	75	10	28	2.2	250	0	36	39	.4	
NOV.											
21... 39	17	77	7.8	30	2.0	230	0	33	46	.4	
FEB., 1975											
06... 60	18	82	8.6	30	2.2	250	0	37	46	.3	
MAY											
01... 39	18	78	13	28	1.8	250	0	40	38	.2	
AUG.											
11... 6.0	11	58	11	37	3.0	190	0	41	53	.4	
07151200 - CHIKASKIA R NR ZENDA, KS (LAT 37 28 23 LONG 098 16 55)											
OCT., 1974											
04... 18	19	82	1.8	19	1.2	260	0	15	19	.3	
NOV.											
20... 24	19	86	6.2	21	1.5	290	0	17	22	.3	
FEB., 1975											
11... 30	18	85	4.9	21	1.8	280	0	20	23	.3	
MAY											
01... 23	20	80	7.9	21	1.2	270	0	20	23	.3	
AUG.											
12... 5.7	9.0	70	6.2	19	1.8	230	0	18	21	.4	

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS- SOLVED NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER DAY)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	TUR- BID- ITY (JTU)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)
ARKANSAS RIVER BASIN											
07145130 - SF NINNESCAH R NR CALISTA, KS (LAT 37 38 45 LONG 098 17 12)											
OCT., 1974											
04....	1.4	.16	80	900	214	1.22	25	240	52	6.8	1650
NOV.											
20....	.45	.05	110	830	269	1.13	--	260	62	5.4	1510
FEB., 1975											
11....	1.7	.15	60	770	358	1.05	35	240	56	5.3	1380
MAY											
01....	.14	.16	120	862	270	1.17	15	240	46	6.2	1540
AUG.											
11....	1.1	.17	120	1020	168	1.39	--	240	58	7.6	1810
07145220 - SMOOTS C NR MURDOCK, KS (LAT 37 38 13 LONG 097 54 06)											
OCT., 1974											
04....	.20	.06	210	360	1.56	.49	--	240	68	1.0	590
NOV.											
22....	.08	.07	120	393	11.7	.53	--	260	38	.9	640
FEB., 1975											
12....	.75	.14	120	370	20.0	.50	--	250	27	1.0	580
MAY											
01....	.27	.05	150	360	12.4	.49	--	240	27	1.1	610
AUG.											
12....	.27	.11	230	440	.36	.60	--	280	64	1.0	710
07148200 - MULE C NR WILMORE, KS (LAT 37 16 55 LONG 099 02 34)											
OCT., 1974											
04....	.36	.09	180	429	10.1	.58	--	300	96	.4	630
NOV.											
21....	.66	.10	120	420	14.7	.57	--	300	80	.4	640
FEB., 1975											
06....	.20	.05	180	400	19.4	.54	--	300	76	.4	600
MAY											
01....	.27	.06	140	415	17.3	.56	--	300	92	.4	610
AUG.											
11....	.20	.11	110	460	7.92	.63	--	320	120	.4	670
07148580 - TURKEY C NR CROFT, KS (LAT 37 29 52 LONG 098 56 56)											
OCT., 1974											
04....	1.6	.09	80	223	2.29	.30	--	160	4	.5	370
NOV.											
21....	1.8	.07	60	227	2.51	.31	--	150	0	.5	370
FEB., 1975											
05....	2.5	.14	140	234	2.40	.32	--	160	2	.5	350
MAY											
01....	1.6	.07	80	230	2.49	.31	--	160	0	.5	360
AUG.											
11....	1.5	.12	60	230	1.68	.31	--	150	0	.5	370
07148600 - MEDICINE LODGE R AT SUN CITY, KS (LAT 37 22 13 LONG 098 54 53)											
OCT., 1974											
04....	.61	.08	170	476	43.7	.65	--	310	120	1.0	740
NOV.											
21....	.72	.07	170	560	71.1	.76	--	350	144	1.1	870
FEB., 1975											
06....	.97	.08	180	565	70.2	.77	--	360	150	.9	830
MAY											
01....	.47	.04	120	482	68.1	.66	--	320	130	.9	730
AUG.											
11....	.27	.80	170	704	3270	.96	--	370	170	1.6	1020
07148900 - ELM C AT MEDICINE LODGE, KS (LAT 37 16 25 LONG 098 34 28)											
OCT., 1974											
04....	27	18	75	10	28	2.2	250	0	36	39	.4
NOV.											
21....	39	17	77	7.8	30	2.0	230	0	33	46	.4
FEB., 1975											
06....	60	18	82	8.6	30	2.2	250	0	37	46	.3
MAY											
01....	39	18	78	13	28	1.8	250	0	40	38	.2
AUG.											
11....	6.0	11	58	11	37	3.0	190	0	41	53	.4
07151200 - CHIKASKIA R NR ZENDA, KS (LAT 37 28 23 LONG 098 16 55)											
OCT., 1974											
04....	18	19	82	1.8	19	1.2	260	0	15	19	.3
NOV.											
20....	24	19	86	6.2	21	1.5	290	0	17	22	.3
FEB., 1975											
11....	30	18	85	4.9	21	1.8	280	0	20	23	.3
MAY											
01....	23	20	80	7.9	21	1.2	270	0	20	23	.3
AUG.											
12....	5.7	9.0	70	6.2	19	1.8	230	0	18	21	.4

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)
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ARKANSAS RIVER BASIN

07151290 - SAND C NR ZENDA, KS (LAT 37 24 41 LONG 098 16 55)

OCT., 1974											
04...	8.4	20	67	3.2	18	1.8	220	0	17	19	.3
NOV.											
20...	14	19	70	9.1	19	1.8	244	0	16	20	.2
FEB., 1975											
11...	16	18	67	6.1	20	1.8	230	0	14	20	.2
MAY											
01...	12	16	64	9.9	18	1.5	230	0	16	20	.2
AUG.											
12...	1.7	8.5	72	9.8	21	2.0	260	0	18	22	.3

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS- SOLVED NITRATE (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER DAY)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	TUR- BID- ITY (JTU)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM AD- SORP- TION RATIO	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)
ARKANSAS RIVER BASIN											
07151290 - SAND C NR ZENDA, KS (LAT 37 24 41 LONG 098 16 55)											
OCT., 1974											
04...	.32	.09	90	270	6.12	.37	--	180	0	.6	440
NOV.											
20...	.63	.08	80	295	11.2	.40	--	210	12	.6	470
FEB., 1975											
11...	.68	.07	180	272	11.8	.37	--	190	2	.6	420
MAY											
01...	.18	.07	60	260	8.63	.35	--	200	10	.6	430
AUG.											
12...	.20	.13	110	300	1.40	.41	--	220	10	.6	510

SUSPENDED-SEDIMENT DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANFOUS DIS- CHARGE (CFS)	SUS- PENDE SEDI- MENT (MG/L)	SUS- PENDE SEDI- MENT DIS- CHARGE (T/DAY)
KANSAS RIVER BASIN				
06844700 - SF SAPPA C NR BREWSTER, KS (LAT 39 17 07 LONG 101 27 56)				
JUNE, 1975				
18...	1700	34	3080	283
19...	2015	.70	1420	2.7
AUG.				
01...	1010	2.3	1780	11
06844900 - SF SAPPA C NR ACHILLES, KS (LAT 39 40 37 LONG 100 43 18)				
JUNE, 1975				
27...	1330	36	724	70
06847900 - PRAIRIE DOG C AB NORTON RE, KS (LAT 39 46 13 LONG 100 06 00)				
JUNE, 1975				
27...	1025	48	809	105
JULY				
09...	0930	141	214	81
SEP.				
17...	1545	4.7	255	3.2
06859500 - LADDER C BL CHALK C NR SCOTT CITY, KS (LAT 38 47 20 LONG 100 52 10)				
APR., 1975				
16...	1100	3.7	87	.87
MAY				
13...	1255	2.7	201	1.5
29...	1155	222	1790	1070
31...	1300	28	357	27
JUNE				
02...	1535	8.7	258	6.1
JULY				
10...	1000	2.0	80	.43
06866500 - SMOKY HILL R NR MENTOR, KS (LAT 38 47 54 LONG 097 34 28)				
AUG., 1975				
24...	1015	676	1610	2940
06871000 - NF SOLOMON R AT GLADE, KS (LAT 39 40 40 LONG 099 18 30)				
JUNE, 1975				
19...	1820	1070	5310	15300
06873000 - SF SOLOMON R AB WEBSTER RE, KS (LAT 39 22 26 LONG 099 34 54)				
JUNE, 1975				
19...	1535	8870	5930	142000
06874000 - SF SOLOMON R AT OSBORNE, KS (LAT 39 25 43 LONG 098 41 40)				
JUNE, 1975				
22...	1255	1680	3440	15600
06887000 - BIG BLUE R NR MANHATTAN, KS (LAT 39 14 14 LONG 096 34 16)				
OCT., 1974				
11...	0930	296	45	36
FEB., 1975				
13...	0945	314	135	114
APR.				
10...	1530	804	35	76
MAY				
14...	0900	776	31	65
JUNE				
11...	0950	10600	45	1290
JULY				
02...	0930	8690	41	962
SEP.				
11...	0930	212	32	18

SUSPENDED-SEDIMENT DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANFOUS DIS- CHARGE (CFS)	SUS- PENDE SEDI- MENT CHARGE (MG/L)	SUS- PENDE SEDI- MENT DIS- CHARGE (T/DAY)
KANSAS RIVER BASIN				
06889100 - SOLDIER C NR GOFF, KS (LAT 39 37 27 LONG 095 57 57)				
APR., 1975				
18...	0145	106	25900	7410
18...	0245	257	12700	8810
18...	1050	4.6	1100	14
MAY				
29...	2045	106	17800	5090
JUNE				
02...	1845	257	17600	12200
18...	0700	106	12800	3660
18...	0715	257	6730	4670
18...	1220	52	2240	314
06889120 - SOLDIER C NR BANCROFT, KS (LAT 39 35 42 LONG 095 58 17)				
APR., 1975				
18...	0315	384	9190	9530
JUNE				
02...	2130	384	8070	8370
10...	2300	922	9260	23100
11...	1155	23	2020	125
18...	0745	408	6230	6860
18...	0800	668	5320	9600
18...	0815	929	8150	20400
18...	1325	571	4860	7490
06889140 - SOLDIER C NR SOLDIER, KS (LAT 39 33 57 LONG 095 57 45)				
APR., 1975				
18...	1220	70	2790	527
JUNE				
10...	0400	1040	1850	5200
10...	0435	1500	75	307
18...	1335	793	4500	9640
06889160 - SOLDIER C NR CIRCLEVILLE, KS (LAT 39 27 47 LONG 095 57 00)				
APR., 1975				
18...	0215	650	10400	18300
18...	0400	1700	3650	16800
18...	1330	362	4800	4690
MAY				
29...	2245	792	4650	9940
29...	2315	1800	4180	20300
29...	2345	2890	9090	70900
30...	1035	218	4000	2350
JUNE				
10...	2015	792	3690	7890
10...	2100	1800	1800	8750
10...	2130	2890	6250	48800
18...	1445	3040	6030	49500
06889180 - SOLDIER C NR ST. CLERE, KS (LAT 39 22 33 LONG 095 55 05)				
APR., 1975				
18...	1520	587	1540	2440
06889200 - SOLDIER C NR DELIA, KS (LAT 39 12 08 LONG 095 52 25)				
MAY, 1975				
30...	1815	3060	2450	20200
31...	0845	358	2760	2670
JUNE				
09...	1120	1940	4600	24100

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

SUSPENDED-SEDIMENT DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANFOUS DIS- CHARGE (CFS)	SUS- PENDE SEDIM- ENT DIS- CHARGE (MG/L)	SUS- PENDE SEDIM- ENT DIS- CHARGE (T/DAY)
ARKANSAS RIVER BASIN				
07139800 - MULBERRY C NR DODGE CITY, KS (LAT 37 35 53 LONG 100 00 52)				
MAY, 1975				
13...	1750	1.7	4050	19
JUNE				
07...	1800	136	1410	518
08...	1400	11	865	26
07142300 - RATTLESNAKE C NR MACKSVILLE, KS (LAT 37 52 20 LONG 098 52 30)				
JUNE, 1975				
25...	1345	2160	988	5760
27...	1330	337	530	482
07156750 - CIMARRON R AT LIBERAL, KS (LAT 37 14 27 LONG 100 55 10)				
NOV., 1974				
14...	1200	19	69	3.5
SEP., 1975				
18...	1050	17	346	16
07156900 - CIMARRON R NR FORGAN, OK (LAT 37 00 45 LONG 100 29 39)				
NOV.				
14...	1445	58	276	43
07157500 - CROOKED C NR NYE, KS (LAT 37 02 02 LONG 100 11 55)				
JULY, 1975				
10...	1510	6.9	66	1.2
AUG.				
20...	1610	1.1	52	.15
07179730 - NEOSHO R NR AMERICUS, KS (LAT 38 28 01 LONG 096 15 01)				
APR., 1975				
19...	1205	1030	1160	3230
07182250 - COTTONWOOD R NR PLYMOUTH, KS (LAT 38 23 51 LONG 096 21 21)				
APR., 1975				
09...	1445	6290	1790	30400

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	SUS- PENDE SEDI- MENT (MG/L)	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .062 MM	SUS. SED. FALL DIAM. % FINER THAN .125 MM	SUS. SED. FALL DIAM. % FINER THAN .250 MM	SUS. SED. FALL DIAM. % FINER THAN .500 MM	SUS. SED. FALL DIAM. % FINER THAN 1.00 MM
KANSAS RIVER BASIN											
06844700 - SF SAPPA C NR BREWSTER, KS (LAT 39 17 07 LONG 101 27 56)											
JUNE, 1975											
18...	1700	34	3080	81	94	99	100	--	--	--	--
19...	2015	.70	1420	90	93	93	99	100	--	--	--
06866500 - SMOKY HILL R NR MENTOR, KS (LAT 38 47 54 LONG 097 34 28)											
AUG., 1975											
24...	1015	676	1610	54	62	75	96	99	100	--	--
06871000 - NF SOLOMON R AT GLADE, KS (LAT 39 40 40 LONG 099 18 30)											
JUNE, 1975											
19...	1820	1070	5310	21	44	70	98	100	--	--	--
06873000 - SF SOLOMON R AB WEBSTER RE, KS (LAT 39 22 26 LONG 099 34 54)											
JUNE, 1975											
19...	1535	8870	5930	70	85	96	97	100	--	--	--
06874000 - SF SOLOMON R AT OSBORNE, KS (LAT 39 25 43 LONG 098 41 40)											
JUNE, 1975											
22...	1255	1680	3440	58	72	89	98	100	--	--	--
06889100 - SOLDIER C NR GOFF, KS (LAT 39 37 27 LONG 095 57 57)											
JUNE, 1975											
18...	1220	52	2240	52	61	64	97	100	--	--	--
06889120 - SOLDIER C NR BANCROFT, KS (LAT 39 35 42 LONG 095 58 17)											
JUNE, 1975											
18...	1325	571	4860	36	39	45	72	100	--	--	--
06889140 - SOLDIER C NR SOLDIER, KS (LAT 39 33 57 LONG 095 57 45)											
JUNE, 1975											
18...	1335	793	4500	42	48	55	91	94	95	99	100
06889160 - SOLDIER C NR CIRCLEVILLE, KS (LAT 39 27 47 LONG 095 57 00)											
MAY, 1975											
30...	1035	218	4000	56	68	78	99	100	--	--	--
JUNE											
18...	1445	3040	6030	37	47	56	96	100	--	--	--
06889200 - SOLDIER C NR DELIA, KS (LAT 39 12 08 LONG 095 52 25)											
MAY, 1975											
30...	1815	3060	2450	65	75	84	100	--	--	--	--
31...	0845	358	2760	57	67	77	100	--	--	--	--
JUNE											
09...	1120	1940	4600	36	42	52	99	100	--	--	--
ARKANSAS RIVER BASIN											
07139800 - MULBERRY C NR DODGE CITY, KS (LAT 37 35 53 LONG 100 00 52)											
MAY, 1975											
13...	1750	1.7	4050	87	97	88	100	--	--	--	--
JUNE											
07...	1800	136	1410	85	89	93	99	100	--	--	--
08...	1400	11	865	94	95	96	99	100	--	--	--
07142300 - RATTLESNAKE C NR MACKSVILLE, KS (LAT 37 52 20 LONG 098 52 30)											
JUNE, 1975											
25...	1345	2160	988	82	85	86	88	92	99	100	--
27...	1330	337	530	90	--	93	95	100	--	--	--
07182250 - COTTONWOOD R NR PLYMOUTH, KS (LAT 38 23 51 LONG 096 21 21)											
APR., 1975											
09...	1445	6290	1790	60	85	89	99	100	--	--	--

MISCELLANEOUS WATER TEMPERATURES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	
BIG NEMAH RIVER BASIN					
06814000	TURKEY C NR SENECA, KS				(LAT 39 56 52 LONG 096 06 30)
	OCT., 1974				
	8...	1330	1.7	12.5	
	NOV.				
	14...	1445	6.7	5.0	
	DEC.				
	17...	1505	9.2	1.0	
	JAN., 1975				
	13...	1555	5.9	0.	
	FEB.				
	3...	1520	12	0.5	
	MAR.				
	13...	0925	6.3	0.5	
	14...	1400	40	0.5	
	APR.				
	7...	1525	46	10.0	
	MAY				
	6...	0905	43	20.0	
	30...	1250	2790	16.5	
	JUNE				
	12...	0900	200	17.0	
	JULY				
	10...	0920	23	25.0	
	AUG.				
	6...	0840	7.3	21.5	
	SEP.				
	10...	1400	0.03	22.5	
KANSAS RIVER BASIN					
06844700	SF SAPP C NR BREWSTER, KS				(LAT 39 17 07 LONG 101 27 56)
	JUNE, 1975				
	18...	1640	34	21.5	
	AUG.				
	1...	1000	2.2	21.0	
06844900	SF SAPP C NR ACHILLES, KS				(LAT 39 40 37 LONG 100 43 18)
	MAY, 1975				
	30...	1425	1.6	18.0	
	JUNE				
	3...	1850	7.4	24.0	
	11...	1410	46	17.0	
	12...	1110	16	17.0	
	19...	1110	2940	20.5	
06846500	BEAVER C AT CEDAR BLUFFS, KS				(LAT 39 59 06 LONG 100 33 35)
	JUNE, 1975				
	3...	1425	33	17.0	
	9...	1920	138	17.5	
	19...	1820	172	19.5	
	JULY				
	9...	1450	16	23.0	
	AUG.				
	2...	0900	1.0	20.0	
06847900	PRAIRIE DOG C AB NORTON RE. KS				(LAT 39 46 13 LONG 100 06 00)
	DEC., 1974				
	13...	1030	0.06	1.0	
	MAR., 1975				
	19...	1105	2.3	3.0	
	JUNE				
	4...	8930	7.0	18.0	
	8...	2150	772	17.0	
	9...	1030	512	17.5	
	20...	1330	396	21.5	
	27...	1000	48	21.0	
06848000	PRAIRIE DOG C AT NORTON, KS				(LAT 39 48 36 LONG 099 55 18)
	NOV., 1974				
	20...	1200	0.04	4.0	
	DEC.				
	13...	1200	3.1	2.5	
	MAR., 1975				
	18...	1625	0.07	6.0	
	JULY				
	3...	1725	96	25.5	
	9...	1110	141	25.0	
	AUG.				
	2...	1325	13	25.0	
	11...	1755	99	26.0	
	27...	1320	93	24.5	
	29...	1420	68	24.5	

	DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	
	KANSAS RIVER BASIN				
06848500	PRAIRIE DOG C NR WOODRUFF, KS			(LAT 39 59 09 LONG 099 28 39)	
	OCT., 1974				
	11...	0910	0.27	15.0	
	NOV.				
	26...	1200	1.0	4.0	
	DEC.				
	11...	0940	1.6	0.	
	JAN., 1975				
	16...	1115	1.1	0.	
	FEB.				
	25...	1555	6.8	0.	
	MAR.				
	20...	1025	7.5	2.0	
	APR.				
	17...	1040	3.1	12.0	
	MAY				
	28...	0940	2.0	15.0	
	JULY				
	16...	1025	5.7	22.0	
	AUG.				
	6...	1030	4.9	23.0	
	SEP.				
	10...	1230	7.4	22.0	
06853500	REPUBLICAN R NR HARDY, NE			(LAT 40 00 01 LONG 097 54 55)	
	OCT., 1974				
	22...	1345	132	17.0	
	NOV.				
	18...	1420	147	8.0	
	DEC.				
	16...	1320	166	0.	
	JAN., 1975				
	20...	1400	179	0.5	
	FEB.				
	20...	1110	138	0.	
	MAR.				
	31...	1300	178	10.5	
	APR.				
	21...	1315	171	16.0	
	MAY				
	21...	1230	48	26.0	
	JUNE				
	16...	1255	242	25.0	
	JULY				
	23...	1200	397	27.0	
	AUG.				
	18...	1540	223	27.5	
	SEP.				
	22...	1345	49	20.0	
06853800	WHITE ROCK C NR BURR OAK, KS			(LAT 39 53 55 LONG 098 15 05)	
	OCT., 1974				
	11...	0830	2.8	15.0	
	NOV.				
	19...	0920	6.1	6.0	
	DEC.				
	16...	1530	8.0	0.5	
	JAN., 1975				
	20...	1545	7.8	1.5	
	FEB.				
	19...	1550	6.5	0.5	
	APR.				
	1...	0925	15	4.0	
	21...	1625	16	15.0	
	MAY				
	7...	1010	10	15.0	
	JUNE				
	16...	1550	16	26.0	
	JULY				
	23...	1545	55	27.0	
	AUG.				
	19...	0905	5.4	26.0	
	SEP.				
	22...	1635	2.1	13.0	
06854000	WHITE ROCK C AT LOVEWELL, KS			(LAT 39 53 10 LONG 098 01 20)	
	JUNE, 1975				
	9...	1310	161	21.0	

MISCELLANEOUS WATER TEMPERATURES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)
KANSAS RIVER BASIN				
06855800	BUFFALO C NR JAMESTOWN, KS			(LAT 39 36 55 LONG 097 51 20)
	OCT., 1974			
	21...	1430	16	14.0
	NOV.			
	18...	1130	15	7.0
	DEC.			
	10...	1240	4.7	1.0
	JAN., 1975			
	15...	1340	13	0.
	FEB.			
	19...	1245	14	0.5
	MAR.			
	26...	1310	7.4	4.0
	APR.			
	18...	1245	53	12.0
	MAY			
	16...	1130	6.4	19.0
	30...	1355	137	17.0
	JUNE			
	13...	1140	24	20.0
	JULY			
	18...	1240	4.1	26.0
	AUG.			
	13...	1425	6.2	23.0
	SEP.			
	12...	1345	11	16.0
06855900	WOLF C NR CONCORDIA, KS			(LAT 39 32 35 LONG 097 43 20)
	OCT., 1974			
	21...	1035	0.27	10.0
	NOV.			
	15...	1400	0.98	5.5
	DEC.			
	10...	1520	1.2	1.5
	JAN., 1975			
	9...	1110	1.9	0.5
	FEB.			
	19...	1050	1.9	0.
	MAR.			
	26...	1435	1.3	5.0
	APR.			
	18...	1450	2.0	11.5
	MAY			
	16...	0950	1.0	16.0
	JUNE			
	13...	1010	0.82	19.0
	24...	1035	41	21.5
	JULY			
	18...	1030	0.43	23.0
	AUG.			
	13...	1100	0.10	22.0
06856000	REPUBLICAN R AT CONCORDIA, KS			(LAT 39 35 25 LONG 097 39 32)
	OCT., 1974			
	22...	1015	136	14.0
	NOV.			
	15...	1120	174	4.0
	DEC.			
	10...	1040	169	0.
	JAN., 1975			
	15...	1050	132	0.
	FEB.			
	25...	1305	257	1.5
	MAR.			
	26...	1035	288	1.0
	APR.			
	15...	1150	252	12.0
	MAY			
	16...	1350	131	24.0
	JUNE			
	11...	1140	2020	18.0
	JUNE, 1972			
	24...	1425	4440	24.0
	JULY, 1975			
	21...	1010	376	25.0
	AUG.			
	19...	1205	394	26.5
	SEP.			
	12...	1600	150	20.0

MISCELLANEOUS WATER TEMPERATURES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

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DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)
KANSAS RIVER BASIN			
06856600	REPUBLICAN R AT CLAY CENTER, KS		(LAT 39 21 20 LONG 097 07 34)
OCT., 1974			
24...	1340	160	17.5
NOV.			
14...	1230	224	17.5
DEC.			
12...	1355	221	5.0
JAN., 1975			
8...	1030	200	0.
FEB.			
26...	1400	308	2.0
MAR.			
25...	1315	408	7.0
APR.			
23...	1110	363	18.0
MAY			
20...	1045	158	22.0
JUNE			
11...	1500	3560	19.0
JULY			
21...	1410	410	29.0
AUG.			
19...	1520	596	27.0
SEP.			
18...	1140	15	19.0
06857100	REPUBLICAN R BL MILFORD DAM, KS		(LAT 39 04 15 LONG 096 52 00)
OCT., 1974			
8...	1410	454	16.5
NOV.			
13...	1340	68	12.0
DEC.			
12...	1140	46	5.0
JAN., 1975			
8...	1530	43	6.5
FEB.			
14...	1320	189	1.0
MAR.			
24...	1605	375	4.5
APR.			
15...	1250	300	7.5
MAY			
15...	1150	69	15.0
JUNE			
9...	1630	1480	21.0
12...	1430	4960	25.5
JULY			
15...	1555	4410	25.0
AUG.			
13...	1720	178	25.0
SEP.			
9...	1220	72	25.0
06859500	LADDER C BL CHALK C NR SCOTT CITY, KS		(LAT 38 47 20 LONG 100 52 10)
NOV., 1974			
22...	1520	0.01	13.0
DEC.			
20...	1320	3.1	1.0
JAN., 1975			
17...	1555	3.4	0.
FEB.			
21...	1230	4.2	2.0
MAR.			
20...	1300	1.1	14.0
APR.			
16...	1035	3.7	12.0
MAY			
9...	1640	0.69	24.0
13...	1240	2.7	14.0
29...	1155	221	12.5
29...	1420	102	12.5
30...	1745	49	20.0
31...	1245	28	18.0
JUNE			
2...	1520	8.7	24.0
12...	1715	4.7	26.5

MISCELLANEOUS WATER TEMPERATURES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	DATE	TIME	DIS- CHARGE (CFS)	TFMP- ERATURE (DEG C)
KANSAS RIVER BASIN				
06860000	SMOKY HILL R AT ELKADER, KS			(LAT 37 47 33 LONG 100 51 19)
	DEC., 1974			
	20...	1200	0.72	1.5
	JAN., 1975			
	17...	1435	1.5	2.5
	FEB.			
	21...	1105	3.2	0.5
	MAR.			
	20...	1405	1.6	18.0
	APR.			
	16...	0910	3.0	12.0
	MAY			
	9...	1535	0.74	24.5
	13...	1335	2.7	15.0
	29...	1230	685	13.0
	29...	1650	359	13.0
	30...	1845	116	20.5
	31...	1435	49	20.0
	JUNE			
	12...	1620	16	29.0
	JULY			
	10...	1100	1.8	22.5
06861000	SMOKY HILL R NR ARNOLD, KS			(LAT 38 48 31 LONG 100 01 13)
	OCT., 1974			
	7...	1715	0.06	18.0
	NOV.			
	19...	1500	0.56	10.5
	DEC.			
	12...	1655	0.58	3.5
	JAN., 1975			
	16...	1420	1.7	2.0
	FEB.			
	19...	1440	2.2	4.0
	MAR.			
	20...	1635	2.0	21.5
	APR.			
	8...	1735	1.4	14.0
	MAY			
	7...	1520	1.2	20.5
	13...	1610	14	15.0
	14...	1335	9.0	29.0
	30...	1125	862	14.5
	JUNE			
	1...	1415	421	20.0
	1...	1415	421	20.0
	3...	0940	80	18.0
	8...	1625	5040	18.0
	16...	1335	40	27.0
	JULY			
	11...	1445	15	29.0
	AUG.			
	5...	1110	100	25.5
06862000	SMOKY HILL R AT CEDAR BLUFF DAM, KS			(LAT 38 47 30 LONG 099 43 20)
	OCT., 1974			
	16...	1130	0.24	14.5
	NOV.			
	11...	1500	0.37	10.5
	DEC.			
	10...	1450	0.97	4.0
	JAN., 1975			
	8...	1430	1.1	4.0
	FEB.			
	18...	1530	1.0	4.0
	MAR.			
	19...	1440	0.48	16.0
06862700	SMOKY HILL R NR SCHOENCHEN, KS			(LAT 38 43 30 LONG 099 23 30)
	OCT., 1974			
	16...	0900	20	10.0
	NOV.			
	11...	1245	24	11.0
	DEC.			
	10...	1215	22	2.0
	JAN., 1975			
	8...	1155	22	3.5
	FEB.			
	18...	1255	25	3.0
	MAR.			
	19...	1145	24	11.0
	APR.			
	8...	1205	22	13.0
	MAY			
	13...	1140	22	14.5
	JUNE			
	16...	1135	27	24.0
	JULY			
	16...	1055	22	24.5
	AUG.			
	12...	1035	16	24.0
	SEP.			
	16...	1540	21	25.0

	DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)
KANSAS RIVER BASIN				
06863500	BIG C NR HAYS, KS			(LAT 38 48 45 LONG 099 15 14)
	OCT., 1974			
	16...	1635	8.0	13.5
	NOV.			
	12...	1210	1.0	6.5
	DEC.			
	11...	1120	10	1.0
	JAN., 1975			
	9...	1040	12	1.0
	FEB.			
	19...	1125	13	0.
	MAR.			
	24...	1200	13	6.0
	APR.			
	9...	1115	13	10.0
	MAY			
	14...	1200	12	18.0
	JUNE			
	9...	1115	13	10.0
	17...	1055	43	23.0
	MAY			
	14...	1200	12	18.0
	JUNE			
	17...	1055	43	23.0
	JULY			
	17...	1045	13	23.0
	AUG.			
	13...	1130	35	25.0
	SEP.			
	17...	1210	13	18.0
06863900	NF BIG C NR VICTORIA, KS			(LAT 38 53 12 LONG 099 12 21)
	OCT., 1974			
	17...	0845	0.02	5.0
	NOV.			
	12...	0910	0.36	5.0
	DEC.			
	11...	0830	0.07	1.5
	JAN., 1975			
	9...	0840	0.22	1.0
	FEB.			
	19...	0850	0.27	0.
	MAR.			
	20...	0850	0.08	14.0
	APR.			
	9...	0850	0.01	7.0
	MAY			
	14...	0840	0.41	15.0
	JUNE			
	17...	0805	1.5	22.0
	JULY			
	17...	0740	0.01	20.0
06864050	SMOKY HILL R NR BUNKER HILL, KS			(LAT 38 47 38 LONG 098 46 50)
	OCT., 1974			
	24...	1140	37	18.0
	NOV.			
	20...	1200	46	7.0
	DEC.			
	18...	1225	49	1.0
	JAN., 1975			
	15...	1120	66	0.5
	FEB.			
	20...	1005	51	1.0
	MAR.			
	20...	1510	55	19.0
	APR.			
	22...	1200	50	16.5
	MAY			
	20...	1135	37	23.5
	JUNE			
	23...	1240	3710	22.0
	JULY			
	22...	1205	47	28.5
	AUG.			
	26...	1310	55	23.0
	SEP.			
	24...	1325	32	18.0

MISCELLANEOUS WATER TEMPERATURES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	
KANSAS RIVER BASIN					
06864500	SMOKY HILL R AT ELLSWORTH, KS				(LAT 38 43 36 LONG 098 14 00)
	OCT., 1974				
	22...	1510	64	13.5	
	NOV.				
	14...	1430	81	7.0	
	DEC.				
	17...	1050	60	0.	
	JAN., 1975				
	13...	1115	47	0.	
	FEB.				
	24...	1120	100	0.	
	MAR.				
	26...	1445	77	8.0	
	APR.				
	14...	1230	118	10.0	
	MAY				
	19...	1010	65	22.0	
	SEP.				
	19...	1535	187	27.0	
	JULY				
	21...	0935	81	27.0	
	AUG.				
	18...	1225	201	27.0	
	SEP.				
	22...	1235	77	17.5	
06865500	SMOKY HILL R NR LANGLEY, KS				(LAT 38 36 38 LONG 097 57 04)
	OCT., 1974				
	10...	1020	55	15.5	
	NOV.				
	7...	1110	346	11.5	
	DEC.				
	9...	1125	50	2.0	
	JAN., 1975				
	7...	1020	51	1.0	
	FEB.				
	13...	1055	52	2.0	
	MAR.				
	9...	1040	54	3.0	
	APR.				
	7...	1155	54	7.5	
	MAY				
	12...	1025	53	19.5	
	JUNE				
	12...	1135	916	22.0	
	JULY				
	15...	0950	807	25.0	
	30...	1050	34	25.5	
	AUG.				
	11...	1320	104	25.5	
	SEP.				
	15...	1150	407	21.0	
06866500	SMOKY HILL R NR MENTOR, KS				(LAT 38 47 54 LONG 097 34 28)
	OCT., 1974				
	9...	1605	184	17.0	
	NOV.				
	8...	1410	364	11.0	
	DEC.				
	9...	1050	114	1.0	
	JAN., 1975				
	8...	1030	114	2.0	
	FEB.				
	12...	1035	126	0.5	
	MAR.				
	5...	1350	123	6.0	
	APR.				
	10...	1130	109	12.0	
	MAY				
	27...	1355	98	22.0	
	JUNE				
	13...	1405	877	24.0	
	24...	0945	5050	23.5	
	JULY				
	15...	1045	902	24.5	
	AUG.				
	8...	1330	81	26.0	
	SEP.				
	22...	1400	477	17.0	

	DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	
KANSAS RIVER BASIN					
06867000	SALINE R NR RUSSELL, KS				(LAT 38 58 00 LONG 098 51 20)
	OCT., 1974				
	24...	1440	23	21.0	
	NOV.				
	20...	1610	35	10.0	
	DEC.				
	18...	1530	32	2.0	
	JAN., 1975				
	15...	1515	48	0.5	
	21...	1420	47	4.0	
	FEB.				
	20...	1320	38	0.	
	MAR.				
	20...	1205	51	13.5	
	APR.				
	22...	1555	40	19.0	
	MAY				
	20...	1440	25	27.5	
	JUNE				
	24...	0840	327	23.0	
	JULY				
	22...	0800	23	33.0	
	AUG.				
	22...	0800	96	23.5	
	SEP.				
	23...	1215	23	17.5	
06868200	SALINE R AT WILSON DAM, KS				(LAT 38 58 35 LONG 098 29 20)
	OCT., 1974				
	9...	1040	11	14.0	
	NOV.				
	7...	1025	10	12.5	
	DEC.				
	4...	1035	8.0	6.0	
	JAN., 1975				
	7...	1045	7.8	3.0	
	FEB.				
	11...	1035	7.8	1.0	
	MAR.				
	25...	1340	21	5.0	
	APR.				
	11...	1055	20	7.0	
	MAY				
	8...	1215	20	18.0	
	JUNE				
	16...	1230	427	21.0	
	JULY				
	11...	1150	432	22.0	
	17...	1130	848	24.0	
	AUG.				
	11...	1105	119	25.0	
	SEP.				
	8...	1315	18	25.0	
06869500	SALINE R AT TESCOTT, KS				(LAT 39 00 15 LONG 097 52 26)
	OCT., 1974				
	8...	1040	53	14.0	
	NOV.				
	6...	1005	67	7.0	
	DEC.				
	3...	1015	45	1.0	
	JAN., 1975				
	9...	1050	62	2.0	
	FEB.				
	21...	1100	66	0.	
	MAR.				
	27...	1030	65	8.0	
	APR.				
	28...	1050	68	19.0	
	MAY				
	16...	1015	69	20.0	
	JUNE				
	11...	1140	329	20.0	
	25...	1305	1070	23.5	
	JULY				
	18...	1100	739	26.0	
	AUG.				
	8...	1045	47	26.0	

	DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)
KANSAS RIVER BASIN				
06870200	SMOKY HILL R AT NEW CAMBRIA, KS			(LAT 38 51 13 LONG 097 27 52)
	OCT., 1974			
	7...	1450	593	16.0
	NOV.			
	8...	1610	503	10.0
	DEC.			
	12...	1400	228	2.0
	JAN., 1975			
	8...	1415	220	2.5
	8...	1415	220	2.5
	FEB.			
	12...	1410	228	1.0
	MAR.			
	5...	1555	385	5.0
	APR.			
	10...	1445	221	12.0
	MAY			
	19...	1410	204	24.0
	JUNE			
	13...	1025	1410	22.5
	JULY			
	15...	1435	1390	25.0
	AUG.			
	8...	1000	158	24.0
	SEP.			
	18...	1455	646	19.0
06871000	NF SOLOMON R AT GLADE, KS			(LAT 39 40 40 LONG 099 18 30)
	NOV., 1974			
	19...	1540	3.4	10.0
	DEC.			
	10...	1555	4.4	1.0
	JAN., 1975			
	21...	1525	12	0.
	FEB.			
	25...	1230	18	0.
	MAR.			
	20...	1305	14	14.0
	APR.			
	16...	1555	13	22.5
	MAY			
	28...	1200	8.0	17.0
	JULY			
	9...	1500	47	26.0
	AUG.			
	5...	1630	91	24.0
	SEP.			
	10...	1635	3.5	23.0
06871500	BOW C NR STOCKTON, KS			(LAT 39 33 46 LONG 099 17 04)
	OCT., 1974			
	17...	1255	3.1	14.0
	NOV.			
	19...	1335	5.8	9.0
	DEC.			
	11...	1330	7.3	3.0
	JAN., 1975			
	21...	1345	7.8	3.0
	FEB.			
	26...	0905	8.7	1.0
	MAR.			
	20...	1435	8.4	10.0
	APR.			
	23...	0905	7.6	14.0
	MAY			
	28...	1430	17	15.0
	JUNE			
	20...	1310	2800	22.0
	21...	1505	1760	24.0
	JULY			
	22...	1530	13	25.0
	AUG.			
	6...	1335	30	24.0
	SEP.			
	11...	0955	4.5	18.0
06871900	DEFR C NR PHILLIPSBURG, KS			(LAT 39 46 50 LONG 099 25 20)
	NOV., 1974			
	26...	1620	0.34	5.0
	DEC.			
	11...	0835	0.58	1.0
	JAN., 1975			
	16...	0910	1.8	0.
	FEB.			
	25...	1415	9.5	1.0
	MAR.			
	20...	0835	2.3	5.0
	APR.			
	17...	0830	2.0	10.0
	JUNE			
	8...	1840	311	17.0
	25...	0900	2.9	22.0

	DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)
KANSAS RIVER BASIN				
06872500	NF SOLOMON R AT PORTIS, KS			(LAT 39 33 15 LONG 098 41 31)
	OCT., 1974			
	16...	1350	34	14.0
	NOV.			
	8...	1240	45	11.0
	DEC.			
	5...	1250	43	3.0
	JAN., 1975			
	15...	1340	49	0.
	FEB.			
	13...	1250	42	1.0
	MAR.			
	26...	1300	49	6.0
	APR.			
	15...	1330	50	12.0
	MAY			
	20...	1200	33	24.0
	JUNE			
	22...	1440	3870	23.5
	26...	1030	228	24.0
	JULY			
	15...	1135	54	24.0
	AUG.			
	5...	1210	85	25.0
	SEP., 1975			
	9...	1430	31	25.0
06873000	SF SOLOMON R AB WEBSTER RE, KS			(LAT 39 22 26 LONG 099 34 54)
	OCT., 1974			
	17...	1630	1.1	22.0
	NOV.			
	20...	0945	2.6	4.0
	DEC.			
	12...	0905	2.2	1.0
	JAN., 1975			
	22...	1015	3.3	1.0
	FEB.			
	26...	1125	15	3.0
	MAR.			
	21...	0935	19	10.0
	APR.			
	22...	1540	16	17.5
	MAY			
	21...	0950	4.8	18.0
	29...	1020	202	15.0
	JUNE			
	19...	1430	8880	23.0
	JULY			
	23...	1010	24	24.0
	AUG.			
	7...	0955	50	25.0
	SEP.			
	17...	0900	4.0	17.0
06873200	SF SOLOMON R BL WEBSTER RE, KS			(LAT 39 24 34 LONG 099 24 53)
	NOV., 1974			
	14...	1020	0.04	6.0
	JUNE, 1975			
	13...	1050	0.08	18.0
	JULY			
	1...	1145	107	25.0
	10...	1050	176	24.0
	AUG.			
	6...	1600	141	26.0
	29...	0855	136	24.0
	SEP.			
	17...	1205	0.21	20.0
06873700	KILL C NR BLOOMINGTON, KS			(LAT 39 22 45 LONG 098 51 33)
	OCT., 1974			
	1...	1310	0.25	12.0
	16...	1625	0.60	13.0
	NOV.			
	7...	1320	1.6	7.0
	DEC.			
	4...	1330	1.9	1.0
	JAN., 1975			
	8...	1120	1.8	0.
	FEB.			
	12...	1110	1.9	0.
	MAR.			
	25...	1120	1.3	2.0
	APR.			
	8...	1400	1.8	11.0
	MAY			
	9...	1300	1.3	17.0
	JUNE			
	6...	1110	2.2	19.0
	JULY			
	25...	1140	0.22	25.0
	SEP.			
	25...	1320	0.02	18.0

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	DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)
KANSAS RIVER BASIN				
06874000	SF SOLOMON R AT OSBORNE, KS			(LAT 39 25 43 LONG 098 41 40)
	OCT., 1974			
	9...	1405	20	16.0
	NOV.			
	15...	1200	25	5.0
	DEC.			
	5...	1130	29	2.0
	JAN., 1975			
	8...	1315	2.8	3.0
	FEB.			
	12...	1305	30	2.0
	MAR.			
	26...	1115	27	5.0
	APR.			
	15...	1120	36	12.0
	MAY			
	9...	1120	25	18.0
	JUNE			
	6...	1330	44	20.0
	22...	1220	1680	23.5
	JULY			
	24...	1230	24	24.0
	AUG.			
	12...	1115	13	25.0
	SEP.			
	24...	1045	31	14.0
06875900	SOLOMON R NR GLEN ELDER, KS			(LAT 39 28 27 LONG 098 16 58)
	DEC., 1974			
	13...	1210	18	3.0
	MAR., 1975			
	19...	1130	161	6.0
	JUNE			
	5...	1215	518	21.0
	JULY			
	7...	1230	2560	26.0
06876700	SALT C NR ADA, KS			(LAT 39 08 30 LONG 097 50 10)
	OCT., 1974			
	8...	1335	5.4	13.0
	NOV.			
	6...	1300	14	7.0
	DEC.			
	3...	1305	15	0.
	JAN., 1975			
	7...	1420	13	1.0
	FEB.			
	11...	1345	13	0.
	MAR.			
	24...	1430	16	6.0
	APR.			
	11...	1445	13	8.0
	MAY			
	16...	1315	14	22.0
	JUNE			
	22...	1800	1010	24.0
	30...	1430	38	23.0
	JULY			
	22...	1440	4.7	26.5
	AUG.			
	8...	1400	3.4	26.0
	SEP.			
	22...	1355	6.2	13.0
06876900	SOLOMON R AT NILES, KS			(LAT 38 58 08 LONG 097 28 34)
	OCT., 1974			
	9...	1010	102	15.0
	NOV.			
	20...	1020	110	7.0
	DEC.			
	12...	1130	105	3.0
	JAN., 1975			
	8...	1525	115	1.5
	FEB.			
	27...	1035	299	2.5
	MAR.			
	24...	1430	267	9.0
	APR.			
	24...	1150	269	20.0
	MAY			
	19...	0855	108	22.0
	JUNE			
	10...	1040	1460	20.0
	25...	1000	6160	22500.0
	JULY			
	22...	1310	129	27.0
	AUG.			
	20...	1010	765	26.0
	SEP.			
	17...	1015	96	18.0

	DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	
KANSAS RIVER BASIN					
06877600	SMOKY HILL R AT ENTERPRISE, KS				(LAT 38 54 24 LONG 097 07 12)
	OCT., 1974				
	7...	1505	649	16.0	
	NOV.				
	8...	1100	710	10.5	
	JAN., 1975				
	8...	1115	477	2.0	
	FEB.				
	14...	1635	533	1.0	
	MAR.				
	12...	1140	788	5.0	
	APR.				
	14...	1530	667	12.0	
	MAY				
	14...	1310	523	21.5	
	JUNE				
	10...	1230	5650	20.5	
	26...	1125	13600	25.0	
	JULY				
	14...	1225	2770	26.0	
	AUG.				
	12...	1555	340	28.5	
	SEP.				
	10...	1220	915	23.5	
06878000	CHAPMAN C NR CHAPMAN, KS				(LAT 39 10 00 LONG 097 13 00)
	OCT., 1974				
	9...	1245	22	16.0	
	NOV.				
	20...	1250	30	20.0	
	DEC.				
	11...	1325	30	4.0	
	JAN., 1975				
	8...	1320	33	1.5	
	FEB.				
	26...	1100	72	2.0	
	MAR.				
	25...	1020	37	5.0	
	APR.				
	23...	1555	47	20.0	
	MAY				
	20...	0850	27	21.5	
	JUNE				
	10...	1405	610	20.0	
	JULY				
	22...	1030	21	25.0	
	AUG.				
	20...	1410	18	27.0	
	SEP.				
	17...	1345	19	19.0	
06879100	KANSAS R AT FORT RILEY, KS				(LAT 39 03 09 LONG 096 46 33)
	OCT., 1974				
	9...	1500	1340	17.0	
	NOV.				
	14...	1630	928	7.0	
	DEC.				
	11...	1130	686	4.0	
	JAN., 1975				
	9...	1100	676	4.0	
	FEB.				
	24...	1205	964	0.5	
	MAR.				
	25...	1210	1260	6.5	
	APR.				
	21...	1315	1380	16.5	
	MAY				
	15...	1700	784	24.5	
	JUNE				
	13...	1230	6760	22.5	
	26...	1125	17000	24.0	
	JULY				
	18...	1015	2930	25.5	
	AUG.				
	20...	1515	2820	28.0	
	SEP.				
	7...	1600	899	27.0	

MISCELLANEOUS WATER TEMPERATURES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)
KANSAS RIVER BASIN				
06884200	MILL C AT WASHINGTON, KS			(LAT 39 48 50 LONG 097 02 20)
	OCT., 1974			
	24...	0915	3.8	16.0
	NOV.			
	19...	1230	7.8	8.5
	DEC.			
	17...	1040	11	1.5
	JAN., 1975			
	21...	1005	18	0.
	FEB.			
	20...	1405	20	0.
	MAR.			
	20...	1220	11	6.0
	APR.			
	11...	1110	32	9.0
	MAY			
	22...	1044	9.7	24.0
	JUNE			
	17...	1030	30	21.0
	JULY			
	24...	1000	24	24.0
	AUG.			
	22...	1200	3.6	27.5
	SEP.			
	23...	1020	1.9	13.0
06884400	L BLUE R NR BARNES, KS			(LAT 39 46 33 LONG 096 51 29)
	OCT., 1974			
	23...	1550	124	19.0
	NOV.			
	20...	1540	170	9.0
	DEC.			
	17...	1220	178	2.0
	JAN., 1975			
	21...	1200	172	0.5
	FEB.			
	20...	1645	193	0.5
	MAR.			
	20...	1520	205	8.5
	APR.			
	22...	1245	329	16.0
	MAY			
	22...	1245	204	26.5
	JUNE			
	4...	1130	3860	20.0
	17...	1330	532	25.0
	JULY			
	24...	1330	7380	25.0
	AUG.			
	22...	0900	248	26.0
	SEP.			
	23...	1300	128	19.0
06885500	BLACK VERMILLION R NR FRANKFORT, KS			(LAT 39 41 03 LONG 096 26 15)
	OCT., 1974			
	23...	1320	5.2	15.0
	NOV.			
	21...	0915	17	50.0
	DEC.			
	19...	1120	21	0.5
	JAN., 1975			
	23...	1210	25	0.
	FEB.			
	21...	1100	39	1.0
	MAR.			
	21...	1235	101	9.0
	APR.			
	28...	1430	76	18.5
	MAY			
	28...	1420	70	19.0
	JUNE			
	3...	1830	5690	17.5
	17...	1715	98	27.0
	AUG.			
	4...	1435	14	26.0
	21...	1225	9.8	26.0
	SEP.			
	29...	1650	8.9	16.0

MISCELLANEOUS WATER TEMPERATURES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

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	DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)
KANSAS RIVER BASIN				
06887000	BIG BLUE R NR MANHATTAN, KS			(LAT 39 14 14 LONG 096 34 16)
	OCT., 1974			
	9...	1100	296	16.5
	16...	1455	52	15.5
	NOV.			
	14...	1050	949	11.0
	DEC.			
	10...	1530	211	5.0
	JAN., 1975			
	10...	0910	118	3.0
	FEB.			
	11...	1530	16	4.0
	MAR.			
	21...	1600	15	13.5
	21...	1600	15	13.5
	APR.			
	11...	1010	8410	6.0
	MAY			
	16...	1050	763	16.0
	JULY			
	16...	1120	2360	25.0
	AUG.			
	18...	1535	732	25.5
	SEP.			
	19...	1045	198	21.0
06887500	KANSAS R AT WAMEGO, KS			(LAT 39 11 52 LONG 096 18 16)
	OCT., 1974			
	30...	1230	2620	19.0
	NOV.			
	25...	1200	2800	8.0
	DEC.			
	19...	1115	1190	3.0
	JAN., 1975			
	14...	1520	721	0.
	FEB.			
	12...	1430	1280	0.
	MAR.			
	31...	1140	1880	9.0
	APR.			
	30...	1155	4190	17.0
	MAY			
	27...	1500	928	25.0
	JULY			
	2...	1300	14600	25.5
	AUG.			
	22...	1135	3340	30.0
	SEP.			
	18...	1220	1190	21.0
06888500	MILL C AT PAXICO, KS			(LAT 39 03 44 LONG 096 10 52)
	OCT., 1974			
	2...	1410	23	14.0
	NOV.			
	8...	1420	274	10.0
	DEC.			
	19...	0950	87	2.0
	JAN., 1975			
	16...	1000	131	0.
	FEB.			
	5...	1140	460	0.
	MAR.			
	10...	1255	150	2.5
	APR.			
	11...	1010	335	9.0
	MAY			
	7...	0945	162	19.0
	JUNE			
	13...	0950	436	20.0
	JULY			
	8...	1350	116	27.0
	AUG.			
	7...	1350	34	25.0
	SEP.			
	8...	1125	30	22.5

MISCELLANEOUS WATER TEMPERATURES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)
KANSAS RIVER BASIN				
06889000	KANSAS R AT TOPEKA, KS			(LAT 39 04 00 LONG 095 38 58)
	OCT., 1974			
	2...	1035	2460	13.0
	10...	1420	2120	19.0
	25...	1010	1610	17.0
	NOV.			
	8...	1020	3590	9.5
	26...	1020	3420	5.5
	DEC.			
	19...	1350	1610	1.5
	JAN., 1975			
	21...	1550	1750	2.5
	FEB.			
	21...	0955	2000	1.0
	MAR.			
	28...	1000	3000	6.0
	APR.			
	11...	1345	6370	10.0
	25...	0925	4840	18.0
	MAY			
	8...	1450	4920	21.0
	23...	1100	2360	23.0
	JUNE			
	6...	0940	14500	23.0
	20...	0910	15800	24.0
	JULY			
	3...	0920	15200	26.0
	18...	0910	6780	26.5
	AUG.			
	1...	0910	6780	26.5
	22...	1410	3960	29.0
	SEP.			
	2...	1340	2310	28.0
	19...	0915	1450	17.5
06889100	SOLDIER C NR GOFF, KS			(LAT 39 37 27 LONG 095 57 57)
	NOV., 1974			
	12...	1110	0.03	5.0
	DEC.			
	17...	1510	0.02	0.5
	FEB., 1975			
	3...	1300	0.07	0.5
	MAR.			
	12...	1440	0.08	4.5
	APR.			
	8...	1100	0.58	6.5
	18...	1050	4.6	11.0
	MAY			
	5...	1540	0.06	25.0
	JUNE			
	11...	1415	1.7	18.0
	18...	1130	108	19.0
	18...	1150	81	19.0
	18...	1212	52	19.0
06889120	SOLDIER C NR BANCROFT, KS			(LAT 39 35 42 LONG 095 58 17)
	OCT., 1974			
	8...	1620	0.13	15.0
	NOV.			
	12...	1220	0.24	7.5
	DEC.			
	18...	0845	0.22	0.5
	JAN., 1975			
	14...	1045	0.19	0.
	FEB.			
	4...	0950	2.0	0.5
	MAR.			
	12...	1350	0.82	5.0
	APR.			
	8...	1300	3.1	7.0
	18...	1120	50	11.5
	MAY			
	5...	1505	0.45	26.0
	JUNE			
	11...	1245	23	18.0
	18...	1300	571	19.0
	JULY			
	9...	1705	0.16	26.0
	AUG.			
	5...	1410	0.01	32.0

	DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (NEG C)
KANSAS RIVER BASIN				
06889140	SOLDIER C NR SOLDIER, KS			(LAT 39 33 57 LONG 095 57 45)
	OCT., 1974			
	9...	1100	0.40	14.0
	NOV.			
	12...	1405	0.74	8.5
	DEC.			
	18...	0940	0.49	0.5
	JAN., 1975			
	14...	1250	0.59	0.5
	FEB.			
	4...	1115	5.6	1.0
	MAR.			
	12...	1220	1.4	3.0
	APR.			
	8...	1425	5.4	8.5
	18...	1200	70	11.5
	MAY			
	5...	1340	1.2	22.0
	30...	1110	34	17.0
	JUNE			
	9...	1145	100	19.0
	11...	1030	53	15.5
	18...	1345	79	19.5
	JULY			
	9...	1325	0.76	26.0
	AUG.			
	9...	1330	0.30	27.0
	SEP.			
	10...	1030	0.18	22.0
06889160	SOLDIER C NR CIRCLEVILLE, KS			(LAT 39 27 47 LONG 095 57 00)
	OCT., 1974			
	9...	1230	0.90	14.0
	NOV.			
	12...	1545	2.0	8.5
	DEC.			
	18...	1040	1.9	1.0
	JAN., 1975			
	14...	1435	1.7	0.
	FEB.			
	4...	1305	17	1.0
	MAR.			
	12...	1040	4.2	2.0
	APR.			
	8...	1600	11	9.5
	18...	1215	362	11.5
	MAY			
	6...	1210	5.3	23.0
	30...	1020	218	16.5
	JUNE			
	9...	1100	900	19.5
	10...	1030	64	17.0
	18...	1505	3040	19.5
	JULY			
	9...	1105	5.3	26.0
	AUG.			
	5...	1030	1.8	23.5
	SEP.			
	10...	0855	1.6	22.0
06889180	SOLDIER C NR ST CLERE, KS			(LAT 39 22 33 LONG 095 55 05)
	OCT., 1974			
	9...	1445	2.6	12.0
	NOV.			
	13...	1205	5.2	7.0
	DEC.			
	16...	1200	4.4	1.0
	JAN., 1975			
	15...	1050	4.8	0.
	FEB.			
	4...	1500	58	5.0
	MAR.			
	11...	1040	8.7	1.5
	APR.			
	10...	1455	14	10.0
	10...	1500	587	11.5
	MAY			
	5...	1105	19	18.5
	JUNE			
	13...	1530	108	21.0
	JULY			
	7...	1200	17	24.5
	AUG.			
	4...	1310	5.4	25.5
	SEP.			
	9...	1415	5.0	23.0

MISCELLANEOUS WATER TEMPERATURES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)
KANSAS RIVER BASIN			
068A9200 SOLDIER C NR DELIA, KS			(LAT 39 12 08 LONG 095 52 25)
OCT., 1974			
9...	1630	3.6	15.0
NOV.			
13...	1430	11	7.0
DEC.			
18...	1210	8.8	0.5
JAN., 1975			
15...	1245	6.9	0.5
FEB.			
13...	1020	14	0.
MAR.			
11...	1220	23	2.0
APR.			
10...	1700	41	10.5
MAY			
7...	1550	33	21.0
30...	1740	2860	16.5
31...	0820	358	16.0
JUNE			
4...	0820	295	19.5
9...	1050	2060	20.0
JULY			
7...	1420	25	27.5
AUG.			
8...	1035	7.1	23.0
SEP.			
9...	1115	7.3	22.0
068A9500 SOLDIER C NR TOPEKA, KS			(LAT 39 06 00 LONG 095 43 27)
OCT., 1974			
10...	1200	9.8	18.5
NOV.			
15...	1055	20	5.5
DEC.			
18...	1440	18	0.5
JAN., 1975			
15...	1510	23	0.5
FEB.			
5...	1515	148	0.
MAR.			
10...	0920	41	0.5
APR.			
9...	1040	132	10.0
MAY			
8...	1020	58	19.5
30...	2035	3420	18.5
31...	0640	1290	16.0
JUNE			
10...	1255	4140	17.5
JULY			
7...	1620	53	31.5
AUG.			
7...	1600	14	30.5
SEP.			
8...	1500	18	28.0
06890100 DELAWARE R NR MUSCOTAH, KS			(LAT 39 31 17 LONG 095 31 57)
OCT., 1974			
7...	1535	8.0	16.5
NOV.			
14...	1140	18	4.0
DEC.			
17...	1110	12	0.5
JAN., 1975			
13...	1110	18	0.5
FEB.			
3...	1045	27	0.5
MAR.			
13...	1220	34	0.5
APR.			
7...	1130	67	9.0
MAY			
6...	1430	41	24.0
30...	1330	26	19.5
JUNE			
12...	1250	742	18.0
JULY			
10...	1420	31	28.5
AUG.			
6...	1545	6.5	28.5
SEP.			
12...	1245	89	17.5

MISCELLANEOUS WATER TEMPERATURES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

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	DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)
KANSAS RIVER BASIN				
06891000	KANSAS R AT LECOMPTON, KS			(LAT 39 03 07 LONG 095 23 15)
	OCT., 1974			
	10...	1000	2680	17.0
	NOV.			
	15...	1340	3200	6.0
	DEC.			
	30...	1310	1920	2.5
	JAN., 1975			
	28...	1415	1650	3.5
	FEB.			
	25...	1525	3220	5.0
	MAR.			
	14...	1240	3060	4.0
	APR.			
	10...	1440	6900	10.5
	MAY			
	14...	1015	3310	20.0
	JUNE			
	24...	1020	21500	24.5
	JULY			
	18...	1040	8110	26.5
	AUG.			
	15...	0945	2750	25.0
	SEP.			
	26...	1510	1660	18.5
06891483	WAKARUSA R BL CLINTON DAM, KS			(LAT 38 55 14 LONG 095 17 17)
	OCT., 1974			
	16...	1605	158	13.0
	JAN., 1975			
	14...	1600	263	1.0
	FEB.			
	12...	1600	175	1.0
	MAR.			
	19...	1510	370	4.0
	APR.			
	17...	1415	460	13.5
	MAY			
	16...	1155	94	21.0
	JUNE			
	12...	1415	939	20.5
	JULY			
	14...	1445	18	25.0
	AUG.			
	13...	1450	2.7	27.5
	SEP.			
	15...	1030	7.0	17.0
06892000	STRANGER C NR TONGANOXIE, KS			(LAT 39 06 59 LONG 095 00 39)
	OCT., 1974			
	16...	1310	40	12.0
	NOV.			
	19...	1015	60	8.5
	DEC.			
	17...	1450	51	1.0
	JAN., 1975			
	13...	1515	221	0.
	FEB.			
	13...	1500	81	0.
	MAR.			
	12...	1510	110	3.0
	APR.			
	18...	1315	165	10.5
	25...	1115	2470	18.0
	MAY			
	14...	1425	101	21.0
	JUNE			
	19...	1515	97	26.5
	JULY			
	14...	0940	11	25.5
	AUG.			
	14...	1000	2.0	25.0
	SEP.			
	16...	0935	38	17.0

MISCELLANEOUS WATER TEMPERATURES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)
KANSAS RIVER BASIN				
06892350	KANSAS R AT DESOTO, KS			(LAT 38 59 00 LONG 094 57 52)
	OCT., 1974			
	3...	1055	2830	14.5
	18...	1345	3350	16.0
	NOV.			
	8...	1330	4700	11.0
	22...	1350	3230	10.5
	DEC.			
	12...	1435	2550	4.5
	JAN., 1975			
	16...	1320	3100	0.5
	FEB.			
	8...	1430	2700	2.5
	MAR.			
	11...	1050	3740	2.0
	20...	1410	4530	5.0
	31...	1050	4170	7.0
	APR.			
	22...	1515	6770	18.0
	MAY			
	1...	1345	7530	19.0
	29...	1150	9180	20.5
	JUNE			
	13...	1405	28000	23.5
	JULY			
	1...	1020	17400	26.0
	11...	1115	21600	25.5
	25...	1025	3650	25.5
	AUG.			
	8...	1040	3310	25.0
	8...	1040	3310	25.0
	29...	1005	3660	23.0
	SEP.			
	12...	1120	5280	19.0
	19...	1440	1990	20.5
BLUE RIVER BASIN				
06893040	BLUE R NR STANLEY, KS			(LAT 38 48 45 LONG 094 40 31)
	OCT., 1974			
	17...	0920	1.9	14.5
	NOV.			
	20...	1030	11	9.0
	DEC.			
	16...	1125	17	2.5
	JAN., 1975			
	13...	1310	21	1.0
	FEB.			
	10...	0930	20	0.5
	MAR.			
	12...	1010	30	2.5
	APR.			
	24...	1310	33	19.5
	MAY			
	15...	1135	5.6	20.5
	JUNE			
	11...	1325	56	19.0
	JULY			
	17...	1020	0.21	25.5
	AUG.			
	15...	1005	0.39	25.0
	SEP.			
	11...	1525	3.4	21.0
INDIAN C AT OVERLAND PARK, KS				
06893300	INDIAN C AT OVERLAND PARK, KS			(LAT 38 56 30 LONG 094 40 10)
	OCT., 1974			
	17...	1220	2.4	15.5
	NOV.			
	20...	1405	8.0	10.0
	DEC.			
	16...	1340	12	2.5
	JAN., 1975			
	13...	1110	13	0.
	FEB.			
	10...	1130	13	0.5
	MAR.			
	12...	1250	20	2.5
	APR.			
	24...	1440	42	19.5
	MAY			
	15...	1430	5.0	20.0
	JUNE			
	11...	1135	42	19.0
	JULY			
	17...	1210	0.24	26.0
	AUG.			
	15...	1240	2.6	25.5
	SEP.			
	11...	1140	51	20.0

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	DATE	TIME	DIS- CHARGE (CFS)	TEMP- FRATURE (DEG C)
BLUE RIVER BASIN				
06893350	TOMAHAWK C NR OVERLAND PARK, KS			(LAT 38 54 47 LONG 094 37 54)
	OCT., 1974			
	17...	1040	1.2	15.0
	NOV.			
	20...	1220	5.4	9.0
	DEC.			
	16...	1225	9.4	2.5
	JAN., 1975			
	13...	1225	11	0.5
	FEB.			
	10...	1030	9.3	0.5
	MAR.			
	12...	1140	15	2.5
	APR.			
	24...	1400	17	20.5
	MAY			
	15...	1345	3.0	20.0
	JUNE			
	19...	1035	3.6	24.5
	JULY			
	17...	1105	0.10	25.0
	AUG.			
	15...	1115	0.20	23.5
	SEP.			
	11...	1355	0.94	20.5
OSAGE RIVER BASIN				
06910800	MARAIS DES CYGNES R NR READING, KS			(LAT 38 34 00 LONG 095 57 50)
	OCT., 1974			
	15...	1130	117	11.5
	NOV.			
	18...	1410	50	7.5
	DEC.			
	13...	1030	113	2.2
	JAN., 1975			
	14...	1050	70	0.5
	FEB.			
	19...	1055	59	0.5
	MAR.			
	13...	1120	72	2.5
	APR.			
	17...	1055	134	14.0
	MAY			
	13...	1140	25	19.5
	JUNE			
	3...	1035	2260	16.5
	17...	1330	4730	20.0
	JULY			
	16...	1435	11	27.0
	AUG.			
	11...	1410	2.0	29.0
	SEP.			
	17...	1220	2.6	19.0
06911500	SALT C NR LYNDON, KS			(LAT 38 36 32 LONG 095 38 17)
	OCT., 1974			
	15...	1615	47	12.5
	NOV.			
	18...	1115	30	8.0
	DEC.			
	13...	1340	62	3.0
	JAN., 1975			
	14...	1230	29	0.5
	FEB.			
	19...	1515	32	1.0
	MAR.			
	13...	1510	59	2.5
	APR.			
	17...	1320	68	16.0
	MAY			
	13...	1440	12	19.0
	28...	1010	1920	19.5
	28...	1400	2180	19.5
	28...	1400	2180	19.5
	JUNE			
	3...	1410	1400	17.0
	17...	1120	8270	19.0
	JULY			
	16...	1010	3.0	26.0
	AUG.			
	11...	0950	0.32	26.5
	SEP.			
	17...	1545	0.40	21.5

MISCELLANEOUS WATER TEMPERATURES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)
OSAGE RIVER BASIN				
06911900	DRAGON C NR BURLINGAME, KS			(LAT 38 42 30 LONG 095 50 20)
	OCT., 1974			
	15...	0935	51	16.0
	NOV.			
	18...	1625	33	8.0
	DEC.			
	13...	0840	51	2.2
	JAN., 1975			
	14...	0845	40	0.5
	FEB.			
	19...	1320	34	1.0
	MAR.			
	13...	0945	44	2.5
	APR.			
	17...	0915	89	13.5
	MAY			
	15...	1520	17	20.0
	28...	1200	1200	19.0
	JUNE			
	3...	1210	516	16.5
	17...	1015	4700	20.5
	JULY			
	16...	1300	5.3	27.5
	AUG.			
	11...	1200	0.34	31.5
	SEP.			
	17...	1025	0.64	19.0
06912500	HUNDRED AND TEN MILE C NR QUENEMO, KS			(LAT 38 38 41 LONG 095 33 34)
	OCT., 1974			
	17...	1000	21	15.0
	NOV.			
	18...	1620	1240	9.0
	DEC.			
	13...	1435	22	4.0
	13...	1600	217	4.0
	JAN., 1975			
	9...	1430	512	2.0
	FEB.			
	20...	1520	414	2.0
	MAR.			
	13...	1600	143	4.0
	APR.			
	15...	1405	501	10.0
	MAY			
	15...	1220	93	19.5
	JUNE			
	25...	1040	26	19.5
	26...	0835	2550	21.5
	JULY			
	15...	1500	69	21.5
	AUG.			
	12...	1030	17	23.0
	SEP.			
	17...	1005	16	21.5
06913000	MARAIS DES CYGNES R NR POMONA, KS			(LAT 38 35 03 LONG 095 27 12)
	OCT., 1974			
	17...	1320	98	14.0
	JAN., 1975			
	14...	1415	720	1.5
	FEB.			
	20...	1335	1200	1.5
	MAR.			
	18...	1330	1640	3.0
	APR.			
	15...	1630	1210	11.0
	MAY			
	15...	0950	174	19.0
	JUNE			
	12...	1030	2840	20.0
	17...	1540	23100	19.5
	27...	1450	4460	26.0
	30...	1450	4440	23.0
	JULY			
	15...	1215	250	23.5
	AUG.			
	12...	1300	38	27.0
	SEP.			
	17...	1415	36	19.5

	DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)
OSAGE RIVER BASIN				
06913500	MARIAS DES CGYNES R NR OTTAWA, KS			(LAT 38 37 00 LONG 095 15 25)
	OCT., 1974			
	16...	1430	187	14.5
	NOV.			
	1...	1135	5450	16.0
	4...	1410	8020	11.5
	18...	1330	2540	8.5
	DEC.			
	16...	1325	871	2.0
	JAN., 1975			
	14...	0955	689	1.0
	FEB.			
	21...	1105	2030	3.0
	MAR.			
	18...	1545	1890	3.5
	APR.			
	16...	1015	1400	11.0
	MAY			
	16...	1025	201	20.5
	JUNE			
	12...	1155	3570	20.5
	18...	1240	15300	20.5
	JULY			
	15...	1030	282	23.0
	AUG.			
	13...	1100	45	26.0
	SEP.			
	17...	1630	41	20.5
06914000	POTTAWATOMIE C NR GARNETT, KS			(LAT 38 20 01 LONG 095 14 55)
	OCT., 1974			
	1...	1605	7.4	26.0
	24...	1515	4.1	3.0
	NOV.			
	4...	1110	5640	9.0
	21...	1250	64	8.5
	DEC.			
	19...	0925	82	2.0
	JAN., 1975			
	23...	1240	56	0.5
	MAR.			
	3...	1100	178	4.5
	17...	1050	2540	6.0
	18...	1100	781	7.5
	27...	1410	107	8.0
	MAY			
	22...	1415	7.3	26.0
	JUNE			
	26...	1335	94	26.0
	JULY			
	24...	1440	1.5	28.0
	AUG.			
	21...	1440	25	27.0
	SEP.			
	25...	1200	1.3	16.0
06915000	BIG BULL C NR HILLSDALE, KS			(LAT 38 38 12 LONG 094 53 29)
	OCT., 1974			
	3...	1140	0.76	15.5
	25...	1050	0.72	16.0
	31...	1420	4110	13.0
	NOV.			
	21...	1610	28	8.5
	DEC.			
	19...	1310	34	2.0
	JAN., 1975			
	23...	1525	42	0.5
	FEB.			
	21...	1505	432	4.0
	MAR.			
	18...	1400	210	8.0
	APR.			
	28...	1200	42	21.0
	MAY			
	23...	1200	8.5	24.0
	JUNE			
	27...	1110	5.0	26.0
	JULY			
	25...	1115	0.17	22.5
	SEP.			
	25...	1408	0.54	17.5

MISCELLANEOUS WATER TEMPERATURES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	
OSAGE RIVER BASIN					
06916600	MARAI	DES CYGNES R NR KS-MO STATE LINE, K			(LAT 38 13 21 LONG 094 40 04)
	MAY , 1975				
	22...	1000	238	24.0	
	JUNE				
	24...	1100	80	29.0	
	SEP.				
	25...	0855	86	16.5	
06917000	L OSAGE R AT FULTON, KS				(LAT 38 01 09 LONG 094 42 48)
	OCT., 1974				
	24...	0915	13	13.0	
	NOV.				
	21...	0803	113	8.0	
	DEC.				
	18...	1430	147	2.0	
	JAN., 1975				
	23...	0900	87	0.5	
	FEB.				
	21...	0915	329	4.0	
	MAR.				
	27...	0820	136	8.0	
	APR.				
	24...	0900	97	17.5	
	MAY				
	22...	0830	17	23.5	
	JUNE				
	26...	0910	110	25.0	
	JULY				
	24...	0850	2.7	26.5	
	AUG.				
	21...	0850	25	25.0	
	SEP.				
	24...	1530	3.6	16.0	
06917380	MARMATON R NR MARMATON, KS				(LAT 37 49 03 LONG 094 47 30)
	OCT., 1974				
	23...	1755	43	13.5	
	NOV.				
	3...	1430	22300	15.0	
	20...	1625	134	9.0	
	DEC.				
	18...	1205	142	2.5	
	JAN., 1975				
	22...	1505	76	1.0	
	FEB.				
	20...	1540	266	4.0	
	MAR.				
	26...	1440	92	8.5	
	APR.				
	23...	1720	55	18.0	
	MAY				
	21...	1615	18	24.5	
	JUNE				
	11...	1235	5230	19.5	
	25...	1515	80	25.5	
	JULY				
	23...	1540	1.7	29.5	
	AUG.				
	20...	1505	1.2	29.0	
	SEP.				
	24...	1230	0.98	15.5	
ARKANSAS RIVER BASIN					
07138000	ARKANSAS R AT SYRACUSE, KS				(LAT 37 57 58 LONG 101 45 23)
	OCT., 1974				
	1...	1200	0.14	13.5	
	15...	1200	0.31	21.5	
	NOV.				
	18...	1245	0.74	14.0	
	DEC.				
	11...	1220	0.90	6.0	
	JAN., 1975				
	7...	1133	1.0	5.0	
	23...	1310	9.4	4.5	
	FEB.				
	11...	1500	36	8.0	
	21...	1030	24	2.5	
	MAR.				
	11...	1100	37	1.0	
	24...	1530	25	13.5	
	APR.				
	8...	1210	25	11.0	
	17...	1535	77	23.5	
	MAY				
	5...	1135	14	19.0	
	15...	1300	23	2.5	
	JUNE				
	3...	1305	40	27.0	
	26...	1435	253	23.5	
	JULY				
	8...	1245	97	23.0	
	21...	1555	15	23.0	
	22...	1152	335	23.0	
	AUG.				
	18...	1645	274	26.0	
	SEP.				
	4...	1420	3.7	28.0	
	17...	1195	5.6	24.5	

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	DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (NEG C)	
ARKANSAS RIVER BASIN					
07139500	ARKANSAS R AT DODGE CITY, KS				(LAT 37 44 51 LONG 100 01 08)
	NOV., 1974				
	20...	1430	2.2	11.0	
	DEC.				
	13...	1130	2.1	9.0	
	JAN., 1975				
	14...	1500	2.2	0.5	
	FER.				
	24...	1455	2.2	8.5	
	MAR.				
	19...	1140	20	10.5	
	APR.				
	9...	1325	24	16.5	
	MAY				
	6...	1335	20	22.5	
	JUNE				
	4...	1420	19	26.5	
	JULY				
	9...	1335	20	30.0	
	AUG.				
	19...	1600	0.18	26.5	
07139800	MULBERRY C NR DODGE CITY, KS				(LAT 37 35 53 LONG 100 00 52)
	MAY, 1975				
	13...	1730	1.7	15.0	
	JUNE				
	7...	1445	198	17.5	
	7...	1750	136	23.0	
	8...	1345	11	24.0	
	AUG.				
	19...	1345	0.59	25.5	
07140000	ARKANSAS R NR KINSLEY, KS				(LAT 37 55 33 LONG 099 22 31)
	OCT., 1974				
	4...	1355	42	21.5	
	NOV.				
	4...	1405	53	11.0	
	DEC.				
	12...	1403	48	6.5	
	JAN., 1975				
	8...	1415	55	6.0	
	FER.				
	24...	1203	54	2.5	
	MAR.				
	17...	1400	52	9.5	
	APR.				
	3...	1415	45	8.5	
	MAY				
	7...	1420	54	19.5	
	JUNE				
	5...	0910	51	19.0	
	24...	1600	36	24.5	
	25...	1450	18	26.5	
	JULY				
	9...	1715	93	28.5	
	29...	1350	20	28.0	
	AUG.				
	20...	1000	22	22.5	
	SEP.				
	10...	1500	11	26.0	
07140700	GUZZLERS GULCH NR NESS CITY, KS				(LAT 38 17 40 LONG 099 57 10)
	JUNE, 1975				
	23...	1350	456	22.0	
	23...	1850	322	22.0	
	23...	2120	286	22.0	
	24...	0845	112	21.0	
	26...	0905	20	22.0	
	27...	0905	8.3	22.0	
07141200	PAWNEE R NR LARNED, KS				(LAT 38 12 00 LONG 099 20 50)
	MAY, 1975				
	7...	1035	4.1	19.5	
	JUNE				
	25...	1120	7.5	23.0	
	30...	1300	2.0	26.5	

MISCELLANEOUS WATER TEMPERATURES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)
ARKANSAS RIVER BASIN			
07141300	ARKANSAS R AT GREAT BEND, KS		(LAT 38 21 11 LONG 098 45 50)
OCT., 1974			
18...	1400	46	19.0
NOV.			
13...	0920	78	8.0
DEC.			
12...	0910	78	3.0
JAN., 1975			
14...	0950	63	0.
FEB.			
25...	0935	85	3.5
MAR.			
25...	0925	51	4.0
APR.			
10...	1105	32	9.5
MAY			
15...	0920	32	18.0
JUNE			
5...	1300	49	27.5
18...	0840	56	23.0
30...	1600	377	29.0
JULY			
18...	0830	37	21.5
AUG.			
14...	0825	13	20.5
SEP.			
18...	0905	30	19.0
07141780	WALNUT C NR RUSH CENTER, KS		(LAT 38 28 07 LONG 099 22 07)
OCT., 1974			
17...	1410	0.62	15.0
NOV.			
12...	1545	0.79	7.0
DEC.			
11...	1430	1.6	3.0
JAN., 1975			
9...	1410	3.0	2.0
FEB.			
19...	1440	3.5	1.0
MAR.			
24...	1510	4.4	10.0
APR.			
9...	1515	4.3	14.5
MAY			
14...	1610	2.8	20.5
JUNE			
17...	1440	5.7	25.0
JULY			
17...	1405	1.5	24.5
AUG.			
13...	1505	0.03	26.5
SEP.			
17...	1655	0.07	20.0
07141900	WALNUT C AT ALBERT, KS		(LAT 38 27 40 LONG 099 00 50)
OCT., 1974			
18...	0920	6.6	12.0
NOV.			
13...	1220	3.2	7.5
DEC.			
12...	1150	2.3	2.5
JAN., 1975			
14...	1250	4.5	1.0
FEB.			
25...	1305	6.9	1.5
MAR.			
25...	1230	7.7	17.0
APR.			
10...	1630	5.9	13.0
MAY			
15...	1250	5.5	20.0
JUNE			
18...	1110	8.6	24.0
JULY			
18...	1130	4.0	24.0
AUG.			
14...	1110	0.17	24.0
SEP.			
18...	1430	0.18	22.0

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DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)
ARKANSAS RIVER BASIN			
07142015 WALNUT C NR HEIZER, KS			(LAT 38 25 11 LONG 098 50 49)
OCT., 1974			
6...	1250	386	12.5
6...	1545	640	12.5
7...	1400	887	11.0
22...	1000	6.9	13.5
NOV.			
13...	1510	5.3	7.0
DEC.			
12...	1430	3.8	2.0
JAN., 1975			
14...	1600	6.3	0.
FEB.			
25...	1610	8.1	1.0
MAR.			
25...	1550	8.6	8.5
APR.			
11...	1000	6.9	11.0
MAY			
15...	1710	6.9	20.0
JUNE			
18...	1445	9.5	25.0
JULY			
22...	0820	4.3	27.0
AUG.			
14...	1405	0.15	26.0
SEP.			
18...	1205	0.24	19.0
07142300 RATTLESNAKE C NR MACKSVILLE, KS			(LAT 37 52 20 LONG 098 52 30)
OCT., 1974			
9...	0930	36	14.5
NOV.			
6...	1500	44	10.0
DEC.			
12...	1130	43	1.0
JAN., 1975			
8...	1230	44	5.0
FEB.			
13...	1240	43	3.0
MAR.			
26...	1200	40	10.0
APR.			
17...	1115	42	15.0
MAY			
27...	1450	34	21.0
JUNE			
17...	1150	56	22.0
25...	1250	2160	25.5
27...	1330	340	24.0
JULY			
8...	1420	61	26.0
SEP.			
10...	1110	35	22.0
07142575 RATTLESNAKE C NR ZENITH, KS			(LAT 38 06 01 LONG 098 30 32)
OCT., 1974			
8...	1435	45	20.0
NOV.			
6...	1320	80	7.0
DEC.			
4...	1130	86	1.0
JAN., 1975			
21...	1035	83	2.5
FEB.			
27...	0930	104	3.0
MAR.			
27...	1000	88	8.5
APR.			
23...	1410	77	24.0
MAY			
27...	1315	50	21.0
JUNE			
27...	1630	781	24.0
JULY			
8...	1200	109	27.0
AUG.			
28...	1315	64	26.0
SEP.			
25...	1035	43	12.5

MISCELLANEOUS WATER TEMPERATURES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	
ARKANSAS RIVER BASIN					
07142620	RATTLESNAKE C NR RAYMOND, KS				(LAT 38 13 50 LONG 098 25 00)
	OCT., 1974				
	8...	1135	22	13.5	
	NOV.				
	6...	1120	67	7.0	
	DEC.				
	4...	0950	66	1.0	
	JAN., 1975				
	21...	1140	107	2.5	
	FEB.				
	27...	1040	131	4.0	
	MAR.				
	19...	1235	92	11.0	
	APR.				
	23...	1120	95	19.0	
	MAY				
	27...	1130	53	19.0	
	JULY				
	8...	1020	209	27.0	
	SEP.				
	3...	1340	74	27.0	
07142860	COW C NR CLAFLIN, KS				(LAT 38 31 20 LONG 098 35 00)
	OCT., 1974				
	21...	1355	0.21	14.0	
	NOV.				
	14...	1130	0.72	5.0	
	DEC.				
	17...	1335	0.79	1.5	
	JAN., 1975				
	13...	1335	1.0	1.0	
	FEB.				
	24...	1405	1.8	1.0	
	MAR.				
	26...	1510	1.4	5.0	
	APR.				
	11...	1215	1.3	10.5	
	MAY				
	16...	1150	1.5	18.0	
	JUNE				
	19...	1150	1.5	23.0	
	JULY				
	21...	1230	0.37	27.0	
	AUG.				
	15...	1105	35	21.0	
	SEP.				
	19...	1500	0.76	17.5	
07142900	BLOOD C NR BOYD, KS				(LAT 38 32 10 LONG 098 51 35)
	OCT., 1974				
	21...	1610	0.81	14.0	
	NOV.				
	14...	0925	0.92	3.5	
	DEC.				
	17...	1545	1.1	0.	
	JAN., 1975				
	13...	1540	1.4	0.	
	FEB.				
	24...	1615	1.2	1.0	
	MAR.				
	26...	0930	1.2	3.5	
	APR.				
	11...	1255	1.2	9.0	
	MAY				
	16...	0900	1.2	15.0	
	JUNE				
	19...	0840	1.6	22.0	
	JULY				
	21...	1440	0.70	26.0	
	AUG.				
	15...	0840	0.28	19.0	
	SEP.				
	19...	1155	0.25	15.0	
07143300	COW C NR LYONS, KS				(LAT 38 18 30 LONG 098 11 30)
	OCT., 1974				
	23...	1310	17	16.0	
	NOV.				
	19...	1045	22	10.5	
	JAN., 1975				
	8...	1010	22	1.0	
	FEB.				
	27...	1320	142	5.0	
	MAR.				
	27...	1240	54	8.0	
	APR.				
	24...	1130	38	19.0	
	MAY				
	27...	0950	15	18.5	
	JUNE				
	30...	1135	1440	25.5	
	JULY				
	28...	1010	18	24.0	
	AUG.				
	28...	0920	13	23.0	
	SEP.				
	24...	1035	25	14.5	

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	DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	
	ARKANSAS RIVER BASIN				
07143330	ARKANSAS R NR HUTCHINSON, KS			(LAT 37 56 47 LONG 097 46 29)	
	OCT., 1974				
	10...	1330	1460	17.5	
	NOV.				
	8...	1320	403	11.0	
	DEC.				
	13...	1125	312	4.5	
	JAN., 1975				
	9...	1320	316	4.0	
	FEB.				
	26...	1240	443	6.5	
	MAR.				
	20...	1250	409	16.5	
	APR.				
	9...	1250	347	15.0	
	MAY				
	14...	0950	331	15.5	
	JUNE				
	13...	1120	584	24.0	
	27...	0940	243	25.0	
	AUG.				
	29...	1345	504	28.5	
	SEP.				
	11...	1335	273	22.5	
07143665	L ARKANSAS R AT ALTA MILLS, KS			(LAT 38 06 44 LONG 097 35 30)	
	SEP., 1974				
	20...	1430	14	19.0	
	OCT.				
	25...	1410	16	18.0	
	NOV.				
	20...	1340	24	8.0	
	DEC.				
	13...	1400	27	4.0	
	JAN., 1975				
	20...	1100	25	1.0	
	FEB.				
	26...	1020	35	1.0	
	MAR.				
	20...	1030	162	10.0	
	MAY				
	29...	1045	250	18.0	
	JULY				
	10...	1300	43	25.0	
	AUG.				
	13...	1335	11	26.0	
	SEP.				
	4...	1350	35	26.5	
	26...	1350	11	15.0	
07144200	L ARKANSAS R AT VALLEY CENTER, KS			(LAT 37 49 56 LONG 097 23 16)	
	OCT., 1974				
	10...	1405	168	18.0	
	NOV.				
	13...	1300	147	10.0	
	DEC.				
	6...	1030	84	8.0	
	JAN., 1975				
	14...	1130	103	1.0	
	FEB.				
	13...	1140	126	3.0	
	MAR.				
	21...	1515	256	14.0	
	APR.				
	17...	1150	211	17.0	
	MAY				
	21...	1725	68	27.0	
	JUNE				
	3...	1230	2080	17.5	
	23...	1400	2570	21.0	
	JULY				
	18...	1405	92	25.0	
	AUG.				
	20...	1350	70	27.0	
	SEP.				
	5...	0935	112	22.5	

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	DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (NEG C)
ARKANSAS RIVER BASIN				
07144300	ARKANSAS R AT WICHITA, KS			(LAT 37 38 41 LONG 097 20 06)
	OCT., 1974			
	11...	0920	1920	17.5
	NOV.			
	13...	1600	609	9.0
	DEC.			
	10...	1315	421	3.5
	JAN., 1975			
	9...	1420	481	5.5
	FEB.			
	13...	1415	761	3.5
	MAR.			
	24...	1420	617	10.5
	APR.			
	17...	1435	744	18.0
	MAY			
	21...	0945	394	20.0
	JUNE			
	10...	1320	5760	17.5
	JULY			
	24...	0930	524	24.0
	AUG.			
	20...	1420	502	29.5
	SEP.			
	19...	1500	370	20.0
07144550	ARKANSAS R AT DERBY, KS			(LAT 37 32 34 LONG 097 16 31)
	OCT., 1974			
	22...	1320	540	17.0
	NOV.			
	14...	1515	656	9.0
	DEC.			
	10...	1555	534	4.5
	JAN., 1975			
	9...	1100	595	5.0
	FEB.			
	20...	1020	858	1.0
	MAR.			
	28...	1420	1180	6.5
	APR.			
	23...	1205	729	20.5
	MAY			
	21...	1200	487	24.0
	JULY			
	16...	1150	838	25.0
	AUG.			
	21...	1115	485	27.0
	SEP.			
	19...	1150	456	17.0
07144780	NF MINNESCAH R AB CHENEY RE, KS			(LAT 37 50 41 LONG 097 56 09)
	OCT., 1974			
	10...	1030	44	16.5
	25...	1200	75	18.0
	NOV.			
	8...	1050	108	10.5
	20...	1100	84	6.0
	DEC.			
	3...	1330	117	0.5
	17...	1430	145	3.0
	JAN., 1975			
	9...	1120	134	4.0
	20...	1330	133	3.5
	FEB.			
	14...	1135	144	6.5
	MAR.			
	20...	1510	147	17.5
	APR.			
	8...	1310	143	14.0
	23...	1700	101	26.0
	MAY			
	14...	1135	121	17.0
	JUNE			
	12...	1135	156	21.0
	JULY			
	10...	1010	91	25.5
	28...	1405	30	31.5
	AUG.			
	13...	1100	16	26.5
	29...	1135	56	26.0
	SEP.			
	11...	1130	15	22.5
	26...	1115	22	16.0

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DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)
ARKANSAS RIVER BASIN			
07144795 NF NINNESCAH R AT CHENEY DAM, KS			(LAT 37 43 17 LONG 097 47 39)
OCT., 1974			
25...	0950	0.46	1.6
NOV.			
19...	1430	0.63	12.5
DEC.			
3...	1200	0.58	1.5
6...	1410	371	5.0
9...	1330	360	3.5
JAN., 1975			
9...	0915	189	2.0
FEB.			
14...	0955	1.1	1.0
MAR.			
21...	1130	155	5.0
APR.			
8...	1435	1.0	18.0
MAY			
28...	1340	1.5	20.0
JULY			
9...	1530	1130	25.0
28...	1515	0.91	33.0
AUG.			
12...	1520	0.84	31.0
SEP.			
4...	1035	0.72	27.0
07144850 SF SF NINNESCAH R NR PRATT, KS			(LAT 37 35 10 LONG 098 49 40)
JUNE, 1975			
17...	1345	138	22.0
18...	1150	25	24.0
07145200 SF NINNESCAH R NR MURDOCK, KS			(LAT 37 33 51 LONG 097 51 10)
OCT., 1974			
24...	1125	157	17.0
NOV.			
20...	0900	164	5.0
DEC.			
13...	0930	314	3.0
JAN., 1975			
20...	1520	169	4.5
FEB.			
26...	1555	287	9.5
MAR.			
21...	0900	227	12.0
APR.			
9...	0940	252	10.0
JUNE			
11...	1135	690	18.0
JULY			
9...	1330	147	31.0
AUG.			
13...	0850	51	23.5
SEP.			
4...	0900	62	23.0
26...	0840	74	12.0
07145500 NINNESCAH R NR PECK, KS			(LAT 37 27 34 LONG 097 25 20)
OCT., 1974			
22...	1530	139	17.0
NOV.			
14...	1005	278	6.0
DEC.			
11...	1500	976	4.5
JAN., 1975			
14...	1410	424	0.5
FEB.			
20...	1220	410	1.0
APR.			
4...	1250	328	8.5
MAY			
21...	1435	216	27.0
JUNE			
18...	1040	7190	20.0
JULY			
18...	0950	356	23.5
AUG.			
13...	1405	72	30.0
SEP.			
2...	1520	99	30.5

	DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)	
ARKANSAS RIVER BASIN					
07145700	SLATE C AT WELLINGTON, KS				(LAT 37 15 00 LONG 097 24 12)
	OCT., 1974				
	30...	1300	26	17.0	
	NOV.				
	20...	1340	14	9.5	
	DEC.				
	16...	1325	22	3.5	
	JAN., 1975				
	16...	1200	19	1.5	
	FEB.				
	25...	1320	40	3.0	
	MAR.				
	19...	1530	53	12.0	
	APR.				
	14...	1415	21	12.5	
	MAY				
	22...	1025	11	22.0	
	JUNE				
	17...	1510	18100	20.5	
	19...	1535	155	24.0	
	JULY				
	17...	1540	7.6	25.0	
	AUG.				
	21...	1430	27	25.5	
	SEP.				
	10...	1055	1.3	22.5	
07146500	ARKANSAS R AT ARKANSAS CITY, KS				(LAT 37 03 23 LONG 097 03 32)
	OCT., 1974				
	30...	0900	2240	17.0	
	NOV.				
	21...	1050	1090	9.5	
	DEC.				
	17...	0940	1900	3.0	
	JAN., 1975				
	17...	0955	1840	2.0	
	FEB., 1974				
	26...	1100	2400	4.5	
	MAR., 1975				
	18...	1250	366	11.0	
	APR.				
	15...	1010	1740	14.5	
	MAY				
	23...	1020	2390	20.5	
	AUG.				
	6...	1015	776	26.0	
	SEP.				
	3...	1325	2090	26.0	
07146570	COLE C NR DEGRAFF, KS				(LAT 37 56 50 LONG 096 46 50)
	NOV., 1974				
	15...	1425	0.67	6.0	
	DEC.				
	11...	1020	5.0	2.0	
	JAN., 1975				
	15...	1340	2.8	1.5	
	FEB.				
	19...	1210	3.9	0.	
	MAR.				
	20...	1415	6.6	14.0	
	APR.				
	8...	1150	187	8.5	
	MAY				
	20...	1315	1.8	22.0	
	JUNE				
	4...	1505	24	20.5	
	JULY				
	23...	1300	0.44	25.0	
	SEP.				
	5...	1300	0.67	23.0	
	30...	1430	0.04	16.0	
07147070	WHITEWATER R AT TOWANDA, KS				(LAT 37 47 45 LONG 097 00 45)
	OCT., 1974				
	11...	1320	21	17.0	
	NOV.				
	15...	1135	61	7.0	
	DEC.				
	17...	1415	8.2	3.0	
	JAN., 1975				
	15...	1050	78	1.0	
	FEB.				
	19...	1400	91	1.0	
	MAR.				
	21...	1240	118	13.0	
	APR.				
	16...	1055	168	14.0	
	MAY				
	20...	1540	49	22.0	
	29...	1200	55	19.0	
	JULY				
	23...	1505	46	25.0	
	AUG.				
	22...	1015	21	25.0	
	SEP.				
	4...	1430	21	26.5	

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ARKANSAS RIVER BASIN				
07147800	WALNUT R AT WINFIELD, KS			(LAT 37 13 27 LONG 096 59 40)
	OCT., 1974			
	29...	1515	311	17.5
	NOV.			
	20...	1620	463	10.0
	DEC.			
	12...	1040	6050	5.0
	JAN., 1975			
	16...	1430	563	1.5
	FEB.			
	25...	1610	1620	3.0
	MAR.			
	19...	0950	1970	10.0
	APR.			
	15...	1410	795	15.5
	MAY			
	22...	1440	381	23.0
	JUNE			
	20...	1040	5640	23.0
	AUG.			
	5...	1310	133	27.5
	SEP.			
	4...	0955	131	27.5
07149000	MEDICINE LODGE R NR KIOWA, KS			(LAT 37 02 17 LONG 098 28 04)
	OCT., 1974			
	9...	1440	77	21.5
	NOV.			
	7...	1350	187	11.5
	DEC.			
	12...	1455	183	3.5
	JAN., 1975			
	8...	1500	145	7.5
	FEB.			
	13...	1530	138	4.0
	MAR.			
	26...	1540	131	8.5
	APR.			
	16...	1510	209	23.0
	MAY			
	28...	0940	109	20.0
	JUNE			
	18...	0930	462	23.5
	JULY			
	9...	0935	111	26.5
	AUG.			
	29...	0920	15	28.0
	SEP.			
	11...	0850	12	22.0
07156010	NF CIMARRON R AT RICHFIELD, KS			(LAT 37 15 30 LONG 101 46 30)
	JULY, 1975			
	2...	1430	0.22	24.0
	8...	1655	0.42	26.5
07157500	CROOKED C NR NYE, KS			(LAT 37 02 02 LONG 100 11 55)
	OCT., 1974			
	8...	1155	14	17.5
	NOV.			
	19...	1210	15	11.5
	DEC.			
	13...	1440	18	7.5
	JAN., 1975			
	9...	1225	25	9.5
	FEB.			
	25...	1350	24	11.5
	MAR.			
	19...	1530	23	22.0
	APR.			
	10...	1310	26	12.0
	MAY			
	10...	1325	12	25.0
	JULY			
	10...	1450	6.7	34.0
	AUG.			
	20...	1555	1.1	32.0

MISCELLANEOUS WATER TEMPERATURES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

	DATE	TIME	DIS- CHARGE (CFS)	TEMP- FRATURE (DEG C)
ARKANSAS RIVER BASIN				
07157900	CAVALRY C AT COLDWATER, KS			(LAT 37 16 00 LONG 099 20 40)
	OCT., 1974			
	7...	1410	2.5	14.5
	NOV.			
	19...	1510	2.6	13.5
	DEC.			
	16...	1340	2.8	8.5
	JAN., 1975			
	8...	1425	2.7	10.0
	FEB.			
	26...	1355	3.3	13.0
	MAR.			
	18...	1350	3.0	18.0
	APR.			
	10...	0930	2.8	10.0
	MAY			
	8...	0930	2.2	12.5
	13...	1340	3.0	15.0
	JUNE			
	5...	1450	3.3	26.5
	7...	0215	6.4	17.5
	7...	1040	3.9	18.5
	23...	1630	1220	24.0
	23...	2030	745	24.0
	24...	1015	117	23.5
	24...	1220	100	23.5
	25...	0745	24	20.5
	JULY			
	10...	1000	3.8	22.0
	AUG.			
	20...	1255	1.6	28.0
	SEP.			
	11...	1035	1.4	20.5
07165700	VERDIGRIS R NR MADISON, KS			(LAT 38 08 15 LONG 096 06 05)
	OCT., 1974			
	1...	1130	15	15.0
	23...	1215	17	14.5
	NOV.			
	7...	1345	516	9.0
	27...	1000	58	7.0
	DEC.			
	19...	1345	104	3.0
	JAN., 1975			
	7...	1030	250	2.0
	24...	1015	77	1.0
	FEB.			
	4...	1450	938	4.5
	25...	1200	229	3.5
	MAR.			
	24...	1030	122	9.5
	APR.			
	14...	1300	215	10.0
	MAY			
	1...	1200	96	17.0
	23...	1100	977	20.0
	JUNE			
	3...	1045	1340	18.0
	17...	1045	2130	20.0
	JULY			
	9...	1020	26	25.5
	24...	1115	6.4	26.0
	AUG.			
	11...	1000	5.2	24.5
	SEP.			
	4...	1015	4.3	26.0

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DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)
ARKANSAS RIVER BASIN			
07166000 VERDIGRIS R NR COYVILLE, KS	(LAT 37 42 20 LONG 095 54 20)		
OCT., 1974			
1...	0845	58	15.0
16...	0945	647	13.5
21...	0915	165	14.0
23...	1215	18	14.5
NOV.			
12...	0930	3280	10.5
DEC.			
3...	1000	265	5.0
5...	1430	1500	5.0
19...	1030	989	4.0
JAN., 1975			
5...	1430	189	3.0
23...	0945	337	1.5
FEB.			
5...	1100	2230	3.5
MAR.			
5...	0930	862	2.5
26...	0940	1320	7.0
APR.			
14...	0955	346	10.5
22...	1030	173	14.5
MAY			
5...	1000	245	19.0
21...	1310	89	22.0
JUNE			
4...	1000	2160	22.0
20...	1315	3320	24.5
JULY			
11...	1200	30	26.0
22...	0945	9.3	29.0
AUG.			
12...	0945	8.2	26.0
SEP.			
3...	1515	8.6	27.0
07166500 VERDIGRIS R NR ALTOONA, KS	(LAT 37 29 26 LONG 095 40 49)		
OCT., 1974			
1...	1000	185	16.5
24...	1500	55	14.5
31...	1130	9250	15.5
NOV.			
5...	1115	11400	10.5
12...	1315	2670	11.0
DEC.			
3...	1030	2650	5.0
27...	1045	270	3.0
JAN., 1975			
14...	1240	840	2.0
FEB.			
4...	1030	206	3.5
MAR.			
5...	1230	1160	3.0
25...	1045	1640	9.5
APR.			
8...	1015	2360	10.0
28...	1410	1270	21.0
MAY			
19...	1030	862	22.0
JUNE			
11...	1225	2480	21.0
18...	1110	7320	21.0
JULY			
7...	1015	180	27.0
15...	1030	82	25.0
29...	1200	17	27.0
AUG.			
11...	1415	12	28.0
14...	1115	4620	23.0
SEP.			
3...	1315	79	27.0

MISCELLANEOUS WATER TEMPERATURES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)
ARKANSAS RIVER BASIN			
07167000 FALL R NR EUREKA, KS			(LAT 37 47 07 LONG 096 13 52)
OCT., 1974			
10...	1300	30	15.0
15...	1330	55	14.5
23...	1100	27	14.5
NOV.			
13...	1245	250	10.5
27...	1215	114	7.0
DEC.			
9...	1320	133	3.5
9...	1415	133	3.5
12...	1130	1090	5.0
13...	1100	552	4.5
30...	1130	150	3.0
31...	1045	22	3.0
JAN., 1975			
24...	1215	140	1.5
31...	1010	2030	2.0
FEB.			
4...	1210	1900	5.5
10...	1430	330	1.0
MAR.			
3...	1030	393	3.0
11...	1130	283	3.5
APR.			
10...	0930	293	10.0
21...	1500	214	14.5
MAY			
9...	1200	93	21.0
23...	1000	2730	21.5
JUNE			
3...	1300	3270	22.0
27...	1000	214	25.0
JULY			
9...	1210	62	26.0
24...	1245	17	27.0
AUG.			
11...	1215	12	27.0
SEP.			
4...	1245	11	29.0
9...	1005	9.2	22.0
07167500 OTTER C AT CLIMAX, KS			(LAT 37 42 30 LONG 096 13 30)
OCT., 1974			
10...	1130	9.2	15.0
23...	1005	8.7	14.5
NOV.			
7...	1030	218	9.5
27...	0945	37	8.0
DEC.			
9...	1225	3.4	3.5
11...	1310	2180	4.0
30...	1030	44	3.0
JAN., 1975			
24...	1415	45	1.0
FEB.			
10...	1245	105	1.0
MAR.			
3...	1215	127	2.0
18...	1200	981	9.5
APR.			
10...	1115	78	10.0
21...	1345	47	14.5
MAY			
9...	1010	42	19.0
14...	1045	331	19.0
JUNE			
3...	1045	2650	21.5
17...	1430	1670	20.0
JULY			
9...	1300	16	21.5
25...	1040	6.1	24.0
AUG.			
11...	1300	2.9	26.5
SEP.			
4...	1415	2.3	27.0
9...	1130	1.6	22.0

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DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)
ARKANSAS RIVER BASIN			
07168500 FALL R NR FALL R, KS			(LAT 37 38 34 LONG 096 03 33)
OCT., 1974			
10...	0945	77	15.5
23...	1015	75	15.0
NOV.			
13...	0945	3180	11.0
DEC.			
2...	1415	246	5.5
27...	1345	266	3.5
JAN., 1975			
14...	1345	418	2.0
23...	1215	253	2.0
FEB.			
10...	1000	1760	1.0
MAR.			
3...	1445	1310	3.5
13...	0945	679	3.0
26...	1345	168	3.5
APR.			
1...	1430	2090	8.0
4...	1430	1030	8.0
10...	1325	529	11.0
21...	1015	339	13.5
MAY			
19...	0930	530	21.0
22...	1145	73	21.0
JUNE			
3...	1540	1040	22.0
20...	1000	3150	24.0
JULY			
9...	1430	49	26.5
25...	1330	13	28.0
AUG.			
11...	1445	14	27.0
SEP.			
10...	1045	13	24.0
07169500 FALL R AT FREDONIA, KS			(LAT 37 30 30 LONG 095 50 00)
OCT., 1974			
8...	0945	103	16.0
24...	1300	104	14.5
31...	1025	10500	16.5
NOV.			
12...	1445	1150	10.5
DEC.			
3...	1310	327	5.0
16...	1030	1150	9.5
DEC., 1975			
30...	1015	319	3.5
JAN.			
14...	1000	492	1.0
22...	1200	338	1.5
FEB.			
10...	1410	2020	1.5
MAR.			
5...	1445	1510	3.5
25...	1315	1460	9.5
APR.			
8...	1245	2330	10.0
22...	1235	400	16.0
MAY			
14...	1400	5750	18.5
JUNE			
4...	1130	1560	22.0
27...	1400	521	25.0
JULY			
15...	1400	67	25.0
29...	1235	23	27.0
AUG.			
18...	1200	43	27.0
SEP.			
10...	1400	24	25.0

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DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)
ARKANSAS RIVER BASIN			
07169800 ELK R AT ELK FALLS, KS			(LAT 37 22 32 LONG 096 11 07)
OCT., 1974			
7...	1245	23	15.5
16...	1345	63	15.0
29...	1115	776	14.0
NOV.			
7...	1000	484	10.5
25...	1400	82	10.0
DEC.			
17...	1030	162	1.5
31...	1430	727	3.5
JAN., 1975			
15...	1045	98	1.0
31...	1430	1630	1.5
FEB.			
25...	1520	327	3.0
MAR.			
17...	1415	462	5.5
18...	1430	2960	9.5
APR.			
7...	1430	164	11.0
30...	1325	56	21.0
MAY			
14...	1600	1040	20.0
23...	1340	1860	21.5
JUNE			
3...	1415	3980	22.0
18...	1530	833	23.0
JULY			
11...	1100	26	26.0
29...	1030	5.2	26.0
AUG.			
18...	1030	13	24.5
27...	1415	3.8	27.0
SEP.			
16...	1330	6.7	19.0
07170060 ELK R BL ELK CITY LK, KS			(LAT 37 16 46 LONG 095 46 53)
OCT., 1974			
3...	1000	526	16.5
7...	1000	6.5	16.0
15...	1100	6.8	15.0
16...	1030	924	16.0
21...	1015	94	15.0
24...	1045	8.2	15.0
NOV.			
12...	1000	4160	11.0
13...	1130	6250	10.5
25...	1100	5490	10.5
DEC.			
2...	1140	209	5.0
DEC., 1975			
5...	1010	386	6.0
DEC., 1974			
26...	1030	566	4.5
JAN., 1975			
6...	1015	370	3.5
13...	1015	775	2.0
17...	1020	74	1.5
FEB.			
5...	1045	6150	3.0
20...	1030	1630	2.0
MAR.			
6...	1045	249	4.0
19...	1100	2550	9.0
25...	1315	12	9.5
26...	1030	4.0	9.0
26...	1130	347	8.0
APR.			
1...	1030	3230	8.5
8...	0930	102	11.0
28...	1015	17	21.0
MAY			
12...	1045	3.9	20.5
16...	1130	2550	19.0
21...	1000	5.0	21.5
JUNE			
10...	1015	3.6	22.0
23...	1030	4190	24.5
JULY			
8...	1015	6.8	29.0
28...	1330	5.6	28.0
AUG.			
18...	0955	3.6	26.0
28...	1030	4.0	26.0
SEP.			
19...	1015	4.1	19.0

DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)
ARKANSAS RIVER BASIN			
07170500	VERDIGRIS R AT INDEPENDENCE, KS		(LAT 37 13 26 LONG 095 40 43)
OCT., 1974			
1...	1315	1140	18.0
21...	1235	473	14.5
NOV.			
1...	1045	18500	16.0
4...	1240	36800	14.5
12...	1300	7390	10.5
21...	1300	12200	10.0
DEC.			
2...	1355	3540	5.0
26...	1530	1480	4.0
JAN., 1975			
13...	1330	2230	2.0
FEB.			
4...	1410	4950	3.0
26...	1345	7660	3.5
MAR.			
19...	1415	12700	9.5
APR.			
8...	1145	4730	11.0
MAY			
2...	1115	1090	21.0
12...	1300	632	21.5
15...	1145	10400	18.0
JUNE			
4...	1400	9220	22.0
17...	1440	16000	20.0
18...	1430	18400	22.0
19...	1130	11100	22.0
JULY			
7...	1210	469	27.0
28...	1145	51	27.0
AUG.			
11...	1130	30	28.0
SEP.			
3...	1030	120	27.0
07170700	BIG HILL C NR CHERRYVALE, KS		(LAT 37 16 00 LONG 095 28 05)
OCT., 1974			
3...	1240	2.0	16.0
8...	1120	0.62	16.0
15...	1315	25	14.5
21...	1415	1.5	15.0
29...	1140	127	16.0
31...	1415	676	15.5
NOV.			
7...	1345	26	10.0
15...	0930	11	7.0
21...	1045	6.7	9.0
DEC.			
11...	1345	606	4.5
23...	1400	6.8	5.0
JAN., 1975			
8...	1015	19	5.5
24...	1015	5.5	4.0
31...	1115	941	5.0
FEB.			
13...	1500	15	4.0
26...	1600	115	1.5
MAR.			
18...	1450	191	8.5
APR.			
7...	0945	12	11.0
29...	1405	9.7	20.0
MAY			
8...	1130	19	21.0
15...	1415	23	19.0
JUNE			
2...	1030	6.5	21.5
17...	1115	1870	19.5
JULY			
7...	1355	0.43	31.0
17...	1530	0.19	30.0
28...	1010	1.8	26.0
AUG.			
7...	1400	0.04	29.0
14...	1100	0.01	27.0
28...	1005	0.09	24.5
SEP.			
15...	1425	0.03	17.0

MISCELLANEOUS WATER TEMPERATURES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	DIS- CHARGE (CFS)	TEMP- FRATURE (DEG C)
ARKANSAS RIVER BASIN			
07172000	CANEY R NR ELGIN, KS		(LAT 37 00 13 LONG 096 18 54)
OCT., 1974			
7...	1100	21	14.5
29...	1340	170	14.5
NOV.			
6...	1500	3530	11.5
25...	1345	186	9.0
DEC.			
17...	1440	370	5.0
31...	1150	1000	5.0
JAN., 1975			
13...	1330	247	1.5
31...	1415	4660	4.5
FEB.			
25...	1120	893	1.5
28...	1130	983	2.0
MAR.			
17...	1110	820	5.5
31...	1440	972	9.0
APR.			
7...	1115	393	11.5
30...	1055	147	20.0
MAY			
14...	1140	6640	17.0
JUNE			
4...	1340	955	22.0
18...	1210	904	22.0
JULY			
9...	1200	45	28.0
28...	1330	15	28.0
AUG.			
13...	1400	4.9	29.0
27...	1100	13	22.0
SEP.			
16...	1100	7.8	20.0
07179500	NEOSHO R AT COUNCIL GROVE, KS		(LAT 38 39 54 LONG 096 29 28)
OCT., 1974			
23...	0935	11	14.5
NOV.			
15...	1120	238	8.5
DEC.			
3...	1220	41	3.0
JAN., 1975			
15...	1110	86	1.5
FEB.			
24...	1420	91	3.0
MAR.			
26...	1110	236	6.0
APR.			
18...	1200	270	11.0
MAY			
21...	1215	32	21.0
JUNE			
19...	1440	48	21.0
JULY			
17...	1315	35	2.5
AUG.			
20...	1040	3.4	23.5
SEP.			
17...	1415	0.20	22.5
07179730	NEOSHO R NR AMERICUS, KS		(LAT 38 35 LONG 096 23)
OCT., 1974			
22...	1625	43	13.5
NOV.			
19...	1445	537	9.0
DEC.			
3...	1520	117	2.0
JAN., 1975			
15...	1500	224	0.5
FEB.			
25...	0945	257	2.0
MAR.			
26...	1530	344	6.0
APR.			
9...	1130	1070	9.0
MAY			
21...	0900	103	22.5
JUNE			
19...	1050	290	22.5
JULY			
17...	0915	444	25.5
AUG.			
19...	1820	77	26.0
SEP.			
17...	0905	9.8	19.5

MISCELLANEOUS WATER TEMPERATURES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

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	DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)
ARKANSAS RIVER BASIN				
07179795	COTTONWOOD R BL MARION LK, KS			(LAT 38 22 00 LONG 097 05 00)
	OCT., 1974			
	21...	1140	7.4	14.5
	NOV.			
	18...	1050	85	8.0
	DEC.			
	9...	1700	6.3	2.5
	JAN., 1975			
	17...	0945	7.8	1.0
	17...	1230	89	1.0
	FEB.			
	21...	0915	84	2.5
	MAR.			
	28...	1415	83	6.0
	APR.			
	16...	1330	86	10.5
	MAY			
	19...	1800	28	20.0
	JUNE			
	16...	1250	190	22.0
	JULY			
	3...	1310	1250	25.0
	AUG.			
	14...	1350	5.4	26.0
	SEP.			
	15...	1240	7.4	20.0
07180400	COTTONWOOD R NR FLORENCE, KS			(LAT 38 14 10 LONG 096 52 37)
	OCT., 1974			
	21...	1555	55	14.5
	NOV.			
	18...	1515	178	8.0
	DEC., 1975			
	10...	1025	84	1.0
	JAN.			
	16...	1620	107	1.0
	FEB.			
	21...	1245	210	4.0
	MAR.			
	28...	1030	480	8.0
	APR.			
	17...	0915	375	16.5
	MAY			
	20...	1040	127	22.0
	JUNE			
	17...	1230	16600	22.0
	JULY			
	10...	1855	252	25.0
	AUG.			
	15...	1040	160	23.0
	SEP.			
	5...	1600	1690	23.0
07180500	CEDAR C NR CEDAR POINT, KS			(LAT 38 11 55 LONG 096 49 22)
	OCT., 1974			
	22...	0915	7.0	12.0
	NOV.			
	18...	1710	22	8.0
	DEC.			
	4...	1445	16	2.0
	JAN., 1975			
	16...	1330	30	1.0
	FEB.			
	21...	1600	45	4.0
	MAR.			
	27...	1635	887	10.0
	APR.			
	17...	1310	70	16.5
	MAY			
	20...	1310	26	22.0
	JUNE			
	17...	1905	512	21.0
	JULY			
	10...	1520	41	25.0
	AUG.			
	14...	1830	17	25.5
	SEP.			
	16...	0935	12	16.5

MISCELLANEOUS WATER TEMPERATURES, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)
ARKANSAS RIVER BASIN			
071A2250	COTTONWOOD R NR PLYMOUTH, KS	(LAT 38 23 51 LONG 096 21 21)	
OCT., 1974			
22...	1350	181	15.0
NOV.			
19...	1110	568	9.0
DEC.			
4...	1200	322	3.0
JAN., 1975			
16...	0920	580	0.5
FEB.			
25...	1310	1050	3.0
MAR.			
27...	1210	864	8.0
APR.			
9...	1350	6340	10.5
MAY			
13...	1400	480	18.5
JUNE			
18...	1545	12700	23.0
JULY			
11...	1330	633	26.0
AUG.			
15...	1430	302	26.5
SEP.			
16...	1535	177	19.5
071A2510	NEOSHO R AT RURLINGTON, KS	(LAT 38 11 40 LONG 095 44 10)	
OCT., 1974			
1...	1205	4.2	27.5
21...	1125	1230	14.0
NOV.			
18...	1200	1470	8.0
DEC.			
16...	1225	2360	2.0
JAN., 1975			
21...	1100	2120	1.0
FEB.			
19...	1050	1580	1.0
MAR.			
24...	1035	1480	11.5
APR.			
21...	1220	2590	15.0
MAY			
19...	1050	499	22.5
JUNE			
23...	1325	11000	24.0
JULY			
21...	1150	390	28.5
AUG.			
18...	1130	134	27.0
SEP.			
22...	1200	223	18.0
071A3000	NEOSHO R NR IOLA, KS	(LAT 37 53 27 LONG 095 25 50)	
OCT., 1974			
1...	0920	101	16.5
22...	0900	883	14.0
NOV.			
19...	0925	3800	8.5
DEC.			
17...	0850	2340	2.0
JAN., 1975			
21...	1505	1940	1.0
FEB.			
19...	1510	2450	1.0
MAR.			
24...	1620	1540	10.0
APR.			
22...	0940	2140	17.0
MAY			
19...	1715	566	22.5
JUNE			
24...	0855	11900	24.0
JULY			
21...	1800	428	28.5
AUG.			
18...	1615	148	29.0
SEP.			
22...	1800	229	20.0

	DATE	TIME	DIS- CHARGE (CFS)	TEMP- ERATURE (DEG C)
ARKANSAS RIVER BASIN				
07183500	NEOSHO R NR PARSONS, KS			(LAT 37 18 30 LONG 095 06 40)
	OCT., 1974			
	1...	1440	888	17.0
	23...	1035	1390	14.5
	NOV.			
	5...	1015	40100	11.0
	20...	0905	3560	9.0
	DEC.			
	17...	1400	2970	3.0
	JAN., 1975			
	22...	0930	469	1.0
	FEB.			
	20...	0955	4050	2.5
	MAR.			
	26...	0920	1860	10.0
	APR.			
	23...	1015	2670	17.0
	MAY			
	21...	0855	746	23.0
	JUNE			
	25...	0905	13900	24.0
	JULY			
	23...	0930	516	29.0
	AUG.			
	20...	0935	400	26.0
	SEP.			
	23...	1545	256	20.5
07184000	LIGHTNING C NR MCCUNE, KS			(LAT 37 16 54 LONG 095 01 56)
	OCT., 1974			
	1...	1620	88	15.5
	23...	1245	19	13.5
	NOV.			
	4...	1345	8250	12.0
	20...	1205	44	9.0
	DEC.			
	17...	1550	56	3.0
	JAN., 1975			
	22...	1200	35	1.0
	FEB.			
	20...	1205	109	3.5
	MAR.			
	26...	1040	32	8.5
	APR.			
	23...	1245	14	17.5
	MAY			
	21...	1110	11	21.5
	JUNE			
	25...	1100	28	26.0
	JULY			
	23...	1225	1.9	27.0
	AUG.			
	20...	1110	1.6	25.5
	SEP.			
	24...	0840	0.77	15.0

CHEMICAL ANALYSES OF GROUND
 RESULTS IN MILLIGRAMS PER LITER,

GEOLOGICAL SURVEY WELL NUMBER	LOCAL WELL NUMBER	WELL DEPTH (FEET)	GEOLOGIC SOURCE ^{2,3}	DATE OF COLLEC- TION	TEMP- ER- ATURE (°C)	SILICA (%SiO ₂)	TOTAL IRON (FE)	MANG- ANESE (MN)	CAL- CIUM (CA)	MAG- NE- SIUM (MG)	SODIUM (NA)
GRANT COUNTY											
373339101155401	29 36W 48AR	645	MESOZOIC ROCKS	8 14 75	....	25	.13	.00	51	23	100
373339101161001	29 36W 48CC	380	PLEISTOCENE SER OGALLALA FM	8 14 75	....	22	.19	.00	74	27	32
MEADE COUNTY											
371931100115501	31 26W 30BR	212	PLEISTOCENE SER OGALLALA FM	11 20 74	....	49	.21	.00	48	19	29
372026100162401	31 27W 20AA	152	PLEISTOCENE SER	7 25 75	14.0	23	.06	.00	34	2.7	22
371425100272001	32 29W 27AA	583	WHITEHORSE FM	12 17 74	....	8.3	.86	.22	320	120	87
371425100272002	32 29W 27AA	468	PLEISTOCENE SER OGALLALA FM	11 22 74	....	22	1.6	.00	59	15	27
370403100344401	34 30W 27BR	720	WHITEHORSE FM	11 21 74	....	10	.88	.00	1500	470	10800
370403100344402	34 30W 27BR	504	PLEISTOCENE SER OGALLALA FM	11 20 74	....	20	.36	.00	83	21	48
370305100375801	34 30W 31AR	R		11 14 74	....	20	....	....	93	74	120
370005100235101	35 29W 18AD	R		11 21 74	....	18	....	....	91	40	410
370101100293301	35 29W 18AD	R		11 14 74	....	20	....	....	93	37	380
370102100280001	35 29W 10BC	R		11 14 74	....	20	....	....	94	42	410
370053100354901	35 30W 9CCR	R		11 14 74	....	21	....	....	86	32	140
370034100323601	35 30W 13BR	R		11 14 74	....	21	....	....	96	38	370
MORTON COUNTY											
371945101541201	31 42W 29AR	776	MESOZOIC ROCKS DAY CREEK DOL	10 10 75	....	....	1.6	.00	378	73	156
371426101475701	32 41W 29AR	620	MESOZOIC ROCKS DAY CREEK DOL	10 15 75	....	....	.11	.00	491	90	112
NESS COUNTY											
382751000555401	18 24W 25BR	54	ALLUVIUM	7 18 75	15.0	43	.16	....	160	21	33
382553000413101	19 21W 6RCA	55	ALLUVIUM	5 22 75	....	41	.00	.00	200	16	41
382545000441701	19 22W 3ACD	47	ALLUVIUM	7 17 75	17.0	37	.08	.00	126	14	67
382453000472701	19 22W 7ADC	49	ALLUVIUM	5 7 75	15.0	42	.05	.00	149	22	45
382500000471001	19 22W 8RCA	58	ALLUVIUM	5 7 75	14.5	41	.05	.00	179	23	31
382537000492301	19 23W 1CCR	450	DAKOTA FM	5 7 75	16.5	48	.05	....	126	25	56
382537000492301	19 23W 1CCR	450	DAKOTA FM	7 17 75	19.0	8.6	.03	.00	9.6	3.9	240
382300000514701	19 23W 21DA	282	DAKOTA FM	8 25 75	....	8.1	.11	.20	16	5.8	510
382416100000201	19 24W 17AD	55	ALLUVIUM	6 20 75	....	38	.09	.00	72	13	45
381753000480501	20 22W 19CCD	75	ALLUVIUM	5 7 75	14.0	39	.03	.00	136	16	32
381753000470803	20 22W 20CCC	127	ALLUVIUM	5 15 75	....	41	.0	.00	112	16	43
381702000460101	20 22W 28RCC	98	ALLUVIUM	6 17 75	....	43	.02	.00	112	42	40
381647000470701	20 22W 29CAR	87	ALLUVIUM	5 9 75	14.5	42	.27	.00	178	18	15
381702000480501	20 22W 30RCD	63	ALLUVIUM	5 15 75	....	44	.02	.00	179	25	31
381629000460901	20 22W 32AAA	60	ALLUVIUM	5 8 75	13.5	25	.06	....	141	12	15
381759000501801	20 23W 23CCD	58	ALLUVIUM	5 8 75	14.5	30	.11	.00	120	9.8	20
381701000494501	20 23W 26ACD	82	ALLUVIUM	5 16 75	....	41	.02	.00	179	17	37
381646000500901	20 23W 26CAR	90	ALLUVIUM	5 8 75	14.5	44	.06	.00	142	17	33
381647000505901	20 23W 27DCR	75	ALLUVIUM	5 8 75	14.0	41	.06	....	163	21	25
381622000534501	20 23W 32RRC	100	ALLUVIUM	6 18 75	....	35	1.3	.00	126	15	27
381622000511601	20 23W 34RCA	85	ALLUVIUM	5 22 75	....	40	.02	.00	133	9.7	19
380725000453301	22 22W 28DRR	70	ALLUVIUM	6 17 75	....	51	.02	.00	130	13	30
381608000553301	20 24W 36CDA	57	ALLUVIUM	6 19 75	....	32	.02	.00	168	17	56
380227100582401	23 33W 20RCC	90	ALLUVIUM	6 18 75	....	39	.02	.00	120	13	19
SEWARD COUNTY											
371449100551001	32 33W 21CCA	R		11 14 74	....	20	....	....	94	31	61
371305100513901	32 33W 36CDA	R		11 14 74	....	15	....	....	78	30	36
370952100491201	33 32W 20ACD	R		11 14 74	....	20	....	....	77	24	43
370858100450001	33 32W 25ACC	R		11 14 74	....	20	....	....	83	23	50
370845100482401	33 32W 28CDD	465		10 10 74	....	14	1.8	.00	3600	1800	6100
370845100482402	33 32W 28CDD	205		10 10 74	....	23	1.5	.00	80	25	82
370516100410401	34 31W 15CBA	705		11 14 74	....	19	....	....	88	27	86
370407100442701	34 31W 30BR	705		10 18 74	....	33	1.0	.00	1300	640	5000
370407100442702	34 31W 30BR	460		10 22 74	....	11	.81	.00	150	50	670
370407100442703	34 31W 30BR	250	PLEISTOCENE SER	7 22 75	16.0	25	.05	.00	70	17	41
370534101015401	34 34W 17DD	562		10 16 74	....	29	1.3	.00	70	23	32
STEVENS COUNTY											
370533101101801	34 35W 18RCA	470		10 9 74	....	8.7	1.8	.00	40	13	26

¹Chemical analyses by Kansas Department of Health and Environment.²The classification and nomenclature of the rock units used in this report are those of the Kansas Geological Survey and differ somewhat from those used by the U.S. Geological Survey.³DOL, dolomite; FM, formation; SER, series.

WATER IN KANSAS¹--CONTINUED

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WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

LOCAL WELL NUMBER	DATE OF COLLEC- TION	PO- TAS- SIUM (K)	CAR- BON- ATE (CO3)	BICAR- BONATE (HCO3)	SUL- FATE (SO4)	CHLORIDE (CL)	FLUO- RIDE (F)	NI- TRATE (NO3)	DIS- SOLVED SOLIDS (EVAPO- RATED AT 180°C)	HARDNESS ----- NON- CAR- BONATE (CA+MG)	SODIUM AD- SORP- TION RATIO	SPECIFIC CONDUCT- ANCE (MT- CROMHOS. AT 25°C)	PH	
GRANT COUNTY														
29 36W 48AB	8 14 75	4.8	0	217	210	30	1.2	3.3	557	220	44	2.9	870	7.6
29 36W 48CC	8 14 75	4.0	0	190	110	67	1.1	9.2	438	300	140	.8	760	7.6
MEADE COUNTY														
31 26W 30RRB	11 20 74	6.2	0	240	48	12	.8	3.0	333	200	....	.9	490	8.1
31 27W 20AAA	7 25 75	4.0	5	76	59	12	.7	5.8	206	96	26	1.0	340	8.9
32 29W 27AAB	12 17 74	10	0	66	1400	16	.9	1.4	1960	1300	54	1.1	2300	7.4
32 29W 27AAB2	11 22 74	4.8	0	200	73	18	.8	3.5	319	210	.8	.8	500	8.0
34 30W 27RRB	11 21 74	38	0	78	2800	18200	1.0	.3	33800	5800	5600	62	57300	7.6
34 30W 27BRB2	11 20 74	4.5	0	190	200	21	.9	6.3	494	290	140	1.2	750	7.9
34 30W 31BRC	11 14 74	4.5	0	240	150	190	.8	5.2	739	370	170	2.7	1260	8.1
35 28W 18DAD	11 21 74	5.5	0	230	180	670	.8	3.3	1530	390	200	9.0	2720	7.9
35 29W 8DDC	11 14 74	5.8	0	230	180	620	.8	4.6	1460	380	190	8.4	2590	7.9
35 29W 10RCD	11 14 74	5.8	0	240	180	650	.8	4.2	1520	410	210	8.9	2650	7.9
35 30W 9CCR	11 14 74	5.2	0	240	150	220	.8	4.4	772	350	150	3.3	1340	7.8
35 30W 13RRB	11 14 74	5.2	0	250	170	580	.8	4.0	1400	400	190	8.1	2460	8.0
MORTON COUNTY														
31 42W 29AAB	10 10 75	....	..	....	1340	21	1.6	2.9	.....	1240	....	1.9	.....	...
32 41W 29ARC	10 15 75	....	..	....	1600	14	1.7	4.2	.....	1600	....	1.2	.....	...
NESS COUNTY														
18 24W 25BRA	7 18 75	7.0	0	324	140	89	.2	16	666	480	214	.7	1080	7.5
19 21W 68CA	5 22 75	6.5	0	444	209	55	.2	7.4	794	565	201	.8	1160	...
19 22W 3ACD	7 17 75	7.5	0	310	186	43	.6	17	650	372	118	1.5	1020	7.5
19 22W 7ADC	5 7 75	7.2	0	359	124	81	.4	19	666	462	168	.9	1030	7.5
19 22W 8BCB	5 7 75	7.0	0	329	168	112	.4	16	739	541	271	.6	1170	7.4
19 23W 1CCB	5 7 75	6.8	0	234	182	117	1.0	.1	677	418	226	1.2	1050	7.6
19 23W 1CCB	7 17 75	5.8	0	244	132	161	2.4	.9	684	40	0	17	1220	7.7
19 23W 21DA	8 25 75	9.8	0	390	240	30	5.2	.1	1420	64	....	28	2470	8.0
19 24W 17BAD	6 20 75	5.5	0	310	52	20	.5	61	4040	2330	...	1.3	6410	7.7
20 22W 19CCD	5 7 75	8.5	0	342	146	26	.7	13	585	406	126	.7	890	7.5
20 22W 20CCC3	5 15 75	8.5	0	339	121	32	.6	1.7	543	346	68	1.0	830	7.6
20 22W 28BCC	6 17 75	11	0	346	201	38	.3	.2	658	452	168	.8	980	7.7
20 22W 29CRB	5 9 75	6.5	0	388	158	33	.1	25	667	518	200	.3	1000	7.5
20 22W 30BCD	5 15 75	8.2	0	268	254	86	.3	28	.....	550	330	.6	1160	7.4
20 22W 32AAA	5 8 75	4.5	0	346	8.8	26	.2	32	524	402	118	.3	820	7.5
20 23W 23CCD	5 8 75	4.5	0	273	76	42	.2	37	474	340	116	.5	760	7.5
20 23W 26ACD	5 16 75	9.0	0	368	233	40	.3	10	748	516	214	.7	1090	7.6
20 23W 26CAB	5 8 75	7.2	0	322	164	37	.5	7.8	611	424	160	.7	920	7.4
20 23W 27DCB	5 8 75	8.2	0	310	204	53	.3	6.4	675	493	239	.5	1010	7.5
20 23W 32BRC	6 18 75	7.0	0	310	140	30	.3	4.3	537	376	122	.6	810	7.7
20 23W 34BAC	5 22 75	5.0	0	310	85	41	.3	18	503	372	118	.4	770	7.8
22 22W 20DRB	6 17 75	6.0	0	349	101	37	.6	7.4	548	378	92	.7	840	7.5
20 24W 36CDA	6 19 75	7.2	0	381	162	86	.2	22	738	489	177	1.1	1160	7.6
23 33W 20BCC	6 18 75	6.2	0	305	93	30	.3	7.8	478	353	103	.5	740	7.6
SEWARD COUNTY														
32 33W 21CCA	11 14 74	5.0	..	....	140	23	.8	.2	566	360	42	1.4	900	7.8
32 33W 36CDA	11 14 74	5.5	0	300	120	19	.8	.4	452	320	72	.9	720	7.9
33 32W 20ACD	11 14 74	3.8	0	260	140	21	.8	5.4	461	290	74	1.1	730	7.9
33 32W 25ACC	11 14 74	4.0	0	240	150	40	.8	6.2	492	300	110	1.3	780	7.6
33 32W 28CDD	10 10 74	680	0	156	1260	20300	.1	.2	33800	16380	6300	21	.....	7.9
33 32W 28CDD2	10 10 74	4.5	0	220	150	96	.7	9.3	577	300	120	2.1	950	8.0
34 31W 15CBA	11 14 74	4.5	0	260	150	98	.8	4.8	608	330	120	2.1	1010	7.9
34 31W 30RRB	10 18 74	320	0	140	1100	11000	.4	1.0	19500	5800	5700	28	.....	7.7
34 31W 30RRB2	10 22 74	12	0	95	200	1300	1.1	2.9	2420	580	510	12	4500	8.1
34 31W 30RRB3	7 22 75	3.2	0	212	77	55	.4	9.6	403	244	70	1.1	700	7.7
34 34W 17DDD	10 16 74	3.2	0	190	140	15	.5	15	423	270	120	.9	660	8.4
STEVENS COUNTY														
34 35W 18RCA	10 9 74	3.0	0	120	65	26	.7	4.5	246	150	56	.9	400	7.9

SECTION 3. GROUND-WATER RECORDS

EDWARDS COUNTY

380145099241301. 23-19W-22CCC. (10) F. F. LIPPOLDT. DUG, UNUSED, WATER-TABLE WELL IN DAKOTA FORMATION. DIAMETER 4.50 FEET, DEPTH 68 FEET, CRIBBED WITH ROCK. MEASURING POINT, TOP OF HOLE IN CONCRETE COVER, 0.60 FOOT ABOVE LSD. G = MEASURED BY K.S.B.A.
 ALTITUDE OF LAND SURFACE 2238.4 FEET.
 HIGHEST WATER LEVEL 60.47 BELOW LSD, SEP. 23, 1975.
 LOWEST WATER LEVEL 68.20 BELOW LSD, MAR. 13, 1946.
 RECORDS AVAILABLE 1944-75.
 MAR. 27, 1975 60.746, JUNE 26, 1975 60.546, SEP. 23, 1975 60.476.

FORD COUNTY

374445100025501. 26-25W-34RRR. (8) F. H. DIEHL. DRILLED, WATER-TABLE IRRIGATION WELL IN ALLUVIUM. DIAMETER 20 INCHES, DEPTH 20 FEET. MEASURING POINT, TOP OF CASING, 0.80 FOOT ABOVE LSD. G = MEASURED BY K.S.B.A.
 J = AFFECTED BY FLOOD WATERS.
 ALTITUDE OF LAND SURFACE 2490.2 FEET.
 HIGHEST WATER LEVEL 0.86 BELOW LSD, MAY 13, 1942.
 LOWEST WATER LEVEL 11.32 BELOW LSD, DEC. 30, 1974.
 RECORDS AVAILABLE 1938-75.
 MAR. 27, 1975 8.496, JUNE 25, 1975 8.806.

GRANT COUNTY

374337101215501. 27-37W-4DA. (5) C. L. JURY. DRILLED, UNUSED WATER-TABLE WELL IN DEPOSITS OF PLEISTOCENE AGE. DIAMETER 4 INCHES, DEPTH 139 FEET. MEASURING POINT, TOP OF CASING, 0.40 FOOT ABOVE LSD.
 G = MEASURED BY K.S.B.A.
 ALTITUDE OF LAND SURFACE 3069.99 FEET.
 HIGHEST WATER LEVEL 65.53 BELOW LSD, MAY 9, 1951, NOV. 28, 1951.
 LOWEST WATER LEVEL 137.42 BELOW LSD, SEP. 11, 1974.
 RECORDS AVAILABLE 1941-75.
 MAR. 12, 1975 137.346, JUNE 19, 1975 136.916.

HARVEY COUNTY

375533097295901. 24-2W-35AAA. (839) CITY OF WICHITA. DRILLED, WATER-TABLE OBSERVATION WELL IN SAND AND GRAVEL OF PLEISTOCENE AGE. DEPTH 44 FEET, DIAMETER 1.25 INCHES. MEASURING POINT, TOP OF PIPE, 1.0 FOOT ABOVE LSD. MEASURED BY CITY OF WICHITA.
 ALTITUDE OF LAND SURFACE 1389.19 FEET.
 HIGHEST WATER LEVEL 9.62 BELOW LSD, AUG. 21, 1939.
 LOWEST WATER LEVEL 32.52 BELOW LSD, MAY 1, 1957.
 RECORDS AVAILABLE 1938-75.
 APR. 1, 1975 18.31, JULY 2, 1975 16.45.

MC PHERSON COUNTY

383400097400301. 17-3W-17DDD. U.S.G.S. DRILLED, WATER-TABLE OBSERVATION WELL IN TERRACE DEPOSITS OF PLEISTOCENE AGE. DEPTH 37 FEET, DIAMETER 1.25 INCHES. MEASURING POINT, TOP OF PIPE, 0.8 FOOT ABOVE LSD.
 ALTITUDE OF LAND SURFACE 1331.5 FEET.
 HIGHEST WATER LEVEL 16.75 BELOW LSD, JULY 24, 1951.
 LOWEST WATER LEVEL 29.80 BELOW LSD, SEP. 7, 1956.
 RECORDS AVAILABLE 1946-53, 1955-75.
 MAR. 7, 1975 24.30, JUNE 17, 1975 23.70, SEP. 10, 1975 23.20.

NESS COUNTY

381728099470701. 20-22W-20CCC. (2) C. L. WHITLEY. DUG AND DRILLED, WATER-TABLE IRRIGATION WELL IN TERRACE DEPOSITS OF PLEISTOCENE AGE. DIAMETER 20 INCHES, DEPTH 51 FEET. MEASURING POINT, TOP OF SOUTH SIDE OF CONCRETE CURR, 0.50 FOOT ABOVE LSD. G = MEASURED BY K.S.B.A.
 ALTITUDE OF LAND SURFACE 2193 FEET.
 HIGHEST WATER LEVEL 17.81 BELOW LSD, JULY 12, 1951.
 LOWEST WATER LEVEL 41.79 BELOW LSD, AUG. 17, 1965.
 RECORDS AVAILABLE 1940-75.
 MAR. 25, 1975 35.166, JUNE 20, 1975 36.196, SEP. 16, 1975 37.186.

PRATT COUNTY

373140098411701. 29-13W-13AAA. E. R. KESSLER. DRILLED, UNUSED IRRIGATION WELL IN SAND AND GRAVEL OF PLEISTOCENE AGE. DIAMETER 10 INCHES, DEPTH 119 FEET. MEASURING POINT, TOP SOUTH SIDE OF CONCRETE PLATFORM, 0.40 FOOT ABOVE LSD. G = MEASURED BY K.S.B.A.
 ALTITUDE OF LAND SURFACE 1916.7 FEET.
 HIGHEST WATER LEVEL 87.65 BELOW LSD, JUNE 29, 1953.
 LOWEST WATER LEVEL 92.25 BELOW LSD, DEC. 15, 1954.
 RECORDS AVAILABLE 1951-75.
 MAR. 24, 1975 88.336, JUNE 23, 1975 88.066, SEP. 17, 1975 87.896.

RAWLINS COUNTY

394204101033001. 4-33W-18DDA. W. B. MINNEY. DRILLED, UNUSED WATER-TABLE WELL IN OGALLALA FORMATION. DIAMETER 5 INCHES, DEPTH 104 FEET. MEASURING POINT, TOP WEST SIDE OF CASING, 1.2 FEET ABOVE LSD. G = MEASURED BY K.S.B.A. MEASURING POINT CHANGED TO TOP NORTH SIDE OF HOLE IN PUMP BASE, 1.3 FEET ABOVE LSD, JAN. 1, 1957.
 ALTITUDE OF LAND SURFACE 3068 FEET.
 HIGHEST WATER LEVEL 85.38 BELOW LSD, JAN. 7, 1975.
 LOWEST WATER LEVEL 88.52 BELOW LSD, OCT. 13, 1959, JAN. 13, 1960.
 RECORDS AVAILABLE 1952-54, 1956-75.
 JAN. 7, 1975 85.38.

SEDGWICK COUNTY

374651097195901. 26-1F-21RRR. (R09) CITY OF WICHITA. DRIVEN, OBSERVATION WATER-TABLE WELL IN SAND AND GRAVEL OF PLEISTOCENE AGE. DIAMETER 1.25 INCHES, DEPTH 29 FEET. MEASURING POINT, TOP OF PIPE, 3.60 FEET ABOVE LSD.
 ALTITUDE OF LAND SURFACE 1330.32 FEET.
 HIGHEST WATER LEVEL 5.91 BELOW LSD, JULY 11, 1951.
 LOWEST WATER LEVEL 17.68 BELOW LSD, JAN. 31, 1957.
 RECORDS AVAILABLE 1938-75.
 APR. 1, 1975 12.59, JULY 2, 1975 10.62.

STAFFORD COUNTY

375433098444601. 25-13W-3BRR. M. L. HALLEY, DRIVEN, UNUSED, WATER-TABLE WELL IN SAND AND GRAVEL OF PLEISTOCENE AGE. DIAMETER 1.25 INCHES, DEPTH 32 FEET. MEASURING POINT, TOP OF PIPE, 0.80 FOOT ABOVE LSD.
 G = MEASURED BY K.S.B.A.
 ALTITUDE OF LAND SURFACE 1932.1 FEET.
 HIGHEST WATER LEVEL 2.75 BELOW LSD, MAY 21, 1952.
 LOWEST WATER LEVEL 21.45 BELOW LSD, SEP. 24, 1968.
 RECORDS AVAILABLE 1951-75.
 MAR. 25, 1975 12.44G, JUNE 20, 1975 12.85G, SEP. 17, 1975 16.58G.

THOMAS COUNTY

392153101223802. 8-36W-18ABA2. NORA CARPENTER. DRILLED, UNUSED WATER-TABLE WELL IN OGALLALA FORMATION. DEPTH 140 FEET, DIAMETER 6 INCHES. MEASURING POINT, TOP OF CASING, 0.3 FOOT ABOVE LSD.
 ALTITUDE OF LAND SURFACE 3428 FEET.
 HIGHEST WATER LEVEL 122.09 BELOW LSD, MAR. 8, 1966.
 LOWEST WATER LEVEL 128.02 BELOW LSD, OCT. 14, 1948.
 RECORDS AVAILABLE 1942-75.
 JAN. 9, 1975 124.81, MAR. 11, 1975 124.96G, JUNE 24, 1975 125.24G, SEP. 16, 1975 125.31G.

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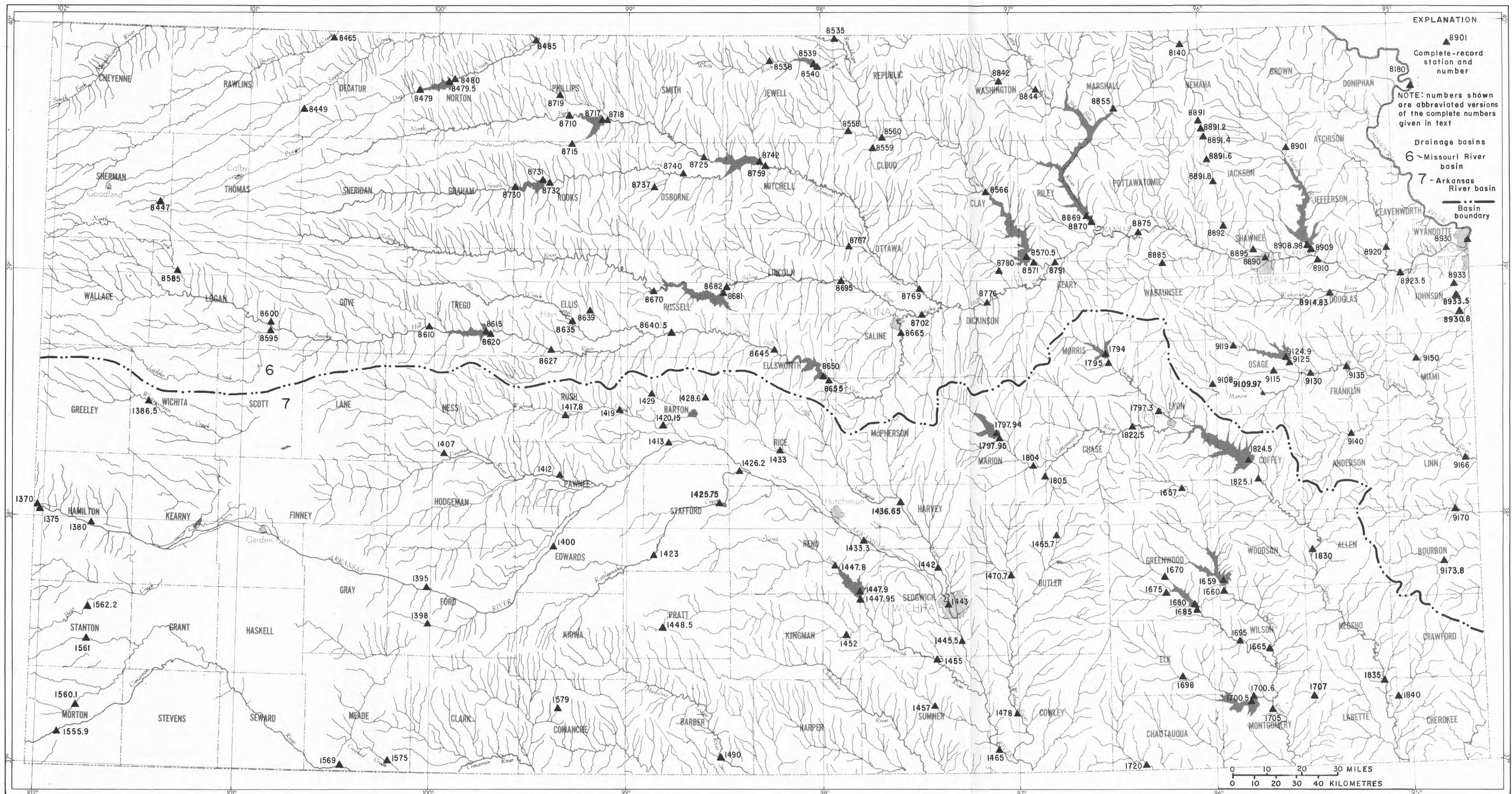


Figure 1.-- Map of Kansas showing location of complete-record surface-water gaging stations, 1975 water year.

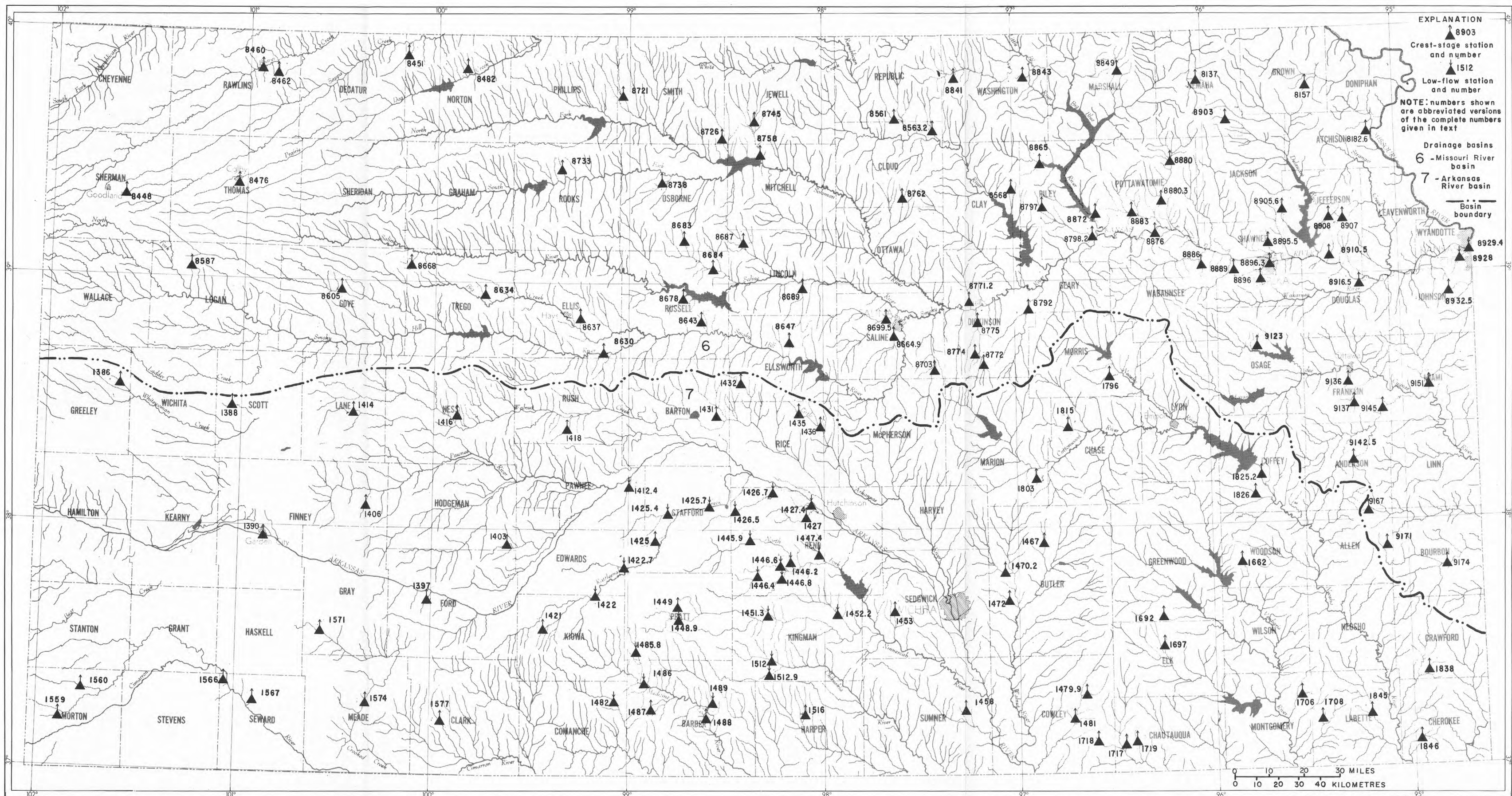


Figure 2.--Map of Kansas showing location of partial-record surface-water gaging stations, 1975 water year.

FACTORS FOR CONVERTING ENGLISH UNITS TO INTERNATIONAL SYSTEM UNITS (SI)

The following factors may be used to convert the English units published herein to the International System of Units (SI). Subsequent reports will contain both the English and SI unit equivalents in the station manuscript descriptions until such time that all data will be published in SI units.

Multiply English units by	By	To obtain SI units
<i>Length</i>		
inches (in)	25.4	millimetres (mm)
	.0254	metres (m)
feet (ft)	.3048	metres (m)
miles (mi)	1.609	kilometres (km)
<i>Area</i>		
acres	4047	square metres (m ²)
square miles (mi ²)	2.590	square kilometres (km ²)
<i>Volume</i>		
gallons (gal)	3.785	*litres (l)
	3.785×10^{-3}	cubic metres (m ³)
cubic feet (ft ³)	.02832	cubic metres (m ³)
cfs-day [(ft ³ /s) d]	2447	cubic metres (m ³)
acre-feet (acre-ft)	1233	cubic metres (m ³)
<i>Flow</i>		
cubic feet per second (ft ³ /s)	28.32	litres per second (l/s)
	.02832	cubic metres per second (m ³ /s)
gallons per minute (gpm)	.06309	litres per second (l/s)
	6.309×10^{-5}	cubic metres per second (m ³ /s)
<i>Mass</i>		
tons (short)	.9072	tonnes (t)

*The unit litre is accepted for use with the International System (SI).
See NBS Special Bulletin 330, p. 13, 1972 edition.

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