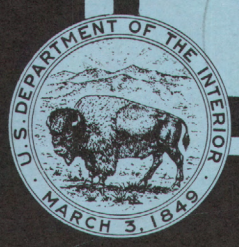
1974

Water Resources Data for Oklahoma

Part 1. Surface Water Records



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Prepared in cooperation with the State of Oklahoma and with other agencies

CALENDAR FOR WATER YEAR 1974

1973

OCTOBER

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1974

Water Resources Data for Oklahoma

Part 1. Surface Water Records

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Prepared in cooperation with the State of Oklahoma
and with other agencies

Prepared in cooperation with

Oklahoma Water Resources Board
Oklahoma Department of Highways
City of Oklahoma City
Corps of Engineers, U.S. Army
Soil Conservation Service, U.S. Department of Agriculture
Bureau of Reclamation, U.S. Department of the Interior

Water-resources records, 1974, for Oklahoma are given in the following reports of the U.S. Geological Survey:

1. Water Resources Data for Oklahoma
   Part 1: Surface Water Records

2. Water Resources Data for Oklahoma
   Part 2: Water Quality Records

Copies of this report may be obtained from
District Chief, Water Resources Division
U.S. Geological Survey
Room 621, Old Post Office Building
Oklahoma City, Okla. 73102

1975

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ILLUSTRATIONS

GAGING STATIONS IN DOWNSTREAM ORDER,
FOR WHICH RECORDS ARE PUBLISHED

LOWER MISSISSIPPI RIVER BASIN

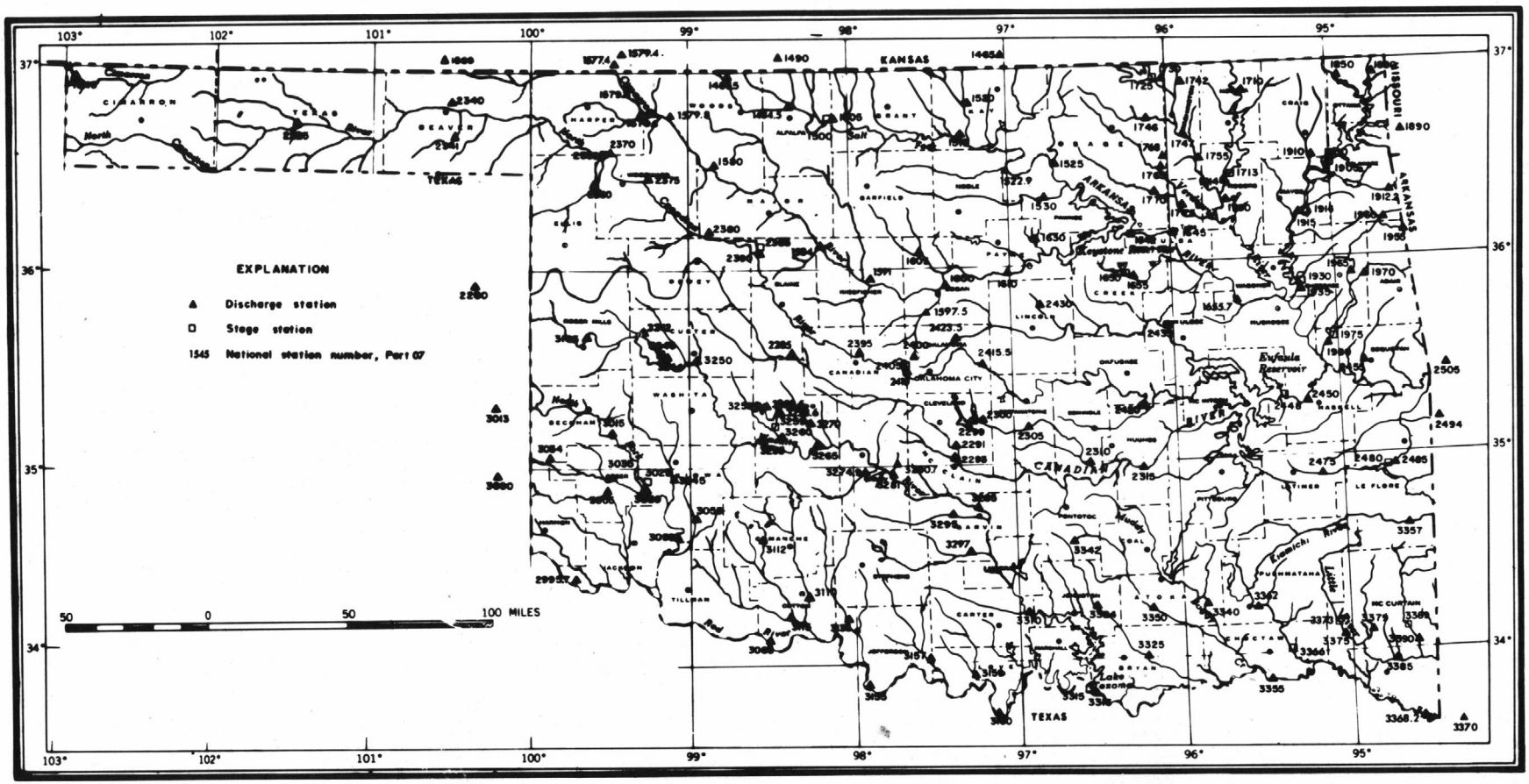

Figure 1.- Map of Oklahoma showing location of continuous record stations, water year 1974

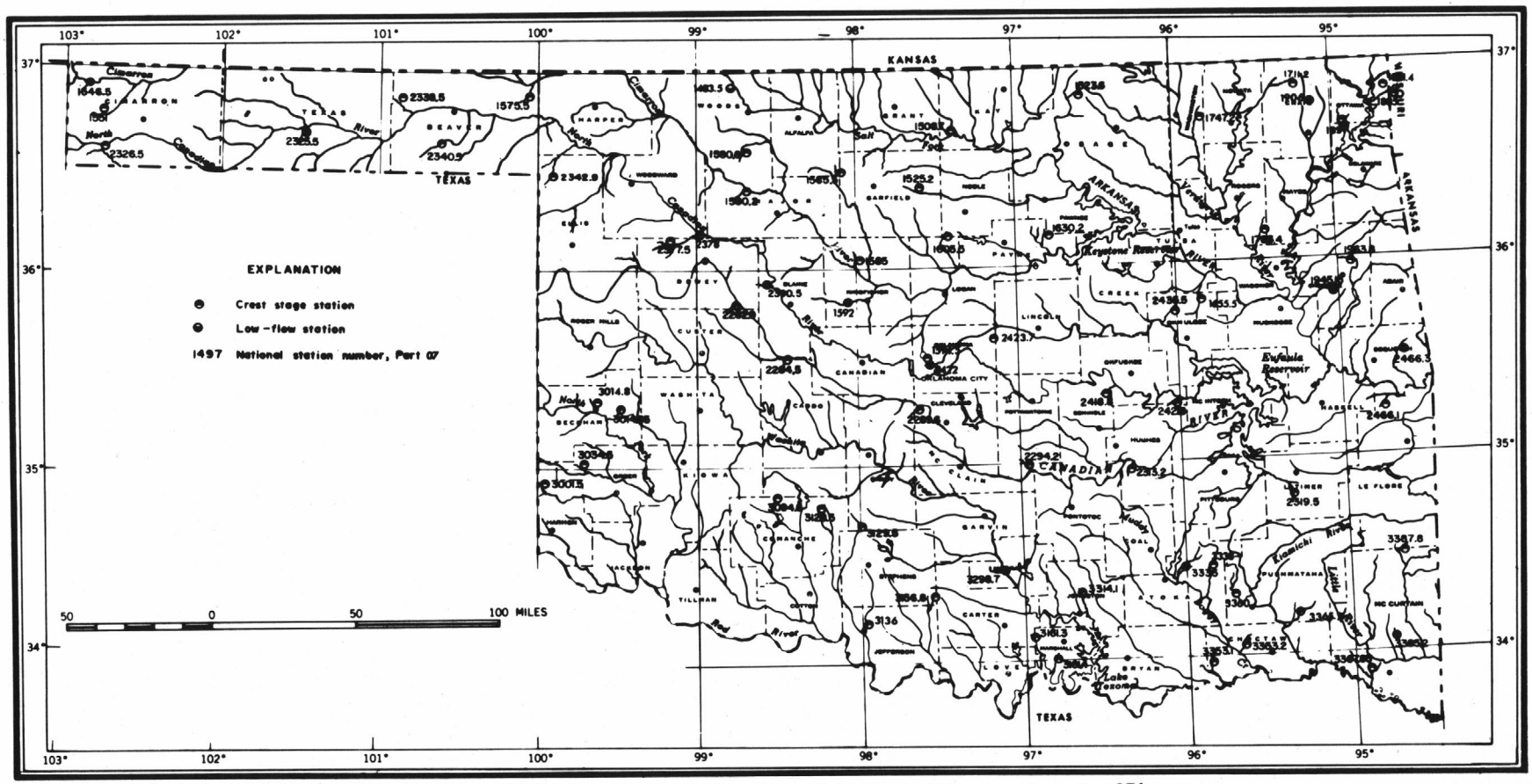

Figure 2.- Map of Oklahoma showing location of partial record stations, water year 1974

WATER RESOURCES DATA FOR OKLAHOMA, 1974

PART 1. SURFACE-WATER RECORDS

by W.J. Murphy Jr.

INTRODUCTION

Surface-water records for the 1974 water year for Oklahoma, including records of streamflow or reservoir storage at gaging stations, partial-record stations, and miscellaneous sites, are given in this report and their locations shown in figures 1, 2. Records for a few pertinent gaging stations in bordering States are also included. The records were collected and computed by the Water Resources Division of the U.S. Geological Survey under the direction of J.H. Irwin, district chief. Oklahoma district personnel who contributed significantly to the collection and preparation of data included in this report were: W.B. Mills, W.O. Thomas, R.L. Goemaat, D.L. Hart Sr., T.L. Huntzinger, D.V. Mitchell, R.K. Corley, C.R. Haddock, J.F. James, L.D. Mize, D.K. White, D.M. Walters, R.W. Chadd, T.E. Coffey, C.J. Henry, M.R. Johnston, C.A. Richard, B.T. Gaines, R.A. Williams, S.P. Watson and R.W. Casey. These data represent that portion of the National Water Data System collected by the U.S. Geological Survey and cooperating State and Federal agencies in Oklahoma.

Through September 30, 1960, the records of discharge and stage of streams and canals and contents and stage of lakes or reservoirs were published in an annual series of U.S. Geological Survey water-supply papers entitled "Surface Water Supply of the United States". Beginning with the 1961 water year, records will be published at 5-year intervals.

Beginning with the 1961 water year, surface-water records have been released by the Geological Survey in annual reports on a State-boundary basis. Distribution of these reports is limited; they are designed primarily for rapid release of data shortly after the end of the water year to meet local needs. The discharge and reservoir storage records for 1961-65 also have been published in a Geological Survey water-supply paper series entitled "Surface Water Supply of the United States 1961-65".

COOPERATION

The U.S. Geological Survey and organizations of the State of Oklahoma have had cooperative agreements for the systematic collection of surface-water records since 1935. Organizations that supplied data are acknowledged in station descriptions. Organizations that assisted in collecting data through cooperative agreement with the Survey are:

Oklahoma Water Resources Board, Lloyde E. Church, Chairman, suceeded by Gerald E. Borelli, Forrest Nelson, executive director.

Oklahoma Department of Highways, Richard A. Ward, Director.

Oklahoma City Water Department, J.H. Almond Jr., Acting Director of water services.

Assistance in the form of funds or services was given by the Corps of Engineers, U.S. Army, in collecting records for 77 gaging stations published in this report. Assistance for 14 stations was furnished by the Soil Conservation Service, U.S. Department of Agriculture, and 4 stations by the Bureau of Reclamation, U.S. Department of the Interior.

The following organizations aided in collecting records:

Grand River Dam authority; Central Oklahoma Master Conservancy District; Fort Cobb Reservoir Master Conservancy District; Lugert-Altus Irrigation District; the cities of Ada, Altus, Lawton, Shawnee, and Tulsa; the Department of Transportation, Federal Highway Administration; and the Agricultural Research Service, U.S. Department of Agriculture.

DEFINITION OF TERMS

Terms related to streamflow 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 page 13.

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 325,851 gallons.

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, 1.9835 acre-feet, or 646,317 gallons, and represents a runoff of 0.0372 inch from 1 square mile.

Contents is the volume of water in a reservoir or lake. Unless otherwise indicated, volume 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 construction of the channel, an artificial structure, or a uniform cross section over a long reach of the channel.

Cubic feet per second per square mile (CFSM) is the average number of cubic feet of water flowing per second from each square mile of area drained, assuming that the runoff is distributed uniformly in time and area.

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

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

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 more 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 obtained.

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

Runoff in inches (IN.) shows the depth to which the drainage area would be covered if all the runoff for a given time period were uniformly distributed on it.

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

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 man-made 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.

DOWNSTREAM ORDER AND STATION NUMBERS

Records 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 list of gaging 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 and partial-record station has been assigned a station number. These are in the same downstream order used in this report. In assigning station numbers, no distinction is made between partial-record stations and continuous-record 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. Gaps are left in the 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 07194500, includes the part number "07" and a 6-digit station number. In previous reports, the nonessential zeros were not shown.

All records for a drainage basin encompassing more than one State could be arranged in downstream order by assembling pages from the various State reports by station number to include all records in the basin.

EXPLANATION OF SURFACE-WATER DATA

Collection and Computation of Data

The base data collected at gaging stations consists 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 a water-stage

recorder that gives a continuous graph of the fluctuations (for digital recorders, a tape punched at 15-minute intervals) or from direct readings on a nonrecording gage. 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 on the measurement of stream discharge.(See also SELECTED REFERENCES.) 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 a stream-gaging station rating tables giving the discharge for any stage are prepared from stage-discharge relation curves defined by discharge measurements. If extensions to the rating curves are necessary to define the extremes of discharge, 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 application of the daily mean gage heights to the rating table gives the daily mean discharge, from which the monthly and the yearly mean discharge are computed. 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 determined by the shifting-control method, in which correction factors based on idividual discharge measurements and notes by engineers 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 determining discharge. Information required for determining 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 determining 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 hydrologists, 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. Discharge over spillways is computed from a stage-discharge relation curve defined by discharge measurements. 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 or contents. This happens when the recorder stops or otherwise fails to operate properly, intakes are plugged, the float is frozen in the well, 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 basic data. 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 monthly summary table of stage and contents or a table showing the daily contents is given. Records are published for a "WATER YEAR", which begins on October 1 and ends on September 30.

The description of the gaging station gives the location, drainage area, period of record, type and history of gages, average discharge, extremes of discharge or contents, and general remarks. 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 or for stations where changes in water development during the period of record cause the figure to have little significance. The maximum discharge (or

contents) and the maximum gage height, the minimum discharge if there is little or no regulation (or the minimum contents), and the minimum gage height if it is significant are given under "EXTREMES." The minimum daily discharge is given if there is extensive regulation (also the minimum discharge and gage height if they are abnormally low). 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 the 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 non-recording 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 alond 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, 1933 stands for the water year October 1, 1932, to September 30, 1933. 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. It should be noted that for all stations for which cubic feet per second per square mile and runoff in inches are published, a revisions of the drainage area necessitates corresponding revision of all figures based on the drainage area. Revised figures of cubic feet per second per square mile and runoff in inches resulting from a revision of the drainage area only are usually not published in the annual series of reports.

Skeleton capacity tables are published for all reservoirs for which records of contents are published on a daily basis.

The daily tables for stream-gaging stations give the discharge corresponding to the daily mean gage height unless there are large or rapid changes in the discharge during a day. For days having large or rapid changes, discharge for the day is computed by averaging the mean discharge for several parts of a day. For digital recorders, the daily mean discharge is always the average of the discharges at each punched reading. For stations equipped with nonrecording gages, the daily discharge corresponds to once-daily readings of the gage or to the mean of twice-daily readings; but for periods of rapidly changing stage the discharge is determined from a gage-height graph based on gage readings.

The daily tables for reservoir stations give the contents corresponding to the water-surface elevation at a given time, usually at 2400 each day. For some reservoirs the elevation at a given time is given in the daily table.

The monthly summary is given below the daily table. For stream-gaging stations the line headed "TOTAL" gives the sum of the daily figures; it is the total cubic feet per second per day for the month. 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 may be expressed in cubic feet per second per square mile (line headed "CFSM"), or in inches (line headed "IN.") or in acre-feet (line headed "AC-FT"). Figures of cubic feet per second per square mile and runoff in inches are omitted if there is extensive regulation or diversion, if the drainage area includes large non-contributing areas, or if the average rainfall on the drainage basin is usually less than 20 inches.

For reservoir stations the monthly summary gives the elevation (or gage height) at the end of the month and the change in contents during the month. For some reservoirs a tabulation of monthly diversions from the reservoir also is included.

In the yearly summary below the monthly summary, the figures of maximum are the maximum daily discharges for the calendar and water years; likewise, the minimums in this summary are the minimum daily discharges.

For reservoir stations the yearly summary gives the change in contents for the calendar year and for the water year. For some reservoirs the yearly diversion also is included.

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 not published for any canals, ditches, drains, or for any stream

for which the peaks are subject to substantial control by man. Time of day is expressed in 24-hour local standard time; for example, 12:30 a.m. is 0030 and 1:30 p.m. is 1330.

In a general footnote, introduced by the word "NOTE" certain periods are indicated 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 condition at the gage 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. Footnotes to reservoir tables may be used to explain the use of new capacity tables or for other special conditions.

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 is within 5 percent; "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 many stations, as indicated by the monthly mean, may not reflect natural runoff due to the effects of diversion, consumptive use, regulation, evaporation, or other factors. For such stations, discharge in cubic feet per second per square mile and runoff in inches are not published unless satisfactory adjustments can be made for such effects. 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 unadjusted losses (consumptive use, evaporation, seepage, etc.) are large in comparison with the observed discharge.

Publications

Daily records for a 5-year period, water years 1961-65, have been published in two volumes of a new continuing series. Data for the Red River basin are contained in Water Supply Paper 1920 "Surface Water Supply of the United States, 1961-65: Part 7, Volume 1, Lower Mississippi River Basin . . ."; data for the Arkansas River basin are contained in Volume 2 (WSP 1921). Records for subsequent years will be published at five-year intervals.

Each volume of the 1965 series of U.S. Geological Survey water-supply papers entitled "Surface Water Supply of the United States" contains a listing of the numbers of all water-supply papers in which records of surface-water data have been published for the area covered by the individual volumes. Each volume also contains a list of water-supply papers that give detailed information on major floods for the area.

Monthly records through September 1950 for the area covered by this report have been compiled and published in Water Supply Paper 1311; records for October 1950 to September 1960 have been compiled and published in Water Supply Paper 1731. 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.

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

Data collected at partial-record stations and at miscellaneous sites 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 table of discharge measurements at miscellaneous sites.

More detailed information 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. Many gaging-station records in Oklahoma through 1968 have been analyzed to give several statistical summaries: (1) the number of days in each year that the daily discharge was between selected limits (duration tables): (2) the lowest mean discharge for selected numbers of consectuive days in each year; and (3) the highest mean discharge for selected numbers of consecutive days in each year.

At or near some gaging stations, water-quality records also are collected. Data are obtained on the chemical quality of the stream water, on water temperature, on suspended-sediment concentration, and on the particle-size distribution of suspended sediment and bed material. These data are given in Part 2 of this report. Under the "REMARKS" paragraph of the gaging-station description, reference is made to water-quality records collected on a regular basis.

HYDROLOGIC CONDITIONS

Yearly runoff was above normal in all sections of Oklahoma except the extreme west central and the panhandle areas where yearly means were well below average mean discharge. In the north-central and eastern sections of the State, yearly mean discharge varied from 100 to 500 percent of the average mean discharge for the period of record.

Peak discharges, except in the northwest, were many and significant. The highest peak of record occured at Salt Fork Arkansas River at Tonkawa, Chikaskia River near Blackwell, Arkansas River at Ralston, Salt Creek near Okeene, Cottonwood Creek at Seward, Sand Creek near Okesa, Candy Creek near Wolco, Flint Creek near Kansas, North Canadian River near Harrah, Deep Fork near Arcadia, Dry Creek near Kendrick, and Mud Creek near Courtney. Three major storms, October 10 in north central, March 11 in the northeast and June 8 in the central and northeast, contributed the major runoff. Many stations in north-central and eastern Oklahoma had the second or third highest peak of record and many peaks above base. The Washita River at Durwood, in south-central Oklahoma, index station was 466 percent of median for the year.

Peak stages occured at sixteen crest-stage partial-record sites. Eleven were in the north-central and northeast on October 10 and June 8, and the remainder were scattered throughout the State, the result of very local runoff.

Reservoir storage in central and eastern Oklahoma were generally at or above normal maximum at the end of the year and varied from 88 percent to 115 percent of normal.

SELECTED REFERENCES

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Langbien, W. B., and Iseri, D. T., 1960, General introduction and hydrologic definitions: U.S. Geol. Survey Water-Supply Paper 1541-A, 29 p.

Factors for Converting English Units to International System (SI) Units

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	To obtain SI units
Length		
inches (in)	25.4	millimetre (mm)
	.0254	metres (m)
feet (ft)	.3048	metres (m)
yards (yd)	.9144	metres (m)
rods	5.0292	metres (m)
miles (mi)	1.609	kilometres (km)
Area		
acres	4047	square metres (m^2)
	.4047	*hectares (ha)
	.4047	square hectometre (hm^2)
	.004047	square kilometres (km^2)
square miles (mi^2)	2.590	square kilometres (km^2)
Volume		
gallons (gal)	3.785	**litres (l)
	3.785	cubic decimetres (dm^3)
	3.785×10^{-3}	cubic metres (m^3)
million gallons (10^6 gal)	3785	cubic metres (m^3)
	3.785×10^{-3}	cubic hectometres (hm^3)
cubic feet (ft^3)	28.32	cubic decimetres (dm^3)
	.02832	cubic metres (m^3)
cfs-day (ft^3/s day)	2447	cubic metres (m^3)
	2.447×10^{-3}	cubic hectometres (hm^3)
acre-feet (acre-ft)	1233	cubic metres (m^3)
	1.233×10^{-3}	cubic hectometres (hm^3)
	1.233×10^{-6}	cubic kilometres (km^3)
Flow		
cubic feet per second (ft^3/s)	28.32	litres per second (l/s)
	28.32	cubic decimetres per second (dm^3/s)
	.02832	cubic metres per second (m^3/s)
gallons per minute (gpm)	.06309	litres per second (l/s)
	.06309	cubic decimetres per second (dm^3/s)
	6.309×10^{-5}	cubic metres per second (m^3/s)
million gallons per day (mgd)	43.81	cubic decimetres per second (dm^3/s)
	.04381	cubic metres per second (m^3/s)
Mass		
ton (short)	.9072	tonne (t)

*The unit hectare is approved for use with the International System (SI) for a limited time. See NBS Special Bulletin 330, p. 15, 1972 edition.

**The unit litre is accepted for use with the International System (SI). See NBS Special Bulletin 300, p. 13, 1972 edition.

07146500 ARKANSAS RIVER AT ARKANSAS CITY, KS.

LOCATION.--Lat 37°03'23", long 97°03'32", in NE 1/4 NE 1/4 NE 1/4 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 mi^2 (113,200 km^2), of which 7,607 mi^2 (19,700 km^2) 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.--57 years, 1,812 ft^3/s (51.32 m^3/s), 1,313,000 acre-ft/yr (1.62 km^3/yr).

EXTREMES.--Current year: Maximum discharge, 56,800 ft^3/s (1,610 m^3/s), Oct. 13, gage height, 23.72 ft (7.230 m); minimum, 556 ft^3/s (15.7 m^3/s) Aug. 9.
Period of record: Maximum discharge, 103,000 ft^3/s (2,920 m^3/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 ft^3/s (226.6 m^3/s) on basis of field estimate, maximum gage height, 25.55 ft (7.788 m) May 18, 1957; minimum discharge, 1.0 ft^3/s (0.028 m^3/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 fair. Flow moderately regulated by John Martin Reservoir since 1943 (see sta 07130000) and Cheney Reservoir since 1964 (see sta 07144790) in Kansas State report. 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 the Kansas State 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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34,200	4,780	2,360	2,160	2,740	2,600	1,770	5,000	6,580	1,140	638	1,090
2	35,100	4,600	2,020	1,480	2,640	2,620	1,700	4,120	4,160	1,130	645	1,060
3	34,000	4,480	2,020	1,340	2,540	2,620	1,680	3,760	2,920	1,090	617	1,280
4	29,400	4,440	3,520	1,300	2,440	2,620	1,660	3,460	2,570	1,060	604	2,240
5	19,000	4,380	6,850	1,300	2,300	2,600	1,640	3,340	2,750	1,020	598	1,650
6	12,000	4,340	8,250	1,300	2,260	2,600	1,650	3,120	5,620	990	592	1,190
7	8,850	4,300	6,400	1,300	2,200	2,210	1,600	2,940	11,200	990	631	980
8	6,950	4,240	6,020	1,400	2,200	1,820	1,620	2,820	7,150	930	631	904
9	5,750	4,180	5,350	1,400	2,260	2,180	1,700	2,760	8,050	920	760	950
10	7,150	4,140	4,800	1,400	2,240	7,420	1,630	3,520	12,000	904	848	1,070
11	37,200	4,080	4,220	1,400	2,240	12,700	1,720	3,200	9,810	888	912	1,000
12	41,000	4,040	3,900	1,500	2,280	10,000	2,210	2,880	6,220	864	792	856
13	52,700	4,040	3,800	1,500	2,270	6,750	2,840	2,720	4,320	840	736	800
14	50,900	4,040	3,660	1,500	2,220	5,100	2,640	2,760	3,120	824	720	768
15	41,700	3,600	3,440	1,500	2,210	3,720	2,330	4,600	2,680	848	712	736
16	36,100	3,220	3,040	1,500	2,210	3,060	2,220	7,380	2,400	824	760	752
17	25,900	3,120	2,980	2,200	2,200	2,750	2,160	5,720	2,140	776	848	720
18	16,500	2,900	2,920	3,000	2,180	2,540	1,950	4,540	2,000	752	904	704
19	12,000	2,720	2,880	3,940	2,140	2,400	1,960	3,880	1,840	784	824	673
20	9,600	3,200	2,630	5,620	2,160	2,300	2,330	3,640	1,760	760	832	673
21	8,300	3,220	2,360	6,680	2,460	2,260	11,800	7,980	1,640	736	784	659
22	7,450	3,260	2,400	6,980	2,420	2,160	33,600	8,400	1,570	728	760	652
23	6,950	3,120	2,640	7,580	2,090	2,060	28,200	9,630	1,490	720	5,240	645
24	6,500	4,180	2,860	6,100	1,920	2,040	16,000	11,800	1,410	712	5,500	645
25	6,080	5,020	3,780	5,050	1,830	2,020	10,500	13,000	1,420	712	2,760	645
26	5,700	4,260	5,620	4,220	1,620	1,950	6,680	12,700	1,410	680	1,750	638
27	5,880	3,500	4,700	3,820	1,950	1,930	5,180	13,400	1,380	696	1,450	638
28	5,800	3,120	4,140	3,440	2,540	1,920	4,460	12,200	1,320	696	1,520	659
29	6,620	2,750	3,440	3,220	------	1,920	4,320	11,700	1,350	666	1,710	652
30	5,380	2,500	2,860	3,060	------	1,870	4,280	11,600	1,180	638	1,580	624
31	5,020	------	2,620	2,860	------	1,820	------	10,000	------	638	1,280	------
TOTAL	585,680	113,770	118,480	91,050	62,960	102,560	164,030	198,570	113,460	25,956	38,938	26,553
MEAN	18,890	3,792	3,822	2,937	2,249	3,308	5,468	6,405	3,782	837	1,256	885
MAX	52,700	5,020	8,250	7,580	2,740	12,700	33,600	13,400	12,000	1,140	5,500	2,240
MIN	5,020	2,500	2,020	1,300	1,820	1,820	1,600	2,720	1,180	638	592	624
AC-FT	1,162M	225,700	235,000	180,600	124,900	203,400	325,400	393,900	225,000	51,480	77,230	52,670

CAL YR 1973 TOTAL 2,199,860 MEAN 6,027 MAX 52,700 MIN 436 AC-FT 4,363,000
WTR YR 1974 TOTAL 1,642,007 MEAN 4,499 MAX 52,700 MIN 592 AC-FT 3,257,000

PEAK DISCHARGE (BASE, 10,000 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-13	1900	23.72	56,800	5-27	1300	15.22	13,900
3-11	1800	15.05	13,400	6-7	0300	14.90	12,900
4-22	2200	21.39	40,300	6-10	1400	15.14	13,600

07148350 SALT FORK ARKANSAS RIVER NEAR WINCHESTER, OKLA.

LOCATION.--Lat 36°57'45", long 98°46'55", in NE 1/4 SE 1/4 sec.26, T.29 N., R.15 W., Woods County, near left bank on downstream side of pier of county road bridge, 1 mi (1.6 km) northeast of Winchester, 2.5 mi (4.0 km) upstream from Greenwood Creek, 4.9 mi (7.9 km) downstream from Yellowstone Creek, 5 mi (8.0 km) downstream from State line, 19 mi (30.6 km) northwest of Alva, and at mile 156.2 (251.3 km).

DRAINAGE AREA.--856 mi^2 (2,220 km^2).

PERIOD OF RECORD.--October 1959 to current year. Monthly discharge only for some periods, published in WSP 1731.

GAGE.--Water-stage recorder. Datum of gage is 1,409.6 ft (429.6 m) above mean sea level.

AVERAGE DISCHARGE.--15 years, 87.6 ft^3/s (2.481 m^3/s), 63,470 acre-ft/yr (78.5 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 10,000 ft^3/s (283 m^3/s) Oct. 11, gage height, 12.31 ft (3.752 m); minimum daily, 0.20 ft^3/s (0.006 m^3/s) July 22.
Period of record: Maximum discharge, 52,000 ft^3/s (1,473 m^3/s) Aug. 19, 1961, gage height, 13.95 ft (4.252 m), from rating curve extended above 17,400 ft^3/s (493 m^3/s); no flow at times in 1961, 1964-72. Flood in May 1957 reached a stage of 15.4 ft (4.69 m), from information by county engineer.

REMARKS.--Records good.

REVISIONS (WATER YEARS).--WSP 1731: Drainage area. WSP 1921: 1960.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	203	98	58	35	62	64	107	73	19	1.8	.49	186
2	170	98	56	32	66	62	93	68	19	1.4	.36	690
3	137	96	90	30	73	66	90	70	19	1.1	.32	489
4	117	87	382	26	73	64	86	62	28	1.1	.36	274
5	117	80	374	26	73	62	85	60	24	.83	.96	242
6	104	75	220	26	68	66	82	56	73	.71	1.3	203
7	90	82	164	24	66	66	80	50	64	.49	.32	108
8	85	82	141	30	75	480	70	47	75	.49	.28	88
9	85	90	127	35	77	147	82	43	104	.49	28	70
10	2,240	80	117	40	73	993	85	38	56	.40	28	71
11	7,790	90	111	45	73	1,390	110	37	38	.32	31	66
12	1,980	96	105	50	68	513	87	38	29	.32	7.6	56
13	872	104	93	60	70	343	82	38	24	.32	2.3	49
14	485	90	93	70	68	279	70	33	23	.32	352	45
15	391	90	90	80	70	240	60	31	16	1.3	101	43
16	348	87	78	100	64	220	54	31	11	.71	18	41
17	291	77	71	120	73	220	56	28	6.8	.36	7.6	40
18	246	82	64	140	75	209	60	25	4.4	.28	3.5	41
19	225	87	60	160	73	199	56	22	4.4	.24	2.3	50
20	203	117	55	193	80	189	158	17	3.1	.24	1.4	50
21	186	147	50	180	80	183	716	17	2.8	.24	1.3	47
22	167	107	55	130	75	176	339	18	2.8	.20	225	45
23	161	93	70	113	70	170	196	40	2.8	.59	44	41
24	140	77	102	104	68	161	158	216	2.4	.32	41	40
25	130	64	90	101	73	155	123	64	2.4	2.3	54	37
26	126	64	90	98	77	151	96	44	2.4	60	33	37
27	117	64	93	96	73	144	85	32	2.1	45	1,550	36
28	110	64	90	90	70	140	82	26	1.8	10	3,340	37
29	104	66	88	85	------	137	93	22	1.8	3.2	530	37
30	107	62	83	77	------	123	85	21	1.8	1.3	252	34
31	101	------	37	70	------	117	------	19	------	.59	236	------
TOTAL	17,628	2,596	3,397	2,466	2,006	7,529	3,626	1,386	663.8	136.96	6,893.39	3,293
MEAN	569	86.5	110	79.5	71.6	243	121	44.7	22.1	4.42	222	110
MAX	7,790	147	382	193	80	1,390	716	216	104	60	3,340	690
MIN	85	62	37	24	62	62	54	17	1.8	.20	.28	34
AC-FT	34,970	5,150	6,740	4,890	3,980	14,930	7,190	2,750	1,320	272	13,670	6,530

CAL YR 1973 TOTAL 110,034.74 MEAN 301 MAX 11,200 MIN .09 AC-FT 218,300
WTR YR 1974 TOTAL 51,621.15 MEAN 141 MAX 7,790 MIN .20 AC-FT 102,400

PEAK DISCHARGE (BASE, 5,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE
10-11	0700	12.31	10,000
8-27	2400	11.30	7,120

07148450 SALT FORK ARKANSAS RIVER NEAR INGERSOLL, OKLA.

LOCATION.--Lat 36°49'18", long 98°21'35", in SW 1/4 NW 1/4, sec.14, T.27 N., R.11 W., Alfalfa County, on downstream right bank near end of bridge on State Highways 8 and 58, 2.0 mi (3.2 km) upstream from Medicine Lodge River, 2.5 mi (4.0 km) northeast of Ingersoll and at mile 120.3 (194 km).

DRAINAGE AREA.--1,140 mi^2 (2,953 km^2).

PERIOD OF RECORD.--September 1961 to September 1962, current year.

GAGE.--Water-stage recorder. Datum of gage is 1,170.30 ft (356.707 m) above mean sea level (State Highway Department bench mark).

EXTREMES.--Current year: Maximum discharge, 5,340 ft^3/s (151 m^3/s) Oct. 12, gage height, 11.5 ft (3.51 m) from graph of wire-weight reading; minimum daily, 0.35 ft^3/s (0.010 m^3/s) July 13.
Period of record: Maximum discharge, 5,340 ft^3/s (151 m^3/s) Oct. 12, 1973, gage height, 11.5 ft (3.51 m) from graph of wire-weight reading; minimum daily, 0.30 ft^3/s (0.008 m^3/s) Sept. 5, 6, 1962.

REMARKS.--Records fair.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	247	169	111	100	115	79	131	165	54	7.0	1.8	399
2	223	158	111	80	115	71	121	147	52	7.0	1.0	497
3	211	158	115	68	115	79	115	133	52	4.8	1.2	873
4	200	149	296	55	105	79	111	127	52	4.8	1.0	589
5	200	149	452	45	105	79	109	115	52	3.3	1.2	442
6	200	141	322	45	96	71	107	105	59	3.0	1.8	334
7	200	141	392	45	96	79	105	99	128	3.0	1.5	265
8	189	141	223	54	87	79	102	93	170	1.8	1.3	217
9	392	131	156	65	79	87	100	88	208	1.8	1.5	190
10	617	141	156	75	87	411	98	83	171	1.6	1.9	165
11	699	131	156	90	96	1,870	123	78	100	1.6	2.3	148
12	4,490	131	167	105	96	963	139	74	67	.84	5.1	122
13	3,430	131	145	120	87	461	141	69	60	.35	17	107
14	1,340	131	135	140	87	349	129	65	48	.70	23	97
15	996	121	125	150	79	283	111	63	43	.63	319	91
16	797	121	125	189	79	247	102	59	41	1.3	165	91
17	651	121	116	211	79	223	98	55	35	1.2	46	87
18	549	111	116	271	87	223	86	51	30	.56	25	82
19	467	111	105	349	87	211	94	48	25	.42	20	79
20	406	121	92	336	87	200	235	44	21	.42	17	79
21	349	152	80	271	87	189	555	41	20	.49	14	75
22	309	163	80	223	87	178	752	41	19	.49	14	69
23	271	163	105	189	79	178	349	44	17	.49	79	64
24	244	163	145	167	79	189	205	90	16	.49	115	64
25	235	152	167	135	79	167	173	376	15	.70	61	62
26	235	141	125	135	71	163	141	246	14	1.0	41	60
27	223	131	125	135	79	163	123	141	13	.56	86	58
28	211	131	125	135	79	163	111	95	12	3.6	2,370	57
29	200	121	115	125	------	152	113	76	10	7.8	2,430	56
30	178	111	115	115	------	141	209	66	9.6	8.2	830	53
31	178	------	115	115	------	131	------	59	------	3.6	537	------
TOTAL	19,137	4,136	4,913	4,338	2,504	7,958	5,088	3,036	1,613.6	73.54	7,230.6	5,572
MEAN	617	138	158	140	89.4	257	170	97.9	53.8	2.37	233	186
MAX	4,490	169	452	349	115	1,870	752	376	208	8.2	2,430	873
MIN	178	111	80	45	71	71	86	41	9.6	.35	1.0	53
AC-FT	37,960	8,200	9,740	8,600	4,970	15,780	10,090	6,020	3,200	146	14,340	11,050

WTR YR 1974 TOTAL 65,599.74 MEAN 180 MAX 4,490 MIN .35 AC-FT 130,100

PEAK DISCHARGE (BASE, 5,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE
10-12	abt1800	11.5	5,340

07149000 MEDICINE LODGE RIVER NEAR KIOWA, KS.

LOCATION.--Lat 37°02'17", long 98°28'04", in SE 1/4 SW1/4 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 mi^2 (2,340 km^2).

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 ft^3/s (57 m^3/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 (392.275 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.--29 years (1937-50, 1954-55, 1959-74), 141 ft^3/s (3.993 m^3/s), 102,200 acre-ft/yr (126 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 12,000 ft^3/s (340 m^3/s) Oct. 12, gage height, 12.10 ft (3.688 m); minimum observed, 5.70 ft^3/s (0.161 m^3/s) July 22.

Period of record: Maximum discharge, 16,000 ft^3/s (453 m^3/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 poor. Records of chemical analyses and water temperatures for the current year are published in Part 2 of this report.

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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	546	228	149	86	197	164	173	280	68	30	17	100
2	470	218	146	80	194	164	164	256	68	28	17	110
3	414	204	164	80	182	164	158	249	68	24	17	207
4	368	194	336	80	176	158	155	232	118	23	17	173
5	340	188	490	80	167	155	152	214	182	30	19	123
6	319	188	358	82	158	155	149	200	378	52	20	106
7	305	185	277	84	158	155	146	182	592	35	25	94
8	294	185	242	85	158	428	143	167	326	25	38	88
9	280	182	238	85	155	341	135	149	416	22	41	86
10	291	170	228	85	164	414	130	140	277	20	38	84
11	5,260	170	207	85	158	963	185	135	200	19	35	78
12	8,840	164	207	85	164	744	246	130	164	17	35	76
13	2,960	167	197	90	170	431	214	123	138	16	32	74
14	1,010	167	188	120	170	333	176	123	128	14	291	74
15	804	164	170	140	170	291	161	114	116	14	1,160	74
16	668	161	170	170	167	270	146	112	98	15	445	76
17	560	161	170	200	164	252	146	110	88	12	210	78
18	490	161	176	240	170	249	146	106	82	12	118	78
19	459	161	152	290	176	246	143	102	78	10	96	76
20	420	170	102	350	173	238	803	102	70	8.0	76	76
21	375	368	150	300	155	221	2,580	100	64	6.0	60	70
22	350	302	173	280	155	221	1,730	96	62	5.7	446	70
23	330	214	207	263	149	214	596	94	56	6.0	469	68
24	305	197	204	218	149	194	462	100	56	8.0	164	68
25	288	197	194	210	146	182	392	96	54	23	179	70
26	274	191	218	210	146	200	347	96	53	185	126	70
27	263	182	197	200	152	200	316	94	52	76	135	68
28	252	167	170	200	164	200	294	88	46	32	340	66
29	246	155	164	197	------	191	298	82	41	25	256	68
30	235	149	155	194	------	182	312	78	32	20	155	68
31	232	------	106	197	------	176	------	72	------	17	118	------
TOTAL	28,248	5,710	6,305	5,066	4,607	8,496	11,198	4,222	4,171	829.7	5,195	2,617
MEAN	911	190	203	163	165	274	373	136	139	26.8	168	87.2
MAX	8,840	368	490	350	197	963	2,580	280	592	185	1,160	207
MIN	232	149	102	80	146	155	130	72	32	5.7	17	66
AC-FT	56,030	11,330	12,510	10,050	9,140	16,850	22,210	8,370	8,270	1,650	10,300	5,190

CAL YR 1973 TOTAL 129,212.10 MEAN 354 MAX 8,840 MIN .60 AC-FT 256,300
WTR YR 1974 TOTAL 86,664.70 MEAN 237 MAX 8,840 MIN 5.7 AC-FT 171,900

PEAK DISCHARGE (BASE, 3,700 CFS)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-12	0300	12.10	12,000	4-22	0100	9.60	3,900

07150000 GREAT SALT PLAINS LAKE NEAR JET, OKLA.

LOCATION.--Lat 36°44'40", long 98°08'08", in NW 1/4 SE 1/4 sec.11, T.26 N., R.9 W., Alfalfa County, at right end of Great Salt Plains Dam on Salt Fork Arkansas River, 4.5 mi (7.2 km) upstream from Wagon Creek, 5.5 mi (8.8 km) northeast of Jet, and at mile 103.3 (166.2 km).

DRAINAGE AREA.--3,200 mi^2 (8,288 km^2), of which 8 mi^2 (20.7 km^2) is probably noncontributing.

PERIOD OF RECORD.--July 1941 to current year. Prior to October 1970, published as Great Salt Plains Reservoir near Jet.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level.

EXTREMES.--Current year: Maximum contents, 110,900 acre-ft (137 hm^3) Oct. 14, elevation, 1,131.28 ft (344.814 m); minimum, 24,590 acre-ft (30.3 hm^3) Aug. 8, 9, elevation, 1,124.17 ft (342.647 m).
Period of record: Maximum contents, 189,400 acre-ft (234 hm^3) July 2, 1951, elevation, 1,134.38 ft (345,759 m); minimum, 17,180 acre-ft (21.2 hm^3) Sept. 6, 1973, elevation, 1,123.16 ft (342.339 m).

REMARKS.--Reservoir is formed by earth dam. Outlet works consist of 310 ft (94.5 m) uncontrolled concrete spillway containing a series of three weirs to form a cascade. Storage began in June 1941; conservation pool was first filled Oct. 21, 1941. Capacity, 257,700 acre-ft (318 hm^3) at elevation 1,138.5 ft (347.01 m), crest of upper weir, and 31,420 acre-ft (38.7 hm^3) at elevation 1,125.0 ft (342.90 m), crest of intermediate weir and conservation pool. Reservoir is used for flood control and as a wildlife refuge. Figures given herein represent total contents. Revised capacity table, based on survey in 1971, used since Oct. 1, 1972.

COOPERATION.--Records furnished by Corps of Engineers.

REVISIONS.--WSP 1117: Drainage area

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

1,124	23,280	1,128	62,940
1,125	31,420	1,130	90,350
1,127	51,180	1,132	123,400

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	53,890	38,459	36,569	36,189	37,030	34,629	35,819	44,329	34,719	31,599	25,609	43,920
2	51,399	37,789	35,729	35,819	36,849	34,989	36,099	43,200	34,259	31,250	25,209	43,000
3	48,549	36,849	37,509	35,640	36,659	34,539	36,849	41,789	33,899	30,989	24,979	42,489
4	47,049	37,409	38,750	35,359	36,659	34,539	34,899	40,700	33,629	30,729	24,739	42,189
5	45,259	37,319	38,560	35,450	36,099	34,539	34,629	40,109	33,099	30,560	24,979	41,390
6	43,509	37,319	38,750	35,269	35,819	34,259	34,989	39,229	33,899	30,299	24,979	40,799
7	41,890	36,849	38,939	35,269	36,009	33,359	34,989	38,170	34,079	30,129	24,739	40,009
8	40,399	37,030	39,129	35,269	36,289	33,810	34,719	37,409	36,569	29,709	24,590	39,420
9	38,939	36,939	38,939	35,539	35,729	35,909	33,899	36,849	35,359	29,539	26,569	38,750
10	39,420	36,849	38,560	35,359	35,539	44,530	34,719	36,469	34,629	29,369	26,569	37,979
11	61,090	36,659	38,269	35,269	35,539	45,159	44,530	36,099	34,719	29,119	26,569	37,409
12	84,419	36,849	38,939	35,079	35,539	47,579	43,299	35,359	34,989	28,869	26,409	37,030
13	108,199	36,569	36,659	34,989	35,269	47,579	43,709	34,539	34,899	28,530	26,250	36,189
14	109,000	36,750	37,599	34,989	35,179	47,049	41,289	34,259	34,629	28,450	32,920	36,009
15	101,599	36,289	37,219	34,989	35,359	45,569	40,109	34,539	34,349	28,200	35,909	35,640
16	92,479	36,289	37,030	35,179	35,359	44,019	39,229	34,079	34,259	28,039	37,129	35,819
17	84,419	36,009	36,939	35,450	35,729	43,200	37,979	33,810	33,810	27,789	37,509	35,539
18	77,069	36,009	36,569	35,640	35,450	41,489	37,979	33,189	33,810	27,299	37,219	35,359
19	70,349	36,849	37,129	35,909	34,810	41,189	37,030	33,099	33,629	26,969	36,849	35,640
20	63,810	36,659	36,379	36,289	35,179	40,890	38,170	32,829	33,269	26,890	36,569	35,450
21	58,679	35,909	36,189	36,849	36,289	39,909	38,649	33,189	33,099	26,569	36,189	35,269
22	54,799	35,819	36,189	37,409	34,629	38,750	42,899	33,189	32,649	26,250	36,099	34,989
23	51,179	36,569	36,569	37,700	34,810	39,329	44,739	33,629	32,649	26,090	36,099	34,989
24	47,909	36,659	36,849	37,789	34,629	38,750	44,530	35,909	32,649	25,849	37,979	34,989
25	45,780	36,750	36,569	37,789	34,539	38,560	43,709	37,979	32,560	26,890	37,509	34,810
26	44,119	36,379	37,319	37,789	35,179	38,269	42,700	37,789	32,560	26,729	37,319	34,719
27	43,099	36,939	36,849	37,599	34,539	38,269	41,390	36,849	32,560	26,890	39,519	34,450
28	41,590	36,569	36,750	37,599	34,539	37,509	40,500	36,099	32,560	26,729	41,989	34,349
29	39,719	36,379	36,099	37,409	------	37,030	42,899	35,640	32,299	26,569	44,950	34,079
30	39,719	36,379	36,289	37,219	------	36,379	44,329	34,989	31,950	26,170	45,780	33,899
31	39,329	------	36,469	37,129	------	36,659	------	34,899	------	25,769	44,849	------
MAX	109,000	38,459	39,129	37,789	37,030	47,579	44,739	44,329	36,569	31,599	45,780	43,920
MIN	38,939	35,849	35,729	34,989	34,539	33,359	33,899	32,829	31,950	25,769	24,590	33,899
(†)	1,125.86	1,125.55	1,125.56	1,125.63	1,125.35	1,125.58	1,126.36	1,125.39	1,125.06	1,124.32	1,126.41	1,125.28
(‡)	-16,520	-2,950	+90	+660	-2,590	+2,120	+7,670	-9,430	-2,950	-6,180	+19,080	-10,950

CAL YR 1973.....‡ +2,020
WTR YR 1974.....‡ -21,950

† Elevation, in feet, at end of month.
‡ Change in contents, in acre-feet.

07150500 SALT FORK ARKANSAS RIVER NEAR JET, OKLA.

LOCATION.--Lat 36°45'11", long 98°07'44", in NE 1/4 NE 1/4 sec.11, T.26 N., R.9 W., Alfalfa County, near center of span on downstream side of county road bridge, 0.6 mi (0.97 km) downstream from Great Salt Plains Dam, 4 mi (6.4 km) upstream from Wagon Creek, 6 mi (9.7 km) northeast of Jet, and at mile 102.7 (165.2 km).

DRAINAGE AREA.--3,202 mi^2 (8,293 km^2), of which 8 mi^2 (20.7 km^2) is probably noncontributing.

PERIOD OF RECORD.--October 1937 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,092.20 ft (332.903 m) above mean sea level (levels by Corps of Engineers). Prior to Mar. 17, 1938, nonrecording gage at site 2.5 miles (4.0 km) upstream at datum 13.46 ft (4.103 m) higher. Mar. 17, 1938, to Apr. 26, 1953, water-stage recorder at site 200 ft (61.0 m) upstream, datum 5.00 ft (1.524 m) higher prior to Oct. 1, 1950.

AVERAGE DISCHARGE.--37 years, 363 ft^3/s (10.28 m^3/s), 263,000 acre-ft/yr (324 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 8,700 ft^3/s (246 m^3/s) Oct. 14, gage height, 10.25 ft (3.124 m); minimum daily, 2.5 ft^3/s (0.071 m^3/s) July 28.
Period of record: Maximum discharge, 25,900 ft^3/s (733 m^3/s) May 19, 1938, gage height, 13.80 ft (4.206 m), present datum; no flow at times in 1939-41, 1944, 1955-56.

REMARKS.--Records good. Flow regulated since June 1941 by Great Salt Plains Lake (see sta. 07150000). Records of chemical analyses and of water temperatures for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1117: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,530	580	435	280	490	207	609	1,330	255	12	15	1,220
2	2,390	512	446	250	468	216	573	1,320	233	40	45	1,110
3	2,240	474	401	230	454	240	677	1,110	228	13	15	1,080
4	1,950	459	607	200	440	292	483	1,010	209	4.9	14	1,050
5	1,670	458	597	220	452	207	431	909	151	4.1	12	1,010
6	1,470	445	602	210	385	228	473	808	161	4.4	12	937
7	1,260	445	625	220	360	286	498	761	195	3.9	12	858
8	1,080	433	636	225	395	507	400	615	238	4.1	9.6	775
9	885	424	647	295	371	648	383	532	382	4.0	12	696
10	925	426	607	291	335	1,010	314	514	235	4.4	17	616
11	2,630	430	578	270	353	1,540	1,180	458	248	19	18	588
12	4,870	441	624	239	326	1,850	1,490	414	265	5.6	14	496
13	7,560	438	526	249	316	2,300	1,450	472	272	5.2	13	429
14	8,480	435	479	278	283	2,010	1,230	289	269	6.2	21	397
15	8,080	406	482	306	295	1,870	1,060	250	238	28	241	364
16	7,180	378	460	330	303	1,700	945	306	216	7.2	430	361
17	6,390	401	452	366	334	1,520	824	263	210	32	475	358
18	5,540	360	410	403	297	1,370	751	211	190	7.2	473	335
19	4,660	327	457	424	277	1,230	686	165	194	34	512	338
20	3,820	280	460	455	262	1,170	764	137	197	6.5	477	331
21	3,070	840	460	476	311	1,120	794	137	167	32	401	301
22	2,510	780	460	481	278	980	1,080	120	82	5.5	335	286
23	2,070	660	421	491	278	869	1,470	120	49	29	378	268
24	1,690	560	408	529	228	884	1,500	281	43	5.1	482	268
25	1,360	480	418	529	224	839	1,450	531	42	45	568	264
26	1,120	470	427	523	224	800	1,300	558	31	3.9	534	248
27	978	465	425	525	211	767	1,170	526	23	2.8	535	218
28	852	458	425	545	215	748	1,050	484	20	2.5	890	234
29	734	439	405	534	------	740	1,070	383	31	26	1,160	190
30	655	425	348	515	------	633	1,330	366	11	25	1,420	143
31	633	------	300	501	------	627	------	258	------	28	1,430	------
TOTAL	91,282	14,129	15,028	11,390	9,165	29,408	27,435	15,638	5,085	450.5	10,970.6	15,769
MEAN	2,945	471	485	367	327	949	915	504	170	14.5	354	526
MAX	8,480	840	647	545	490	2,300	1,500	1,330	382	45	1,430	1,220
MIN	633	280	300	200	211	207	314	120	11	2.5	9.6	143
AC-FT	181,100	28,020	29,810	22,590	18,180	58,330	54,420	31,020	10,090	894	21,760	31,280

CAL YR 1973 TOTAL 436,583.58 MEAN 1,196 MAX 10,500 MIN .76 AC-FT 866,000
WTR YR 1974 TOTAL 245,750.10 MEAN 673 MAX 8,480 MIN 2.5 AC-FT 487,400

07151000 SALT FORK ARKANSAS RIVER AT TONKAWA, OKLA.

LOCATION.--Lat 36°40'13", long 97°18'33", in NW 1/4 SE 1/4 sec.4, T.25 N., R.1 W., Kay County, near right bank on downstream side of pier of bridge on U.S. Highway 77 in Tonkawa, 4 mi (6.4 km) downstream from Thompson Creek, 7.8 mi (12.6 km) upstream from Chikaskia River, and at mile 33.8 (54.4 km).

DRAINAGE AREA.--4,528 mi^2 (11,728 km^2) of which 8 mi^2 (20.7 km^2) is probably noncontributing.

PERIOD OF RECORD.--September 1903 to October 1905 (gage heights only), October 1935 to current year. Monthly discharge only for some periods, published as Arkansas River (Salt Fork) near Tonkawa 1903-4 and as "near Tonkawa" 1905.

GAGE.--Water-stage recorder. Datum of gage is 930.-2 ft (283.531 m) above mean sea level (Corps of Engineers bench mark). September 1903 to October 1905, nonrecording gage near present site at different datum. Jan. 2, 1936, to Jan. 22, 1939 nonrecording gage, and Jan. 23, 1939, to June 20, 1960, water-stage recorder at site 100 ft (30.5 m) upstream at same datum.

AVERAGE DISCHARGE.--39 years, 677 ft^3/s (19.17 m^3/s), 490,500 acre-ft/yr (605 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 97,300 ft^3/s (2,760 m^3/s) Oct. 11, gage height, 28.98 ft (8.833 m); minimum, 81 ft^3/s (2.29 m^3/s) July 30, Aug. 1.
Period of record: Maximum discharge, 97,300 ft^3/s (2,760 m^3/s) Oct. 11, 1973, gage height, 28.98 ft (8.833 m); no flow Aug. 31 to Oct. 12, Oct. 14-16, 1956.
Flood of June 10, 1923, reached a stage of 26.8 ft (8.17 m), from information by Corps of Engineers. Flood of July 11, 1904, reached a stage of 14.6 ft (4.45 m), datum then in use.

REMARKS.--Records good. Some regulation since June 1941 by Great Salt Plains Lake, 69.5 miles (111.8 km) upstream (see sta. 07150000). Records of chemical analyses and of water temperatures for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1117: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4,230	1,210	613	440	775	515	736	5,940	895	152	87	1,590
2	3,370	1,110	620	440	755	506	722	5,960	634	152	110	9,540
3	2,860	1,020	1,200	445	734	515	683	4,710	571	137	96	10,900
4	2,490	911	5,750	450	710	501	655	2,510	564	127	87	4,230
5	2,090	847	3,300	600	689	492	718	1,790	587	136	93	2,490
6	1,930	819	2,340	620	674	475	547	1,450	1,190	123	89	1,890
7	1,560	800	1,600	580	674	470	475	1,260	3,210	118	89	1,350
8	1,280	776	1,270	620	623	633	491	1,110	1,660	111	88	1,080
9	1,060	754	1,140	590	608	1,050	497	1,010	2,710	107	126	938
10	873	730	1,080	500	623	13,200	435	849	1,300	102	140	831
11	49,000	713	1,050	400	594	22,000	884	748	860	100	120	739
12	57,800	711	985	400	560	18,300	2,330	706	579	96	137	647
13	33,700	709	943	500	570	8,640	5,360	640	511	93	128	597
14	21,700	737	974	800	546	4,790	2,800	594	496	92	108	502
15	12,600	698	834	1,500	537	3,000	1,910	629	536	90	102	435
16	9,610	683	805	1,900	515	2,590	1,400	486	500	90	993	415
17	8,550	653	789	1,550	528	2,280	1,170	429	434	87	711	386
18	7,570	612	759	1,320	533	2,000	1,010	457	393	91	549	363
19	6,980	713	749	1,170	584	1,790	874	417	379	87	484	378
20	6,380	2,960	506	947	542	1,560	1,410	371	351	90	446	388
21	5,730	866	643	897	5,060	1,440	1,800	341	338	87	470	364
22	5,090	721	848	881	4,590	1,360	1,660	328	322	89	440	345
23	4,460	622	832	864	1,500	1,270	1,270	429	305	87	377	318
24	3,760	610	925	837	749	1,100	1,450	1,600	258	91	393	319
25	3,220	619	811	832	618	1,040	1,640	6,370	221	96	431	290
26	2,700	609	837	830	575	1,010	1,620	7,470	205	98	485	280
27	2,330	603	832	820	579	971	1,530	3,830	193	94	614	270
28	2,020	627	848	815	546	924	1,400	2,130	185	97	1,030	280
29	1,740	634	832	827	------	895	2,320	1,270	172	86	1,180	260
30	1,510	632	806	816	------	860	4,890	946	157	82	1,580	250
31	1,310	------	450	795	------	836	------	761	------	83	1,470	------
TOTAL	269,503	24,709	35,971	24,986	26,591	97,013	44,687	57,541	20,716	3,171	13,253	42,665
MEAN	8,694	824	1,160	806	950	3,129	1,490	1,856	691	102	428	1,422
MAX	57,800	2,960	5,750	1,900	5,060	22,000	5,360	7,470	3,210	152	1,580	10,900
MIN	873	603	450	400	515	470	435	328	157	82	87	250
AC-FT	534,600	49,010	71,350	49,560	52,740	192,400	88,640	114,100	41,090	6,290	26,290	84,630

CAL YR 1973 TOTAL 934,068 MEAN 2,559 MAX 57,800 MIN 55 AC-FT 1,853,000
WTR YR 1974 TOTAL 660,806 MEAN 1,810 MAX 57,800 MIN 82 AC-FT 1,311,000

PEAK DISCHARGE (BASE, 11,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE
10-11	1900	28.98	97,300
3-11	1800	21.06	23,200
9-2	2245	17.58	15,600

07152000 CHIKASKIA RIVER NEAR BLACKWELL, OKLA.

LOCATION.--Lat 36°48'31", long 97°16'39", in NE 1/4 NW 1/4 sec.23, T.27 N., R.1 W., Kay County, near left bank on downstream side of pier of St. Louis-San Francisco Railway Co. bridge at northeast edge of Blackwell, 0.2 mi (0.32 km) downstream from Bitter Creek, and at mile 28.2 (45.4 km).

DRAINAGE AREA.--1,859 mi^2 (4,815 km^2).

PERIOD OF RECORD.--October 1935 to current year. Monthly discharge only for some periods, published in WSP 1311.

GAGE.--Water-stage recorder. Datum of gage is 967.41 ft (29.487 m) above mean sea level (levels by Corps of Engineers). See WSP 1921 for history of changes prior to April, 1952.

AVERAGE DISCHARGE.--39 years, 481 ft^3/s (13.62 m^3/s), 348,500 acre-ft/yr (430 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 63,500 ft^3/s (1,800 m^3/s) Oct. 11, gage height, 33.85 ft (10.317 m); minimum, 24 ft^3/s (0.68 m^3/s) July 18, 19.
Period of record: Maximum discharge, 85,000 ft^3/s (2,410 m^3/s), June 22, 1942, gage height, 33.3 ft (10.15 m), from floodmark, present site and datum; maximum gage height, 33.85 (10.317 m) Oct. 11, 1973; no flow at times in 1954, 1956.
Flood of June 10, 1923 reached a stage of about 34 ft (10.4 m), present site and datum, from information by local residents, discharge 100,000 ft^3/s (283 m^3/s).

REMARKS.--Records fair. Some regulation at low flow by Lake Blackwell, capacity, 3,600 acre-ft (4.44 hm^3), 12.6 mi (20.3 km) above station. Small diversion made from reservoir for municipal supply of city of Blackwell.

REVISIONS.--WSP 1117: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,000	438	315	273	350	260	305	486	260	115	200	372
2	1,270	418	315	240	330	254	285	676	300	110	130	2,640
3	957	396	710	220	320	253	278	467	290	121	120	7,570
4	773	391	4,930	215	310	251	275	382	330	120	110	3,590
5	642	372	5,820	210	300	247	272	340	310	110	100	653
6	571	370	1,900	210	300	241	266	313	546	120	75	389
7	512	372	937	210	290	235	266	287	6,140	100	74	311
8	473	372	690	250	280	246	258	269	6,080	90	70	385
9	441	370	587	400	280	1,130	250	252	2,480	84	2,000	479
10	824	361	536	450	270	7,980	247	241	2,010	80	1,500	344
11	48,000	353	503	500	260	13,800	399	235	912	78	1,000	288
12	36,300	348	475	470	250	7,080	3,890	221	542	75	250	259
13	23,500	350	456	438	240	1,930	1,530	214	414	70	88	232
14	5,810	348	447	448	250	1,080	550	221	359	65	69	221
15	2,280	334	429	458	260	797	392	201	371	56	612	201
16	1,540	325	415	491	250	676	330	194	292	51	1,460	205
17	1,200	317	409	963	260	593	304	186	246	31	300	232
18	1,010	315	400	2,020	270	531	290	180	219	24	391	224
19	897	376	411	2,930	260	487	275	176	208	31	359	208
20	808	1,130	301	2,300	270	468	637	168	200	33	196	208
21	713	881	322	1,250	1,250	454	2,500	161	167	31	124	189
22	649	482	389	1,000	1,100	447	3,790	756	151	30	102	186
23	605	402	465	800	437	417	1,460	643	148	30	102	172
24	570	363	824	500	319	405	868	312	149	100	272	173
25	533	344	822	450	285	382	580	354	141	500	337	167
26	506	344	580	430	270	370	470	997	137	400	361	153
27	1,210	321	482	410	263	364	417	1,720	175	250	280	155
28	982	325	439	400	262	358	388	458	140	200	1,300	155
29	548	321	410	420	------	350	1,050	220	130	200	4,530	155
30	485	310	400	386	------	331	655	200	120	210	1,970	153
31	455	------	327	360	------	319	------	220	------	400	520	------
TOTAL	137,064	12,149	26,446	20,102	9,786	42,736	23,477	11,750	23,967	3,915	19,002	20,669
MEAN	4,421	405	853	648	350	1,379	783	379	799	126	613	689
MAX	48,000	1,130	5,820	2,930	1,250	13,800	3,890	1,720	6,140	500	4,530	7,570
MIN	441	310	301	210	240	235	247	161	120	24	69	153
AC-FT	271,900	24,100	52,460	39,870	19,410	84,770	46,570	23,310	47,540	7,770	37,690	41,000

CAL YR 1973 TOTAL 581,939 MEAN 1,594 MAX 48,000 MIN 20 AC-FT 1,154,000
WTR YR 1974 TOTAL 351,063 MEAN 962 MAX 48,000 MIN 24 AC-FT 696,300

PEAK DISCHARGE (BASE, 8,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-11	0645	33.85	63,500	6-7	2045	23.90	8,290
3-11	1300	29.25	21,200	9-3	1330	23.67	8,170

07152500 ARKANSAS RIVER AT RALSTON, OKLA.

LOCATION.--Lat 36°30'09", long 96°43'22", in NW 1/4 sec.1, T.23 N., R.5 E., Osage County, near left bank on downstream side of pier of bridge on State Highway 18 at Ralston, 2 mi (3.2 km) downstream from Salt Creek, 2 mi (3.2 km) upstream from Grayhorse Creek, and at mile 594.0 (955.7 km).

DRAINAGE AREA.--54,465 mi^2 (141,064 km^2), of which 7,615 mi^2 (19,723 km^2) is probably noncontributing.

PERIOD OF RECORD.--October 1925 to current year. Monthly discharge only for some periods, published in WSP 1311. Gage-height records collected in this vicinity since 1922 are contained in reports of U.S. Weather Bureau.

GAGE.--Water-stage recorder. Datum of gage is 776.70 ft (236.738 m) above mean sea level. Oct. 1, 1925, to Nov. 13, 1935, nonrecording gage at site of former highway bridge 1,200 ft (366 m) downstream at same datum. Nov. 14, 1935, to Feb. 23, 1939, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--49 years, 4,737 ft^3/s (134.2 m^3/s), 3,432,000 acre-ft/yr (4.23 km^3/yr).

EXTREMES.--Current year: Maximum discharge, 211,000 ft^3/s (5,980 m^3/s) Oct. 13, gage height, 22.98 ft (7.004 m); minimum, 771 ft^3/s (21.8 m^3/s) Aug. 9.
Period of record: Maximum discharge, 211,000 ft^3/s (5,980 m^3/s) Oct. 13, 1973, gage height, 22.98 ft (7.004 m); minimum, 14 ft^3/s (0.40 m^3/s) Oct. 12, 1956.
Flood of June 11, 1923, reached a stage of 23.8 ft (7.25 m), referred to outside gage on basis of stages observed in 1923 and 1944 at site 1,200 ft (366 m) downstream.

REMARKS.--Records good. Some regulation by John Martin Reservoir in Colorado and Great Salt Plains Lake (see sta. 07150000). Records of chemical analyses and of water temperatures for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1341: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	72,200	11,200	6,400	6,400	5,990	5,860	5,100	13,700	16,100	2,470	870	5,480
2	49,200	10,300	6,070	5,400	5,710	6,090	5,000	20,200	12,400	2,340	866	11,100
3	43,200	9,640	6,140	4,800	5,550	6,060	4,800	20,100	8,850	2,230	838	16,400
4	41,800	9,050	15,800	4,000	5,380	5,990	4,710	16,000	6,960	2,110	822	20,400
5	37,300	8,580	21,800	4,500	5,030	5,820	4,590	12,700	5,860	2,020	810	14,600
6	28,300	8,190	22,500	5,200	5,020	5,670	4,520	9,080	5,330	1,960	819	8,810
7	18,900	7,900	22,200	6,000	4,890	5,530	4,380	7,840	33,400	1,880	807	6,310
8	14,700	7,670	12,600	6,000	4,850	5,460	4,170	7,000	48,800	1,780	780	4,690
9	12,200	7,390	12,100	6,400	4,730	6,620	4,040	6,570	36,000	1,700	5,000	3,850
10	8,600	7,180	11,500	6,600	4,660	50,000	3,970	6,110	27,600	1,650	5,480	3,490
11	11,600	7,020	10,100	7,000	4,620	100,000	4,360	6,010	30,500	1,600	8,700	3,340
12	97,700	6,830	9,280	7,200	4,600	85,100	4,930	7,530	29,000	1,580	5,540	3,170
13	194,000	6,670	8,200	7,660	4,580	63,200	6,520	6,380	18,600	1,510	3,460	3,010
14	163,000	6,510	7,400	8,870	4,550	38,100	10,600	5,840	11,600	1,500	2,190	2,750
15	136,000	6,290	7,000	9,100	4,540	22,800	8,790	5,440	8,690	1,460	1,930	2,560
16	89,100	6,150	6,800	9,720	4,530	17,300	7,230	7,530	7,020	1,430	4,720	2,410
17	56,400	5,780	6,530	10,900	4,450	14,000	6,250	12,500	6,070	1,380	7,940	2,280
18	43,800	5,380	6,370	13,100	4,420	11,800	5,640	10,600	5,520	1,300	6,410	2,190
19	32,800	5,270	6,100	14,600	4,540	10,300	5,260	7,950	5,010	1,220	3,640	3,490
20	25,900	8,270	5,940	13,900	5,670	9,350	4,950	6,610	4,700	1,120	3,250	7,420
21	22,000	11,300	5,740	19,200	6,000	8,400	5,560	5,940	4,580	1,050	2,930	4,040
22	19,200	10,700	5,380	15,900	13,700	7,900	8,120	7,360	4,670	1,010	2,790	3,200
23	17,100	7,910	5,370	13,700	18,200	7,400	30,800	13,600	4,720	996	3,240	2,320
24	15,400	8,420	5,510	12,900	12,400	7,000	40,000	19,700	4,800	968	2,550	2,170
25	14,200	14,200	6,090	11,800	9,910	6,700	24,000	25,400	4,220	981	3,920	2,480
26	13,200	10,600	5,860	10,100	7,370	6,300	16,900	37,700	3,190	983	5,870	2,600
27	12,400	8,880	5,480	8,690	6,520	6,000	12,400	42,400	3,000	966	4,360	2,240
28	12,500	8,000	9,510	7,820	6,090	5,800	10,100	34,000	2,850	945	3,770	1,970
29	16,100	7,200	7,520	7,370	------	5,600	9,570	23,000	2,730	905	4,690	1,840
30	14,200	6,600	4,620	6,800	------	5,400	12,700	16,300	2,580	893	8,760	1,740
31	13,500	------	6,270	6,350	------	5,300	------	15,800	------	861	8,310	------
TOTAL	1,346,5M	245,080	278,180	277,980	178,500	546,850	279,960	436,890	365,350	44,798	116,062	152,350
MEAN	43,440	8,169	8,974	8,967	6,375	17,640	9,332	14,090	12,180	1,445	3,744	5,078
MAX	194,000	14,200	22,500	19,200	18,200	100,000	40,000	42,400	48,800	2,470	8,760	20,400
MIN	8,600	5,270	4,620	4,000	4,420	5,300	3,970	5,440	2,580	861	780	1,740
AC-FT	2,671M	486,100	551,800	551,400	354,100	1,085M	555,300	866,600	724,700	88,860	230,200	302,200

CAL YR 1973 TOTAL 5,417,360 MEAN 14,840 MAX 194,000 MIN 1,090 AC-FT 10,750,000
WTR YR 1974 TOTAL 4,268,500 MEAN 11,690 MAX 194,000 MIN 780 AC-FT 8,467,000

PEAK DISCHARGE (BASE, 30,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-13	0630	22.98	211,000	5-27	1215	11.81	43,300
3-11	0515	17.72	106,000	6-8	0415	12.96	52,900
4-24	0115	12.19	46,400				

07153000 BLACK BEAR CREEK AT PAWNEE, OKLA.

LOCATION.--Lat 36°20'37", long 96°47'57", on east line of SE 1/4 NE 1/4 sec.31, T.22 N., R.5 E., Pawnee County, on downstream side of left pier of bridge on State Highway 18 in north Pawnee, 300 ft (91.4 m) downstream from Skedee Creek, and at mile 23.4 (37.7 km).

DRAINAGE AREA.--576 mi^2 (1,492 km^2).

PERIOD OF RECORD.--July 1944 to current year.

GAGE.--Water-stage recorder. Datum of gage is 802.73 ft (244.672 m) above mean sea level (levels by Corps of Engineers). Prior to Sept. 21, 1944, nonrecording gage at present site and datum except for Aug. 27, 1953, to Apr. 29, 1954, nonrecording gage at site 500 ft (152 m) downstream at same datum.

AVERAGE DISCHARGE.--30 years, 169 ft^3/s (4.786 m^3/s), 122,400 acre-ft/yr (151 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 11,500 ft^3/s (326 m^3/s) Mar. 12, gage height, 24.43 ft (7.446 m); minimum daily, 1.6 ft^3/s (0.045 m^3/s) Aug. 1, 3.
Period of record: Maximum discharge, 30,200 ft^3/s (855 m^3/s) Oct. 3, 1959, gage height, 31.43 ft (9.580 m); no flow at times in many years.
Flood of May 19, 1943, reached a stage of 28.19 ft (8.592 m), from floodmark, discharge, 17,800 ft^3/s (504 m^3/s).

REMARKS.--Records good.

REVISIONS.--WSP 1117: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	479	25	160	33	34	150	92	494	1,770	9.4	1.6	53
2	322	24	106	35	30	130	82	1,870	1,360	8.6	1.7	4,400
3	245	19	314	30	28	118	74	2,440	571	7.9	1.6	3,420
4	200	20	2,290	26	26	95	71	2,380	429	10	21	787
5	129	17	2,500	25	30	81	58	916	350	20	60	469
6	89	14	1,100	25	24	69	53	602	300	7.8	44	329
7	65	14	513	26	22	74	50	448	1,740	6.5	22	218
8	47	14	348	27	24	100	50	321	2,440	8.6	14	150
9	36	13	268	26	21	248	43	226	1,570	8.1	3,340	92
10	25	14	192	28	20	3,820	40	166	656	6.6	2,500	59
11	787	14	142	25	21	8,480	114	125	377	5.9	2,330	44
12	2,070	13	114	22	20	11,400	478	97	227	5.4	3,630	39
13	2,530	13	98	21	20	6,930	327	78	153	5.3	1,360	30
14	928	13	76	22	26	2,080	168	68	108	5.1	902	23
15	384	20	64	33	30	1,550	101	51	83	4.9	775	19
16	237	10	53	62	36	1,280	74	42	63	4.6	712	17
17	142	9.1	46	92	46	1,050	60	37	49	4.6	618	13
18	95	9.4	43	130	153	856	54	32	37	4.1	520	11
19	71	19	51	141	420	701	50	28	33	11	422	1,720
20	55	140	41	127	1,020	548	80	25	28	13	351	7,770
21	44	756	35	99	2,740	445	187	25	24	5.0	277	5,260
22	37	330	37	85	2,590	381	288	23	20	3.3	301	2,050
23	30	150	44	75	1,100	343	136	131	17	3.0	717	812
24	24	943	52	67	614	270	86	1,180	15	4.4	445	821
25	22	2,900	75	55	423	220	69	1,400	13	4.4	300	1,380
26	22	2,170	89	49	311	188	58	2,260	12	3.2	159	1,000
27	26	668	80	45	235	165	53	1,990	11	2.5	122	553
28	35	508	68	39	184	148	46	678	11	2.1	85	344
29	48	433	60	38	------	143	51	378	11	2.0	58	227
30	26	265	55	38	------	115	776	247	10	1.9	201	159
31	20	------	51	37	------	101	------	828	------	1.8	86	------
TOTAL	9,270	9,557.5	9,165	1,583	10,248	42,279	3,869	19,586	12,488	191.0	20,376.9	32,269
MEAN	299	319	296	51.1	366	1,364	129	632	416	6.16	657	1,076
MAX	2,530	2,900	2,500	141	2,740	11,400	776	2,440	2,440	20	3,630	7,770
MIN	20	9.1	35	21	20	69	40	23	10	1.8	1.6	11
AC-FT	18,390	18,960	18,180	3,140	20,330	83,860	7,670	38,850	24,770	379	40,420	64,010

CAL YR 1973 TOTAL 155,915.5 MEAN 427 MAX 5,300 MIN 1.4 AC-FT 309,300
WTR YR 1974 TOTAL 170,882.4 MEAN 468 MAX 11,400 MIN 1.6 AC-FT 338,900

PEAK DISCHARGE (BASE, 4,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
3-12	0400	24.43	11,500	9-2	1315	15.64	5,900
8-9	2000	15.89	6,040	9-20	0115	21.33	9,390

07154500 CIMARRON RIVER NEAR KENTON, OKLA.

LOCATION.--Lat 36°55'36", long 102°57'31", in SE 1/4 sec.4, T.5 N., R.1 E., Cimarron County, near right bank on downstream side of pier of county road bridge, 1.5 mi (2.41 km) upstream from North Carrizo Creek, 1.7 mi (2.74 km) northeast of Kenton, 2.2 mi (3.54 km) downstream from Carrizozo Creek, and at mile 594.0 (955.7 km).

DRAINAGE AREA.--1,106 mi^2 (2,865 km^2), of which 68 mi^2 (176.1 km^2) is probably noncontributing.

PERIOD OF RECORD.--April 1904 to July 1905 (gage heights only), October 1950 to current year.

GAGE.--Water-stage recorder. Datum of gage is 4,262.08 ft (1,299.082 m) above mean sea level, (levels by State Highway Department). April 1904 to July 1905 nonrecording gage at site 0.9 mi (1.45 km) upstream at different datum. Oct. 1, 1950, to Sept. 19, 1967, water-stage recorder at same site and at datum 5.00 ft (1.524 m) higher.

AVERAGE DISCHARGE.--24 years (1950-74), 22.9 ft^3/s (0.649 m^3/s), 16,590 acre-ft/yr (20.5 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 4,180 ft^3/s (118 m^3/s) July 31, gage height, 12.87 ft (3.923 m); no flow at times.
Period of record: Maximum discharge, 43,400 ft^3/s (1,230 m^3/s) Oct. 17, 1965, gage height, 22.32 ft (6.803 m), present datum, from rating curve extended above 7,000 ft^3/s (198 m^3/s) on basis of contracted-opening measurement of peak flow; no flow at times in most years.

REMARKS.--Records fair. Extensive diversions for irrigation above station.

REVISIONS (WATER YEARS).--WSP 1711: 1956(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	.06	1.2	.50	.48	.33	.19	.10	0	0	1.8	.50
2	1.3	.07	1.2	.45	.42	.33	.11	.12	0	0	.43	.30
3	1.2	.05	1.8	.38	.28	.32	.16	.10	0	0	.10	.15
4	1.0	.04	2.8	.25	.27	.25	.17	.10	0	0	0	.10
5	.77	.03	1.9	.29	.27	.23	.17	.10	0	0	0	.07
6	.75	.06	1.8	.27	.33	.24	.18	.09	0	0	0	.04
7	.60	.37	1.3	.33	.32	.31	.15	.08	.05	0	0	.05
8	.52	.53	1.2	.38	.42	.31	.16	.09	.44	0	151	.04
9	.38	.45	1.0	.33	.62	.53	.20	.09	.20	0	321	.02
10	.44	.52	1.1	.38	.46	1.3	.20	.09	.15	0	487	0
11	1.1	.45	1.0	.32	.28	1.6	.18	.05	.08	0	49	0
12	1.3	.56	.61	.58	.25	1.2	.19	.05	.05	0	109	0
13	.73	.39	.24	1.0	.22	1.2	.19	.03	.07	0	16	0
14	.57	.44	.22	1.5	.19	.89	.17	.02	.03	0	7.5	.02
15	.57	.31	.25	1.8	.21	.81	.18	.03	0	0	2.5	.07
16	.45	.34	.27	2.2	.21	.94	.18	.05	0	0	35	.08
17	.45	.35	.32	1.8	.25	.89	.14	.06	0	0	17	.03
18	.38	.29	.30	1.2	.26	.99	.16	.03	0	0	6.7	0
19	.42	.43	.29	.85	.22	.74	.11	.01	0	0	1.3	0
20	.36	1.3	.40	.59	.28	.70	.13	.01	0	0	.30	0
21	.32	1.5	.77	.33	.38	.53	.12	.01	0	0	.10	0
22	.25	1.5	.98	.18	.24	.53	.11	.01	0	0	0	0
23	.24	1.4	1.1	.19	.23	.45	.10	.02	0	69	0	0
24	.17	1.6	1.4	.20	.21	.45	.10	.06	56	48	0	0
25	.17	1.5	.95	.23	.31	.42	.11	.13	.67	2.3	0	0
26	.13	1.7	1.2	.38	.34	.38	.14	.10	0	0	0	0
27	.13	1.4	.84	.41	.40	.38	.10	.09	0	0	0	0
28	.10	1.5	1.0	.49	.38	.38	.10	.08	0	0	0	0
29	.10	1.5	.99	.51	------	.25	.10	.05	0	0	137	0
30	.07	1.3	.87	.54	------	.23	.10	.01	0	0	39	0
31	.07	------	.54	.57	------	.23	------	0	------	213	2.5	------
TOTAL	16.44	21.94	29.84	19.43	8.73	18.34	4.40	1.86	57.74	332.3	1,384.23	1.47
MEAN	.53	.73	.96	.63	.31	.59	.15	.060	1.92	10.7	44.7	.049
MAX	1.4	1.7	2.8	2.2	.62	1.6	.20	.13	56	213	487	.50
MIN	.07	.03	.22	.18	.19	.23	.10	0	0	0	0	0
AC-FT	33	44	59	39	17	36	8.7	3.7	115	659	2,750	2.9

CAL YR 1973 TOTAL 4,712.62 MEAN 12.9 MAX 3,300 MIN 0 AC-FT 9,350
WTR YR 1974 TOTAL 1,896.72 MEAN 5.20 MAX 487 MIN 0 AC-FT 3,760

PEAK DISCHARGE (BASE, 2,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE
7-31	1900	12.87	4,180
8-9	2300	12.07	3,170

07156900 CIMARRON RIVER NEAR FORGAN, OKLA.

LOCATION.--Lat 37°00'45", long 100°29'39", in SE 1/4 SE 1/4 sec.8, T.35 S., R.24 E., Mead 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 (12.5 km) north of Forgan, and at mile 375.7 (604.5 km).

DRAINAGE AREA.--8,536 mi^2 (22,108 km^2), of which 4,316 mi^2 (11,178 km^2) is probably noncontributing.

PERIOD OF RECORD.--October 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,320.05 ft (707.151 m) above mean sea level.

AVERAGE DISCHARGE.--9 years, 85.4 ft^3/s (2.419 m^3/s), 61,870 acre-ft/yr (76.3 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 440 ft^3/s (12.5 m^3/s), Aug. 24, gage height, 3.80 ft (1.158 m); minimum, 18 ft^3/s (.510 m^3/s) Jan. 4.
Period of record: Maximum discharge, 21,200 ft^3/s (600 m^3/s) Oct. 20, 1965, gage height, 8.10 ft (2.469); minimum, 18 ft^3/s (.510 m^3/s) Jan. 4, 1974.

REMARKS.--Records good except for winter periods, which are fair. Extensive diversion for irrigation above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	66	54	69	30	63	66	65	59	46	39	52	48
2	64	48	65	28	59	69	62	59	45	38	55	60
3	59	51	85	23	48	69	59	55	62	38	56	50
4	53	57	91	18	47	77	59	56	140	36	56	48
5	61	57	79	20	47	77	59	56	80	38	56	52
6	64	59	73	19	48	79	57	55	71	38	60	44
7	59	65	72	23	46	76	51	52	71	37	56	47
8	58	62	85	29	37	77	51	56	100	37	54	49
9	61	65	78	27	37	76	62	60	77	38	103	46
10	84	69	65	30	40	110	57	61	62	37	63	46
11	90	72	55	25	36	95	51	55	53	35	71	45
12	67	69	51	28	35	81	48	56	53	38	57	44
13	59	65	61	50	41	74	48	51	55	35	55	50
14	58	59	65	60	42	70	43	49	47	34	60	58
15	60	57	63	100	46	69	45	53	40	38	56	62
16	61	57	79	170	45	67	62	56	37	44	49	67
17	54	59	95	130	41	66	69	60	34	42	46	131
18	58	55	90	110	41	65	65	59	54	38	53	71
19	61	66	55	90	45	63	63	55	44	37	57	58
20	66	86	35	83	52	66	59	60	35	39	54	57
21	67	82	40	79	48	66	59	62	37	39	56	55
22	67	76	50	76	63	64	58	55	41	40	65	55
23	57	67	57	72	62	69	58	54	41	43	95	58
24	52	57	59	69	59	70	58	58	46	44	161	53
25	54	55	80	72	60	72	57	55	46	115	55	56
26	56	55	76	69	73	71	57	50	53	63	46	54
27	54	66	74	73	82	75	57	42	50	52	53	51
28	45	76	48	71	66	72	58	44	44	53	77	47
29	49	81	34	59	------	65	59	44	41	55	48	48
30	55	52	32	58	------	69	58	45	42	55	41	59
31	57	------	25	60	------	69	------	45	------	53	45	------
TOTAL	1,876	1,899	1,986	1,851	1,409	2,254	1,714	1,677	1,647	1,368	1,911	1,669
MEAN	60.5	63.3	64.1	59.7	50.3	72.7	57.1	54.1	54.9	44.1	61.6	55.6
MAX	90	86	95	170	82	110	69	62	140	115	161	131
MIN	45	48	25	18	35	63	43	42	34	34	41	44
AC-FT	3,720	3,770	3,940	3,670	2,790	4,470	3,400	3,330	3,270	2,710	3,790	3,310

CAL YR 1973 TOTAL 28,051 MEAN 76.9 MAX 548 MIN 25 AC-FT 55,640
WTR YR 1974 TOTAL 21,261 MEAN 58.2 MAX 170 MIN 18 AC-FT 42,170

PEAK DISCHARGE (BASE, 3,000 FT^3/S).--No peak above base.

07157740 CIMARRON RIVER NEAR BUTTERMILK, KANS.

LOCATION.--Lat. 37°01'36", long. 99°28'45", NW 1/4 sec.3, T.35 S., R.20 W., Comanche County, Kansas, near left abutment of county road bridge, 0.5 mi (.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 mi^2 (28,800 km^2), of which 4,737 mi^2 (12,270 km^2) 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, 1,300 ft^3/s (36.8 m^3/s) Oct. 11, gage height, 4.95 ft (1.509 m); no flow June 26 to Aug. 4.
Period of record: Maximum discharge, 6,690 ft^3/s (189 m^3/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 this report. September 1973 record not previously published.

Date	Discharge	Date	Discharge	Date	Discharge	Date	Discharge
1	0	9	142	17	315	25	981
2	0	10	60	18	281	26	3,660
3	0	11	40	19	281	27	1,800
4	150	12	715	20	281	28	981
5	172	13	1,880	21	281	29	520
6	72	14	1,050	22	250	30	315
7	53	15	520	23	195		
8	131	16	315	24	609		

Total 16,050 Mean 535 Max. 3,360 Min. 0 Ac-ft 31,840

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	315	83	130	170	157	80	88	18	1.0		0	70
2	301	80	130	150	154	79	88	18	.90		0	100
3	238	74	184	140	154	80	85	16	.80		0	300
4	205	71	626	120	154	77	73	16	2.0		0	200
5	150	75	416	110	154	70	81	16	3.6		1.0	120
6	121	89	278	130	153	76	91	17	49		280	75
7	103	96	249	150	142	82	66	19	117		22	50
8	88	100	226	200	120	98	67	18	111		12	50
9	70	99	199	180	128	121	70	15	110		980	48
10	205	100	170	150	149	440	62	12	111		150	43
11	1,020	97	172	130	139	599	52	10	71		70	40
12	570	97	185	120	124	337	43	7.9	45		50	32
13	329	94	178	110	113	300	36	7.4	41		15	31
14	250	85	164	100	115	265	30	6.3	30		12	28
15	190	85	153	100	112	216	29	5.2	20		130	26
16	162	79	151	110	113	182	27	5.5	14		115	26
17	142	79	203	120	116	165	27	5.1	9.8		100	30
18	138	94	175	120	103	154	26	4.8	6.5		85	35
19	130	143	172	130	91	153	28	4.0	4.0		70	35
20	127	428	137	170	106	155	308	2.5	2.8		50	38
21	118	362	183	250	107	151	291	1.7	2.0		30	38
22	115	300	141	200	102	158	130	1.3	.80		60	38
23	109	253	243	172	101	150	78	1.1	.40		130	35
24	94	219	279	159	89	146	52	2.0	.20		170	36
25	91	187	225	153	85	142	39	4.2	.18		300	44
26	91	171	201	152	105	130	31	3.7	0		250	44
27	88	168	224	138	105	130	26	3.0	0		130	44
28	88	153	196	148	83	121	22	2.5	0		300	44
29	88	140	189	145	------	116	21	1.8	0		200	44
30	88	134	201	177	------	104	20	1.4	0		100	44
31	85	------	200	162	------	98	------	1.2	------		80	------
TOTAL	5,909	4,235	6,580	4,566	3,374	5,175	2,087	247.6	753.98	0	3,892.0	1,788
MEAN	191	141	212	147	121	167	69.6	7.99	25.1	0	126	59.6
MAX	1,020	428	626	250	157	599	308	19	117	0	980	300
MIN	70	71	130	100	83	70	20	1.1	0	0	0	26
AC-FT	11,720	8,400	13,050	9,060	6,690	10,260	4,140	491	1,500	0	7,720	3,550

WTR YR 1974 TOTAL 38,607.58 MEAN 106 MAX 1,020 MIN 0 AC-FT 76,580

PEAK DISCHARGE (BASE, 3,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE
*9-26-73	1600	8.29	6,690

No peak above base 1974 water year.
*Note--Not previously published.

07157940 BLUFF CREEK NEAR BUTTERMILK, KANS.

LOCATION.--Lat. 37°01'55", long. 99°28'45", NW 1/4 sec.3, T.35 S., R.20 W., Comanche County, Kansas, 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 (.5 km).

DRAINAGE AREA.--657 mi^2 (1,702 km^2), of which 76 mi^2 (197 km^2) 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, 2,880 ft^3/s (81.6 m^3/s) Oct. 11, gage height, 9.95 ft (3.033 m); minimum daily, 1.8 ft^3/s (.051 m^3/s) July 11.
Period of record: Maximum discharge, 16,000 ft^3/s (453 m^3/s) Sept. 26, 1973, gage height, 14.35 ft (4.374 m); minimum daily, 1.8 ft^3/s (.051 m^3/s) July 11, 1974.

REMARKS.--Records good. Record of chemical analyses and water temperature for the current year are published in Part 2 of this report.
September 1973 record not previously published.

Date	Discharge	Date	Discharge	Date	Discharge	Date	Discharge
1	3.7	9	18	17	80	25	841
2	3.9	10	12	18	68	26	6,260
3	4.4	11	7.5	19	63	27	2,260
4	6.0	12	135	20	60	28	530
5	6.9	13	857	21	51	29	290
6	5.0	14	244	22	46	30	211
7	17	15	163	23	39		
8	43	16	99	24	63		

Total 12,487.4 Mean 416 Max 6,260 Min 3.7 Ac-ft 24,770

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	285	71	76	43	72	54	60	53	14	6.8	2.6	20
2	245	70	76	49	71	55	59	53	14	5.6	2.5	67
3	219	67	166	50	69	55	58	51	13	4.9	2.4	74
4	184	66	935	40	67	54	56	48	18	4.2	2.4	46
5	143	67	253	35	68	53	55	46	23	4.0	3.4	33
6	124	66	186	29	66	53	55	44	80	3.6	30	26
7	114	68	132	40	61	53	55	42	313	3.0	5.8	23
8	102	68	110	64	62	60	54	40	105	2.6	4.6	20
9	94	65	99	56	63	67	53	38	76	2.3	89	19
10	197	64	91	42	63	294	53	37	67	2.1	32	18
11	1,880	63	86	34	62	723	52	34	57	1.8	17	18
12	1,040	63	80	38	62	258	52	32	48	2.1	10	16
13	321	64	77	50	62	168	51	31	47	2.3	7.8	15
14	217	64	74	57	61	151	50	29	43	2.7	6.8	15
15	174	64	71	58	59	134	47	27	38	3.1	18	15
16	151	62	66	62	60	114	47	26	34	3.5	19	15
17	135	61	64	82	59	104	46	25	31	3.6	15	16
18	124	61	58	100	60	100	45	24	29	3.9	11	16
19	116	79	52	98	58	94	46	22	27	4.2	7.9	16
20	108	309	52	95	57	88	368	21	24	4.5	6.2	15
21	100	142	64	90	56	82	331	19	21	5.1	4.9	14
22	94	106	65	86	54	81	118	18	18	5.6	17	13
23	89	97	64	81	55	75	91	18	16	6.6	27	13
24	85	94	63	76	52	72	79	22	15	7.5	23	13
25	79	92	64	74	53	71	70	23	15	24	35	13
26	77	90	65	73	56	71	65	23	13	34	26	13
27	75	86	64	72	56	70	62	23	12	11	23	13
28	73	81	62	74	55	69	59	19	10	6.2	109	13
29	73	79	61	75	------	65	58	17	8.7	4.1	52	15
30	73	77	60	76	------	62	56	16	7.4	3.5	34	14
31	72	------	49	74	------	61	------	14	------	3.1	25	------
TOTAL	6,863	2,506	3,485	1,973	1,699	3,511	2,351	935	1,237.1	181.5	669.3	637
MEAN	221	83.5	112	63.6	60.7	113	78.4	30.2	41.2	5.85	21.6	21.2
MAX	1,880	309	935	100	72	723	368	53	313	34	109	74
MIN	72	61	49	29	52	53	45	14	7.4	1.8	2.4	13
AC-FT	13,610	4,970	6,910	3,910	3,370	6,960	4,660	1,850	2,450	360	1,330	1,260

WTR YR 1974 TOTAL 26,047.9 MEAN 71.4 MAX 1,880 MIN 1.8 AC-FT 51,670

PEAK DISCHARGE (BASE, 1,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
*9-26-73	1445	14.35	16,000	12-04	0845	7.46	1,260
10-11	2030	9.95	2,880	3-11	0430	7.23	1,040

*Note--Not previously published.

07157950 CIMARRON RIVER NEAR BUFFALO, OKLA.

LOCATION.--Lat 36°55'28", long 99°23'56", in NW 1/4 SW 1/4 sec.7, T.28 N., R.20 W., Harper County, on left bank 800 ft (244 m) downstream from unnamed tributary, 6 miles (9.7 km) upstream from Keno Creek, 7 mi (11.3 km) upstream from bridge on U.S. Highway 64, 14 mi (22.5 km) northeast of Buffalo, and at mile 296.0 (476.3 km).

DRAINAGE AREA.--11,930 mi^2 (30,900 km^2), of which 4,813 mi^2 (12,466 km^2) is probably noncontributing.

PERIOD OF RECORD.--May 1960 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,650 ft (502.9 m), from river profile map.

AVERAGE DISCHARGE.--14 years, 159 ft^3/s (4.503 m^3/s), 115,200 acre-ft/yr (142 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 4,670 ft^3/s (132 m^3/s) Oct. 11, gage height, 3.81 ft (1.161 m); no flow at times.
Period of record: Maximum discharge, 26,400 ft^3/s (748 m^3/s) Sept. 26, 1973, gage height, 5.57 ft (1.698 m); no flow at times each year.

REMARKS.--Records good. Extensive diversions for irrigation above station. Records of chemical analyses and of water temperatures for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	590	148	164	70	231	169	140	85	19	1.8	0	93
2	534	138	173	64	226	173	144	86	20	.71	0	487
3	467	133	397	56	226	169	140	81	19	0	0	976
4	386	130	1,020	45	209	165	127	74	50	0	0	429
5	332	132	767	54	191	160	133	64	28	0	5.0	291
6	281	139	615	58	161	161	155	64	98	0	391	186
7	233	152	491	62	154	189	130	68	521	0	74	132
8	190	150	407	68	154	214	133	65	309	0	35	114
9	156	156	336	62	144	252	147	61	199	0	527	98
10	239	159	264	64	176	755	135	58	203	0	200	88
11	2,640	162	232	56	174	1,290	116	53	138	0	144	82
12	2,440	155	223	54	176	871	97	48	87	0	74	76
13	868	159	212	62	181	507	86	47	88	0	22	70
14	590	150	190	76	185	363	75	40	74	0	17	65
15	484	140	174	92	180	312	74	35	53	0	92	62
16	416	134	166	110	172	269	79	35	42	0	194	60
17	374	138	150	130	177	242	78	33	36	0	157	62
18	338	138	140	160	183	211	78	38	30	0	127	66
19	314	158	130	250	170	188	122	34	24	0	94	85
20	300	452	110	453	178	172	1,150	31	18	0	67	102
21	286	404	130	447	162	177	1,070	30	13	0	52	86
22	272	333	160	302	160	188	348	27	11	0	199	75
23	260	268	256	252	165	194	203	26	9.0	0	174	64
24	240	232	208	225	177	183	146	61	9.0	0	167	56
25	215	211	181	222	152	188	112	43	8.3	1.5	248	50
26	196	196	220	208	170	167	103	37	7.5	.35	223	50
27	185	182	220	189	175	172	97	32	5.9	.15	876	51
28	170	167	213	187	165	172	90	26	4.4	0	1,520	60
29	165	166	216	219	------	153	101	22	2.6	0	453	58
30	162	162	117	239	------	135	90	21	1.9	1.2	203	59
31	150	------	83	233	------	148	------	18	------	.75	139	------
TOTAL	14,473	5,544	8,365	4,769	4,974	8,709	5,699	1,443	2,128.6	6.46	6,474.0	4,233
MEAN	467	185	270	154	178	281	190	46.5	71.0	.21	209	141
MAX	2,640	452	1,020	453	231	1,290	1,150	86	521	1.8	1,520	976
MIN	150	130	83	45	144	135	74	18	1.9	0	0	50
AC-FT	28,710	11,000	16,590	9,460	9,870	17,270	11,300	2,860	4,220	13	12,840	8,400

CAL YR 1973 TOTAL 177,931.45 MEAN 487 MAX 12,500 MIN 0 AC-FT 352,900
WTR YR 1974 TOTAL 66,818.06 MEAN 183 MAX 2,640 MIN 0 AC-FT 132,500

PEAK DISCHARGE (BASE, 3,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE
10-11	2300	3.81	4,670

07157960 BUFFALO CREEK NEAR LOVEDALE, OKLA.

LOCATION.--Lat 36°46'08", long 99°21'58", in NW 1/4 NW 1/4 sec.4, T.26 N., R.20 W., Harper County, near center of channel on downstream side of pier of bridge on State Highway 34, 1.2 mi (1.9 km) east of Lovedale, 1.3 mi (2.1 km) upstream from Sleeping Bear Creek, and at mile 7.6 (12.2 km).

DRAINAGE AREA.--408 mi^2 (1,057 km^2).

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

GAGE.--Water-stage recorder. Datum of gage is 1,602.56 ft (488.460 m) above mean sea level (State Highway Department bench mark).

AVERAGE DISCHARGE.--8 years, 10.5 ft^3/s (0.297 m^3/s), 7,610 acre-ft/yr (9.38 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 4,370 ft^3/s (124 m^3/s) Sept. 2, gage height, 11.96 ft (3.645 m); no flow at times.
Period of record: Maximum discharge, 15,800 ft^3/s (447 m^3/s) Aug. 9, 1967 gage height, 14.80 ft (4.511 m), extended above 7,000 ft^3/s (198 m^3/s); no flow each year.

REMARKS.--Records good.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.7	1.2	5.8	5.7	10	3.9	6.4	15	1.4	.42	0	25
2	5.4	.96	5.8	5.3	9.8	3.5	6.0	14	1.4	.34	0	2,180
3	3.8	.86	53	7.2	9.5	3.4	5.6	9.8	1.3	.27	0	978
4	2.8	1.1	493	8.2	8.6	2.7	5.4	7.4	2.4	.21	0	244
5	2.2	1.1	167	7.8	8.5	2.5	5.1	6.4	3.1	.19	.07	140
6	2.0	1.3	73	6.0	7.7	2.3	5.4	5.3	21	.15	.75	91
7	1.6	1.5	44	5.8	7.0	3.2	4.7	4.4	4.2	.09	2.1	67
8	1.2	1.7	31	5.5	7.0	70	4.8	4.2	4.0	.01	12	55
9	1.2	1.7	24	5.4	6.8	42	4.9	3.9	3.5	0	21	48
10	252	1.7	18	5.1	7.1	380	4.8	3.1	2.8	0	1.5	41
11	1,560	1.8	16	5.3	7.2	391	4.7	3.1	2.1	0	.61	35
12	331	2.1	14	6.0	7.4	75	4.3	2.8	1.7	0	1.6	28
13	121	2.5	11	7.0	7.6	36	4.0	2.7	2.2	0	.46	24
14	63	2.6	9.7	9.2	7.3	26	3.0	2.4	6.7	0	.35	20
15	40	2.2	8.7	15	7.0	22	2.9	2.2	32	0	.24	19
16	27	1.9	8.0	26	6.7	17	3.0	1.9	10	0	.09	18
17	21	1.9	7.8	26	7.1	16	2.8	1.7	4.6	0	.05	17
18	14	1.8	7.7	26	6.9	14	2.9	1.7	3.4	0	0	16
19	11	2.3	7.3	24	7.1	12	3.1	1.5	2.8	0	.01	15
20	8.9	99	7.0	22	7.0	11	648	1.2	2.1	0	0	13
21	6.9	104	6.8	21	5.6	12	124	.98	1.4	0	0	12
22	5.8	40	6.6	19	4.7	11	46	.92	1.1	0	.04	10
23	5.2	25	6.7	15	4.6	10	35	.87	.96	0	.19	8.3
24	3.8	17	7.0	13	3.8	9.3	26	4.2	.96	0	.24	8.2
25	3.6	13	7.8	11	3.7	8.9	18	77	.86	0	.69	7.9
26	3.4	11	8.4	11	4.0	8.7	14	25	.75	0	.27	7.1
27	3.0	9.1	8.8	9.9	3.8	8.4	11	7.6	.63	0	142	6.8
28	3.0	7.2	8.8	9.8	4.0	8.1	10	4.6	.55	0	968	6.8
29	2.9	6.6	8.6	10	------	7.4	62	2.9	.47	0	184	6.6
30	2.7	6.0	8.2	10	------	6.7	18	2.1	.43	0	96	5.8
31	1.2	------	6.5	10	------	6.8	------	1.6	------	0	50	------
TOTAL	2,520.3	370.12	1,096.0	368.2	187.5	1,230.8	1,095.8	222.47	120.81	1.68	1,482.26	4,153.5
MEAN	81.3	12.3	35.4	11.9	6.70	39.7	36.5	7.18	4.03	.054	47.8	138
MAX	1,560	104	493	26	10	391	648	77	32	.42	968	2,180
MIN	1.2	.86	5.8	5.1	3.7	2.3	2.8	.87	.43	0	0	5.8
AC-FT	5,000	734	2,170	730	372	2,440	2,170	441	240	3.3	2,940	8,240

CAL YR 1973 TOTAL 7,470.74 MEAN 20.5 MAX 1,560 MIN 0 AC-FT 14,820
WTR YR 1974 TOTAL 12,849.44 MEAN 35.2 MAX 2,180 MIN 0 AC-FT 25,490

PEAK DISCHARGE (BASE, 1,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-11	0445	8.86	2,190	8-28	1200	9.63	2,360
4-20	1330	9.09	1,470	9-2	0930	11.96	4,370

07157980 CIMARRON RIVER NEAR FREEDOM, OKLA.

LOCATION.--Lat 36°45'18", long 99°06'58", in SE 1/4 SE 1/4 sec.3, T.26 N., R.18 W., Woodward County, near right bank of State Highway 50, 1.0 mi (1.6 km) south of Freedom, 1.1 mi (1.8 km) upstream from unnamed tributary and at mile 272.4 (438 km).

DRAINAGE AREA.--12,706 mi^2 (32,909 km^2), of which 4,813 mi^2 (12,466 km^2) is probably noncontributing.

PERIOD OF RECORD.--Current year.

GAGE.--Nonrecording gage. Datum of gage is 1,503.99 ft (458.416 m) above mean sea level (State Highway Department bench mark).

EXTREMES.--Current year: Maximum discharge, 12,000 ft^3/s (340 m^3/s) Oct. 10, gage height, 9.25 ft (2.819 m) from graph of wire-weight readings; no flow at times.

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 this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	675	204	198	190	264	158	167	134	20		0	900
2	600	170	163	150	248	154	137	91	20		0	2,890
3	550	150	3,550	120	228	158	141	81	12		0	2,820
4	430	154	3,930	105	228	141	127	68	58		0	765
5	400	130	1,280	110	210	141	114	64	41		0	384
6	380	137	660	120	158	150	141	66	167		98	248
7	360	171	660	140	150	117	127	64	176		104	154
8	350	167	540	160	163	328	137	64	675		43	154
9	800	186	450	180	127	328	114	64	274		91	114
10	4,580	163	368	150	186	1,040	124	50	167		210	88
11	7,950	163	288	125	228	2,380	137	48	150		111	86
12	2,620	163	280	115	186	1,200	124	41	120		70	80
13	1,200	150	352	150	176	705	104	40	296		90	80
14	1,000	150	352	180	130	550	78	35	127		111	78
15	750	146	288	225	158	450	72	35	64		98	76
16	520	150	280	280	141	360	72	35	52		78	75
17	520	146	272	350	163	320	72	35	40		58	74
18	450	158	232	660	163	228	68	36	30		52	74
19	384	186	210	810	204	960	64	28	23		45	80
20	368	392	200	735	204	500	2,120	26	18		40	92
21	320	660	270	590	210	410	1,980	19	14		28	80
22	264	550	296	600	180	296	645	21	11		154	72
23	240	490	352	392	150	328	384	18	8.8		104	64
24	228	430	660	234	154	296	264	348	4.0		146	66
25	228	352	288	272	137	280	192	137	1.5		186	63
26	234	312	384	234	141	210	180	96	.45		210	59
27	234	272	440	234	154	256	150	83	0		4,130	55
28	171	264	450	222	163	234	171	38	0		4,100	53
29	176	256	440	228	------	192	176	28	0		1,420	54
30	176	222	368	248	------	180	127	18	0		550	55
31	180	------	250	228	------	167	------	18	------		140	------
TOTAL	27,338	7,244	18,751	8,537	5,004	13,217	8,509	1,929	2,569.75	0	12,467	9,933
MEAN	882	241	605	275	179	426	284	62.2	85.7	0	402	331
MAX	7,950	660	3,930	810	264	2,380	2,120	348	675	0	4,130	2,890
MIN	171	130	163	105	127	117	64	18	0	0	0	53
AC-FT	54,220	14,370	37,190	16,930	9,930	26,220	16,880	3,830	5,100	0	24,730	19,700

WTR YR 1974 TOTAL 115,498.75 MEAN 316 MAX 7,950 MIN 0 AC-FT 229,100

PEAK DISCHARGE (BASE, 8,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE
10-10	2200	9.25	12,000
8-27	2000	9.15	10,800

07158000 CIMARRON RIVER NEAR WAYNOKA, OKLA.

LOCATION.--Lat 36°31'02", long 98°52'45", near center of sec.35, T.24 N., R.16 W., Woods County, near left bank on downstream side of bridge on U.S. Highway 281, 0.8 mi (1.39 km) downstream from Main Creek, 5 mi (8.0 km) south of Waynoka, and at mile 247.0 (397 km).

DRAINAGE AREA.--13,334 mi^2 (34,535 km^2), of which 4,830 mi^2 (12,510 km^2) is probably noncontributing.

PERIOD OF RECORD.--September 1903 to December 1905 (gage heights and discharge measurements only), October 1937 to current year. Monthly discharge only for some periods, published in WSP 1311.

GAGE.--Water-stage recorder. Datum of gage is 1,367.50 ft (416.814 m) above mean sea level (levels by Corps of Engineers). September 1903 to December 1905, nonrecording gage at The Atchison, Topeka and Santa Fe Railway Co. bridge 5 mi (8.0 km) upstream at different datum. Feb. 4, to Mar. 3, 1938, nonrecording gage and Mar. 4, 1938, to Oct. 24, 1956, water-stage recorder, on former highway bridge 50 ft (15.2 m) downstream at present datum.

AVERAGE DISCHARGE.--37 years (1937-74), 356 ft^3/s (10.08 m^3/s), 257,900 acre-ft/yr (318 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 52,400 ft^3/s (1,480 m^3/s) Sept. 2, gage height, 10.08 ft (3.072 m); no flow at times.
Period of record: Maximum discharge, 94,500 ft^3/s (2,676 m^3/s) May 16, 1957, gage height, 15.10 ft (4.602 m), from rating curve extended above 45,000 ft^3/s (1,274 m^3/s) on basis of contracted-opening measurement of peak flow; no flow at times in most years.
A stage of about 14 ft (4.3 m) occurred probably in 1914.

REMARKS.--Records good. Extensive diversions for irrigation above station. Records of chemical analyses and of water temperatures for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 897: 1939. WSP 1341: Drainage area. WSP 1731: 1950(M). WSP 1921: 1960.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,130	196	270	170	294	149	164	187	36	0	0	120
2	926	181	276	150	293	139	157	170	35	0	0	15,600
3	816	165	328	130	277	129	170	153	37	0	0	4,130
4	735	165	1,970	90	270	113	173	120	70	0	0	1,110
5	626	171	3,120	110	260	114	172	101	146	0	0	496
6	527	171	1,060	130	264	125	164	90	247	0	10	337
7	448	179	659	150	262	126	159	82	381	0	84	290
8	393	189	494	180	266	171	155	75	357	0	106	245
9	353	191	436	160	256	254	143	68	481	0	97	210
10	2,600	182	388	170	247	1,270	137	64	217	0	183	178
11	15,000	174	359	140	254	3,290	131	57	168	0	239	150
12	10,200	181	344	120	271	2,000	126	51	145	0	103	119
13	2,420	193	327	140	258	828	120	46	129	0	66	100
14	1,090	195	293	165	241	504	118	44	167	0	125	90
15	692	181	286	210	235	386	114	35	108	0	296	87
16	535	171	270	245	229	337	112	33	73	0	51	85
17	411	161	267	320	224	296	108	32	58	0	46	85
18	371	160	276	400	220	289	102	31	46	0	67	82
19	356	168	250	500	215	278	128	28	36	0	56	87
20	316	268	210	700	218	272	927	22	27	0	47	90
21	284	673	250	901	204	288	2,490	21	20	0	34	93
22	262	715	270	703	175	265	1,180	18	13	0	28	83
23	241	546	293	527	148	238	417	16	10	0	88	68
24	218	436	306	405	143	230	267	39	8.8	0	97	71
25	203	374	396	344	129	217	204	374	6.1	.25	129	70
26	214	349	363	314	145	221	181	189	4.0	0	149	65
27	214	336	355	291	133	222	164	115	.30	0	7,060	58
28	204	311	327	287	143	209	128	76	0	0	11,500	57
29	196	283	319	274	------	194	247	56	0	0	2,450	59
30	195	273	297	277	------	176	242	45	0	0	741	58
31	197	------	220	293	------	174	------	38	------	0	242	------
TOTAL	42,373	7,938	15,279	8,996	6,274	13,504	9,100	2,476	3,026.20	.25	24,094.0	24,373
MEAN	1,367	265	493	290	224	436	303	79.9	101	.008	777	812
MAX	15,000	715	3,120	901	294	3,290	2,490	374	481	.25	11,500	15,600
MIN	195	160	210	90	129	113	102	16	0	0	0	57
AC-FT	84,050	15,750	30,310	17,840	12,440	26,790	18,050	4,910	6,000	.5	47,790	48,340

CAL YR 1973 TOTAL 270,908.88 MEAN 742 MAX 22,400 MIN 0 AC-FT 537,300
WTR YR 1974 TOTAL 157,433.45 MEAN 431 MAX 15,600 MIN 0 AC-FT 312,300

PEAK DISCHARGE (BASE, 10,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE
10-11	0030	9.15	27,000
8-27	2330	9.70	40,700
9-2	0900	10.08	52,400

07158400 SALT CREEK NEAR OKEENE, OKLA.

LOCATION.--Lat 36°06'11", long 98°11'36", in SW 1/4 sec.20, T.19 N., R.9 W., Kingfisher County, near left bank on downstream wingwall of county bridge, 2.2 mi (3.5 km) downstream from Spring Creek, 7.0 mi (11.3 km) east of Okeene, and at mile 2.2 (3.5 km).

DRAINAGE AREA.--196 mi^2 (508 km^2).

PERIOD OF RECORD.--June 1961 to September 1967, December 1973 to September 1974.

GAGE.--Water-stage recorder. Datum of gage is 1,085.25 ft (330.784 m) above mean sea level.

AVERAGE DISCHARGE.--6 years (1962-67), 32.1 ft^3/s (0.909 m^3/s), 23,240 acre-ft/yr (28.7 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 12,700 ft^3/s (360 m^3/s) Sept. 19, gage height, 16.90 ft (5.151 m); minimum daily, 3.7 ft^3/s (0.10 m^3/s) July 18, Aug. 21.
Period of record: Maximum discharge, 12,700 ft^3/s (360 m^3/s) Sept. 19, 1974, gage height, 16.90 ft (5.151 m); minimum daily, 0.90 ft^3/s (0.003 m^3/s) July 13, 14, 1966.
A higher stage occured in 1957 during backwater from Cimarron River, from information by local residents.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1			11	10	10	19	21	901	74	5.6	4.8	9.9
2			11	9.0	10	18	21	747	20	5.6	21	63
3			501	8.0	9.7	18	20	83	49	5.3	5.8	27
4			206	7.2	9.7	17	22	39	18	5.5	4.8	13
5			54	6.8	10	17	21	31	15	5.6	4.2	11
6			15	7.4	9.7	16	21	27	14	5.6	11	10
7			10	8.8	9.7	15	20	24	21	5.3	5.8	10
8			10	10	9.8	15	19	22	21	5.0	4.6	9.6
9			10	9.0	9.8	63	18	21	22	4.7	14	9.4
10			10	8.0	10	1,300	16	20	15	5.2	68	9.3
11			10	7.2	10	753	350	17	13	5.4	8.6	9.3
12			9.4	6.8	10	210	106	16	13	5.5	5.8	8.8
13			8.7	7.8	10	148	49	16	13	5.2	4.6	8.7
14			7.8	10	10	113	39	17	13	5.6	5.0	8.6
15			7.8	14	37	79	36	14	13	5.5	4.7	8.3
16			7.8	12	59	66	35	13	12	5.4	4.0	8.3
17			7.4	11	19	59	34	13	11	4.1	4.1	8.3
18			7.1	11	15	54	33	11	12	3.7	4.1	8.3
19			8.7	10	17	47	33	11	12	4.5	4.3	2,630
20			11	9.7	90	43	783	10	9.3	4.8	3.9	3,670
21			11	9.4	415	50	141	19	8.6	4.3	3.7	230
22			11	9.4	65	47	57	16	8.3	4.0	4.0	165
23			13	9.0	40	39	34	62	8.7	4.2	132	144
24			12	9.0	28	36	21	409	7.6	5.3	36	149
25			11	8.4	26	33	20	710	6.4	4.3	17	257
26			11	8.7	28	33	19	92	6.5	4.2	8.0	102
27			11	8.7	28	33	19	26	6.2	4.1	90	41
28			11	9.6	24	29	18	18	6.2	3.9	500	32
29			10	10	------	25	21	16	5.8	3.9	44	27
30			10	11	------	24	36	14	5.6	4.6	15	23
31		------	10	10	------	24	------	295	------	5.4	12	------
TOTAL			1,044.7	286.9	1,029.4	3,443	2,083	3,730	460.2	151.3	1,054.8	7,710.8
MEAN			33.7	9.25	36.8	111	69.4	120	15.3	4.88	34.0	257
MAX			501	14	415	1,300	783	901	74	5.6	500	3,670
MIN			7.1	6.8	9.7	15	16	10	5.6	3.7	3.7	8.3
AC-FT			2,070	569	2,040	6,830	4,130	7,400	913	300	2,090	15,290

PEAK DISCHARGE (BASE, 2,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE
5-1	2245	11.44	2,920
9-19	2245	16.90	12,700

07159100 CIMARRON RIVER NEAR DOVER, OKLA.

LOCATION.--Lat 35°57'06", long 97°54'51", in SW 1/4 NE 1/4 sec.14, T.17 N., R.7 W., Kingfisher County, near right bank of downstream bridge on U.S. Highway 81, 1.0 mi (1.6 km) downstream from Turkey Creek, 2.0 mi (3.2 km) south of Dover, 2.5 mi (4.0 km) upstream from Kingfisher Creek, and at mile 160.6 (258.4 km).

DRAINAGE AREA.--15,713 mi^2 (40,697 km^2), of which 4,926 mi^2 (12,758 km^2) is probably noncontributing.

PERIOD OF RECORD.--Current year.

GAGE.--Water-stage recorder. Datum of gage is 999.10 ft (304.526 m) above mean sea level.

EXTREMES.--Maximum discharge, 62,000 ft^3/s (1,760 m^3/s) Oct. 11, gage height, 21.81 ft (6.648 m) from high-water mark; minimum daily, 24 ft^3/s (0.68 m^3/s) July 28.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,000	326	571	480	499	419	422	2,600	1,150	64	35	2,220
2	1,800	348	571	450	499	395	397	7,830	439	58	104	2,180
3	1,700	348	895	400	499	390	365	4,240	343	58	64	11,200
4	1,500	326	2,450	350	499	385	345	2,070	322	64	41	6,220
5	1,320	326	1,710	320	499	366	327	1,130	300	66	33	3,490
6	1,160	326	1,770	300	499	348	318	775	282	60	37	2,230
7	1,030	326	1,650	330	499	330	300	612	672	60	43	1,630
8	941	348	1,160	350	499	319	293	522	672	60	44	1,290
9	900	348	941	330	371	327	271	458	740	55	41	1,080
10	713	352	784	310	371	8,150	288	407	547	50	646	931
11	26,800	348	713	300	371	16,400	490	360	490	50	622	834
12	23,800	348	646	340	326	7,240	4,930	326	439	45	326	739
13	11,300	348	646	380	326	4,920	2,310	287	343	41	248	682
14	5,470	330	584	430	326	3,370	922	257	289	41	280	630
15	3,220	304	584	480	348	2,400	562	251	260	41	217	591
16	2,690	304	524	540	419	1,650	439	229	234	41	1,480	575
17	1,480	304	524	600	371	1,290	382	217	251	41	1,930	553
18	1,370	286	524	646	326	1,060	337	206	218	41	611	528
19	1,210	326	524	646	419	908	322	192	184	41	282	729
20	861	584	419	713	713	845	446	177	151	35	170	11,200
21	646	524	419	1,030	3,870	807	1,340	570	127	35	157	2,640
22	449	496	499	941	3,030	777	1,700	417	112	35	160	1,270
23	524	524	524	941	941	740	2,090	267	101	35	484	927
24	496	553	646	784	679	699	1,330	1,590	92	41	1,090	821
25	395	822	584	679	553	653	844	3,040	87	41	940	1,060
26	449	713	524	584	496	614	611	3,850	85	41	648	1,010
27	419	646	524	553	499	590	484	2,440	79	35	466	758
28	395	747	524	553	429	555	413	1,180	77	24	5,520	657
29	348	733	553	499	------	519	420	667	71	35	9,980	627
30	348	634	524	439	------	486	500	483	65	35	6,110	571
31	371	------	524	479	------	456	------	933	------	35	3,520	------
TOTAL	96,105	13,248	24,035	16,177	19,176	58,408	24,198	38,583	9,222	1,404	36,329	59,873
MEAN	3,100	442	775	522	685	1,884	807	1,245	307	45.3	1,172	1,996
MAX	26,800	822	2,450	1,030	3,870	16,400	4,930	7,830	1,150	66	9,980	11,200
MIN	348	286	419	300	326	319	271	177	65	24	33	528
AC-FT	190,600	26,280	47,670	32,090	38,040	115,900	48,000	76,530	18,290	2,780	72,060	118,800

WTR YR 1974 TOTAL 396,758 MEAN 1,087 MAX 26,800 MIN 24 AC-FT 787,000

PEAK DISCHARGE (BASE, 12,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-11	abt2000	21.81	62,000	9-3	1045	17.84	16,300
3-11	0545	18.40	20,000	9-20	0745	17.58	14,900
8-28	2315	17.71	15,600				

07159750 COTTONWOOD CREEK AT SEWARD, OKLA.

LOCATION.--Lat 35°47'43", long 97°29'32", in SW 1/4 sec.2, T.15 N., R.3 W., Logan County, on downstream right bank, 0.3 mi (0.5 km) west of Seward, 7.7 mi (12.4 km) southwest of Guthrie, and at mile 19.2 (30.9 km).

DRAINAGE AREA.--316 mi^2 (818 km^2).

PERIOD OF RECORD.--March 1973 to current year.

GAGE.--Water-stage recorder. Datum of gage is 946.49 ft (288.490 m) above mean sea level.

EXTREMES.--Current year: Maximum discharge, 15,100 ft^3/s (428 m^3/s) June 8, gage height, 23.70 ft (7.071 m); minimum, 9.9 ft^3/s (0.28 m^3/s) Aug. 22.
Period of record: Maximum discharge, 15,100 ft^3/s (428 m^3/s) June 8, 1974, gage height, 23.20 ft (7.071 m); minimum, 9.9 ft^3/s (0.28 m^3/s) Aug. 22, 1974.

REMARKS.--Records good. Low flow sustained by part of sewage effluent from Oklahoma City. Records of chemical analysis and of water temperatures for the current water year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	225	53	65	26	22	76	77	640	952	33	14	33
2	170	50	60	23	19	74	68	1,370	295	31	15	89
3	141	48	101	22	18	69	63	1,060	157	31	15	243
4	152	58	1,140	20	18	65	60	356	337	32	16	54
5	310	85	753	22	18	62	57	210	312	55	15	34
6	197	46	250	22	17	57	58	148	146	36	15	28
7	183	49	153	21	16	56	54	112	140	32	15	25
8	134	51	117	21	16	59	52	89	4,940	30	15	23
9	109	50	94	22	15	1,330	49	78	8,330	28	14	22
10	95	50	80	19	15	1,910	47	71	2,620	26	17	22
11	454	50	72	22	16	4,980	69	63	840	25	54	21
12	1,590	48	69	19	17	2,170	161	58	637	24	29	20
13	986	46	67	19	17	799	81	54	521	23	23	19
14	447	50	63	22	16	633	67	50	425	22	20	18
15	225	50	60	26	18	425	55	46	307	21	18	18
16	164	53	57	28	21	300	54	45	185	20	18	21
17	129	43	55	27	23	230	55	43	137	18	40	63
18	107	39	55	28	22	187	54	40	119	16	22	37
19	95	41	53	27	23	162	53	37	108	18	16	29
20	86	117	47	27	30	153	54	34	86	17	14	47
21	79	152	45	25	1,370	170	55	35	68	17	12	69
22	71	78	49	23	2,030	225	60	410	62	17	11	51
23	65	52	50	22	546	154	56	126	58	16	325	34
24	60	100	49	21	259	125	51	664	53	15	411	30
25	49	1,220	46	20	155	110	48	829	50	16	53	303
26	56	475	43	19	117	106	46	1,030	47	16	32	315
27	58	194	38	19	102	116	47	334	42	16	32	99
28	61	132	35	19	87	110	45	170	40	15	496	56
29	58	93	34	19	------	96	63	116	37	14	139	46
30	55	78	33	22	------	87	759	85	35	14	62	34
31	54	------	31	22	------	80	------	362	------	13	42	------
TOTAL	6,665	3,651	3,864	694	5,043	15,176	2,518	8,765	22,086	707	2,020	1,903
MEAN	215	122	125	22.4	180	490	83.9	283	736	22.8	65.2	63.4
MAX	1,590	1,220	1,140	28	2,030	4,980	759	1,370	8,330	55	496	315
MIN	49	39	31	19	15	56	45	34	35	13	11	18
AC-FT	13,220	7,240	7,660	1,380	10,000	30,100	4,990	17,390	43,810	1,400	4,010	3,770

WTR YR 1974 TOTAL 73,092 MEAN 200 MAX 8,330 MIN 11 AC-FT 145,000

PEAK DISCHARGE (BASE, 3,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE
3-11	0830	21.29	6,420
6-8	2330	23.20	15,100

07160000 CIMARRON RIVER NEAR GUTHRIE, OKLA.

LOCATION.--Lat 35°55'10", long 97°25'35", in NE 1/4 SE 1/4 sec.29, T.17 N., R.2 W., Logan County, on left bank 125 ft (38.1 m) upstream from the Atchison, Topeka and Santa Fe Railway Co. bridge, 1.2 mi (1.9 km) downstream from Cottonwood Creek, 2.5 mi (4.0 km) north of Guthrie, 6.5 mi (10.5 km) upstream from Skeleton Creek, and at mile 121.8 (196.0 km).

DRAINAGE AREA.--16,892 mi^2 (43,750 km^2), of which 4,926 mi^2 (12,758 km^2) is probably noncontributing.

PERIOD OF RECORD.--October 1937 to current year. Monthly discharge only for some periods, published in WSP's 1311 and 1731.

GAGE.--Water-stage recorder. Datum of gage is 900.50 ft (274.472 m) above mean sea level (Corps of Engineers bench mark). Prior to Mar. 19, 1939, nonrecording gage at railway bridge 125 ft (38.1 m) downstream at same datum. Since Sept. 14, 1967, supplementary water-stage recorder, at site 2,000 ft (609.7 m) downstream and at datum 4.00 ft (1.219 m) lower.

AVERAGE DISCHARGE.--37 years, 869 ft^3/s (24.61 m^3/s), 629,600 acre-ft/yr (776 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 43,600 ft^3/s (1,230 m^3/s) Oct. 12, gage height, 11.12 ft (3.389 m); minimum, 55 ft^3/s (1.56 m^3/s) July 29, 30.
Period of record: Maximum discharge, 158,000 ft^3/s (4,473 cu m^3/s) May 17, 1957, gage height, 18.58 ft (5.663 m); minumum, 0.1 ft^3/s (2.83 dm^3/s) Nov. 2, 1939.

REMARKS.--Records fair.

REVISIONS.--WSP 1341: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3,460	552	1,090	496	556	584	785	1,750	3,320	195	67	1,840
2	2,250	544	1,070	480	546	551	699	11,600	2,530	182	70	1,450
3	1,660	522	1,130	470	524	546	637	12,900	976	163	70	4,800
4	1,390	515	2,250	460	524	534	615	4,550	881	177	153	8,270
5	1,470	507	4,280	450	518	518	596	2,310	900	191	135	3,420
6	1,230	495	1,930	490	502	502	573	1,450	787	198	114	2,060
7	1,030	489	1,940	560	496	460	562	1,100	798	184	88	1,470
8	908	489	1,560	662	485	445	552	933	2,630	170	73	1,150
9	799	491	1,120	617	480	865	544	829	12,300	160	97	997
10	722	484	945	507	470	6,070	522	756	8,460	142	107	953
11	5,730	479	826	518	440	28,300	611	696	2,480	132	393	760
12	37,800	478	777	524	460	15,800	1,510	637	1,470	125	533	716
13	18,500	474	740	595	460	6,330	4,180	585	1,130	121	331	552
14	12,200	466	764	710	455	5,340	1,900	546	893	114	289	538
15	6,380	473	668	710	496	3,770	990	504	728	111	279	516
16	4,140	462	639	680	546	2,490	768	482	586	111	261	511
17	3,020	455	612	612	562	1,720	667	451	480	100	675	507
18	2,340	449	606	568	606	1,400	625	419	453	94	916	498
19	1,910	445	590	622	628	1,190	597	393	414	91	498	502
20	1,510	501	518	740	737	1,090	584	360	370	85	369	4,140
21	1,130	852	435	710	2,960	1,040	851	356	326	82	303	6,040
22	960	724	408	840	10,600	1,000	1,810	1,040	301	79	265	1,550
23	869	569	430	945	3,980	982	2,330	1,250	292	76	533	968
24	780	695	485	875	1,580	942	2,080	1,020	284	76	768	800
25	728	2,350	546	791	980	895	1,390	4,040	272	100	701	839
26	701	2,570	595	716	770	866	1,050	7,720	263	76	617	1,150
27	683	1,330	568	650	662	845	896	4,580	252	67	542	853
28	644	1,170	556	606	622	835	800	2,210	236	64	617	675
29	621	1,130	600	590	------	825	806	1,180	218	61	9,320	606
30	595	1,120	606	578	------	808	1,060	854	205	61	6,230	563
31	579	------	568	568	------	795	------	888	------	64	3,000	------
TOTAL	116,739	22,280	29,852	19,340	32,645	88,338	31,590	68,389	45,235	3,652	28,414	49,694
MEAN	3,766	743	963	624	1,166	2,850	1,053	2,206	1,508	118	917	1,656
MAX	37,800	2,570	4,280	945	10,600	28,300	4,180	12,900	12,300	198	9,320	8,270
MIN	579	445	408	450	440	445	522	356	205	61	67	498
AC-FT	231,600	44,190	59,210	38,360	64,750	175,200	62,660	135,600	89,720	7,240	56,360	98,570

CAL YR 1973 TOTAL 746,688 MEAN 2,046 MAX 37,800 MIN 49 AC-FT 1,481,000
WTR YR 1974 TOTAL 536,168 MEAN 1,469 MAX 37,800 MIN 61 AC-FT 1,063,000

PEAK DISCHARGE (BASE, 16,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE
10-12	1230	11.12	43,600
3-11	2100	9.70	32,500

07160500 SKELETON CREEK NEAR LOVELL, OKLA.

LOCATION.--Lat 36°03'36", long 97°35'05", in NW 1/4 SW 1/4 sec.1, T.18 N., R.4 W., Logan County, near right bank on downstream side of pier of bridge on State Highway 74, 2 mi (3.2 km) upstream from Otter Creek, 2.8 mi (4.5 km) east of Lovell, and at mile 14.6 (23.5 km).

DRAINAGE AREA.--410 mi^2 (1,062 km^2).

PERIOD OF RECORD.--October 1949 to current year.

GAGE.--Water-stage recorder. Datum of gage is 914.76 ft (278.819 m) above mean sea level (State Highway Department bench mark). Prior to Dec. 5, 1949, nonrecording gage at site 60 ft (18.3 m) downstream at datum 0.30 ft (91.4 mm) lower.

AVERAGE DISCHARGE.--25 years, 110 ft^3/s (3.115 m^3/s), 79,700 acre-ft/yr (98.3 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 27,900 ft^3/s (790 m^3/s) Oct. 11, gage height, 29.75 ft (9.068 m); minimum daily, 3.4 ft^3/s (0.096 m^3/s) Aug. 7.
Period of record: Maximum discharge, 75,200 ft^3/s (2,130 m^3/s) May 16, 1957, gage height, 34.58 ft (10.540 m); no flow at times in 1953-54, 1956.
Flood of Aug. 17, 1932, reached a stage of 32.0 ft (9.75 m), from floodmarks.

REMARKS.--Records good except prior to February which are poor.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	62	33	40	9.0	17	41	75	805	893	14	3.5	26
2	50	32	29	9.0	16	38	69	3,010	137	12	4.0	1,350
3	31	30	131	9.4	15	35	66	4,560	81	12	4.1	1,720
4	21	27	1,110	11	14	34	61	1,160	39	12	4.4	388
5	15	26	932	11	14	31	57	173	54	13	4.7	63
6	12	25	198	10	13	29	58	120	66	19	3.7	36
7	9.8	29	120	13	13	27	56	95	276	19	3.4	28
8	6.1	33	90	17	13	27	53	79	922	13	3.7	24
9	4.9	36	72	24	12	58	51	71	561	12	35	25
10	3.8	33	60	16	12	4,960	51	61	366	12	1,440	24
11	8,800	26	48	13	12	11,500	336	55	72	12	3,070	21
12	15,700	22	45	12	12	5,140	1,150	48	55	12	314	20
13	3,660	19	40	11	11	609	241	44	43	12	36	18
14	419	16	37	11	11	307	97	40	38	11	23	19
15	257	14	35	14	11	238	69	37	37	7.3	36	17
16	142	12	33	95	11	205	57	38	33	7.0	63	19
17	94	12	33	160	13	177	54	37	29	8.8	25	18
18	66	11	33	172	29	165	53	36	30	9.9	18	19
19	50	15	32	127	1,540	150	52	33	28	6.2	17	157
20	40	1,010	32	60	380	132	70	32	26	5.0	12	2,190
21	38	1,210	30	50	2,290	135	373	32	25	6.0	8.3	5,000
22	34	145	32	30	5,860	152	151	233	23	5.7	19	1,110
23	32	51	35	25	2,880	154	72	106	21	6.2	37	94
24	33	349	64	22	201	125	54	604	20	5.2	627	91
25	34	1,540	129	20	94	109	45	1,160	18	4.4	126	855
26	33	396	88	16	72	105	45	1,860	19	9.1	32	774
27	32	60	44	14	60	102	41	627	17	26	33	156
28	29	267	30	15	48	99	41	101	16	11	492	78
29	29	306	20	18	------	93	50	59	17	6.9	214	52
30	29	72	13	20	------	85	123	46	18	5.3	44	40
31	30	------	10	18	------	80	------	1,090	------	4.0	30	------
TOTAL	29,796.6	5,857	3,645	1,052.4	13,674	25,142	3,771	16,452	3,980	319.0	6,782.8	14,432
MEAN	961	195	118	33.9	488	811	126	531	133	10.3	219	481
MAX	15,700	1,540	1,110	172	5,860	11,500	1,150	4,560	922	26	3,070	5,000
MIN	3.8	11	10	9.0	11	27	41	32	16	4.0	3.4	17
AC-FT	59,100	11,620	7,230	2,090	27,120	49,870	7,480	32,630	7,890	633	13,450	28,630

CAL YR 1973 TOTAL 98,021.40 MEAN 269 MAX 15,700 MIN 0 AC-FT 194,400
WTR YR 1974 TOTAL 124,903.80 MEAN 342 MAX 15,700 MIN 3.4 AC-FT 247,700

PEAK DISCHARGE (BASE, 1,500 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-11	1845	29.75	27,900	2-22	1030	25.12	7,110	5-31	1215	13.51	2,080
11-21	0600	11.85	1,620	3-11	0330	27.84	14,300	8-11	0945	17.92	3,520
11-25	0945	12.38	1,730	5-3	1215	21.74	4,980	9-2	1030	13.48	2,080
2-19	1800	13.22	2,010	5-26	1800	13.14	1,990	9-21	0730	23.28	5,670

07161000 CIMARRON RIVER AT PERKINS, OKLA.

LOCATION.--Lat 35°57'32", long 97°01'49", in SW 1/4 SW 1/4 sec.7, T.17 N., R.3 E., Payne County, near right bank at downstream side of bridge on U.S. Highway 177, 1.0 mi (1.6 km) south of Perkins, 1.5 mi (2.4 km) upstream from Dugout Creek, 4.0 mi (6.4 km) downstream from Wildhorse Creek, and at mile 87.3 (140.5 km).

DRAINAGE AREA.--17,852 mi^2 (46,237 km^2) of which 4,926 mi^2 (12,758 km^2) is probably noncontributing.

PERIOD OF RECORD.--June 1939 to current year. Monthly discharge only for some periods, published in WSP 1311. Gage-height records collected at same site since 1927 are contained in reports of U.S. Weather Bureau.

GAGE.--Water-stage recorder. Datum of gage is 819.88 ft (249.899 m) above mean sea level (levels by Corps of Engineers). Prior to June 26, 1940, and Jan. 9, to Apr. 7, 1957, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--35 years, 1,144 ft^3/s (32.40 m^3/s), 828,800 acre-ft/yr (1.02 km^3/yr).

EXTREMES.--Current year: Maximum discharge, 70,900 ft^3/s (2,010 m^3/s) Mar. 12, gage height, 14.86 ft (4.529 m); minimum daily, 93 ft^3/s (2.63 m^3/s) Aug. 3.
Period of record: Maximum discharge, 149,000 ft^3/s (4,220 m^3/s) May 17, 1957, gage height, 19.53 ft (5.953 m); minimum, 0.8 ft^3/s (0.023 m^3/s) Dec. 8, 1954.
Flood of Oct. 4, 5, 1926, reached a stage of 17.0 ft (5.18 m) from floodmarks, from information by Corps of Engineers.

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

REVISIONS.--WSP 1341: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5,500	736	1,070	600	703	1,220	880	1,550	5,640	329	96	3,870
2	3,790	706	918	500	680	1,110	880	7,220	5,410	312	104	7,400
3	2,820	686	868	450	654	1,050	870	18,100	2,790	293	93	5,360
4	2,340	665	6,040	400	622	981	860	10,600	1,620	306	156	14,000
5	2,090	655	5,760	440	622	923	862	4,920	1,760	293	239	7,000
6	2,200	638	4,050	530	602	874	823	2,980	1,880	292	180	4,500
7	1,920	629	2,410	480	601	821	784	2,090	2,480	301	142	3,060
8	1,740	622	2,420	400	574	792	754	1,580	5,650	282	117	2,280
9	1,560	618	1,880	390	555	1,350	754	1,310	10,700	260	155	1,760
10	1,410	609	1,560	420	547	10,600	754	1,110	13,300	239	240	1,430
11	3,440	600	1,370	425	525	45,400	784	987	6,280	215	2,840	1,220
12	45,100	618	1,220	430	517	36,000	1,470	866	3,000	200	3,780	1,040
13	29,800	563	1,120	450	504	15,000	3,470	768	2,400	189	1,460	906
14	13,600	561	1,050	500	501	9,200	3,690	692	1,980	179	660	795
15	8,000	553	986	580	537	6,000	2,130	620	1,680	172	498	729
16	5,810	549	922	660	620	3,900	1,280	560	1,390	169	444	710
17	4,270	541	884	775	620	2,600	1,030	524	1,210	163	411	686
18	3,500	541	833	827	677	1,750	862	479	1,040	152	1,570	657
19	2,960	531	829	889	1,440	1,500	784	431	959	146	1,630	670
20	2,550	689	750	887	2,660	1,300	708	390	878	142	766	2,970
21	2,120	1,750	650	948	3,680	1,200	678	371	800	135	467	14,700
22	1,750	2,260	598	937	15,300	1,120	1,710	376	686	127	334	9,420
23	1,510	1,130	604	1,180	12,400	1,080	2,130	1,910	656	123	1,870	3,000
24	1,330	1,140	712	1,210	5,320	1,040	2,580	2,100	578	122	2,370	1,800
25	1,200	4,630	819	1,140	2,620	1,020	2,050	3,850	526	116	2,090	2,260
26	1,090	5,050	1,030	1,030	1,820	1,000	1,530	8,400	497	121	1,560	2,870
27	1,020	2,430	926	943	1,520	980	1,160	9,290	468	112	1,190	3,000
28	941	1,500	828	847	1,350	960	947	4,750	402	103	1,040	1,650
29	871	1,260	822	782	------	940	890	2,910	371	112	4,840	1,120
30	816	1,450	834	756	------	920	1,310	1,800	350	108	9,670	884
31	781	------	823	732	------	910	------	3,820	------	99	6,630	------
TOTAL	157,829	34,910	45,586	21,538	58,771	153,541	39,414	97,354	77,381	5,912	47,642	101,747
MEAN	5,091	1,164	1,471	695	2,099	4,953	1,314	3,140	2,579	191	1,537	3,392
MAX	45,100	5,050	6,040	1,210	15,300	45,400	3,690	18,100	13,300	329	9,670	14,700
MIN	781	531	598	390	501	792	678	371	350	99	93	657
AC-FT	313,100	69,240	90,420	42,720	116,600	304,500	78,180	193,100	153,500	11,730	94,500	201,800

CAL YR 1973 TOTAL 945,212 MEAN 2,590 MAX 45,100 MIN 110 AC-FT 1,875,000
WTR YR 1974 TOTAL 841,625 MEAN 2,306 MAX 45,400 MIN 93 AC-FT 1,669,000

PEAK DISCHARGE (BASE, 16,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-12	2200	14.36	63,400	5-3	1315	10.33	20,000
2-22	1830	10.46	19,300	9-4	1300	9.28	17,100
3-12	1130	14.86	70,900	9-21	1345	9.46	18,100

07163000 COUNCIL CREEK NEAR STILLWATER, OKLA.

LOCATION.--Lat 36°07'07", long 96°52'00", in SE 1/4 SW 1/4 sec.15, T.19 N., R.4 E., Payne County, on right bank 200 ft (61.8 m) upstream from bridge on State Highway 51, 10.0 mi (16.1 km) east of Stillwater, and at mile 10.0 (16.1 km).

DRAINAGE AREA.--31 mi^2 (80.3 km^2).

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 838.28 ft (255.077 m) above mean sea levle, adjustment of 1912. Prior to May 4, 1934, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--40 years, 10.6 ft^3/s (0.300 m^3/s), 4.64 in/yr (118 mm/yr), 7,680 acre-ft/yr (9.47 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 1,880 ft^3/s (53.2 m^3/s) Sept. 2, gage height, 8.74 ft (2.664 m); no flow at times.
Period of record: Maximum discharge, 25,000 ft^3/s (708 m^3/s) Oct. 2, 1959, gage height, 18.9 ft (5.76 m), from floodmarks, from rating curve extended above 2,500 ft^3/s (70.8 m^3/s) on basis of slope-area measurements at gage heights 13.4 (4.08 m) and 17.5 ft (5.33 m); no flow at times in each year.
Flood of Apr. 27, 1912, reached a stage of 16.6 ft (5.06 m) at gage, based on floodmarks set by local resident at site 900 ft (274 m) downstream.

REMARKS.--Records fair.

REVISIONS.--WSP 1211: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.45	1.2	2.8	1.8	1.9	5.0	5.7	281	16	.51	0	70
2	.29	1.4	2.7	1.6	1.7	5.0	4.8	258	6.4	.49	0	586
3	.22	1.4	152	1.6	1.5	5.0	4.6	18	4.4	.38	0	9.8
4	.29	1.7	71	1.7	1.5	5.0	3.4	8.8	4.3	.83	225	3.5
5	.22	1.8	12	1.9	1.5	5.0	2.4	6.6	4.2	.67	6.0	2.1
6	.45	1.8	5.6	2.0	1.7	5.0	3.1	5.3	28	.49	1.0	1.5
7	.45	2.1	4.0	1.9	1.5	5.0	2.6	4.5	32	.32	.31	1.2
8	.29	2.2	3.7	1.8	1.6	5.0	2.4	4.5	217	.28	.14	.98
9	.15	2.0	3.4	1.7	1.6	30	2.5	4.4	63	.25	.09	1.1
10	.15	1.6	2.9	1.4	1.8	50	3.0	4.0	8.1	.18	16	1.1
11	106	1.8	3.0	1.4	1.6	300	7.7	3.7	5.1	.14	12	.88
12	63	1.9	3.1	1.5	1.8	100	4.1	3.3	4.2	.11	7.0	.62
13	24	2.0	2.7	2.1	1.5	15	2.8	2.6	3.6	.09	1.0	.42
14	3.5	2.0	2.4	2.8	1.7	9.0	2.3	2.0	3.2	.09	.50	.47
15	1.7	1.8	2.3	4.5	10	8.1	2.8	1.7	2.9	.12	.10	.76
16	1.3	1.8	2.0	4.1	6.0	6.6	2.8	1.9	2.4	.05	.06	1.1
17	1.6	1.8	2.1	4.6	7.0	6.0	2.6	1.6	2.3	.02	.05	.99
18	1.7	2.1	2.3	4.5	8.0	6.1	2.8	1.5	2.3	.02	.05	.95
19	1.8	4.9	2.8	3.9	13	5.4	2.9	1.3	1.9	.01	.03	9.1
20	1.6	151	2.2	3.7	17	5.4	3.2	1.2	1.5	0	.01	4.1
21	1.5	7.9	2.3	3.3	120	7.0	5.4	1.2	1.3	0	0	1.3
22	1.5	2.9	2.8	3.2	50	6.5	3.6	1.2	1.1	0	100	.78
23	1.5	2.1	3.1	2.9	20	5.4	2.7	2.4	1.1	0	124	.63
24	1.3	358	3.1	2.7	12	4.4	2.4	202	1.1	0	4.9	70
25	1.2	80	2.6	2.5	10	4.4	2.5	325	1.1	0	1.2	20
26	1.4	12	2.3	2.0	8.0	4.6	2.7	85	1.1	0	.65	3.9
27	58	8.7	2.2	1.9	6.0	4.7	2.6	9.7	1.1	0	.72	2.1
28	3.1	8.3	2.2	1.6	5.0	5.0	2.5	5.1	.94	0	.70	1.5
29	1.3	4.2	2.3	1.8	------	4.9	26	3.6	.65	0	.33	1.2
30	.97	3.3	2.5	2.0	------	4.7	170	3.1	.56	0	.28	1.7
31	.98	------	2.5	2.2	------	5.9	------	243	------	0	.23	------
TOTAL	281.91	675.7	312.9	76.6	314.9	639.1	288.9	1,497.2	422.85	5.05	502.35	799.78
MEAN	9.09	22.5	10.1	2.47	11.2	20.6	9.63	48.3	14.1	.16	16.2	26.7
MAX	106	358	152	4.6	120	300	170	325	217	.83	225	586
MIN	.15	1.2	2.0	1.4	1.5	4.4	2.3	1.2	.56	0	0	.42
CFSM	.29	.73	.33	.08	.36	.66	.31	1.56	.45	.005	.52	.86
IN.	.34	.81	.38	.09	.38	.77	.35	1.80	.51	.006	.60	.96
AC-FT	559	1,340	621	152	625	1,270	573	2,970	839	10	996	1,590

CAL YR 1973 TOTAL 6,953.76 MEAN 19.1 MAX 706 MIN 0 CFSM .62 IN 8.34 AC-FT 13,790
WTR YR 1974 TOTAL 5,817.24 MEAN 15.9 MAX 586 MIN 0 CFSM .51 IN 6.98 AC-FT 11,540

PEAK DISCHARGE (BASE, 1,200 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE
11-24	1830	7.36	1,310
5-1	2130	8.14	1,550
9-2	0215	8.74	1,880

07164200 KEYSTONE LAKE NEAR SAND SPRINGS, OKLA.

LOCATION.--Lat 36°09'05", long 96°15'05", in SW 1/4 SE 1/4 sec.4, T.19 N., R.10 E., Tulsa County, in stair tower of intake structure near left end of Keystone Dam on Arkansas River, 8.5 mi (13.7 km) west of Sand Springs, and at mile 538.8 (866.9 km).

DRAINAGE AREA.--74,506 mi² (192,971 km²), of which 12,541 mi² (32,481 km²) is probably noncontributing.

PERIOD OF RECORD.--September 1964 to current year. Prior to October 1970 published as Keystone Reservoir near Sand Springs.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level. Prior to Nov. 1, 1964, nonrecording gage nearby at same datum.

EXTREMES.--Current year: Maximum contents, 1,714,000 acre-ft (2.11 km³) Oct. 16, elevation, 751.76 ft (229.136 m); minimum, 475,800 acre-ft (587 hm³) Aug. 2, elevation, 716.92 ft (218.517 m).
Period of record: Maximum contents, 1,714,000 acre-ft (2.11 km³) Oct. 16, 1973, elevation, 751.76 ft (229.136 m); minimum since power pool was first filled, 297,800 acre-ft (376 hm³) Jan. 19, 1965, elevation, 705.07 ft (214.903 m).

REMARKS.--Reservoir is formed by rolled-fill earth dam. Spillway is concrete ogee weir controlled by 18 40-foot (12.2 m) taintor gates. Outlet works consist of nine sluices. Regulated storage began Sept. 11, 1964; power pool was first filled Nov. 20, 1964. Capacity, 1,836,000 acre-ft (2.26 km³), at elevation 754.0 ft (229.82 m), top of flood control pool, 618,000 acre-ft (762 hm³), at elevation 723.0 ft (220.37 m) top of power pool, 520,700 acre-ft (642 hm³) at elevation 719.0 ft (219.15 m). Crest of controlled spillway, and 287,500 acre-ft (354 hm³) at elevation 706.0 ft (215.19 m), minimum power pool. Figures given herein represent total contents. Reservoir is designed for flood control, power development, and conservation. Revised capacity table, based on survey in 1969, used since Oct. 1, 1972. Records of chemical analysis for the current year are published in Part 2 of this report.

COOPERATION.--Records furnished by Corps of Engineers.

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

715	437.4	730	820.8	745	1,387
720	543.9	735	988.4	752	1,727
725	671.9	740	1,176		

CONTENTS, IN THOUSANDS OF ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,021	743.4	794.4	771.3	709.0	683.6	750.0	760.4	880.3	767.9	480.6	633.4
2	1,083	713.7	795.6	751.8	697.3	671.0	732.2	810.1	882.9	753.6	476.0	697.3
3	1,122	688.1	801.6	732.2	684.5	671.0	723.0	840.6	875.7	743.2	476.2	730.1
4	1,147	674.6	832.6	712.5	669.6	664.4	706.7	853.9	860.7	728.3	478.1	739.3
5	1,180	663.0	878.0	694.4	660.8	655.8	700.1	843.8	840.0	711.1	477.4	748.2
6	1,236	651.2	918.6	678.3	652.0	644.7	696.7	819.2	833.5	695.8	478.3	742.3
7	1,236	639.8	948.1	669.1	641.2	634.5	698.7	787.9	848.7	683.1	478.9	739.9
8	1,218	627.9	967.8	665.7	629.7	632.6	691.6	772.5	964.6	668.2	478.1	730.7
9	1,191	615.4	977.5	661.6	640.1	645.5	687.6	764.9	1,062	653.1	513.2	717.2
10	1,163	602.0	978.6	656.7	650.1	757.4	683.1	753.6	1,101	640.4	553.7	701.3
11	1,112	588.9	977.9	649.3	645.8	1,037	682.5	742.0	1,138	626.3	577.4	684.5
12	1,112	592.4	976.1	642.0	641.7	1,237	680.8	732.8	1,165	611.5	585.1	681.1
13	1,362	594.2	968.5	635.6	637.4	1,329	687.6	723.0	1,170	606.9	595.4	675.5
14	1,545	594.9	963.2	629.7	631.9	1,348	689.3	724.8	1,157	607.4	593.7	669.3
15	1,671	595.4	954.7	626.3	625.8	1,336	691.6	719.8	1,136	601.0	586.6	668.5
16	1,713	594.2	944.6	624.0	635.3	1,305	685.9	716.9	1,111	593.1	583.3	664.9
17	1,671	593.4	934.3	624.5	644.4	1,264	674.4	723.9	1,077	585.1	584.3	660.8
18	1,604	592.4	926.2	627.9	644.4	1,219	659.1	731.3	1,036	575.9	596.7	653.1
19	1,524	592.4	920.2	653.1	639.6	1,176	650.9	733.7	993.2	564.7	594.2	658.0
20	1,432	613.8	906.6	677.4	635.3	1,145	646.6	731.6	950.5	558.2	591.1	691.8
21	1,336	624.0	893.8	707.0	647.1	1,109	643.9	725.7	908.6	551.6	584.8	696.4
22	1,237	638.8	881.3	729.8	663.0	1,076	639.3	707.6	872.8	543.0	580.6	710.5
23	1,136	649.0	869.8	746.1	713.4	1,040	653.4	710.5	843.2	534.2	581.4	707.6
24	1,008	674.6	856.8	760.1	731.3	1,004	709.3	737.2	822.4	524.9	579.4	697.0
25	961.1	721.9	843.8	766.7	730.4	967.1	729.2	772.2	805.7	518.0	589.9	686.7
26	898.7	750.3	833.5	765.8	719.2	931.3	730.4	812.9	796.3	509.8	593.7	675.2
27	852.9	772.2	821.1	761.0	709.3	896.4	728.6	867.2	790.3	507.0	598.0	671.9
28	827.2	782.3	815.4	753.6	697.0	862.0	726.6	890.8	785.4	500.3	596.4	668.2
29	819.6	788.8	808.5	744.0	------	826.5	728.6	884.9	780.4	490.7	591.9	660.8
30	799.7	792.5	799.7	733.1	------	789.7	745.2	873.7	776.1	484.8	597.5	653.1
31	774.0	------	788.5	721.6	------	765.5	------	874.1	------	482.5	614.6	------
MAX	1,713	792.5	978.6	771.3	731.3	1,348	750.0	890.8	1,170	767.9	614.6	748.2
MIN	774.0	588.9	788.5	624.0	625.8	632.6	639.3	707.6	776.1	482.5	476.0	633.4
(†)	728.50	729.10	728.97	726.74	725.89	728.22	727.54	731.65	728.57	717.24	722.87	724.32
(‡)	-137.6	+18.5	-4.0	-66.9	-24.6	+68.5	-20.3	+128.9	-98.0	-293.6	+132.1	+38.5

CAL YR 1973 .....‡ +164.8
WTR YR 1974 .....‡ -258.5

† Elevation, in feet, at end of month.
‡ Change in contents, in thousands of acre-ft.

07164500 ARKANSAS RIVER AT TULSA, OKLA.

LOCATION.--Lat 36°08'37", long 96°00'13", in NW 1/4 sec.11, T.19 N., R.12 E., Tulsa County, near left bank on downstream side of pier of bridge on U.S. Highway 66 in Tulsa, 10.1 mi (16.3 km) upstream from Polecat Creek, 15.1 mi (24.3 km) downstream from Keystone Dam, and at mile 523.7 (842.6 km).

DRAINAGE AREA.--74,615 mi^2 (193,253 km^2), of which 12,541 mi^2 (32,481 km^2) is probably noncontributing.

PERIOD OF RECORD.--October 1925 to current year. Monthly discharge only for some periods, published in WSP 1311. Gage-height records collected in this vicinity since 1904 are published in reports of the U.S. Weather Bureau.

GAGE.--Water-stage recorder. Datum of gage is 615.23 ft (187.522 m) above mean sea level (Corps of Engineers bench mark). Prior to Feb. 2, 1939, nonrecording gage and Feb. 2, 1939, to Sept. 30, 1952, water-stage recorder at datum 3.00 ft (0.914 m) higher.

AVERAGE DISCHARGE.--49 years, 6,617 ft^3/s (187.4 m^3/s), 4,794,000 acre-ft/yr (5.91 km^3/yr).

EXTREMES.--Current year: Maximum discharge, 89,000 ft^3/s (2,520 m^3/s) Oct. 13, gage height, 13.03 ft (3.972 m); minimum daily, 407 ft^3/s (11.5 m^3/s) Aug. 5.
Period of record: Maximum discharge, 246,000 ft^3/s (6,970 m^3/s) Oct. 5, 1959, gage height, 22.00 ft (6.706 m); minimum, 27 ft^3/s (0.76 m^3/s) Oct. 12, 13, 1956.
Maximum stage since 1904, 22.8 ft (6.949 m) June 13, 1923, present datum, from reports of U.S. Weather Bureau.

REMARKS.--Records fair. Except for 109 mi^2 (282 km^2) intervening area, flow completely regulated by Keystone Lake (see sta. 07164200) since September 1964. Prior minor regulation by John Martin Lake in Colorado and by Great Salt Plains Lake (see sta. 07150000). Records of chemical analyses and of water temperatures for site 7 miles (11.3 km) upstream (Published as "at Sand Springs Bridge near Tulsa") for the current year are published in Part 2 of this report.

COOPERATION.--Gage-height record and 16 discharge measurements furnished by Corps of Engineers; records computed by Geological Survey.

REVISIONS.--WSP 1341: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21,100	26,600	7,300	13,900	14,600	14,500	14,800	14,300	19,800	6,220	2,330	10,200
2	21,500	26,200	7,340	13,800	14,600	14,600	13,500	13,900	19,800	10,200	2,750	14,300
3	22,700	23,400	7,400	13,800	14,600	8,810	13,200	19,200	19,800	9,220	2,620	15,900
4	27,800	17,700	7,370	13,700	14,600	10,600	13,000	27,700	19,800	10,300	694	21,800
5	25,600	15,500	7,160	13,600	12,300	11,600	7,000	27,700	20,100	11,200	407	22,500
6	3,810	15,500	8,320	13,500	11,800	11,600	6,200	27,500	19,900	11,300	1,460	21,100
7	17,500	15,500	12,800	10,900	12,000	12,000	6,300	27,200	21,100	9,230	1,120	13,400
8	26,800	15,400	12,900	7,890	12,600	10,400	6,500	21,300	22,600	9,390	1,120	13,300
9	26,800	15,400	12,900	7,850	3,760	2,620	6,500	13,600	24,800	10,300	2,170	13,300
10	26,700	15,500	12,900	7,820	732	5,360	6,300	13,600	20,800	8,460	2,020	13,300
11	34,200	15,500	13,000	7,820	5,380	18,500	6,800	13,500	21,300	8,800	1,550	13,400
12	77,600	7,530	13,000	7,820	7,710	40,200	6,800	13,500	21,300	9,290	4,550	7,360
13	85,600	7,230	13,000	7,830	7,480	47,700	6,300	13,700	21,900	5,710	7,290	6,580
14	84,400	7,250	13,000	7,830	7,940	46,500	7,480	9,620	23,500	3,130	7,310	7,020
15	83,300	7,460	13,000	7,890	9,030	39,000	10,600	9,120	23,300	4,450	7,390	5,640
16	83,600	7,590	12,700	7,930	4,020	38,700	12,500	9,370	23,300	4,950	7,370	5,090
17	83,200	7,680	13,200	7,930	662	38,500	12,500	8,920	24,800	5,860	5,280	5,240
18	81,800	7,670	13,300	7,920	6,050	38,100	12,500	9,190	28,500	5,620	5,550	7,250
19	78,000	7,680	13,500	2,450	8,810	36,600	12,600	9,130	28,000	6,730	7,350	7,030
20	75,000	8,860	13,500	577	9,710	30,200	8,370	8,900	27,600	5,880	7,390	8,290
21	73,900	7,600	13,600	1,560	9,250	27,800	8,160	9,610	27,100	4,980	7,910	12,700
22	72,900	7,600	13,700	8,000	12,100	27,600	8,160	13,500	25,000	5,460	8,030	12,700
23	71,100	7,580	13,900	8,030	14,600	27,100	12,700	13,700	20,500	5,430	7,960	12,800
24	67,500	8,790	13,500	8,030	14,600	26,800	14,300	14,900	16,100	5,970	7,180	13,300
25	58,200	9,110	13,800	9,820	15,400	26,600	18,300	18,800	13,400	5,280	4,450	13,600
26	47,100	7,790	13,900	13,800	17,000	26,300	18,900	24,200	8,910	5,290	3,400	13,600
27	39,700	7,530	13,900	14,000	14,800	26,000	17,000	24,000	7,730	4,500	6,540	8,100
28	28,300	7,390	14,100	14,700	14,500	25,600	13,500	29,200	6,200	3,930	6,770	7,820
29	19,200	7,340	14,000	14,700	------	25,200	13,600	33,200	5,930	5,090	7,310	8,110
30	24,000	7,350	14,000	14,600	------	24,700	14,300	29,900	6,110	5,590	7,380	6,860
31	27,600	------	14,000	14,500	------	20,700	------	20,100	------	2,710	7,630	------
TOTAL	1,516,5M	349,230	379,990	304,497	290,634	760,490	328,670	542,060	588,980	210,470	152,281	341,590
MEAN	48,920	11,640	12,260	9,822	10,380	24,530	10,960	17,490	19,630	6,789	4,912	11,390
MAX	85,600	26,600	14,100	14,700	17,000	47,700	18,900	33,200	28,500	11,300	8,030	22,500
MIN	3,810	7,230	7,160	577	662	2,620	6,200	8,900	5,930	2,710	407	5,090
AC-FT	3,008M	692,700	753,700	604,000	576,500	1,508M	651,900	1,075M	1,168M	417,500	302,000	677,500

CAL YR 1973 TOTAL 6,952,598 MEAN 19,050 MAX 85,600 MIN 170 AC-FT 13,790,000
WTR YR 1974 TOTAL 5,765,402 MEAN 15,800 MAX 85,600 MIN 407 AC-FT 11,440,000

07165000 HEYBURN LAKE NEAR HEYBURN, OKLA.

LOCATION.--Lat 35°56'52", long 96°17'55", in SE 1/4 sec.13, T.17 N., R.9 E., Creek County, at intake structure at right abutment of Heyburn Dam on Polecat Creek, 2.5 mi (4.0 km) northwest of Heyburn, 3.4 mi (5.5 km) upstream from bridge on U.S. Highway 66, 11.0 mi (17.7 km) southwest of Sapulpa, and at mile 48.6 (28.2 km).

DRAINAGE AREA.--123 mi^2 (318.6 km^2).

PERIOD OF RECORD.--October 1950 to current year. Prior to October 1970, published as Heyburn Reservoir near Heyburn.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level.

EXTREMES.--Current year: Maximum contents, 28,780 acre-ft (35.5 hm^3) June 9, elevation, 775.51 ft (236.375 m); minimum, 5,830 acre-ft (7.19 hm^3) Feb. 18, elevation, 760.56 ft (231.819 m).
Period of record: Maximum contents, 28,780 acre-ft (35.5 hm^3), June 9, elevation, 775.51 ft (236.375 m); minimum since conservation pool was first filled, 5,830 acre-ft (7.19 hm^3), elevation, 760.56 ft (231.819 m).

REMARKS.--Reservoir is formed by an earth dam. Outlet works consist of an 8.25 ft (2.515 m) diameter concrete conduit extending from an uncontrolled concrete drop inlet at the upstream side of dam to a concrete stilling basin near downstream toe of dam and three 36-inch (.91 m) gated low-flow pipes which drain into the conduit below the drop inlet. Spillway is 200-foot (61.0 m) channel in a natural saddle about 1,000 ft (304.8 m) west of right abutment. Storage began Sept. 29, 1950; conservation pool was first filled Mar. 10, 1951. Capacity, 144,800 acre-ft (179 hm^3), at elevation 802.0 ft (244.45 m) maximum pool, 55,030 acre-ft (67.9 hm^3), at elevation 784.0 ft (238.96 m), spillway crest and top of flood-control pool, and 6,620 acre-ft (8.2 hm^3) at elevation 761.5 (232.11 m), conservation pool. Dead storage, 226 acre-ft (3,280 m^3) below elevation 740.0 ft (225.55 m), invert of low-flow sluices. Reservoir was designed for flood control and conservation. Figures given herein represent total contents. Revised capacity table, based on survey in 1971, used since Oct. 1, 1972.

COOPERATION.--Records furnished by Corps of Engineers.

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

760	5,420	769	15,940
763	8,130	772	21,090
766	11,690	776	30,020

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7,130	6,830	7,290	6,860	6,780	6,980	6,880	8,670	7,450	6,720	6,150	7,480
2	7,030	6,790	7,200	6,840	6,770	6,950	6,880	8,620	7,270	6,700	6,120	11,340
3	6,980	6,770	7,520	6,810	6,770	6,940	6,870	8,120	7,150	6,690	6,090	9,450
4	6,920	6,760	7,750	6,800	6,760	6,930	6,810	7,770	7,110	6,700	6,070	8,370
5	6,880	6,740	7,540	6,790	6,750	6,900	6,800	7,540	7,050	6,690	6,050	7,730
6	6,880	6,730	7,350	6,790	6,750	6,870	6,780	7,350	8,060	6,680	6,070	7,420
7	6,850	6,720	7,220	6,790	6,740	6,860	6,790	7,210	9,890	6,660	6,050	7,240
8	6,820	6,710	7,140	6,800	6,720	6,860	6,760	7,120	21,110	6,640	6,030	7,110
9	6,800	6,690	7,060	6,800	6,720	6,870	6,750	7,060	27,170	6,620	6,970	7,030
10	6,790	6,680	7,000	6,800	6,720	11,600	6,760	7,000	23,720	6,600	7,570	6,990
11	7,160	6,670	6,980	6,800	6,720	10,890	6,970	6,980	21,450	6,570	7,340	6,940
12	7,600	6,670	6,960	6,800	6,660	9,370	7,000	6,930	18,460	6,540	7,180	6,890
13	7,600	6,680	6,920	6,810	6,470	8,520	6,990	6,860	15,290	6,540	7,060	6,900
14	7,400	6,680	6,900	6,810	6,300	8,010	6,920	7,000	12,200	6,510	7,000	6,860
15	7,230	6,670	6,880	6,810	6,210	7,730	6,890	6,960	10,020	6,480	6,940	6,840
16	7,110	6,660	6,850	6,820	6,070	7,510	6,870	6,940	8,820	6,460	6,880	6,880
17	7,020	6,660	6,840	6,840	5,900	7,340	6,850	6,910	8,150	6,440	6,820	6,870
18	6,960	6,660	6,880	6,860	6,080	7,240	6,840	6,880	7,760	6,420	7,000	6,840
19	6,920	6,770	7,420	6,860	6,670	7,170	6,830	6,840	7,450	6,400	6,960	7,030
20	6,880	8,070	7,310	6,860	6,770	7,170	6,980	6,820	7,260	6,380	6,890	7,220
21	6,840	7,740	7,240	6,840	7,470	7,170	7,760	6,790	7,130	6,360	6,840	7,140
22	6,810	7,490	7,210	6,840	7,580	7,200	7,710	6,770	7,040	6,330	6,800	7,060
23	6,780	7,310	7,190	6,830	7,450	7,160	7,500	6,770	6,980	6,320	7,030	7,000
24	6,770	10,240	7,140	6,820	7,280	7,100	7,320	7,130	6,920	6,320	6,980	7,150
25	6,760	9,710	7,080	6,810	7,170	7,050	7,190	8,290	6,870	6,310	6,920	7,520
26	6,740	8,970	7,040	6,810	7,100	7,040	7,110	7,920	6,840	6,280	6,880	7,370
27	7,040	8,440	6,990	6,830	7,040	7,020	7,040	7,600	6,810	6,270	6,870	7,230
28	7,000	8,030	6,970	6,820	7,000	7,010	7,000	7,380	6,780	6,250	6,850	7,120
29	6,950	7,700	6,940	6,810	------	6,990	7,460	7,220	6,770	6,220	6,820	7,030
30	6,920	7,470	6,930	6,800	------	6,960	9,310	7,120	6,750	6,200	6,790	6,980
31	6,880	------	6,890	6,790	------	6,930	------	7,610	------	6,180	6,770	------
MAX	7,600	10,240	7,750	6,860	7,580	11,600	9,310	8,670	27,170	6,720	7,570	11,340
MIN	6,740	6,660	6,840	6,790	5,900	6,860	6,750	6,770	6,750	6,180	6,030	6,840
(†)	761.78	762.37	761.79	761.69	761.91	761.83	764.06	762.51	761.64	761.00	761.67	761.88
(‡)	-370	+590	-580	-100	+210	-70	+2,380	-1,700	-860	-570	+590	+210

CAL YR 1973 .....‡ 0
WTR YR 1974 .....‡ -270

† Elevation, in feet, at end of month.
‡ Change in contents, in acre-ft.

07165500 POLECAT CREEK BELOW HEYBURN LAKE, NEAR HEYBURN, OKLA.

LOCATION.--35°56'42", 96°17'39", in NW 1/4 NW 1/4 sec.19, T.17 N., R.10 E., Creek County, on right bank of outlet channel, 1,100 ft (335 m) downstream from Heyburn dam, 3.2 mi (5.1 km) upstream from bridge on U.S. Highway 66, 11 mi (17.7 km) southwest of Sapulpa, and at mile 48.4 (77.9 km).

DRAINAGE AREA.--123 mi^2 (319 km^2).

PERIOD OF RECORD.--October 1943 to current year. Prior to October 1956, published as Polecat Creek at Heyburn and October 1956 to September 1970 as Polecat Creek below Heyburn Reservoir near Heyburn.

GAGE.--Water-stage recorder. Datum of gage is 718.00 ft (218.846 m) above mean sea level. Prior to Feb. 22, 1949, nonrecording gage and Feb. 22, 1949, to Feb. 16, 1956, water-stage recorder at site 3.2 mi (5.1 km) downstream at datum 706.47 ft (215.332 m). Mar. 8, 1958 to Sept. 30, 1971, water-stage recorder at intake structure at right abutment of Heyburn Dam 1,100 ft (335 m) upstream at datum 760.00 ft (231.648 m), present site used supplementary gage.

AVERAGE DISCHARGE.--31 years, 52.2 ft^3/s (1.478 m^3/s), 37,820 acre-ft/yr (46.6 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 2,020 ft^3/s (57.2 m^3/s) June 9, computed from outflow 1,100 ft (335 m) upstream, gage height, 14.6 ft (4.45 m) from HWM; no flow at times.
Period of record: Maximum discharge, 17,300 ft^3/s (490 m^3/s) June 23, 1948 and May 19, 1949, from rating curve extended above 6,100 ft^3/s (173 m^3/s); maximum gage height, 28.53 ft (8.696 m) May 19, 1949, site and datum then in use; no flow at times in most years.
Flood of Sept. 4, 1949, reached a stage of 31.5 ft (9.60 m), from flood mark, at former site and datum.

REMARKS.--Records fair. Flow regulated since September 1950 by Heyburn Lake (see sta. 07165000) with occasional prior regulation from March 1950 by lake construction operations.

COOPERATION.--Gage-height record, 26 discharge measurements and 1 observations of no flow furnished by Corps of Engineers; records computed by Geological Survey.

REVISIONS.--WSP 1411: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	60	8.5	85	19	9.7	33	22	531	128	7.5	1.5	44
2	46	7.9	62	21	8.8	31	23	459	89	0	0	639
3	36	5.8	56	21	7.3	29	17	351	61	0	0	1,030
4	32	4.8	176	21	6.7	27	17	213	48	.05	0	504
5	23	3.8	152	20	6.1	25	11	132	42	0	0	234
6	21	2.0	97	20	11	22	9.7	89	73	0	0	124
7	19	1.5	68	14	6.7	20	11	60	970	0	0	78
8	17	1.5	50	13	5.5	19	12	46	1,760	0	.22	52
9	14	1.5	42	13	7.3	17	5.7	36	1,970	.67	5.3	39
10	11	.80	33	13	4.3	535	5.0	29	1,970	0	121	32
11	30	.70	29	13	4.1	1,430	10	24	1,960	0	107	25
12	61	.50	26	13	38	929	22	18	1,890	.36	69	20
13	158	.25	23	12	91	542	23	13	1,830	0	48	18
14	114	.25	20	12	90	331	21	20	1,680	0	35	16
15	74	2.8	17	12	88	208	18	26	1,270	8.0	27	14
16	52	.50	15	19	88	137	13	18	680	4.5	19	15
17	39	.15	13	12	88	95	11	14	363	4.3	14	16
18	26	0	13	13	88	72	9.7	11	201	3.2	25	15
19	18	.10	55	13	55	57	8.8	8.7	126	2.7	27	23
20	14	196	85	13	4.5	47	8.5	6.0	82	2.2	20	47
21	11	220	69	13	43	48	62	5.0	58	2.0	15	54
22	7.9	141	62	15	135	52	163	4.2	43	1.8	11	42
23	6.1	89	57	14	125	53	116	3.6	31	1.6	24	34
24	4.8	275	52	13	90	47	77	15	23	1.5	31	39
25	3.8	1,120	46	12	65	41	54	222	16	1.4	23	162
26	2.8	754	40	11	51	36	40	289	11	1.3	17	170
27	19	474	35	11	43	33	31	178	8.3	1.2	14	134
28	30	335	31	11	37	31	26	109	5.9	1.2	13	112
29	22	206	27	12	------	31	40	74	4.2	1.1	10	89
30	14	129	25	12	------	26	558	52	3.7	1.0	7.3	72
31	13	------	23	11	------	23	------	89	------	1.0	5.3	------
TOTAL	999.4	3,982.35	1,584	442	1,297.0	5,027	1,445.4	3,145.5	17,397.1	48.58	689.62	3,893
MEAN	32.2	133	51.1	14.3	46.3	162	48.2	101	580	1.57	22.2	130
MAX	158	1,120	176	21	135	1,430	558	531	1,970	8.0	121	1,030
MIN	2.8	0	13	11	4.1	17	5.0	3.6	3.7	0	0	14
AC-FT	1,980	7,900	3,140	877	2,570	9,970	2,870	6,240	34,510	96	1,370	7,720

CAL YR 1973 TOTAL 50,751.68 MEAN 139 MAX 1,910 MIN 0 AC-FT 100,700
WTR YR 1974 TOTAL 39,950.95 MEAN 109 MAX 1,970 MIN 0 AC-FT 79,240

07165570 ARKANSAS RIVER NEAR HASKELL, OKLA.

LOCATION.--Lat 35°49'23", long 95°38'39", in NE 1/4 sec.31, T.16 N., R.16 E., Muskogee County, near right bank on downstream side of bridge on State Highway 104, 2 mi (3.2 km) east of Haskell, 23.5 mi (37.8 km) upstream from Verdigris River, and at mile 483.7 (778.3 km).

DRAINAGE AREA.--75,473 mi² (195,475 km²), of which 12,541 mi² (32,481 km²) probably is noncontributing.

PERIOD OF RECORD.--June 1972 to current year.

GAGE.--Water-stage recorder. Datum of gage is 530.00 ft (161.544 m) above mean sea level.

EXTREMES.--Current year: Maximum discharge, 94,500 ft³/s (2,680 m³/s) Oct. 13, gage height 17.28 ft (5.267 m); minimum daily, 1,040 ft³/s (29.5 m³/s) Aug. 6.
Period of record: Maximum discharge, 94,500 ft³/s (2,680 m³/s) Oct. 13, 1974, gage height. 17.28 ft ft (5.267 m); minimum daily, 679 ft³/s (19.2 m³/s) Sept. 11, 1973.

REMARKS.--Records fair. Flow regulated by Keystone Lake (see sta. 07164200), 55.1 mi (88.7 km) upstream.

COOPERATION.--Gage-height record and 33 discharge measurements furnished by Corps of Engineers; records computed by Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21,200	27,800	8,740	15,000	14,700	14,500	19,000	15,900	21,000	6,790	2,900	8,520
2	21,500	27,000	8,610	15,100	14,800	14,400	14,700	15,200	20,300	7,500	2,470	14,100
3	22,100	26,300	8,610	15,000	14,700	13,800	14,500	14,700	20,000	10,200	2,700	16,500
4	25,300	21,400	10,400	14,400	14,700	8,290	14,200	23,900	20,000	9,110	2,640	19,600
5	28,900	16,800	9,650	14,500	13,800	10,800	12,600	28,100	19,900	10,800	1,340	22,000
6	20,600	15,700	8,670	14,600	11,700	11,500	8,460	27,800	21,000	11,300	1,040	22,300
7	4,640	15,500	12,900	14,600	11,600	11,900	7,580	27,700	26,400	10,700	1,670	18,500
8	21,600	15,400	14,700	10,700	12,200	11,900	7,400	27,200	32,300	9,320	1,410	13,700
9	27,000	15,300	14,600	8,260	11,800	9,430	7,840	17,800	68,700	9,570	1,500	13,700
10	26,600	15,300	14,500	8,330	3,220	3,730	7,680	14,400	46,100	9,740	2,720	13,700
11	28,000	15,300	14,600	8,330	1,390	10,500	7,730	14,200	29,100	8,620	2,610	13,800
12	60,400	14,000	14,700	8,290	5,020	29,400	8,540	14,000	27,300	8,990	1,970	13,200
13	92,900	7,430	14,600	8,540	7,640	48,200	8,250	13,900	24,000	9,230	4,020	8,440
14	87,900	8,080	14,600	8,290	7,470	50,600	7,390	14,800	25,000	5,420	6,790	7,980
15	85,300	7,940	14,600	8,360	8,090	42,700	8,700	12,600	25,100	3,330	7,050	7,970
16	84,400	7,940	14,400	8,480	11,300	39,400	10,500	10,400	24,700	4,370	7,200	6,060
17	85,600	8,030	14,500	8,540	4,510	39,300	12,600	9,730	24,100	5,150	7,270	6,190
18	84,700	7,990	14,600	8,450	1,760	39,000	12,700	9,450	27,000	5,210	5,380	6,410
19	83,100	7,990	17,300	8,140	7,310	38,100	12,800	9,470	28,200	5,410	5,470	7,860
20	77,100	15,000	18,000	2,000	10,100	33,800	11,900	9,240	27,700	6,760	7,160	10,900
21	75,900	15,600	15,500	1,050	10,300	28,800	8,750	9,250	27,200	5,190	7,370	10,500
22	73,900	9,850	15,500	3,600	12,600	28,200	8,850	10,200	26,700	4,650	7,950	14,000
23	71,600	8,660	15,600	8,350	13,700	27,800	9,380	13,500	23,200	5,050	8,440	14,100
24	69,300	14,200	18,600	8,350	14,900	27,500	13,300	14,600	18,900	5,250	8,110	14,500
25	62,200	26,400	16,300	8,350	14,700	27,000	16,100	19,200	15,500	5,470	7,550	15,700
26	52,600	18,100	15,400	10,600	16,000	27,000	19,500	26,300	13,100	5,020	4,310	15,300
27	46,100	13,000	15,300	13,600	16,300	27,000	19,700	25,400	10,200	4,970	3,920	13,900
28	34,900	10,400	15,200	14,200	14,500	26,500	15,700	25,200	8,400	3,880	6,650	9,020
29	22,700	9,510	15,300	14,800	------	26,000	13,800	31,500	7,190	3,830	7,170	8,840
30	21,000	9,000	15,200	14,800	------	25,500	15,600	32,200	6,840	4,930	7,600	8,880
31	26,500	------	14,900	14,700	------	25,000	------	25,900	------	4,780	7,740	------
TOTAL	1,545.5M	430,920	436,080	320,310	300,810	777,550	355,750	563,740	715,130	210,540	152,120	376,170
MEAN	49,860	14,360	14,070	10,330	10,740	25,080	11,860	18,190	23,840	6,792	4,907	12,540
MAX	92,900	27,800	18,600	15,100	16,300	50,600	19,700	32,200	68,700	11,300	8,440	22,300
MIN	4,640	7,430	8,610	1,050	1,390	3,730	7,390	9,240	6,840	3,330	1,040	6,060
AC-FT	3,066M	854,700	865,000	635,300	596,700	1,542M	705,600	1,118M	1,418M	417,600	301,700	746,100

CAL YR 1973 TOTAL 7,399,284 MEAN 20,270 MAX 92,900 MIN 679 AC-FT 14,680,000
WTR YR 1974 TOTAL 6,184,660 MEAN 16,940 MAX 92,900 MIN 1,040 AC-FT 12,270,000

07171000 VERDIGRIS RIVER NEAR LENAPAH, OKLA.

LOCATION.--Lat 36°51'05", long 95°35'06", at center of sec.3, T.27 N., R.16 E., Nowata County, near right bank on downstream side of pier of county road bridge, 2.8 mi (4.5 km) east of Lenapah, 4.5 mi (7.2 km) upstream from Cedar Creek, and at mile 144.6 (232.7 km).

DRAINAGE AREA.--3,639 mi^2 (942.5 km^2).

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 644.89 ft (196.562 m) above mean sea level.

AVERAGE DISCHARGE.--36 years, 2,217 ft^3/s (62.79 m^3/s), 1,606,000 acre-ft/yr (1.98 km^3/yr).

EXTREMES.--Current year: Maximum discharge, 75,500 ft^3/s (2,140 m^3/s) Mar. 11, gage height, 37.21 ft (11.342 m); minimum, 40 ft^3/s (1.13 m^3/s) Aug. 5, 6.
Period of record: Maximum discharge, 137,000 ft^3/s (3,880 m^3/s) May 20, 1943, gage height, 40.44 ft (12.326 m), from floodmarks; no flow at times in 1939-40, 1956.

REMARKS.--Records fair. Some regulation, by dams in Kansas, since April 1949.

COOPERATION.--Gage-height record and 33 discharge measurements furnished by Corps of Engineers; records computed by Geological Survey.

REVISIONS (WATER YEARS).--WSP 977: 1942(M). WSP 1117: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9,390	5,030	3,910	1,470	3,110	4,440	6,260	4,490	6,470	500	47	4,010
2	9,760	4,420	3,750	1,800	2,840	3,460	5,030	4,960	2,980	500	44	11,800
3	9,960	3,280	4,320	2,500	2,450	2,400	3,640	3,990	2,230	500	44	12,500
4	9,130	2,280	20,900	3,500	2,260	1,480	2,840	4,260	2,600	400	43	9,200
5	8,200	2,140	25,000	4,000	2,160	1,080	2,270	3,700	10,100	250	42	3,290
6	6,980	2,100	17,900	4,000	1,680	969	1,500	3,400	18,000	230	49	4,230
7	5,330	1,770	5,760	3,000	950	923	1,000	3,300	29,300	225	110	5,700
8	4,890	1,160	4,150	2,500	750	912	700	2,650	30,400	218	106	7,970
9	4,390	716	4,820	2,300	750	3,300	600	4,170	23,500	208	155	8,890
10	4,170	635	4,980	2,000	750	28,700	550	2,900	9,030	202	216	7,860
11	5,330	604	4,820	1,000	750	68,800	600	2,080	3,070	186	157	7,150
12	13,600	594	4,670	950	750	59,600	700	1,630	1,290	136	122	7,000
13	16,100	588	4,550	950	850	42,200	750	1,530	2,000	100	105	5,800
14	5,660	544	4,420	1,100	850	29,000	650	1,890	3,370	100	91	4,580
15	5,530	500	5,380	1,220	800	11,900	550	4,220	5,680	100	84	3,260
16	8,870	500	6,110	2,290	750	13,200	500	4,130	6,670	100	85	2,220
17	11,000	450	5,990	4,120	750	8,950	500	2,710	6,920	92	101	2,160
18	12,200	400	5,880	6,350	1,000	8,470	500	3,310	7,930	79	140	2,120
19	11,400	350	7,160	9,230	8,990	9,820	500	3,000	9,400	70	139	2,190
20	10,400	7,090	6,900	11,100	7,330	11,000	514	2,850	10,100	66	123	1,740
21	10,200	15,600	4,610	8,810	3,780	11,700	583	2,650	9,990	62	106	728
22	10,100	14,200	2,510	7,700	6,740	11,600	3,530	2,610	9,440	59	96	474
23	9,930	7,330	3,720	9,150	7,890	11,500	3,120	4,250	8,630	61	94	420
24	9,810	10,200	17,100	9,150	5,490	11,300	2,950	13,400	8,250	58	102	414
25	9,480	24,700	13,500	8,050	4,860	11,000	2,430	11,900	8,070	58	98	486
26	9,100	15,500	6,030	7,590	4,530	10,800	1,770	14,200	5,050	60	178	383
27	12,100	5,930	2,970	6,710	4,450	10,600	1,250	7,600	2,030	57	154	290
28	11,000	5,840	2,440	6,960	4,720	10,200	1,080	7,170	900	54	134	293
29	4,340	4,780	2,040	5,950	------	9,830	1,090	7,370	600	52	203	3,450
30	1,680	4,200	1,710	4,070	------	8,580	2,740	5,240	500	52	3,420	3,310
31	3,660	------	1,470	3,320	------	6,800	------	6,920	------	50	2,200	------
TOTAL	263,690	143,431	209,470	142,840	82,980	424,514	50,697	148,480	244,500	4,885	8,788	123,918
MEAN	8,506	4,781	6,757	4,608	2,964	13,690	1,690	4,790	8,150	158	283	4,131
MAX	16,100	24,700	25,000	11,100	8,990	68,800	6,260	14,200	30,400	500	3,420	12,500
MIN	1,680	350	1,470	950	750	912	500	1,530	500	50	42	290
AC-FT	523,000	284,500	415,500	283,300	164,600	842,000	100,600	294,500	485,000	9,690	17,430	245,800

CAL YR 1973 TOTAL 2,089,299 MEAN 5,724 MAX 31,100 MIN 33 AC-FT 4,144,000
WTR YR 1974 TOTAL 1,848,193 MEAN 5,064 MAX 68,800 MIN 42 AC-FT 3,666,000

PEAK DISCHARGE (BASE, 23,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
11-25	1230	27.51	25,600	3-11	1315	37.21	75,500
12-5	0600	28.46	26,300	6-8	0330	30.53	30,700

07171300 OOLOGAH LAKE NEAR OOLOGAH, OKLA.

LOCATION.--Lat 36°25'19", long 95°40'43", in NE 1/4 NW 1/4 sec.2, T.22 N., R.15 E., Rogers County, in gage tower 1,000 ft (304.8 m) from left end of dam on Verdigris River, 2.0 mi (3.2 km) southeast of Oologah, and at mile 90.3 (145.3 km).

DRAINAGE AREA.--4,339 mi^2 (11,238 km^2).

PERIOD OF RECORD.--May 1963 to current year. Prior to October 1970 published as Oologah Reservoir near Oologah.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level.

EXTREMES.--Current year: Maximum contents, 1,198,000 acre-ft (1.48 km^3) Mar. 17, elevation, 654.90 ft (199.614 m); minimum, 542,700 acre-ft (558 hm^3) Aug. 8, elevation, 634.38 ft (193.359 m).
Period of record: Maximum contents, 1,426,000 acre-ft (1.76 km^3) Apr. 26, 1973, elevation, 659.33 ft (200.964 m); minimum since conservation pool first filled 33,750 acre-ft (41.6 hm^3) Aug. 28, Oct. 27, 1969, elevation, 602.87 ft (183.755 m).

REMARKS.--Reservoir is formed by earth dam with concrete outlet structure and emergency spillway. Storage began May 15, 1963; conservation pool was first filled Apr. 4, 1964. Capacity, 1,519,000 acre-ft (1.87 km^3) at elevation 661.0 ft (201.47 m), top of flood control pool 553,400 acre-ft (682 hm^3) at elevation 638.0 ft (194.46 m), conservation pool, revised. Dead storage, 9,300 acre-ft (11.5 hm^3) below elevation 592.0 ft (180.44 m). Figures given herein represent total contents. Reservoir is used for flood control and conservation.

COOPERATION.--Records furnished by Corps of Engineers.

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

634	442.8	645	782.4
637	524.7	650	977.8
640	614.2	655	1,203

CONTENTS, IN THOUSANDS OF ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	634.9	830.2	810.9	931.1	588.4	646.6	789.8	581.0	630.0	724.1	459.2	490.4
2	651.8	812.8	808.0	910.9	583.5	644.3	753.9	587.2	624.9	710.9	462.1	520.1
3	672.0	784.6	813.9	888.8	575.8	640.4	735.5	596.4	620.6	695.9	457.6	542.5
4	692.6	758.5	863.8	865.8	566.3	636.2	725.1	601.9	621.8	683.8	456.5	562.0
5	707.0	726.8	918.5	854.3	565.7	622.7	714.7	606.8	625.5	665.5	455.4	566.0
6	721.6	697.3	960.9	838.3	565.1	608.3	699.4	609.6	653.1	648.3	454.6	566.6
7	731.0	673.0	971.5	824.2	561.2	597.9	691.0	607.4	721.3	632.3	455.4	567.3
8	740.0	653.1	971.9	807.6	556.3	595.1	675.6	608.6	785.4	618.7	453.0	573.1
9	749.4	634.6	971.5	790.9	556.9	605.3	660.3	615.4	847.5	605.0	459.4	578.3
10	754.6	615.4	963.0	772.4	556.3	714.0	648.3	616.6	873.7	591.5	459.4	579.2
11	772.1	599.1	960.9	753.6	554.9	840.9	635.6	616.6	876.5	577.4	459.4	577.4
12	805.4	581.7	955.9	733.1	554.9	970.6	627.4	613.2	862.6	561.5	459.4	578.9
13	846.1	570.6	949.1	712.2	555.4	1,069	615.7	606.8	847.9	543.9	459.2	579.8
14	850.1	565.1	942.8	693.9	557.2	1,145	602.8	608.6	834.2	524.7	459.2	580.1
15	840.9	563.6	938.7	669.4	557.4	1,184	585.6	607.7	819.4	512.0	460.5	580.4
16	834.6	560.6	931.1	648.6	557.4	1,198	567.6	610.2	804.6	498.2	460.5	577.4
17	832.0	559.2	927.2	631.0	555.4	1,195	549.7	607.4	790.6	484.5	462.7	574.3
18	832.0	559.2	926.8	618.7	566.6	1,187	541.6	602.2	776.1	471.5	462.4	571.2
19	832.7	559.2	950.8	609.2	585.6	1,164	539.6	594.5	767.8	466.7	461.1	580.4
20	833.1	579.8	954.2	604.6	601.0	1,143	541.6	587.2	761.6	465.9	461.1	589.9
21	840.5	611.7	952.9	601.0	612.9	1,108	542.8	580.4	753.2	465.6	460.8	587.2
22	853.1	631.3	947.0	600.1	622.7	1,089	547.7	576.5	752.6	467.8	462.1	584.1
23	870.9	630.3	948.7	599.4	642.1	1,058	552.6	574.9	739.4	465.1	463.2	580.7
24	890.7	662.3	987.5	599.7	640.1	1,030	554.9	591.2	734.5	463.5	462.9	580.1
25	908.2	734.8	1,018	596.1	641.1	1,004	558.0	610.2	739.0	463.7	462.7	578.6
26	924.0	777.6	1,026	593.3	640.8	974.4	558.3	635.6	742.1	462.9	462.1	576.8
27	940.7	795.0	1,014	595.8	643.0	940.7	561.2	641.7	742.8	462.7	463.7	575.5
28	942.4	808.0	1,006	596.4	646.0	915.3	560.6	641.1	739.0	461.9	464.0	574.3
29	918.9	815.4	988.4	595.1	------	887.2	564.5	638.5	734.8	460.8	464.0	577.4
30	889.9	817.2	973.6	591.8	------	856.7	573.1	631.3	734.1	458.6	467.2	582.3
31	860.6	------	952.5	592.1	------	821.3	------	629.7	------	458.9	472.1	------
MAX	942.4	830.2	1,026	931.1	646.0	1,198	789.8	641.7	876.5	724.1	472.1	589.9
MIN	634.9	559.2	808.0	591.8	554.9	595.1	539.6	574.9	620.6	458.6	453.0	490.4
(†)	647.10	645.94	649.40	639.28	641.00	646.05	638.66	640.50	643.63	634.61	635.10	638.96
(‡)	+244.3	-43.4	+135.3	-360.4	+53.9	+175.3	-248.2	+56.6	+104.4	+275.2	+13.2	+110.2

CAL YR 1973 .....‡ +367.8
WTR YR 1974 .....‡ -34.0

† Elevation, in feet, at end of month.
‡ Change in contents, in thousands of acre-ft.

07171400 VERDIGRIS RIVERN NEAR OOLOGAH, OKLA.

LOCATION.--Lat 36°25'17", long 95°41'01", in NW 1/4 sec.2, T.22 N., R.15 E., Rogert County, on right bank 0.3 mi (0.48 km) downstream from Oologah Dam, 1.2 mi (1.9 km) upstream from Fourmile Creek, 2 mi (3.2 km) southeast of Oologah, and at mile 90.0 (144.8 km).

DRAINAGE AREA.--4,339 mi^2 (11,238 km^2).

PERIOD OF RECORD.--June 1961 to current year.

GAGE.--Water-stage recorder. Datum of gage is 552.00 ft (168.250 m) above mean sea level.

AVERAGE DISCHARGE.--13 years, 2,576 ft^3/s (72.95 m^3/s), 1,866,000 acre-ft/yr (2.30 km^3/yr).

EXTREMES.--Current year: Maximum discharge, 27,800 ft^3/s (787 m^3/s) Mar. 27, gage height, 36.56 ft (11.14 m); minimum daily, 46 ft^3/s (1.30 m^3/s) Aug. 29, 31.
Period of record: Maximum discharge, 30,000 ft^3/s (850 m^3/s) May 16, 1973, gage height, 38.05 ft (11.598 m); no flow Mar. 16-26, 1967, and Sept. 2, 1969.
Flood in May 1943 reached a stage of 65.2 ft (19.87 m), from floodmarks. Flood of May 9, 1961, reached a stage of 52.8 ft (16.09 m).

REMARKS.--Records good. Some regulation by several dams in Kansas prior to May 1963 and completely regulated thereafter by Oologah Lake (see sta. 07171300). Records of chemical analyses for the current year are published in Part 2 of this report.

COOPERATION.--Gage-height record and 19 discharge measurements furnished by Corps of Engineers; records computed by Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	49	17,700	6,110	12,600	5,730	4,060	25,100	676	7,260	4,620	65	50
2	49	17,600	6,100	12,500	5,720	4,060	23,800	671	5,660	6,470	66	50
3	49	17,500	6,100	12,500	5,710	4,050	16,400	662	4,040	7,280	67	50
4	49	17,400	3,400	12,400	5,690	5,970	9,410	657	3,010	9,070	67	52
5	49	17,300	137	12,400	4,130	7,760	8,160	660	5,520	9,000	68	805
6	51	17,100	111	12,300	2,910	7,710	8,130	1,750	7,650	8,940	68	3,480
7	53	16,800	1,470	12,300	2,910	7,690	8,110	3,100	7,650	7,860	71	4,590
8	51	11,700	4,310	12,300	2,190	4,000	8,090	3,100	1,300	7,100	74	4,600
9	51	9,340	6,340	12,200	1,630	1,520	8,060	2,190	100	7,080	82	5,400
10	49	9,290	7,260	12,200	1,630	100	8,040	1,770	100	7,060	71	7,450
11	108	9,250	7,530	12,200	1,630	100	8,040	3,080	4,100	7,030	71	7,430
12	74	9,210	7,720	12,100	1,400	100	8,010	3,080	9,050	8,040	74	7,440
13	63	7,060	8,000	12,100	894	100	7,980	3,070	8,980	9,140	73	5,290
14	4,910	3,910	8,180	12,000	892	100	6,270	3,080	10,100	9,090	73	3,760
15	10,600	1,950	8,170	13,200	893	900	9,620	3,080	13,500	7,980	90	3,760
16	11,900	1,530	8,150	14,300	900	8,920	9,560	3,080	13,400	6,990	53	3,760
17	11,800	995	8,140	13,800	897	11,600	9,510	4,390	13,300	6,950	51	3,750
18	11,700	992	8,130	13,800	900	14,700	6,130	6,770	13,300	6,920	53	3,750
19	11,700	993	3,900	13,800	920	20,500	670	6,750	13,200	2,610	51	2,800
20	10,600	992	3,560	13,800	952	24,400	670	6,720	13,200	71	48	2,150
21	6,360	2,100	6,250	11,600	988	26,300	670	5,650	13,200	70	48	2,140
22	3,200	6,180	7,460	9,280	1,370	25,700	665	4,810	13,200	70	48	2,110
23	404	9,750	8,200	9,280	2,150	25,600	661	4,810	13,100	68	49	2,100
24	74	4,400	3,000	9,270	3,370	25,500	657	4,820	10,500	67	49	2,100
25	81	100	1,230	9,260	4,070	25,400	659	4,800	5,810	67	50	2,100
26	79	100	3,310	9,250	4,060	26,400	658	4,800	3,360	67	49	1,680
27	3,050	100	6,260	7,920	4,060	27,400	657	4,800	1,920	67	47	981
28	10,500	100	9,740	6,450	4,060	26,800	656	6,700	1,920	70	47	974
29	16,800	844	12,700	7,600	------	25,700	658	9,610	1,920	71	46	972
30	18,000	4,590	12,700	6,090	------	25,600	660	9,510	1,920	66	47	964
31	17,800	------	12,600	3,970	------	25,300	------	9,500	------	65	46	------
TOTAL	150,303	216,876	196,268	344,770	72,656	414,040	196,361	128,146	221,270	140,049	1,862	86,538
MEAN	4,848	7,229	6,331	11,120	2,595	13,360	6,545	4,134	7,376	4,518	60.1	2,885
MAX	18,000	17,700	12,700	14,300	5,730	27,400	25,100	9,610	13,500	9,140	90	7,450
MIN	49	100	111	3,970	892	100	656	657	100	65	46	50
AC-FT	298,100	430,200	389,300	683,900	144,100	821,200	389,500	254,200	438,900	277,800	3,690	171,600

CAL YR 1973 TOTAL 2,418,081 MEAN 6,625 MAX 28,700 MIN 43 AC-FT 4,796,000
WTR YR 1974 TOTAL 2,169,139 MEAN 5,943 MAX 27,400 MIN 46 AC-FT 4,302,000

07172500 HULAH LAKE NEAR HULAH, OKLA.

LOCATION.--Lat 36°55'44", long 96°05'18", in SE 1/4 sec.2, T.28 N., R.11 E., Osage County, in stair tower at right end of Hulah Dam on Caney River, 0.5 mi (.80 km) downstream from Hickory Creek, 2.0 mi (3.2 km) west of Hulah, 15.7 mi (25.3 km) upstream from Little Caney River, and at mile 96.2 (154.8 km).

DRAINAGE AREA.--732 mi^2 (1,896 km^2).

PERIOD OF RECORD.--April 1950 to current year. Prior to October 1970 published as Hulah Reservoir near Hulah.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level. Prior to Feb. 15, 1951, nonrecording gage at same site and datum.

EXTREMES.--Current year: Maximum contents, 199,800 acre-ft (246 hm^3) Mar. 18, elevation, 757.07 ft (230.755 m); minimum, 32,620 acre-ft (40.2 hm^3) Aug. 8, elevation, 732.43 ft (223.245 m).
Period of record: Maximum contents, 293,400 acre-ft (362 hm^3) June 23, 1957, elevation, 764.87 ft (233.132 m); minimum since conservation pool was first filled, 11,250 acre-ft (13.9 hm^3) Mar. 20, 1957, elevation, 723.22 ft (220.437 m).

REMARKS.--Reservoir is formed by an earth dam. Spillway is 472-ft (143.9 m) concrete ogee-type weir controlled by 10 taintor gates. Outlet works consist of nine rectangular sluices, two 24-inch (0.61 m) gated pipes, and one 10-inch (254 mm) water-supply pipe. Closure for diversion made Feb. 6, 1950; regulated storage began Oct. 25, 1950; conservation pool was first filled Sept. 24, 1951. Capacity, 292,600 acre-ft (624,000 m^3) below elevation 706.0 ft (215.19 m), crest of spillway, and 34,660 acre-ft (42.7 hm^3) at herein represent total contents. Reservoir is used for flood control, conservation, and municipal water supply. Revised capacity table, based on survey in 1958, used since Oct. 1, 1958.

COOPERATION.--Records furnished by Corps of Engineers.

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

732	31,200	747	109,500
737	50,860	752	150,600
742	76,720	758	209,800

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35,400	42,460	50,770	40,130	34,660	42,830	66,660	38,990	52,570	35,620	33,110	36,990
2	35,400	42,180	49,150	38,540	34,880	41,480	57,000	43,120	49,150	35,440	33,020	38,100
3	35,580	41,890	50,860	37,800	34,990	40,130	49,820	44,510	45,500	35,290	32,880	38,990
4	35,470	41,600	70,160	37,580	35,070	38,880	45,870	44,920	43,280	35,290	32,780	39,400
5	35,440	41,360	74,270	37,400	35,180	37,470	43,120	44,880	41,520	35,250	32,780	39,660
6	35,510	40,950	75,180	37,180	35,220	35,990	40,250	44,470	53,110	35,220	32,780	39,470
7	35,550	40,330	74,270	36,950	35,180	35,330	37,880	43,940	74,610	35,220	32,750	38,990
8	35,510	39,880	73,190	36,770	35,140	35,580	35,920	43,370	84,450	35,140	32,650	38,430
9	35,440	39,100	71,930	36,730	35,100	47,040	35,250	42,670	89,340	35,070	33,050	37,880
10	35,400	38,470	70,450	36,440	35,070	132,400	35,140	42,260	91,780	34,960	32,980	37,250
11	39,030	37,880	68,940	36,180	34,990	161,700	35,580	41,600	93,890	34,880	32,920	36,620
12	39,770	37,250	67,610	35,840	34,960	169,900	36,030	40,950	93,230	34,730	32,880	36,030
13	40,170	36,660	65,810	35,550	34,960	176,700	36,580	40,700	89,800	34,660	32,780	35,470
14	40,410	36,320	64,170	35,220	34,840	182,700	36,440	41,520	86,220	34,590	32,750	35,070
15	40,580	36,180	62,370	35,470	34,880	192,600	36,580	41,560	82,440	34,730	33,080	34,810
16	40,660	35,960	60,530	37,840	34,920	196,300	36,620	41,070	78,470	34,660	33,050	34,730
17	40,740	35,840	58,760	41,640	34,960	198,900	36,700	40,330	74,500	34,550	33,880	34,730
18	40,740	35,660	57,290	43,740	36,030	198,500	36,770	39,510	70,450	34,440	34,070	34,660
19	40,820	36,030	55,870	44,800	38,660	192,900	36,810	39,660	66,450	34,400	34,100	34,920
20	40,820	47,220	54,010	44,840	39,620	184,900	37,060	37,770	62,530	34,290	34,070	34,920
21	40,820	47,350	52,390	44,350	44,760	175,000	38,800	36,880	58,520	34,180	34,070	34,880
22	40,780	45,290	50,950	43,940	48,520	165,000	39,170	37,730	54,260	33,990	34,180	34,840
23	40,740	43,610	50,770	43,450	48,920	154,600	38,660	37,730	50,320	33,920	34,220	34,770
24	40,700	48,160	51,130	42,590	48,200	144,200	37,950	41,230	46,200	33,810	34,180	34,920
25	40,700	53,110	50,180	41,400	47,260	134,200	37,180	46,900	42,100	33,850	34,100	34,920
26	40,740	54,210	49,100	40,330	46,240	123,900	36,360	58,270	38,880	33,740	34,070	34,880
27	41,730	55,330	47,350	39,170	45,250	114,200	35,550	61,780	36,990	33,250	34,330	34,880
28	42,300	55,580	46,320	38,430	44,060	104,500	34,730	63,480	36,070	33,550	34,960	35,510
29	42,670	53,960	44,880	37,510	------	95,010	35,250	61,730	35,960	33,400	35,660	35,730
30	42,870	52,440	43,450	36,360	------	85,480	36,660	59,010	35,810	33,330	35,990	35,810
31	42,710	------	41,810	35,100	------	76,040	------	55,920	------	33,220	36,140	------
MAX	42,870	55,580	75,180	44,840	48,920	198,900	66,660	63,480	93,890	35,620	36,140	39,660
MIN	35,400	35,660	41,810	35,100	34,660	35,330	34,730	36,880	35,810	33,220	32,650	34,660
(†)	735.10	737.35	734.88	733.12	735.43	741.88	733.54	738.09	733.31	732.61	733.40	733.31
(‡)	+7,380	+9,730	-10,630	-6,710	+8,960	+31,980	-39,380	+19,260	-20,110	-2,590	+2,920	-330

CAL YR 1973 .....‡ -3,440
WTR YR 1974 .....‡ +480

† Elevation, in feet, at end of month.
‡ Change in contents, in acre-ft.

07173000 CANEY RIVER NEAR HULAH, OKLA.

LOCATION.--Lat 36°55'34", long 96°05'01", in NE 1/4 NE 1/4 sec.11, T.28 N., R.11 E., Osage County, on left bank 1,200 ft (365.8 m) downstream from Hulah Dam, 2.1 mi (3.4 km) upstream from Opossum Creek, 2.1 mi (3.4 km) west of Hulah, and at mile 95.9 (154.3 km).

DRAINAGE AREA.--733 mi^2 (1,898 km^2).

PERIOD OF RECORD.--October 1937 to current year.

GAGE.--Water-stage recorder. Datum of gage is 699.00 ft (213.055 m), above mean sea level. Prior to Feb. 18, 1939, nonrecording gage and Feb. 18, 1939 to Sept. 30, 1948, water-stage recorder, at county road bridge, 0.2 mi (0.3 km) upstream at datum 4.04 ft (1.231 m) lower, and Oct. 1, 1948 to Sept. 30, 1973 at site 0.6 mi (1.0 km) downstream at datum 7.04 ft (2.146 m) lover.

AVERAGE DISCHARGE.--37 years, 352 ft^3/s (9.969 m^3/s), 255,000 acre-ft/yr (314 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 5,830 ft^3/s (165 m^3/s) Mar. 22-31, gage height, 11.96 ft (3.645 m); minimum daily, 7.7 ft^3/s (0.22 m^3/s) Nov. 25.
Period of record: Maximum discharge, 51,000 ft^3/s (1,444 m^3/s) Apr. 10, 1944, gage height, 39.45 ft (12.024 m), former site and datum; no flow at times in 1939-40, 1946, 1962.
A stage of 40.2 ft (12.25 m) occurred at former site and datum, date unknown, from floodmark, from information by Corps of Engineers.

REMARKS.--Records fair. Flow completely regulated since February 1950 by Hulah Lake (see sta. 07172500). About 5 to 9 ft^3/s (0.14 to 0.25 m^3/s) is diverted above station by city of Bartlesville for municipal water supply.

COOPERATION.--Gage-height record and 18 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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	158	932	955	613	964	4,720	611	2,080	90	10	8.8
2	12	160	922	955	150	964	4,630	626	2,080	90	11	8.9
3	13	160	755	639	150	960	4,640	576	2,080	50	11	8.4
4	13	160	54	224	150	955	2,000	576	2,080	17	12	8.2
5	13	160	59	224	150	955	1,500	576	2,080	17	12	8.2
6	12	237	408	224	150	955	1,300	576	1,300	17	12	141
7	12	332	1,010	223	150	620	1,300	576	100	17	12	326
8	12	332	1,020	223	150	305	1,300	576	10	17	10	329
9	12	332	1,020	223	150	203	600	576	10	17	10	329
10	12	332	1,020	223	150	65	255	576	10	17	10	329
11	29	332	1,020	223	150	10	175	576	10	17	10	329
12	20	332	1,010	223	150	10	100	576	1,500	17	10	326
13	15	332	1,000	223	150	10	100	576	2,200	17	10	256
14	14	211	1,000	223	150	10	95	576	2,170	17	10	166
15	14	95	1,000	160	130	10	95	576	2,160	17	10	164
16	14	95	1,000	93	87	10	95	576	2,160	17	8.0	70
17	14	95	1,000	487	87	10	95	576	2,160	17	8.0	11
18	14	95	1,000	1,040	87	1,300	96	576	2,160	16	8.0	11
19	14	95	1,000	1,040	87	3,400	98	576	2,160	16	8.0	11
20	14	115	964	1,040	87	4,770	98	576	2,160	16	8.0	11
21	14	725	964	1,050	87	5,220	98	576	2,160	14	7.8	11
22	14	1,490	964	1,070	505	5,820	327	576	2,160	13	7.9	13
23	14	1,210	964	1,070	964	5,830	611	576	2,160	9.1	8.3	14
24	14	739	955	1,070	964	5,830	611	576	2,160	9.4	8.2	14
25	14	7.7	955	1,070	964	5,830	611	601	2,160	11	8.3	14
26	14	12	955	1,070	964	5,830	611	233	1,500	14	8.2	14
27	15	26	955	1,070	964	5,830	611	40	1,000	14	8.6	14
28	15	340	955	1,060	964	5,830	611	366	700	14	8.4	14
29	15	945	955	1,060	------	5,830	611	1,750	130	13	8.3	14
30	97	945	955	1,060	------	5,830	611	2,080	90	11	8.3	13
31	157	------	955	1,060	------	5,500	------	2,080	------	10	8.4	------
TOTAL	668	10,599.7	27,726	20,575	9,504	79,666	28,605	21,059	44,890	648.5	290.7	2,986.5
MEAN	21.5	353	894	664	339	2,570	954	679	1,496	20.9	9.38	99.6
MAX	157	1,490	1,020	1,070	964	5,830	4,720	2,080	2,200	90	12	329
MIN	12	7.7	54	93	87	10	95	40	10	9.1	7.8	8.2
AC-FT	1,320	21,020	54,990	40,810	18,850	158,000	56,740	41,770	89,040	1,290	577	5,920

CAL YR 1973 TOTAL 282,217.7 MEAN 773 MAX 4,140 MIN 7.7 AC-FT 559,800
WTR YR 1974 TOTAL 247,218.4 MEAN 677 MAX 5,830 MIN 7.7 AC-FT 490,400

07174200 LITTLE CANEY RIVER BELOW COTTON CREEK NEAR COPAN, OKLA.

LOCATION.--Lat 36°53'42", long 95°58'00", in W 1/2 sec.19, T.28 N., R.13 E., Washington County, near right bank on downstream side of pier of bridge on State Highway 10, 2 mi (3.2 km) west of Copan, 4.2 mi (6.8 km) downstream from Cotton Creek, and at mile 8.8 (14.2 km).

DRAINAGE AREA.--502 mi^2 (1,300 km^2).

PERIOD OF RECORD.--October 1958 to current year. Prior to October 1962, published as Caney Creek below Cotton Creek, near Copan.

GAGE.--Water-stage recorder. Datum of gage is 672.23 ft (204,900 m) above mean sea level. Since Nov. 16, 1962, auxiliary water-stage recorder 6.0 mi (9.7 km) downstream, at datum 10 ft (3.048 m) lower.

AVERAGE DISCHARGE.--16 years, 262 ft^3/s (7.420 m^3/s), 189,800 acre-ft/yr (234 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 33,200 ft^3/s (940 m^3/s) Mar. 10, gage height, 25.30 ft (7.711 m); minimum, 1.4 ft^3/s (0.040 m^3/s) July 31, Aug. 1, 5.
Period of record: Maximum discharge, 33,200 ft^3/s (940 m^3/s) Mar. 10, 1974, gage height, 25.30 ft (7.711 m); no flow at times in 1962-66, 1971.
Flood in April 1944 reached a stage of 29.3 ft (8.93 m), from floodmarks.

REMARKS.--Records good.

COOPERATION.--Gage-height record and 29 discharge measurements furnished by Corps of Engineers; records computed by Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	232	38	234	170	241	220	72	1,440	476	21	4.9	512
2	138	28	186	140	208	194	57	1,560	308	19	8.5	1,570
3	81	22	179	120	179	168	48	2,090	204	17	4.3	1,530
4	56	17	2,820	110	159	153	37	1,360	150	16	2.3	921
5	39	16	3,430	100	149	138	31	810	151	17	1.9	584
6	31	15	2,730	90	141	127	28	484	773	15	4.1	385
7	28	14	1,410	85	131	108	25	315	3,320	13	133	258
8	25	13	808	81	117	95	24	218	4,490	12	110	166
9	31	12	535	78	108	456	21	663	5,120	10	50	114
10	29	11	378	75	103	11,600	19	1,420	4,610	8.5	185	85
11	2,200	11	283	72	99	22,000	21	655	3,660	7.6	67	67
12	3,190	12	234	70	95	9,940	41	373	2,400	6.6	31	54
13	1,380	11	200	65	94	6,550	51	233	1,360	6.4	20	45
14	390	10	170	62	89	5,240	40	364	859	5.7	15	38
15	194	8.1	154	72	85	4,720	31	507	545	5.6	104	33
16	120	7.0	141	484	81	4,900	24	306	353	5.2	28	29
17	75	15	128	1,350	80	3,490	22	217	249	5.0	15	27
18	54	14	119	1,790	85	2,040	20	154	186	5.3	452	24
19	42	8.8	201	1,640	2,020	1,270	18	112	143	4.2	178	24
20	34	1,710	241	1,280	1,520	819	19	81	113	3.4	63	26
21	28	2,960	200	927	1,090	592	61	63	89	3.4	38	24
22	23	1,480	200	723	2,180	466	543	65	72	3.1	27	22
23	20	674	564	714	1,620	392	414	711	59	3.2	21	21
24	16	1,150	2,830	608	1,010	312	240	2,040	50	2.7	17	21
25	14	3,780	1,680	456	624	251	150	2,530	42	3.5	14	23
26	11	2,860	722	370	437	212	96	3,450	37	3.2	12	24
27	97	1,070	490	327	338	187	65	3,650	33	2.7	11	23
28	256	733	360	419	269	162	49	2,840	29	2.6	20	80
29	125	454	286	558	------	147	354	1,560	26	2.2	316	1,120
30	73	309	236	351	------	119	1,530	1,040	23	1.9	707	553
31	51	------	200	281	------	89	------	719	------	1.5	580	------
TOTAL	9,083	17,462.9	22,349	13,668	13,352	77,157	4,151	32,030	29,930	233.5	3,240.0	8,403
MEAN	293	582	721	441	477	2,489	138	1,033	998	7.53	105	280
MAX	3,190	3,780	3,430	1,790	2,180	22,000	1,530	3,650	5,120	21	707	1,570
MIN	11	7.0	119	62	80	89	18	63	23	1.5	1.9	21
AC-FT	18,020	34,640	44,330	27,110	26,480	153,000	8,230	63,530	59,370	463	6,430	16,670

CAL YR 1973 TOTAL 251,225.98 MEAN 688 MAX 6,800 MIN .20 AC-FT 498,300
WTR YR 1974 TOTAL 231,059.40 MEAN 633 MAX 22,000 MIN 1.5 AC-FT 458,300

PEAK DISCHARGE (BASE, 5,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE
3-10	2330	25.30	33,200
6-9	0730	22.86	5,810

07174600 SAND CREEK AT OKESA, OKLA.

LOCATION.--Lat 36°43'10", long 96°07'56", in NW 1/4 NW 1/4 sec.21, T.26 N., R.11 E., Osage County, on downstream side of left abutment of county road bridge, 0.5 mi (0.80 km) northeast of Okesa, 9 mi (14.5 km) southwest of Bartlesville, and at mile 17.2 (27.7 km).

DRAINAGE AREA.--139 mi^2 (360 km^2).

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

GAGE.--Water-stage recorder. Datum of gage is 689.20 ft (210.068 m) above mean sea level. Prior to May 25, 1960, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--15 years, 66.3 ft^3/s (1.878 m^3/s), 48,030 acre-ft/yr (59.2 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 19,500 ft^3/s (552 m^3/s) Mar. 10, gage height, 28.6 ft (8.72 m), from floodmarks; no flow at times.
Period of record: Maximum discharge, 19,500 ft^3/s (552 m^3/s) Mar. 10, 1974, gage height, 28.6 ft (8.72 m), from floodmarks; no flow at times in each year.

REMARKS.--Records good.

COOPERATION.--Gage-height record, 18 discharge measurements and one observation of no flow furnished by Corps of Engineers; records computed by Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38	16	66	42	55	47	30	298	76	4.5	0	285
2	26	12	55	33	47	44	28	1,360	62	5.0	0	500
3	19	11	142	27	42	42	24	331	53	5.4	0	179
4	13	9.3	2,730	25	37	39	21	134	48	4.9	0	59
5	9.5	8.1	484	24	34	35	20	76	106	4.2	0	30
6	9.1	7.3	188	24	31	31	18	55	500	3.9	0	17
7	7.6	6.8	113	23	28	28	17	42	1,200	3.3	0	12
8	6.4	6.8	86	23	27	27	18	42	793	3.1	0	8.9
9	4.9	8.4	74	24	25	385	18	35	670	2.9	.27	7.0
10	4.1	9.5	62	25	24	13,200	18	31	183	2.5	.30	5.9
11	402	8.8	53	22	23	8,310	22	26	112	1.9	.20	4.9
12	323	8.5	48	19	23	519	52	23	84	.81	.11	3.7
13	208	7.6	44	18	23	287	56	20	61	.52	.15	2.6
14	87	7.2	39	17	23	206	33	64	47	.31	.36	2.1
15	44	7.8	35	24	23	1,520	23	145	39	.21	1.7	1.8
16	28	9.6	31	226	23	590	18	56	31	.20	39	1.9
17	19	9.8	29	251	23	225	17	31	25	.10	15	2.0
18	14	11	27	183	34	158	16	21	21	.06	11	1.8
19	11	14	63	125	346	123	15	16	18	.01	10	26
20	8.1	1,230	92	92	177	94	16	13	16	0	8.8	324
21	6.5	346	71	75	353	96	19	11	15	0	6.3	59
22	4.8	121	88	67	561	96	73	36	13	0	5.2	25
23	3.5	70	289	72	201	87	39	71	11	0	5.6	15
24	3.1	1,440	540	59	119	68	25	49	9.4	0	10	13
25	2.0	1,890	195	47	78	59	18	1,890	8.3	0	8.9	64
26	2.2	281	109	42	64	58	16	3,930	7.7	.02	5.6	37
27	26	205	83	39	59	54	14	358	7.0	.02	4.4	20
28	31	322	71	56	53	48	14	206	6.1	.03	4.6	14
29	33	151	62	156	------	45	382	146	5.9	0	3.4	10
30	25	91	54	101	------	39	1,330	113	5.4	0	8.8	7.9
31	20	------	51	70	------	35	------	91	------	0	16	------
TOTAL	1,438.8	6,326.5	6,074	2,031	2,556	26,595	2,410	9,720	4,233.8	43.89	165.69	1,739.5
MEAN	46.4	211	196	65.5	91.3	858	80.3	314	141	1.42	5.34	58.0
MAX	402	1,890	2,730	251	561	13,200	1,330	3,930	1,200	5.4	39	500
MIN	2.0	6.8	27	17	23	27	14	11	5.4	0	0	1.8
AC-FT	2,850	12,550	12,050	4,030	5,070	52,750	4,780	19,280	8,400	87	329	3,450

CAL YR 1973 TOTAL 67,459.41 MEAN 185 MAX 3,750 MIN 0 AC-FT 133,800
WTR YR 1974 TOTAL 63,334.18 MEAN 174 MAX 13,200 MIN 0 AC-FT 125,600

PEAK DISCHARGE (BASE, 3,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE
11-25	0045	15.07	5,370
12-4	0700	12.96	3,890
3-10	abt2000	28.6[a]	19,500

[a]From floodmarks.

07174700 CANEY RIVER NEAR OCHELATA, OKLA.

LOCATION.--Lat 36°38'26", long 95°56'02", in SW 1/4 SW 1/4 sec.16, T.25 N., R.13 E., Washington County, near right bank on downstream side of pier of bridge on U.S. Highway 75, 3.5 mi (5.6 km) upstream from Fish Creek, 4.0 mi (6.4 km) northeast of Ochelata, 8.0 mi (12.9 km) southeast of Bartlesville, and at mile 53.8 (86.6 km).

DRAINAGE AREA.--1,753 mi^2 (4,540 km^2).

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

GAGE.--Water-stage recorder. Datum of gage is 611.98 ft (186.532 m), above mean sea level.

AVERAGE DISCHARGE.--18 years, 947 ft^3/s (26.82 m^3/s), 686,100 acre-ft/yr (846 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 28,900 ft^3/s (818 m^3/s) Mar. 11, gage height, 38.39 ft (11.701 m); minimum, 24 ft^3/s (0.68 m^3/s) Aug. 3-5.
Period of record: Maximum discharge, 33,800 ft^3/s (957 m^3/s) June 13, 1957, gage height, 38.82 ft (11.832 m); minimum, 0.4 ft^3/s (.011 m^3/s) Sept. 28, 29, 1956.

REMARKS.--Records good. Some regulation by Hulah Lake 42.4 mi (68.2 km) upstream. (See sta. 07172500).

COOPERATION.--Gage-height record 20 discharge measurements furnished by Corps of Engineers; records computed by Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	539	250	1,710	1,350	1,410	1,450	5,500	4,610	3,110	137	26	1,970
2	334	235	1,550	1,170	766	1,400	5,350	4,130	2,840	128	25	3,080
3	237	219	1,760	1,000	458	1,370	5,210	4,590	2,630	127	24	3,250
4	182	215	8,420	800	413	1,330	4,220	3,340	2,490	108	24	1,800
5	142	213	10,100	500	388	1,280	2,390	2,310	1,900	58	26	1,030
6	131	211	5,760	350	373	1,240	1,850	1,660	2,320	49	34	634
7	117	278	3,850	350	353	1,200	1,810	1,290	6,760	46	36	530
8	107	383	2,790	320	334	694	1,780	1,080	7,270	44	129	596
9	97	380	2,210	300	322	1,250	1,200	967	6,330	42	194	497
10	91	378	1,920	300	312	12,200	563	1,870	5,620	62	119	431
11	2,900	378	1,710	300	308	27,600	348	2,040	4,800	44	195	405
12	7,070	378	1,590	320	305	25,800	277	1,360	4,210	39	116	376
13	6,690	378	1,510	408	301	21,300	323	1,070	3,670	38	89	360
14	2,030	375	1,440	360	296	13,800	311	973	3,590	36	84	275
15	680	290	1,380	380	292	9,080	263	1,290	3,160	37	94	188
16	380	159	1,340	682	270	8,890	240	1,340	2,820	40	154	206
17	263	148	1,300	1,200	219	6,270	222	1,070	2,630	37	101	153
18	207	152	1,280	2,500	252	4,440	213	936	2,500	34	110	69
19	172	167	1,850	2,700	2,690	4,130	209	847	2,430	35	542	281
20	150	4,680	1,870	2,700	3,410	5,370	200	772	2,370	34	204	2,320
21	131	6,270	1,710	2,400	2,430	6,120	204	723	2,320	34	99	494
22	115	4,400	1,760	2,130	4,310	6,310	305	747	2,290	33	70	189
23	105	3,160	2,620	2,000	3,880	6,400	954	929	2,240	33	163	126
24	97	5,330	6,460	1,940	2,990	6,450	1,110	2,020	2,210	30	63	148
25	91	14,300	5,530	1,730	2,240	6,420	964	3,720	2,170	29	50	319
26	85	12,100	3,130	1,550	1,840	6,260	869	10,300	2,140	35	39	242
27	184	5,750	2,180	1,460	1,650	6,130	807	8,240	1,760	31	35	164
28	257	2,400	1,850	1,630	1,540	6,020	768	4,660	1,110	29	108	125
29	315	1,910	1,680	2,420	------	5,900	946	3,530	508	28	81	385
30	213	1,970	1,570	1,950	------	5,780	4,690	3,610	153	28	421	952
31	203	------	1,470	1,570	------	5,640	------	3,460	------	28	667	------
TOTAL	24,315	67,457	85,300	38,770	34,352	217,524	44,096	79,484	90,351	1,513	4,122	21,595
MEAN	784	2,249	2,752	1,251	1,227	7,017	1,470	2,564	3,012	48.8	133	720
MAX	7,070	14,300	10,100	2,700	4,310	27,600	5,500	10,300	7,270	137	667	3,250
MIN	85	148	1,280	300	219	694	200	723	153	28	24	69
AC-FT	48,230	133,800	169,200	76,900	68,140	431,500	87,460	157,700	179,200	3,000	8,180	42,830

CAL YR 1973 TOTAL 863,984 MEAN 2,367 MAX 17,400 MIN 22 AC-FT 1,714,000
WTR YR 1974 TOTAL 708,879 MEAN 1,942 MAX 27,600 MIN 24 AC-FT 1,406,000

PEAK DISCHARGE (BASE, 7,500 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-13	0200	25.81	8,420	3-11	1415	38.39	28,900
11-20	2330	24.43	7,530	5-26	1930	30.82	11,800
11-25	1645	34.35	15,200	6-7	2130	26.84	8,930
12-5	0130	30.64	11,700				

07175500 CANEY RIVER NEAR RAMONA, OKLA.

LOCATION.--Lat 36°30'31", long 95°50'36", in NE 1/4 NW 1/4 sec.5, T.23 N., R.14 E., Washington County, near left bank on downstream side of pier of county road bridge, 1 mi (1.6 km) upstream from Buck Creek, 2.2 mi (3.5 km) downstream from Double Creek, 4.5 mi (7.2 km) southeast of Ramona, and at mile 32.0 (51.5 km).

DRAINAGE AREA.--1,955 mi^2 (5,063 km^2).

PERIOD OF RECORD.--October 1935 to February 1939 (published as "near Collinsville"), September 1945 to current year. Monthly discharge only for some periods, published in WSP 1311.

GAGE.--Water-stage recorder. Datum of gage is 586.43 ft (178.744 m) above mean sea level. Dec. 4, 1935, to Feb. 28, 1939, nonrecording gage at site 16.2 mi (26.1 km) downstream at datum 21.41 ft (6.526 m) lower. Sept. 1, 1945, to Feb. 15, 1946, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--32 years, 930 ft^3/s (26.34 m^3/s), 673,800 acre-ft/yr (831 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 38,400 ft^3/s (1,090 m^3/s) Mar. 11, gage height, 30.12 ft (9.181 m); minimum daily, 18 ft^3/s (0.51 m^3/s) Aug. 5.
Period of record: Maximum discharge, 38,500 ft^3/s (1,090 m^3/s) Oct. 3, 1945, gage height, 30.12 ft (9.181 m); no flow Aug. 9 to Sept. 15, 1936, Sept. 11 to Nov. 3, 1956.

REMARKS.--Records fair. Some regulation since February 1950 by Hulah Lake (see sta. 07172500). Records of chemical analyses and of water temperatures 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 1117: Drainage area. WSP 1241: 1939.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	847	253	2,010	1,430	1,540	1,510	5,640	5,150	3,240	166	22	1,870
2	462	260	1,730	1,100	1,170	1,440	5,510	3,690	2,940	153	21	3,600
3	303	234	1,770	1,000	594	1,410	5,380	4,610	2,710	145	20	3,850
4	209	219	6,930	800	523	1,370	4,890	3,640	2,550	144	19	2,420
5	157	211	8,600	650	491	1,320	3,100	2,560	2,170	104	18	1,330
6	132	206	7,880	550	465	1,270	1,970	1,810	2,210	69	19	798
7	123	208	5,320	450	440	1,240	1,740	1,370	5,630	60	23	525
8	110	355	3,470	400	424	978	1,710	1,130	7,630	56	32	564
9	101	405	2,510	400	409	916	1,430	989	8,010	52	216	512
10	88	405	2,090	350	397	9,240	802	1,290	7,020	50	243	445
11	1,310	404	1,830	350	392	26,300	511	2,160	5,970	70	187	410
12	6,700	402	1,690	350	388	30,700	448	1,490	5,300	53	213	404
13	8,900	402	1,600	400	383	22,800	394	1,120	4,210	45	119	385
14	5,360	402	1,530	431	376	19,300	388	984	4,040	43	81	365
15	1,540	389	1,460	440	372	16,100	350	1,090	3,630	41	84	250
16	766	224	1,410	609	365	11,600	323	1,420	3,210	39	133	220
17	424	153	1,370	1,090	320	9,110	303	1,120	2,910	39	179	230
18	282	146	1,350	1,960	315	7,090	286	970	2,760	39	94	125
19	215	151	2,590	2,980	2,510	4,600	279	870	2,650	36	332	213
20	179	4,010	2,440	3,020	3,820	4,820	268	796	2,560	36	397	4,280
21	157	6,720	2,050	2,680	2,900	5,700	262	747	2,500	35	162	1,700
22	134	5,280	2,060	2,280	4,290	6,180	265	729	2,430	33	96	543
23	118	3,850	2,980	2,090	4,290	6,560	658	798	2,370	34	238	301
24	106	4,400	6,600	2,030	3,390	6,600	1,090	1,440	2,320	32	136	242
25	94	10,100	6,580	1,860	2,500	6,480	966	2,850	2,280	31	69	646
26	83	13,400	4,440	1,670	1,990	6,330	859	7,010	2,250	26	58	420
27	397	10,400	2,620	1,550	1,740	6,210	791	8,370	2,050	34	48	272
28	276	6,750	2,070	1,650	1,610	6,110	747	6,650	1,200	29	68	186
29	419	3,270	1,820	2,430	------	6,010	757	4,370	824	23	115	140
30	300	2,440	1,670	2,270	------	5,890	3,320	3,590	251	22	143	832
31	198	------	1,570	1,760	------	5,770	------	3,580	------	22	652	------
TOTAL	30,490	76,049	94,040	41,030	38,404	240,954	45,437	78,393	99,825	1,761	4,237	28,078
MEAN	984	2,535	3,034	1,324	1,372	7,773	1,515	2,529	3,328	56.8	137	936
MAX	8,900	13,400	8,600	3,020	4,290	30,700	5,640	8,370	8,010	166	652	4,280
MIN	83	146	1,350	350	315	916	262	729	251	22	18	125
AC-FT	60,480	150,800	186,500	81,380	76,170	477,900	90,120	155,500	198,000	3,490	8,400	55,690

CAL YR 1973 TOTAL 970,574 MEAN 2,659 MAX 15,600 MIN 17 AC-FT 1,925,000
WTR YR 1974 TOTAL 778,698 MEAN 2,133 MAX 30,700 MIN 18 AC-FT 1,545,000

PEAK DISCHARGE (BASE, 7,500 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-13	1030	25.23	9,490	3-11	2115	30.12	38,400
11-26	1415	29.19	14,500	5-27	1115	26.84	8,540
12-5	1630	27.26	8,810	6-9	0045	26.49	8,400

07176000 VERDIGRIS RIVER NEAR CLAREMORE, OKLA.

LOCATION.--Lat 36°18'26", long 95°41'52", in SE 1/4 SW 1/4 sec.10, T.21 N., R.15 E., Rogers County, near left bank on downstream side of pier of bridge on State Highway 20, 2.3 mi (3.7 km) downstream from Caney River, 4.5 mi (7.2 km) west of Claremore, 12.4 mi (20.0 km) upstream from Bird Creek, and at mile 76.0 (122.3 km).

DRAINAGE AREA.--6,534 mi^2 (16,923 km^2).

PERIOD OF RECORD.--October 1935 to current year. Monthly discharge only for some periods, published in WSP 1311.

GAGE.--Water-stage recorder. Datum of gage is 538.62 ft (164.171 m) above mean sea level. Prior to Feb. 24, 1939, and May 17 to Aug. 24, 1967, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--39 years, 3,647 ft^3/s (103.3 m^3/s), 2,642,000 acre-ft/yr (3.26 km^3/yr).

EXTREMES.--Current year: Maximum discharge, 36,600 ft^3/s (1,040 m^3/s) Mar. 13, gage height, 34.13 ft (10.403 m); minimum, 106 ft^3/s (3.00 m^3/s) Aug. 6.
Period of record: Maximum discharge, 182,000 ft^3/s (5,150 m^3/s) May 21, 1943, gage height, 55.05 ft (16.779 m); no flow at times in 1936, 1939-40, 1956.

REMARKS.--Records good. Flow regulated since May 1963 by Oologah Lake 14.3 mi (23.0 km) upstream (see sta. 07171300); some regulation by dams in Kansas since 1949 and by Hulah Lake since 1950. (See sta. 07172500).

COOPERATION.--Gage-height record and 21 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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,720	18,200	8,550	13,800	7,560	5,820	29,000	4,100	11,200	4,730	111	2,500
2	776	18,200	8,120	13,600	7,390	5,740	28,400	5,900	8,570	7,330	111	5,180
3	554	18,000	8,030	13,200	6,840	5,690	23,300	4,500	7,120	7,710	111	4,880
4	448	17,900	10,500	13,300	6,500	6,930	15,100	5,400	5,350	9,920	108	3,610
5	356	17,800	9,190	13,000	5,360	9,380	11,900	4,400	6,970	9,900	108	2,420
6	323	17,700	9,720	12,700	3,640	9,320	10,200	3,700	10,300	9,790	111	4,290
7	328	17,100	9,120	12,500	3,600	9,250	9,650	4,620	15,600	9,020	108	5,330
8	291	13,100	9,000	12,500	2,900	6,560	9,560	4,260	10,000	7,880	108	5,180
9	258	9,960	9,260	12,400	2,300	2,660	9,460	3,790	9,200	7,850	172	5,610
10	238	9,840	9,850	12,300	2,200	9,320	8,960	2,050	8,400	7,810	453	7,970
11	580	9,800	9,710	12,300	2,200	15,200	8,540	4,810	11,200	7,780	319	7,950
12	4,080	9,780	9,810	12,200	2,000	22,100	8,410	4,810	15,500	8,440	247	7,900
13	8,180	8,390	9,870	12,200	1,500	35,400	8,180	4,320	14,700	9,930	274	6,370
14	10,700	5,230	10,000	12,100	1,400	31,000	6,460	4,110	14,300	9,880	208	4,150
15	13,500	2,480	9,970	13,000	1,400	24,400	10,300	3,960	18,000	8,970	274	4,120
16	13,000	2,210	9,890	15,300	1,400	24,700	10,400	4,270	17,600	7,200	419	4,020
17	12,500	1,210	9,820	14,900	1,400	25,400	10,300	4,920	17,200	7,170	233	3,990
18	12,300	1,130	9,790	15,400	1,500	24,800	8,310	7,840	16,900	6,960	270	3,980
19	12,200	909	8,820	16,400	1,700	26,200	1,050	7,700	16,800	4,070	212	3,360
20	11,600	5,250	6,050	17,000	2,900	26,800	1,050	7,630	16,600	144	448	8,110
21	7,700	8,460	8,910	15,600	5,000	29,600	1,050	6,820	16,500	128	414	6,500
22	4,290	12,300	9,660	12,000	5,350	29,700	1,000	5,550	16,400	128	238	3,260
23	817	13,900	11,500	11,700	7,020	29,700	1,000	5,550	16,300	122	183	2,620
24	238	12,300	12,000	11,500	7,120	29,800	1,400	5,850	14,500	122	324	2,420
25	239	12,300	8,580	11,400	7,190	29,800	1,900	7,190	9,450	119	233	3,380
26	222	11,400	9,270	11,300	6,490	30,100	1,800	11,600	6,290	119	165	2,840
27	2,470	11,800	9,740	10,500	6,110	31,000	1,700	13,300	4,490	119	144	1,580
28	9,610	12,000	11,200	7,760	5,930	30,800	1,600	14,600	4,000	116	136	1,330
29	17,000	8,100	14,400	9,820	------	29,800	1,550	15,700	3,510	119	126	1,210
30	18,600	6,830	14,200	9,620	------	29,500	1,550	13,400	3,050	119	180	1,280
31	18,400	------	14,000	5,710	------	29,300	------	13,100	------	114	301	------
TOTAL	183,518	313,579	308,530	387,010	115,900	655,770	243,080	209,750	346,000	153,809	6,849	127,340
MEAN	5,920	10,450	9,953	12,480	4,139	21,150	8,103	6,766	11,530	4,962	221	4,245
MAX	18,600	18,200	14,400	17,000	7,560	35,400	29,000	15,700	18,000	9,930	453	8,110
MIN	222	909	6,050	5,710	1,400	2,660	1,000	2,050	3,050	114	108	1,210
AC-FT	364,000	622,000	612,000	767,600	229,900	1,301M	482,100	416,000	686,300	305,100	13,580	252,600

CAL YR 1973 TOTAL 3,446,443 MEAN 9,442 MAX 31,800 MIN 76 AC-FT 6,836,000
WTR YR 1974 TOTAL 3,051,135 MEAN 8,359 MAX 35,400 MIN 108 AC-FT 6,052,000

PEAK DISCHARGE (BASE, 24,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE
3-13	1500	34.13	36,600

07176500 BIRD CREEK NEAR AVANT, OKLA.

LOCATION.--Lat 36°29'11", long 96°03'45", in NW 1/4 sec.7, T.23 N., R.12 E., Osage County, near left bank on downstream side of pier of county road bridge at Avant, 1.5 mi (2.4 km) upstream from Candy Creek, and at mile 54.2 (87.2 km).

DRAINAGE AREA.--364 mi^2 (943 km^2).

PERIOD OF RECORD.--August 1945 to current year.

GAGE.--Water-stage recorder. Datum of gage is 651.28 ft (198.510 m) above mean sea level.

AVERAGE DISCHARGE.--29 years, 187 ft^3/s (5.296 m^3/s), 135,500 acre-ft/yr (167 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 32,300 ft^3/s (915 m^3/s) Mar. 11, gage height, 32.03 ft (9.763 m); no flow Aug. 5.
Period of record: Maximum discharge, 32,400 ft^3/s (918 m^3/s), Oct. 2, 1959, gage height, 31.40 ft (9.571 m); maximum gage height, 32.03 ft (9.763 m) Mar. 11, 1974; no flow at times in most years. Flood in May 1943 reached a stage of 29.6 ft (9.02 m), from floodmark.

REMARKS.--Records fair. Small diversions above station for municipal water supply of cities of Pawhuska and Barnsdall.

COOPERATION.--Gage-height record, 22 discharge measurements furnished by Corps of Engineers; records computed by Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	45	64	189	80	100	140	149	1,060	198	13	.22	2,570
2	29	62	149	70	75	130	144	3,750	185	12	.30	5,290
3	20	60	692	65	60	130	138	1,190	120	11	.17	1,370
4	14	58	7,070	60	55	120	129	383	111	8.5	.02	264
5	10	57	2,390	55	50	120	129	216	111	7.0	0	101
6	10	56	982	50	45	110	124	154	534	6.0	.04	61
7	11	39	452	45	45	100	70	124	3,120	5.0	.10	42
8	10	21	273	40	40	100	54	149	2,390	4.5	.10	32
9	8.8	14	196	40	40	3,420	49	129	2,170	4.3	1,490	25
10	8.3	11	158	40	40	17,000	49	119	766	3.6	1,110	21
11	1,150	9.4	127	35	40	28,500	64	115	628	3.4	73	18
12	1,800	8.5	151	35	40	5,660	102	102	443	3.0	32	15
13	937	8.5	180	33	35	1,210	124	102	230	2.7	20	14
14	299	8.7	170	35	35	747	73	189	184	2.5	14	11
15	163	8.1	170	62	35	997	51	658	150	2.1	1,010	9.6
16	118	8.6	172	361	35	1,610	45	189	130	2.1	1,370	8.9
17	97	9.2	164	383	35	641	39	129	110	1.9	254	8.5
18	89	8.0	162	272	80	418	39	115	95	1.7	162	25
19	84	8.1	903	238	2,000	319	39	102	85	1.7	140	865
20	77	4,590	613	159	782	263	39	94	75	1.5	95	7,300
21	76	1,830	408	111	1,600	255	41	90	70	1.5	96	700
22	74	256	621	94	2,420	263	171	230	65	1.3	88	243
23	71	129	1,480	90	915	255	94	300	60	1.2	1,270	147
24	73	4,550	1,540	87	479	216	56	1,110	55	1.0	279	295
25	73	9,060	600	73	300	189	43	4,100	50	.92	164	1,450
26	71	1,000	330	64	230	183	37	6,690	45	1.0	120	376
27	441	400	220	80	180	183	33	1,430	35	.90	105	200
28	203	1,380	170	120	160	177	32	508	25	.80	140	147
29	115	375	130	183	------	171	196	373	20	.71	125	120
30	79	304	100	223	------	171	2,920	264	15	.54	124	103
31	71	------	90	144	------	154	------	224	------	.37	98	------
TOTAL	6,327.1	24,393.1	21,052	3,427	9,951	63,952	5,273	24,388	12,275	107.74	8,379.95	21,832.0
MEAN	204	813	679	111	355	2,063	176	787	409	3.48	270	728
MAX	1,800	9,060	7,070	383	2,420	28,500	2,920	6,690	3,120	13	1,490	7,300
MIN	8.3	8.0	90	33	35	100	32	90	15	.37	0	8.5
AC-FT	12,550	48,380	41,760	6,800	19,740	126,800	10,460	48,370	24,350	214	16,620	43,300

CAL YR 1973 TOTAL 213,744.89 MEAN 586 MAX 11,700 MIN .46 AC-FT 424,000
WTR YR 1974 TOTAL 201,357.89 MEAN 552 MAX 28,500 MIN 0 AC-FT 399,400

PEAK DISCHARGE (BASE, 6,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
11-20	1545	10.31	6,480	5-2	1015	10.11	6,360
11-25	0145	22.46	15,100	5-26	0330	15.44	9,510
12-4	1130	14.01	8,630	9-2	1530	11.34	7,070
3-11	0945	32.03	32,300	9-20	0600	18.89	12,000

07176800 CANDY CREEK NEAR WOLCO, OKLA.

LOCATION.--Lat 36°32'06", long 96°02'54", in NW 1/4 NW 1/4 sec.29, T.29 N., R.12 E., Osage County, 1.3 mi (2.1 km) east of Wolco, 3.3 mi (5.3 km) northeast of Avant, and at mile 5.6 (9.0 km).

DRAINAGE AREA.--30.6 mi^2 (79.3 km^2).

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

GAGE.--Water-stage recorder. Datum of gage is 673.00 ft (205.130 m) above mean sea level.

AVERAGE DISCHARGE.--5 years, 32.7 ft^3/s (0.926 m^3/s), 23,690 acre-ft/yr (29.2 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 9,520 ft^3/s (270 m^3/s) Mar. 10, 1974, gage height, 18.16 ft (5.535 m); no flow at times.
Period of record: Maximum discharge, 9,520 ft^3/s (270 m^3/s) Mar. 10, 1974, gage height, 18.16 ft (5.535 m); no flow at times each year.

REMARKS.--Records poor. Record October 1969 to September 1971 to be published in five year WSP.

COOPERATION.--Gage-height record, 19 discharge measurements and one no flow observation furnished by Corps of Engineers; records computed by Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.1	2.8	16	8.3	7.3	6.9	5.0	34	5.3	.46	0	269
2	5.2	2.1	13	7.0	5.8	6.9	4.8	40	4.3	.53	0	344
3	3.9	1.8	422	6.0	5.6	6.9	4.2	25	3.7	.43	0	57
4	3.0	1.5	1,040	5.0	5.2	5.9	4.5	12	3.2	.33	0	17
5	2.4	1.3	89	4.5	5.1	5.3	3.7	7.2	3.0	.33	0	8.2
6	2.5	1.3	34	5.4	5.0	4.6	3.0	4.9	12	.33	0	5.0
7	2.5	.99	21	6.6	4.8	3.9	3.2	3.8	135	.24	0	3.7
8	2.8	1.1	16	8.0	4.7	4.1	3.3	2.9	160	.22	0	2.7
9	2.9	1.6	13	7.2	4.6	790	3.7	2.7	60	.15	40	2.2
10	2.5	2.1	10	6.2	4.5	3,860	3.7	2.7	11	.10	1,300	2.1
11	661	2.0	8.8	5.8	4.5	420	8.0	2.5	28	0	50	1.7
12	129	1.6	7.9	5.0	4.4	66	22	2.2	83	0	15	1.1
13	107	1.5	7.3	4.5	4.4	36	8.3	1.8	19	0	2.5	.88
14	31	1.6	6.9	8.0	4.3	28	5.3	2.0	9.6	0	1.9	.88
15	16	1.6	6.3	11	4.3	81	4.3	2.7	7.0	0	1.9	.88
16	9.6	1.6	5.5	15	4.2	55	3.8	2.5	5.1	0	150	.88
17	6.4	1.6	5.3	14	4.2	28	3.4	2.3	3.8	0	50	.88
18	4.9	1.6	5.5	13	13	22	2.9	2.2	2.9	0	200	.88
19	4.2	1.7	82	11	161	17	3.0	2.2	2.4	0	20	306
20	3.6	769	41	12	38	13	3.0	2.1	1.9	0	3.7	596
21	3.0	61	39	11	131	12	3.0	2.1	1.5	0	2.7	36
22	2.6	25	65	9.7	95	15	2.6	2.1	1.4	0	2.1	15
23	2.3	15	174	13	35	16	2.2	2.0	1.1	0	500	8.4
24	2.1	2,030	129	12	20	14	2.0	200	1.1	0	35	58
25	1.8	675	38	7.9	13	10	2.0	1,000	1.0	0	10	121
26	1.8	85	22	6.8	10	9.0	2.3	150	.88	0	2.0	25
27	30	111	17	6.5	9.0	8.6	2.2	30	.78	0	1.6	13
28	13	86	13	14	7.7	7.8	2.1	15	.68	0	1.7	7.7
29	6.4	33	11	23	------	7.1	3.9	10	.64	0	1.6	5.2
30	4.5	22	10	13	------	6.0	161	7.8	.55	0	1.6	4.2
31	3.8	------	9.0	9.5	------	5.4	------	6.0	------	0	1.6	------
TOTAL	1,078.8	3,943.39	2,377.5	289.9	615.6	5,571.4	286.4	1,582.7	569.83	3.12	2,394.9	1,914.48
MEAN	34.8	131	76.7	9.35	22.0	180	9.55	51.1	19.0	.10	77.3	63.8
MAX	661	2,030	1,040	23	161	3,860	161	1,000	160	.53	1,300	596
MIN	1.8	.99	5.3	4.5	4.2	3.9	2.0	1.8	.55	0	0	.88
AC-FT	2,140	7,820	4,720	575	1,220	11,050	568	3,140	1,130	6.2	4,750	3,800

CAL YR 1973 TOTAL 22,450.96 MEAN 61.5 MAX 2,030 MIN 0 AC-FT 44,530
WTR YR 1974 TOTAL 20,628.02 MEAN 56.5 MAX 3,860 MIN 0 AC-FT 40,920

PEAK DISCHARGE (BASE, 2,500 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
11-24	abt2000	14.65	5,940	5-25	unknown	13.88	5,300
12-3	2230	11.20	3,350	9-20	0045	10.68	3,020
3-11	abt0900	18.16	9,520				

07177000 HOMINY CREEK NEAR SKIATOOK, OKLA.

LOCATION.--Lat 36°20'55", long 96°06'35", in SW 1/4 SE 1/4 sec.27, T.22 N., R.11 E., Osage County, near left bank on downstream side of pier of bridge on State Highway 20, 1.0 mi (1.6 km) upstream from Tall Chief Creek, 6.0 mi (9.7 km) west of Skiatook, and at mile 16.7 (26.9 km).

DRAINAGE AREA.--340 mi^2 (881 km^2).

PERIOD OF RECORD.--March 1944 to current year.

GAGE.--Water-stage recorder. Datum of gage is 619.66 ft (188.872 m) above mean sea level. Prior to May 26, 1945, nonrecording gage and May 26, 1945, to Sept. 30, 1958, water-stage recorder at site 600 ft (182.9 m) upstream at same datum.

AVERAGE DISCHARGE.--30 years, 178 ft^3/s (5.041 m^3/s), 129,000 acre-ft/yr (159 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 16,200 ft^3/s (459 m^3/s) Mar. 12, gage height, 35.11 ft (10.702 m); minimum, 0.60 ft^3/s (0.017 m^3/s) Aug. 3-6.
Period of record: Maximum discharge, 35,600 ft^3/s (1,010 m^3/s) Oct. 3, 1959, gage height, 38.82 ft (11.832 m); no flow at times in 1946, 1952-58, 1963-66.
Flood in May 1943 reached a stage of 35.0 ft (10.67 m) from floodmark.

REMARKS.--Records fair.

COOPERATION.--Gage-height record and 21 discharge measurements furnished by Corps of Engineers; records computed by Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	54	21	138	61	54	64	56	1,570	77	9.5	1.0	1,690
2	37	16	110	56	44	59	52	2,430	65	9.0	1.1	5,480
3	26	14	177	42	38	57	48	2,630	58	8.0	.9	5,910
4	19	14	3,120	38	34	55	47	329	55	7.5	.7	805
5	15	12	2,000	33	31	51	43	182	52	7.0	.7	229
6	15	13	397	30	29	46	41	128	210	6.5	.9	148
7	16	13	216	29	27	40	40	99	3,510	6.0	1.0	105
8	16	12	150	27	25	38	38	79	2,070	5.8	1.1	80
9	12	12	123	26	24	193	37	66	5,540	5.6	1,710	62
10	9.9	12	105	25	23	5,610	36	59	1,000	5.7	7,880	51
11	214	11	88	24	23	13,700	50	55	279	5.7	3,980	43
12	927	10	79	23	23	11,000	124	50	334	5.6	185	36
13	1,420	10	72	23	23	1,260	112	44	133	5.2	83	30
14	322	11	65	22	22	340	76	48	84	4.9	49	26
15	129	9.2	58	26	25	270	53	329	63	4.8	42	22
16	72	8.1	53	39	36	233	43	144	59	4.5	44	21
17	47	8.4	48	175	36	191	38	72	51	4.4	38	21
18	35	8.1	46	159	40	156	36	54	44	3.9	41	20
19	27	8.4	565	144	881	137	34	43	37	3.6	37	224
20	23	2,880	457	118	512	121	37	37	33	3.2	28	7,350
21	19	2,170	198	98	603	129	37	33	29	3.3	22	6,350
22	16	315	277	83	1,570	148	49	33	25	3.0	20	594
23	13	154	428	75	487	141	68	53	22	2.5	1,490	190
24	12	1,390	408	76	209	119	52	3,260	19	2.6	818	161
25	10	7,620	250	65	128	100	40	4,780	17	2.4	135	1,760
26	10	3,520	152	52	94	86	34	3,710	16	2.0	64	678
27	903	461	112	45	79	80	32	981	14	1.7	40	256
28	236	949	91	48	71	79	29	276	13	1.7	157	161
29	70	446	79	53	------	76	75	161	11	1.4	59	119
30	38	207	71	73	------	69	1,510	110	10	1.2	36	91
31	27	------	68	78	------	62	------	88	------	1.1	26	------
TOTAL	4,789.9	20,335.2	10,201	1,866	5,191	34,710	2,967	21,933	13,930	139.3	16,991.4	32,713
MEAN	155	678	329	60.2	185	1,120	98.9	708	464	4.49	548	1,090
MAX	1,420	7,620	3,120	175	1,570	13,700	1,510	4,780	5,540	9.5	7,880	7,350
MIN	9.9	8.1	46	22	22	38	29	33	10	1.1	.70	20
AC-FT	9,500	40,330	20,230	3,700	10,300	68,850	5,890	43,500	27,630	276	33,700	64,890

CAL YR 1973 TOTAL 169,517.6 MEAN 464 MAX 7,620 MIN 1.8 AC-FT 336,200
WTR YR 1974 TOTAL 165,766.8 MEAN 454 MAX 13,700 MIN .70 AC-FT 328,800

PEAK DISCHARGE (BASE, 5,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
11-25	1600	29.63	8,070	8-10	1830	31.25	9,140
3-12	0130	35.11	16,200	9-3	0430	28.71	7,190
5-25	0015	25.25	5,380	9-21	0130	31.35	9,230
6-9	0700	27.69	6,790				

07177500 BIRD CREEK NEAR SPERRY, OKLA.

LOCATION.--Lat 36°16'42", long 95°57'14", in NW 1/4 NW 1/4 sec.29, T.21 N., R.13 E., Tulsa County, on downstream side of right pier of county road bridge, 1.5 mi (2.4 km) upstream from Delaware Creek, 2.4 mi (3.9 km) downstream from Hominy Creek, 2.5 mi (4.0 km) southeast of Sperry, and at mile 25.0 (40.2 km).

DRAINAGE AREA.--905 mi^2 (2,344 km^2).

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 579.43 ft (176.610 m) above mean sea level.

AVERAGE DISCHARGE.--36 years, 480 ft^3/s (13.59 m^3/s), 347,800 acre-ft/yr (429 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 45,600 ft^3/s (1,290 m^3/s) Mar. 12, gage height 30.75 ft (9.373m); minimum, 9.7 ft^3/s (0.27 m^3/s) Aug. 3, 5.
Period of record: Maximum discharge, 90,000 ft^3/s (2,550 m^3/s) Oct. 3, 1959, gage height, 32.60 ft (9.936 m), from rating curve extended above 49,000 ft^3/s (1,390 m^3/s); no flow at times in 1939, 1954-57, 1964-66, 1970.
Flood of May 18, 1943, reached a stage of 31.68 ft (9.656 m), discharge, 72,200 ft^3/s (2,040 m^3/s). Flood in 1915 reached a stage similar to flood of Oct. 31, 1941, 30.14 ft (9.187 m), from information by local residents.

REMARKS.--Records good. Records of chemical analyses and of water temperatures 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 1117: Drainage area. WSP 1921: 1943.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	222	137	573	231	240	334	268	4,940	314	46	12	1,570
2	150	117	437	190	196	314	252	2,700	279	40	12	8,000
3	108	108	391	175	173	305	237	6,210	246	35	11	10,600
4	84	102	4,940	141	155	293	223	1,870	222	34	10	6,090
5	67	98	9,120	129	143	286	217	629	211	32	10	627
6	66	95	3,270	126	132	271	209	430	385	31	11	334
7	59	93	966	116	121	244	196	325	6,350	31	12	229
8	56	76	627	122	116	237	153	278	6,930	29	13	172
9	54	56	494	112	109	418	135	269	11,300	28	211	136
10	49	48	411	116	106	8,820	128	238	7,520	26	6,000	110
11	706	44	346	111	105	29,100	177	217	1,250	24	7,510	94
12	2,700	40	301	100	103	39,200	286	202	1,420	23	2,270	82
13	4,840	36	325	96	103	16,800	304	177	662	22	197	70
14	1,720	35	320	90	101	3,870	293	213	415	21	122	61
15	564	35	292	91	101	1,100	209	529	329	20	93	54
16	331	33	277	115	121	1,590	165	654	274	20	1,530	53
17	229	30	257	489	126	1,120	143	310	245	19	594	52
18	178	28	251	576	209	744	130	223	223	18	333	49
19	154	30	1,140	491	1,550	601	126	194	200	17	264	540
20	137	4,540	1,680	418	2,040	507	128	170	192	17	200	9,080
21	124	8,210	882	343	1,310	489	143	156	177	17	157	12,800
22	115	2,300	857	295	3,930	529	191	176	167	16	151	6,480
23	107	561	1,590	270	2,850	522	306	364	152	14	1,270	626
24	102	1,700	2,820	274	910	458	246	2,700	141	13	2,460	472
25	97	12,200	1,320	254	584	399	183	6,990	138	13	543	2,440
26	91	15,400	751	215	443	363	149	9,780	140	14	293	2,350
27	936	6,920	553	190	390	340	132	8,710	125	15	216	777
28	1,230	2,460	450	226	363	330	123	1,540	95	15	237	476
29	378	1,820	355	254	------	319	122	660	63	13	292	352
30	218	861	273	315	------	308	2,090	456	53	12	213	285
31	164	------	255	302	------	294	------	368	------	13	196	------
TOTAL	16,036	58,213	36,524	6,973	16,830	110,505	7,664	52,678	40,218	688	25,443	65,061
MEAN	517	1,940	1,178	225	601	3,565	255	1,699	1,341	22.2	821	2,169
MAX	4,840	15,400	9,120	576	3,930	39,200	2,090	9,780	11,300	46	7,510	12,800
MIN	49	28	251	90	101	237	122	156	53	12	10	49
AC-FT	31,810	115,500	72,450	13,830	33,380	219,200	15,200	104,500	79,770	1,360	50,470	129,000

CAL YR 1973 TOTAL 490,607 MEAN 1,344 MAX 19,100 MIN 12 AC-FT 973,100
WTR YR 1974 TOTAL 436,833 MEAN 1,197 MAX 39,200 MIN 10 AC-FT 866,500

PEAK DISCHARGE (BASE, 11,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
11-26	1045	27.69	16,700	9-3	1200	24.03	11,100
3-12	0600	30.75	45,600	9-21	0915	26.26	13,900
6-9	1615	23.96	11,800				

07185000 NEOSHO RIVER NEAR COMMERCE, OKLA.

LOCATION.--Lat 36°55'43", long 94°57'26", in SW 1/4 SE 1/4 sec.5, T.28 N., R.22 E., Ottawa County, on downstream side of left pier of county road bridge, 1.3 mi (2.1 km) upstream from Mud Creek, 2.2 mi (3.5 km) downstream from Four Mile Creek, 4.5 mi (7.2 km) west of Commerce, and at mile 153.4 (246.8 km).

DRAINAGE AREA.--5,876 mi^2 (15,219 km^2).

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

GAGE.--Water-stage recorder. Datum of gage is 748.97 ft (228.286 m) above mean sea level (Corps of Engineers bench mark).

AVERAGE DISCHARGE.--35 years, 3,572 ft^3/s (101.2 m^3/s) 2,588,000 acre-ft/yr (3.19 km^3/yr).

EXTREMES.--Current year: Maximum discharge, 66,900 ft^3/s (1,890 m^3/s) Mar. 12, gage height, 22.42 ft (6.834 m); minimum, 62 ft^3/s (1.76 m^3/s) July 27.
Period of record: Maximum discharge, 267,000 ft^3/s (7,560 m^3/s) July 15, 1951, computed by flood-routing methods from hydrograph defined at Miami, mile 144.2 (232.0 km), by several discharge measurements, gage-height record, and by comparison with computed inflow into Lake O' The Cherokees; maximum gage height, 34.03 ft (10.327 km) July 16, 1951, from floodmark; no flow at times in 1953-54, 1956.

REMARKS.--Records good. Flow regulated to some extent since 1963 by John Redmond Reservoir in Kansas, 190 mi (306 km) upstream.

REVISIONS.--WSP 1117: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24,500	11,600	4,660	5,000	5,350	3,490	4,180	13,300	4,770	2,090	73	7,770
2	24,100	12,500	3,800	4,700	3,570	2,410	3,810	15,200	2,590	1,730	70	17,500
3	18,400	12,900	3,540	4,600	2,980	1,990	3,640	8,950	1,940	1,620	68	21,300
4	13,900	12,800	15,500	4,550	2,770	1,900	3,240	4,350	1,780	1,260	72	21,800
5	13,200	12,800	26,700	4,600	2,630	1,820	2,080	3,330	6,420	989	68	21,000
6	12,800	12,800	29,000	4,100	2,490	1,730	1,580	2,550	15,600	845	75	11,200
7	12,500	12,900	24,600	3,500	1,650	1,660	1,510	2,250	30,900	603	98	4,630
8	13,000	12,900	11,500	2,500	1,040	1,620	1,270	2,120	34,600	428	105	6,440
9	14,300	12,700	6,390	1,900	786	2,270	1,020	2,060	31,600	331	114	6,640
10	14,000	12,500	6,100	1,700	808	28,800	974	1,830	18,300	449	211	6,190
11	13,100	12,300	5,930	2,200	1,510	52,600	1,000	1,700	11,900	492	233	5,300
12	16,300	12,400	5,710	2,500	1,690	65,000	1,090	1,640	6,360	451	192	3,350
13	24,700	12,400	5,470	2,600	1,510	60,200	1,170	1,590	8,220	378	160	1,690
14	25,600	12,300	5,270	2,200	1,210	42,000	1,190	1,590	6,990	289	138	966
15	24,900	11,800	5,100	1,700	1,110	31,000	1,100	4,270	5,140	261	139	780
16	24,700	9,640	4,860	2,000	1,080	19,900	1,030	7,670	5,020	239	210	730
17	23,000	7,240	4,670	3,500	1,050	9,950	960	4,450	6,300	209	243	721
18	15,300	6,030	4,470	9,600	1,220	7,310	921	5,620	6,170	166	223	750
19	13,200	4,590	7,990	14,200	8,130	6,280	878	6,290	5,850	125	297	822
20	13,300	8,070	7,870	19,600	15,400	5,560	924	6,070	5,610	112	276	1,030
21	13,200	16,400	7,270	19,500	8,090	5,080	967	5,180	5,400	113	340	943
22	13,000	20,300	5,450	15,600	7,960	5,000	1,940	3,770	5,190	107	519	721
23	12,800	20,600	7,070	12,200	9,690	4,910	3,850	3,750	4,970	100	532	599
24	12,800	13,400	20,800	13,300	7,670	4,730	2,520	6,220	4,800	94	429	540
25	12,800	26,000	26,300	11,100	5,460	4,540	5,910	7,120	4,680	93	832	540
26	12,700	29,900	26,100	8,180	4,620	4,550	9,020	9,820	4,540	82	632	565
27	19,900	20,100	17,200	8,580	4,130	5,050	10,100	5,660	4,400	66	409	514
28	20,200	10,200	8,100	8,850	3,890	6,270	10,100	4,080	3,970	71	380	506
29	18,300	7,660	6,630	9,860	------	6,060	8,260	4,330	2,920	78	2,270	4,210
30	17,300	6,370	5,810	8,870	------	5,650	8,360	5,060	2,610	77	11,700	5,190
31	11,500	------	5,440	6,850	------	5,120	------	5,830	------	75	11,600	------
TOTAL	519,300	394,100	325,300	220,140	109,494	404,450	94,594	157,650	259,540	14,023	32,708	154,937
MEAN	16,750	13,140	10,490	7,101	3,911	13,050	3,153	5,085	8,651	452	1,055	5,165
MAX	25,600	29,900	29,000	19,600	15,400	65,000	10,100	15,200	34,600	2,090	11,700	21,800
MIN	11,500	4,590	3,540	1,700	786	1,620	878	1,590	1,780	66	68	506
AC-FT	1,030M	781,700	645,200	436,600	217,200	802,200	187,600	312,700	514,800	27,810	64,880	307,300

CAL YR 1973 TOTAL 3,642,301 MEAN 9,979 MAX 33,500 MIN 132 AC-FT 7,225,000
WTR YR 1974 TOTAL 2,686,236 MEAN 7,360 MAX 65,000 MIN 66 AC-FT 5,328,000

PEAK DISCHARGE (BASE, 20,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-13	2300	17.78	26,500	12-25	2400	17.98	27,000
10-27	2300	16.15	22,700	1-20	1900	14.83	20,300
11-23	0330	15.25	20,900	3-12	1700	22.42	66,900
11-26	0930	18.54	28,600	6-8	2130	19.65	36,600
12-6	0500	18.34	28,000	9-4	1330	15.74	21,900

07188000 SPRING RIVER NEAR QUAPAW, OKLA.

LOCATION.--Lat 36°56'04", long 94°44'45", in NE 1/4 SW 1/4 sec.5, T.28 N., R.24 E., Ottawa County, near center of span on downstream side of pier of county road bridge, 0.1 mi (0.2 km) upstream from Rock Creek, 3.0 mi (48 km) southeast of Quapaw, and at mile 13.9 (22.4 km). Records include flow of Rock Creek.

DRAINAGE AREA.--2,510 mi^2 (6,501 km^2), includes that of Rock Creek.

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

GAGE.--Water-stage recorder. Datum of gage is 746.25 ft (227.457 m) above mean sea level. Nonrecording gage on right bank at same datum used May 20 to Nov. 16, 1943.

AVERAGE DISCHARGE.--35 years, 1,927 ft^3/s (54.57 m^3/s), 10.43 in/yr (265 mm/yr), 1,396,000 acre-ft/yr (1.72 km^3/yr).

EXTREMES.--Current year: Maximum discharge, 78,400 ft^3/s (2,220 m^3/s) Mar. 12, gage height, 30.24 ft (9.217 m); minimum, 462 ft^3/s (13.1 m^3/s) July 23.
Period of record: Maximum discharge, 190,000 ft^3/s (5,380 m^3/s) May 19, 1943, gage height, 43.4 ft (13.23 m), from floodmark, from rating curve extended above 54,000 ft^3/s (1,530 m^3/s) on basis of slope-area measurement of peak flow; minimum daily, 5.8 ft^3/s (0.16 m^3/s) July 8, 1954.

REMARKS.--Records good. Low and medium flow regulated by Riverton Hydroelectric plant, 15 mi (24 km) above station.

REVISIONS.--WSP 1117: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,470	2,120	4,560	3,100	2,840	2,390	2,790	2,650	2,730	1,470	560	1,600
2	2,340	1,870	4,040	2,850	2,570	2,140	2,680	2,310	2,100	1,390	653	4,780
3	1,860	1,690	3,950	2,720	2,380	2,020	2,540	1,840	1,930	1,330	755	4,510
4	1,770	1,560	24,000	2,580	2,210	2,030	2,160	1,760	1,810	1,330	628	2,930
5	1,920	1,470	33,600	2,280	2,090	1,930	2,270	1,720	3,020	1,280	594	1,730
6	1,630	1,440	24,500	2,080	1,980	1,820	2,210	1,490	10,700	1,220	585	1,400
7	1,770	1,430	11,200	2,230	1,910	1,740	2,160	1,370	39,200	1,180	609	1,160
8	1,570	1,410	6,490	2,150	1,820	1,660	2,170	1,290	43,500	1,120	629	797
9	1,440	1,340	5,380	2,090	1,740	1,820	2,230	1,300	39,800	1,080	902	861
10	1,310	1,260	4,710	2,050	1,680	30,200	2,130	1,300	19,800	1,050	1,250	807
11	1,270	1,180	4,260	1,960	1,620	63,800	2,100	1,270	8,930	984	991	760
12	1,470	1,110	3,930	1,850	1,300	73,100	2,140	1,210	6,350	937	798	718
13	3,190	984	3,620	1,740	1,380	45,600	2,130	1,150	5,870	909	715	676
14	4,640	904	3,330	1,740	1,460	15,700	2,030	1,160	4,760	893	653	645
15	2,830	876	3,040	1,800	1,410	10,200	1,930	3,390	3,910	880	621	631
16	2,010	876	2,840	3,120	1,380	15,400	1,910	3,440	3,240	855	606	633
17	1,840	855	2,660	5,340	1,360	9,720	1,850	2,140	3,240	793	593	629
18	1,500	820	2,560	6,860	1,410	6,730	1,800	1,330	2,970	798	708	621
19	1,290	785	8,680	5,130	7,720	5,290	1,770	1,310	2,780	789	807	648
20	1,290	806	8,790	3,560	10,500	4,690	1,750	1,200	2,530	782	2,880	871
21	1,190	6,730	5,910	3,560	6,930	4,490	1,870	1,130	2,390	771	1,100	1,030
22	1,100	6,920	4,570	3,030	7,130	4,480	2,040	1,090	1,910	699	901	959
23	1,020	3,660	5,660	3,300	5,240	4,370	2,260	1,090	2,020	523	947	830
24	955	4,270	17,100	3,350	3,820	4,210	1,840	1,610	1,980	634	1,300	778
25	896	28,300	15,800	2,650	3,230	4,190	1,620	4,290	1,880	647	991	758
26	888	39,300	9,920	2,320	2,860	4,160	1,510	7,630	1,810	660	689	717
27	7,170	27,900	6,910	3,970	2,670	3,970	1,440	5,390	1,730	659	592	683
28	9,520	11,500	4,710	4,640	2,520	3,640	1,390	3,750	1,670	647	973	648
29	5,290	7,110	4,130	5,190	------	3,360	1,370	2,880	1,600	621	1,700	867
30	3,280	4,950	3,780	4,460	------	3,150	1,700	2,500	1,530	602	1,460	1,530
31	2,180	------	3,450	3,360	------	2,950	------	3,820	------	568	1,010	------
TOTAL	72,899	165,426	248,080	97,060	85,160	340,950	59,790	69,810	227,690	28,101	28,200	36,207
MEAN	2,352	5,514	8,003	3,131	3,041	11,000	1,993	2,252	7,590	906	910	1,207
MAX	9,520	39,300	33,600	6,860	10,500	73,100	2,790	7,630	43,500	1,470	2,880	4,780
MIN	888	785	2,560	1,740	1,300	1,660	1,370	1,090	1,530	523	560	621
CFSM	.94	2.20	3.19	1.25	1.21	4.38	.79	.90	3.02	.36	.36	.48
IN.	1.08	2.45	3.68	1.44	1.26	5.05	.89	1.03	3.37	.42	.42	.54
AC-FT	144,600	328,100	492,100	192,500	168,900	676,300	118,600	138,500	451,600	55,740	55,930	71,820

CAL YR 1973 TOTAL 1,888,868 MEAN 5,175 MAX 39,300 MIN 380 CFSM 2.06 IN 27.99 AC-FT 3,747,000
WTR YR 1974 TOTAL 1,459,373 MEAN 3,998 MAX 73,100 MIN 523 CFSM 1.59 IN 21.63 AC-FT 2,895,000

PEAK DISCHARGE (BASE, 18,000 ft^3/s)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
11-26	1800	23.44	42,700	3-12	0600	30.24	78,400
12-5	1745	21.17	34,200	6-9	0015	24.63	48,600
12-24	1215	16.11	18,800				

07189000 ELK RIVER NEAR TIFF CITY, MO.

LOCATION.--Lat 36°37'50", long 94°35'12", in NE 1/4 sec.22, T.22 N., R.34 W., McDonald County, on downstream side of right pier of bridge on State Highway 43, 0.8 mi (1.3 km) downstream from Blackfoot Branch, 2.8 mi (4.5 km) upstream from Buffalo Creek, 3.0 mi (4.8 km) southeast of Tiff City, and at mile 15.8 (25.4 km).

DRAINAGE AREA.--872 mi^2 (2,258 km^2).

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

GAGE.--Water-stage recorder. Datum of gage is 750.61 ft (228.786 m) above mean sea level (levels by Corps of Engineers). Sept. 6, 1960 to Aug. 24, 1961, at site 100 ft (30.5 m) downstream.

AVERAGE DISCHARGE.--35 years, 795 ft^3/s (22.51 m^3/s), 12.38 in/yr (314 mm/yr), 576,000 acre-ft (710 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 40,000 ft^3/s (1,130 m^3/s) June 9, gage height, 22.32 ft (6.803 m); minimum, 190 ft^3/s (5.38 m^3/s) Aug. 31.
Period of record: Maximum discharge, 137,000 ft^3/s (3,880 m^3/s) Apr. 19, 1941, gage height, 28.4 ft (8.66 m), from floodmark, from rating curve extended above 60,000 ft^3/s (1,700 m^3/s) on basis of slope-area measurement of peak flow; minimum daily, 5.1 ft^3/s (0.14 m^3/s), Sept. 5, 6, 1954.

REMARKS.--Records good.

REVISIONS (WATER YEARS).--WSP 927: 1940. WSP 1117: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	359	638	2,330	1,410	1,310	1,330	1,110	1,020	1,140	675	203	312
2	337	628	2,040	1,300	1,220	1,220	1,050	1,090	1,020	639	232	514
3	305	576	1,900	1,190	1,150	1,140	997	1,130	911	598	263	768
4	279	512	14,300	1,100	1,060	1,070	944	1,150	814	558	252	700
5	261	452	16,900	1,040	989	994	892	1,110	767	518	242	581
6	253	407	10,000	985	922	937	850	1,050	1,340	486	235	501
7	242	372	7,520	937	853	892	800	989	21,500	448	244	429
8	230	345	4,690	893	800	824	776	930	24,400	418	240	373
9	215	319	2,730	863	745	792	744	1,040	28,200	406	291	331
10	202	295	2,080	889	694	2,090	706	2,750	11,400	386	449	306
11	216	277	1,820	849	652	13,400	706	2,570	5,800	372	406	289
12	265	262	1,630	806	616	10,900	736	1,750	3,800	359	336	277
13	598	251	1,500	771	586	4,720	728	1,420	2,920	342	308	314
14	945	241	1,360	767	556	3,240	698	1,220	2,390	326	294	383
15	792	232	1,210	776	570	2,650	675	1,260	2,050	302	283	371
16	661	224	1,100	779	664	2,610	668	1,180	1,810	295	274	351
17	550	215	1,030	753	720	2,380	653	1,010	1,610	287	264	328
18	475	211	989	758	803	2,190	646	907	1,440	302	292	303
19	417	204	1,000	747	1,140	2,030	632	792	1,350	302	294	292
20	373	285	1,420	741	1,600	1,870	626	699	1,240	297	302	682
21	332	2,470	1,970	724	1,760	1,780	675	627	1,130	294	303	1,200
22	303	2,280	1,460	700	2,370	1,720	1,880	583	1,030	289	311	999
23	279	1,560	1,400	675	2,440	1,720	2,430	645	974	286	311	788
24	260	7,450	2,580	642	2,160	1,700	1,830	985	922	277	322	668
25	243	32,000	4,200	615	1,910	1,630	1,500	1,110	892	272	299	592
26	229	14,200	3,290	616	1,690	1,550	1,310	1,760	858	285	270	524
27	445	7,240	2,580	674	1,550	1,480	1,180	1,930	833	287	229	461
28	1,580	4,980	2,140	819	1,430	1,410	1,060	1,540	792	272	204	409
29	977	3,510	1,880	1,120	------	1,340	974	1,290	760	268	205	372
30	770	2,780	1,690	1,340	------	1,260	959	1,100	721	252	201	339
31	669	------	1,540	1,340	------	1,180	------	1,170	------	222	197	------
TOTAL	14,062	85,416	102,279	27,619	32,960	74,049	29,435	37,807	124,814	11,320	8,556	14,757
MEAN	454	2,847	3,299	891	1,177	2,389	981	1,220	4,160	365	276	492
MAX	1,580	32,000	16,900	1,410	2,440	13,400	2,430	2,750	28,200	675	449	1,200
MIN	202	204	989	615	556	792	626	583	721	222	197	277
CFSM	.52	3.26	3.78	1.02	1.35	2.74	1.13	1.40	4.77	.42	.32	.56
IN.	.60	3.64	4.36	1.18	1.41	3.16	1.26	1.61	5.32	.48	.37	.63
AC-FT	27,890	169,400	202,900	54,780	65,380	146,900	58,380	74,990	247,600	22,450	16,970	29,270

CAL YR 1973 TOTAL 717,669 MEAN 1,966 MAX 32,000 MIN 137 CFSM 2.25 IN 30.62 AC-FT 1,423,000
WTR YR 1974 TOTAL 563,074 MEAN 1,543 MAX 32,000 MIN 197 CFSM 1.77 IN 24.02 AC-FT 1,117,000

PEAK DISCHARGE (BASE, 9,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
11-25	0845	21.76	36,000	3-11	2230	16.71	19,300
12-4	2400	18.25	24,000	6-9	0600	22.32	40,000

07190000 LAKE O' THE CHEROKEES AT LANGLEY, OKLA.

LOCATION.--Lat 36°28'17", long 95°02'19", in SW 1/4 sec.14, T.23 N., R.21 E., Mayes County, on upstream side of pier at intake structure near right end of Pensacola Dam on Neosho River at Langley, 9.9 mi (15.9 km) upstream from Big Cabin Creek, and at mile 77.0 (123.9 km).

DRAINAGE AREA.--10,298 mi² (26,672 km²).

PERIOD OF RECORD.--March 1940 to current year. Prior to October 1940, published as Grand Lake at Langley.

GAGE.--Water-stage recorder. Datum of gage is 1.10 ft (0.335 m) above mean sea level (Corps of Engineers bench mark). Prior to Nov. 14, 1941, nonrecording gage at same site and datum.

EXTREMES.--Current year: Maximum contents, 2,052,000 acre-ft (2.53 km³) June 10, gage height, 752.50 ft (229.362 m); minimum, 1,409,000 acre-ft (1.74 km³) Feb. 18, gage height, 738.95 ft (225.232 m).
Period of record: Maximum contents, 2,213,000 acre-ft (2,730 hm³), May 25, 1957, gage height, 755.27 ft (230.206 m), minimum since power-pool was first filled, 642,900 acre-ft (793 hm³) Sept. 28, 1954, gage height, 713.41 ft (217.447 m).

REMARKS.--Reservoir is formed by multiple-arch concrete dam, with top of taintor-type spillway gates at gage height 755.0 ft (230.12 m). Storage began Mar. 21, 1940; power-pool was first filled Apr. 19, 1941. Capacity between gage heights 682.0 ft (207.87 m), sill of powerhouse penstock, and 745.0 ft (227.08 m), maximum power pool is 1,492,000 acre-ft (1,840 hm³). Capacity between gage heights 745.0 ft (227.08 m), and 755.0 ft (230.12 m) is 525,000 acre-ft (647 hm³) and is reserved for flood control. Dead storage below gage height 682.0 ft (207.87 m) is 180,200 acre-ft (222 hm³). Figures given herein represent total contents. Reservoir is utilized for power development and flood control.

REVISIONS.--WSP 1117: Drainage area.

Capacity table (gage height, in feet, and contents, in thousands of acre-ft)

738	1,371	747	1,767
741	1,494	750	1,917
744	1,626	753	2,080

CONTENTS, IN THOUSANDS OF ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,638	1,714	1,903	1,717	1,667	1,507	1,715	1,533	1,634	1,662	1,542	1,508
2	1,666	1,711	1,885	1,700	1,660	1,493	1,701	1,548	1,622	1,657	1,542	1,540
3	1,689	1,709	1,875	1,689	1,648	1,482	1,685	1,554	1,608	1,651	1,541	1,573
4	1,702	1,707	1,950	1,679	1,631	1,470	1,678	1,543	1,608	1,654	1,542	1,601
5	1,704	1,703	2,015	1,669	1,621	1,459	1,665	1,531	1,613	1,645	1,543	1,624
6	1,707	1,699	2,045	1,658	1,609	1,445	1,647	1,529	1,666	1,636	1,540	1,634
7	1,708	1,697	2,041	1,644	1,594	1,437	1,632	1,532	1,846	1,627	1,530	1,622
8	1,710	1,696	2,018	1,630	1,574	1,426	1,618	1,532	1,951	1,619	1,518	1,612
9	1,713	1,692	1,990	1,617	1,557	1,417	1,601	1,545	2,044	1,615	1,517	1,604
10	1,717	1,686	1,970	1,602	1,539	1,528	1,584	1,556	2,041	1,611	1,513	1,593
11	1,720	1,682	1,962	1,587	1,522	1,712	1,571	1,569	2,012	1,609	1,513	1,583
12	1,720	1,679	1,946	1,569	1,506	1,919	1,558	1,579	1,981	1,604	1,510	1,569
13	1,728	1,680	1,936	1,557	1,490	2,008	1,540	1,583	1,955	1,601	1,508	1,549
14	1,744	1,680	1,922	1,543	1,474	2,022	1,524	1,589	1,931	1,596	1,500	1,528
15	1,754	1,684	1,909	1,528	1,458	2,029	1,509	1,585	1,905	1,597	1,496	1,508
16	1,760	1,681	1,890	1,519	1,441	2,008	1,494	1,590	1,877	1,593	1,486	1,488
17	1,761	1,672	1,867	1,516	1,423	1,973	1,482	1,589	1,851	1,584	1,479	1,491
18	1,753	1,665	1,838	1,526	1,412	1,960	1,471	1,584	1,826	1,576	1,477	1,494
19	1,741	1,652	1,848	1,541	1,431	1,934	1,462	1,581	1,804	1,562	1,470	1,497
20	1,737	1,657	1,842	1,564	1,469	1,911	1,464	1,577	1,782	1,555	1,468	1,503
21	1,737	1,690	1,822	1,594	1,490	1,888	1,478	1,574	1,759	1,553	1,463	1,499
22	1,736	1,712	1,797	1,611	1,508	1,875	1,470	1,573	1,742	1,548	1,456	1,495
23	1,734	1,724	1,780	1,620	1,527	1,858	1,479	1,578	1,717	1,544	1,450	1,491
24	1,736	1,768	1,805	1,631	1,532	1,841	1,479	1,589	1,703	1,541	1,443	1,493
25	1,739	1,890	1,834	1,638	1,532	1,824	1,481	1,604	1,694	1,542	1,440	1,492
26	1,742	1,944	1,851	1,639	1,527	1,812	1,490	1,630	1,684	1,542	1,438	1,490
27	1,754	1,973	1,846	1,646	1,522	1,797	1,500	1,638	1,676	1,543	1,442	1,484
28	1,757	1,957	1,820	1,653	1,517	1,786	1,504	1,634	1,670	1,543	1,443	1,485
29	1,748	1,937	1,792	1,662	------	1,770	1,510	1,628	1,667	1,544	1,450	1,493
30	1,737	1,922	1,770	1,668	------	1,754	1,522	1,632	1,666	1,544	1,468	1,499
31	1,727	------	1,743	1,671	------	1,731	------	1,638	------	1,543	1,492	------
MAX	1,761	1,973	2,045	1,717	1,667	2,029	1,715	1,638	2,044	1,662	1,543	1,634
MIN	1,638	1,652	1,743	1,516	1,412	1,417	1,462	1,529	1,608	1,541	1,438	1,484
(†)	746.17	750.09	746.50	744.98	741.54	746.25	741.66	744.26	744.87	742.13	740.94	741.11
(‡)	+120	+195	-179	-72	-154	+214	-209	+116	+28	-123	-51	+7

CAL YR 1973 .....‡ +191
WTR YR 1974 .....‡ -108

† Gage height, in feet, at end of month.
‡ Change in contents, in thousands of acre-ft.

07190500 NEOSHO RIVER NEAR LANGLEY, OKLA.
(Below Spring River, known locally as Grand River)

LOCATION.--Lat 36°26'15", long 95°02'44", in SE 1/4 sec.27, T.23 N., R.21 E., Mayes County, on hillside of left bank, 0.5 mi (0.80 km) upstream from bridge on State Highway 82, 1.5 mi (2.4 km) south of Langley, 3.6 mi (5.8 km) downstream from Pensacola Dam, 6.3 mi (10.1 km) upstream from Big Cabin Creek, and at mile 73.4 (118.1 km).

DRAINAGE AREA.--10,335 mi^2 (26,768 km^2).

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

GAGE.--Water-stage recorder. Datum of gage is 607.65 ft (185.212 m) above mean sea level (Corps of Engineers bench mark). Prior to Feb. 16, 1940, nonrecording gage at site 0.1 mile (0.2 km) upstream at same datum. Feb. 10, 1954, to Sept. 30, 1963, water-stage recorder at site 0.5 mi (0.8 km) downstream at same datum. Auxiliary water-stage recorders at sites 2.0 and 3.0 mi (3.2 and 4.8 km) upstream at same datum.

AVERAGE DISCHARGE.--35 years, 6,996 ft^3/s (198.1 m^3/s), 5,069,000 acre-ft/yr (6.25 km^3/yr).

EXTREMES.--Current year: Maximum discharge, 91,700 ft^3/s (2,600 m^3/s) Mar. 14; maximum gage height, 29.10 ft (8.870 m); minimum daily discharge, 15 ft^3/s (0.42 m^3/s) at times.
Period of record: Maximum discharge, 300,000 ft^3/s (8,500 m^3/s) May 20, 1943, gage height, 45.5 ft (13.87 m), from floodmarks, from computation of outflow from Lake O' The Cherokees; minimum daily, 9 ft^3/s (0.25 m^3/s), Mar. 25, 1940 (caused by closure of Pensacola Dam).

REMARKS.--Records good. Low flow values of 15 ft^3/s (0.42 m^3/s) consist of estimated base flow (since July 1964). Flow regulated since 1940 by Lake O' The Cherokees (see sta. 07190000).

REVISIONS.--WSP 1117: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12,300	20,300	20,000	21,200	12,600	12,400	19,000	10,700	12,700	6,180	171	7,330
2	13,100	18,200	20,000	15,300	12,600	12,400	15,000	12,300	12,600	5,640	1,660	11,400
3	13,100	16,800	18,000	13,500	12,600	12,400	13,000	12,400	12,600	6,180	15	11,700
4	13,100	16,700	24,600	12,500	12,600	12,400	12,500	12,500	6,720	3,720	15	11,200
5	14,000	16,600	42,500	12,600	12,500	11,200	12,400	12,500	6,420	7,570	562	12,300
6	15,000	16,400	43,500	12,600	12,500	10,400	12,500	7,240	7,590	7,440	2,630	12,600
7	15,000	16,400	44,000	12,500	12,400	10,400	12,500	1,830	35,000	6,000	6,650	12,600
8	15,000	16,400	31,300	12,500	12,400	10,400	12,500	5,490	68,000	5,000	6,010	12,600
9	15,000	16,300	23,200	12,400	12,400	10,400	12,500	2,690	80,000	3,790	5,830	12,500
10	15,000	16,200	20,000	12,400	12,500	11,400	12,400	15	72,000	3,240	3,760	12,500
11	15,100	16,000	17,500	12,400	12,500	25,000	12,400	15	45,000	2,710	1,670	12,500
12	17,500	15,000	17,500	12,400	12,400	61,700	12,500	15	34,000	3,850	3,380	12,500
13	22,800	14,400	17,400	12,300	12,400	86,400	12,600	268	30,000	3,320	2,090	12,500
14	23,300	13,600	17,400	12,400	12,400	81,100	12,500	5,230	28,000	3,620	4,630	12,500
15	24,400	13,000	17,000	12,400	12,300	60,800	12,400	10,200	26,000	1,810	5,570	12,100
16	24,700	12,600	16,800	12,400	12,300	59,200	11,300	10,600	24,000	3,030	6,180	12,400
17	24,800	12,600	19,000	12,300	12,400	39,400	9,700	10,600	23,000	5,430	4,960	576
18	24,500	12,600	20,400	12,400	12,400	22,600	10,100	10,700	23,000	5,110	3,540	186
19	20,200	12,500	22,400	12,400	12,400	21,700	9,000	10,600	22,000	7,210	4,530	2,500
20	16,700	12,600	20,900	12,500	12,400	21,300	2,550	10,700	21,000	4,960	4,610	1,850
21	15,400	15,400	24,100	12,500	12,400	19,600	25	10,500	20,000	1,810	4,360	5,580
22	15,100	20,000	26,000	12,500	12,400	17,400	8,480	6,450	19,000	5,060	3,860	4,780
23	15,200	20,800	24,500	12,400	12,500	17,700	5,960	5,970	18,000	1,880	6,310	4,110
24	13,600	22,500	29,500	12,400	12,500	17,700	6,230	5,660	14,000	914	4,610	1,560
25	13,100	36,700	34,100	12,500	12,500	17,800	6,120	10,700	12,100	123	3,600	2,620
26	13,100	55,200	36,100	12,500	12,500	17,800	7,510	11,400	12,000	553	2,400	3,180
27	22,400	51,500	35,400	12,500	12,400	17,700	9,530	12,600	11,800	179	36	5,290
28	31,100	34,700	28,100	12,500	12,400	17,800	10,800	12,700	8,660	15	15	1,110
29	30,500	24,000	24,500	12,600	------	19,200	9,570	12,600	6,570	15	15	131
30	25,700	21,000	22,800	12,600	------	20,000	7,290	12,600	5,350	68	3,370	5,010
31	20,600	------	22,600	12,600	------	19,600	------	8,160	------	1,390	3,910	------
TOTAL	570,400	607,000	781,100	399,000	348,600	795,300	310,865	255,933	717,110	107,817	100,949	229,713
MEAN	18,400	20,230	25,200	12,870	12,450	25,650	10,360	8,256	23,900	3,478	3,256	7,657
MAX	31,100	55,200	44,000	21,200	12,600	86,400	19,000	12,700	80,000	7,570	6,650	12,600
MIN	12,300	12,500	16,800	12,300	12,300	10,400	25	15	5,350	15	15	131
AC-FT	1,131M	1,204M	1,549M	791,400	691,400	1,577M	616,600	507,600	1,422M	213,900	200,200	455,600

CAL YR 1973 TOTAL 6,551,039 MEAN 17,950 MAX 64,600 MIN 15 AC-FT 12,990,000
WTR YR 1974 TOTAL 5,223,787 MEAN 14,310 MAX 86,400 MIN 15 AC-FT 10,360,000

07191000 BIG CABIN CREEK NEAR BIG CABIN, OKLA.

LOCATION.--Lat 36°34'06", long 95°09'07", in NE 1/4 NE 1/4 sec.15, T.24 N., R.20 E., Craig County, on downstream side of right bank end of county road bridge, 4.9 mi (7.9 km) northeast of Big Cabin, 0.9 mi (1.5 km) downstream from White Oak Creek, 6.8 mi (10.9 km) upstream from Mustang Creek and at mile 13.0 (20.9 km).

DRAINAGE AREA.--450 mi^2 (1,165 km^2).

PERIOD OF RECORD.--October 1947 to current year.

GAGE.--Water-stage recorder. Datum of gage is 622.00 ft (189.586 m) above mean sea level (levels by Corps of Engineers). Prior to Sept. 30, 1972, water-stage recorder at site 4.5 mi (7.2 km) downstream at same datum and present site used as auziliary gage.

AVERAGE DISCHARGE.--27 years, 322 ft^3/s (9.119 m^3/s) 9.38 in/yr (238 mm/yr), 233,300 acre-ft/yr (288 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 25,400 ft^3/s (719 m^3/s) Mar. 11, gage height, 40.42 ft 12.320 m); minimum, 1.2 ft^3/s (0.034 m^3/s) July 30 to Aug. 5.
Period of record: Maximum discharge, 52,000 ft^3/s (1,470 m^3/s) Oct. 3, 1959, gage height, 34.55 ft (10.531 m), at former site; minimum, 0.10 ft^3/s (2.83 l/s) at times in 1954, 1956 and 1963.
Flood of May 18, 1943, reached a stage of 34.96 ft (10.656 m) at former site, discharge, 63,000 ft^3/s (1,780 m^3/s), by slope-area measurement of peak flow.

REMARKS.--Records good. Low flow sustained by sewage from City of Vinita.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	217	140	259	164	184	139	110	142	2,280	12	1.2	1,580
2	149	85	203	122	151	132	98	114	288	11	1.2	4,880
3	107	58	378	102	126	126	85	81	145	8.7	1.2	2,970
4	325	37	8,320	92	109	115	76	59	89	8.1	1.2	330
5	155	34	7,440	88	100	101	68	47	190	7.1	1.3	147
6	170	30	713	89	92	91	59	39	2,480	6.2	1.7	80
7	267	23	382	86	82	84	54	34	18,500	5.6	2.1	41
8	186	22	291	82	71	74	54	30	13,400	4.8	2.0	26
9	113	20	249	80	67	72	59	2,000	12,300	4.5	3.2	18
10	70	19	211	78	66	7,110	59	1,410	2,770	4.2	4.0	12
11	323	20	179	65	66	22,300	66	174	413	4.1	2.6	8.1
12	1,110	22	161	52	66	8,120	170	99	370	3.8	1.9	7.4
13	4,620	23	149	52	63	573	144	62	234	3.5	1.6	13
14	1,220	25	132	56	62	499	94	228	166	3.3	1.4	19
15	374	27	118	70	164	2,270	65	234	128	3.0	1.3	16
16	232	29	104	96	589	3,930	53	93	100	2.9	42	15
17	173	28	94	148	234	630	48	79	78	2.8	15	16
18	131	26	88	182	428	412	47	56	64	2.6	21	16
19	102	30	6,200	259	6,650	318	46	43	54	2.4	35	27
20	86	4,180	3,400	394	1,470	248	45	35	45	2.2	26	2,760
21	71	4,150	734	272	1,710	323	173	30	38	1.9	10	774
22	56	465	776	194	1,950	504	158	36	32	1.7	7.5	213
23	46	255	1,590	190	572	369	96	43	30	1.5	395	113
24	29	1,420	6,860	203	321	253	60	801	29	1.5	315	66
25	22	13,200	2,100	152	215	209	47	1,810	21	1.3	104	96
26	18	10,700	538	161	186	197	38	2,680	19	1.6	50	147
27	301	1,800	401	638	173	186	35	635	17	1.8	24	107
28	328	1,140	342	798	154	173	31	209	15	1.6	11	74
29	176	570	277	765	------	163	30	111	14	1.4	8.5	50
30	100	348	233	355	------	144	72	64	13	1.3	7.9	41
31	192	------	225	238	------	127	------	2,540	------	1.2	7.7	------
TOTAL	11,469	38,926	43,147	6,323	16,121	49,992	2,240	14,018	54,322	119.6	1,107.5	14,662.5
MEAN	370	1,298	1,392	204	576	1,613	74.7	452	1,811	3.86	35.7	489
MAX	4,620	13,200	8,320	798	6,650	22,300	173	2,680	18,500	12	395	4,880
MIN	18	19	88	52	62	72	30	30	13	1.2	1.2	7.4
CFSM	.81	2.84	3.05	.45	1.26	3.53	.16	.99	3.96	.008	.08	1.07
IN.	.93	3.17	3.51	.51	1.31	4.07	.18	1.14	4.42	.009	.09	1.19
AC-FT	22,750	77,210	85,580	12,540	31,980	99,160	4,440	27,800	107,700	237	2,200	29,080

CAL YR 1973 TOTAL 345,622.4 MEAN 947 MAX 16,200 MIN 2.1 CFSM 2.07 IN 28.13 AC-FT 685,500
WTR YR 1974 TOTAL 252,447.6 MEAN 692 MAX 22,300 MIN 1.2 CFSM 1.51 IN 20.55 AC-FT 500,700

PEAK DISCHARGE (BASE, 9,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
11-25	2100	36.20	15,600	3-11	abt1600	40.42	25,400
12-4	2345	32.69	10,800	6-7	1945	39.85	23,800
12-19	1800	31.93	9,850				

07191220 SPAVINAW CREEK NEAR SYCAMORE, OKLA.

LOCATION.--Lat 36°19'57", long 94°58'24", in NE 1/4 SW 1/4 sec.4, T.21 N., R.25 E., Delaware County, on right bank 1.8 mi (2.9 km) upstream from Cherokee Creek, 4.8 mi (7.7 km) northeast of Row, 6.5 mi (10.5 km) southeast of Sycamore, and at mile 35.0 (56.3 km).

DRAINAGE AREA.--133 mi^2 (344 km^2).

PERIOD OF RECORD.--October 1961 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 875 ft (266.7 m), from topographic map.

AVERAGE DISCHARGE.--13 years, 107 ft^3/s (3.030 m^3/s), 10.92 in/yr (277 mm/yr), 77,520 acre-ft/yr (95.6 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 19,100 ft^3/s (541 m^3/s) June 8, gage height, 17.54 ft (5.346 m); minimum, 30 ft^3/s (0.85 m^3/s) Aug. 7, 8.
Period of record: Maximum discharge, 19,100 ft^3/s (541 m^3/s), June 8, 1974, gage height, 17.54 ft (5.346 m); minimum, 1.2 ft^3/s (34.0 l/s) Aug. 9, 1964.
Flood of May 19, 1961, reached a stage of 15.61 ft (4.758 m), from floodmark, discharge 15,000 ft^3/s (425 m^3/s), from rating curve extended above 4,000 ft^3/s (113 m^3/s) at former station 1 mi (1.6 km) upstream.

REMARKS.--Records good.

REVISIONS (WATER YEARS).--WSP 2121: 1965(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	195	269	296	215	159	161	155	121	319	92	35	441
2	162	239	252	197	151	149	147	143	266	88	34	1,240
3	137	201	309	183	142	139	140	141	217	84	33	381
4	119	167	2,520	171	131	129	131	133	181	82	32	281
5	107	140	1,250	161	122	119	122	121	156	79	31	214
6	98	122	743	154	115	111	114	109	199	76	31	172
7	90	111	536	148	109	105	110	99	4,600	72	30	141
8	83	105	441	142	103	100	107	90	5,910	67	30	123
9	78	99	378	138	99	95	102	101	8,700	64	32	108
10	73	93	326	137	95	233	99	152	1,280	62	33	94
11	71	88	286	133	92	1,610	101	157	773	60	37	85
12	87	83	259	126	89	841	106	139	539	58	44	78
13	259	80	240	121	88	545	105	120	423	56	48	74
14	346	77	222	119	86	431	101	124	350	54	48	71
15	287	75	207	118	91	395	96	157	292	53	51	69
16	230	73	193	117	105	460	94	162	252	52	48	65
17	178	71	181	116	115	413	91	151	222	50	47	59
18	146	69	170	115	120	360	90	135	199	50	47	54
19	127	68	235	114	132	317	88	116	182	49	46	53
20	114	82	320	111	147	282	85	100	166	48	47	54
21	105	314	321	108	187	266	83	89	154	46	46	57
22	96	298	294	105	292	251	85	84	143	45	46	61
23	88	249	282	102	317	248	90	78	132	44	45	62
24	83	8,920	612	99	283	241	120	75	123	42	46	63
25	79	4,700	617	96	245	227	110	77	116	41	46	63
26	75	1,370	492	97	215	215	97	114	110	39	44	62
27	104	919	411	102	194	203	90	137	106	39	42	61
28	127	608	349	114	177	194	86	128	102	38	39	60
29	148	450	300	141	------	184	83	114	98	37	39	60
30	137	358	264	162	------	174	92	101	96	36	40	60
31	142	------	238	165	------	164	------	207	------	36	41	------
TOTAL	4,171	20,498	13,544	4,127	4,201	9,362	3,120	3,775	26,406	1,739	1,258	4,466
MEAN	135	683	437	133	150	302	104	122	880	56.1	40.6	149
MAX	346	8,920	2,520	215	317	1,610	155	207	8,700	92	51	1,240
MIN	71	68	170	96	86	95	83	75	96	36	30	53
CFSM	1.02	5.14	3.29	1.00	1.13	2.27	.78	.92	6.62	.42	.31	1.12
IN.	1.17	5.73	3.79	1.15	1.18	2.62	.87	1.06	7.39	.49	.35	1.25
AC-FT	8,270	40,660	26,860	8,190	8,330	18,570	6,190	7,490	52,380	3,450	2,500	8,860

CAL YR 1973 TOTAL 118,853 MEAN 326 MAX 8,920 MIN 39 CFSM 2.45 IN 33.24 AC-FT 235,700
WTR YR 1974 TOTAL 96,667 MEAN 265 MAX 8,920 MIN 30 CFSM 1.99 IN 27.04 AC-FT 191,700

PEAK DISCHARGE (BASE, 2,500 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE
11-24	1130	17.36	18,400
12-4	0530	10.38	3,470
6-8	2115	17.54	19,100

07191400 LAKE HUDSON NEAR LOCUST GROVE, OKLA.

LOCATION.--Lat 36°13'54", long 95°11'36", in SE 1/4 NW 1/4 sec.9, T.20 N., R.20 E., Mayes County, at left side of Robert S. Kerr dam, 2.0 mi (3.2 km) northwest of Locust Grove, 3.5 mi (5.6 km) downstream from Salina Creek, and at mile 47.3 (76.1 km).

DRAINAGE AREA.--11,534 mi^2 (29,873 km^2).

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

GAGE.--Remote-controlled indicator and nonrecording gage. Datum of gage is at mean sea level (levels by Grand River Dam Authority).

EXTREMES.--Current year: Maximum contents, 397,600 acre-ft (490 hm^3) June 11, elevation, 633.39 ft (193.057m); minimum, 189,300 acre-ft (233 hm^3) Oct. 12, elevation, 617.97 ft (188.357 m).
Period of record: Maximum contents, 425,700 acre-ft (529 hm^3), Apr. 26, 1973, elevation, 634.98 ft (198.542 m); minimum since power pool first filled, 183,100 acre-ft (226 hm^3) Dec. 24, 1967, elevation, 617.38 ft (188.177 m).

REMARKS.--Reservoir is formed by earth dam and gated concrete spillway. Storage began Nov. 12, 1963; power pool first filled June 12, 1964. Capacity, 444,500 acre-ft (548 hm^3) at elevation 636.0 ft (193.85 m), top of taintor gates, 200,300 acre-ft (247 hm^3) at elevation 619.0 ft (188.67 m) power pool, and 48,630 acre-ft (60.0 hm^3) at elevation 599.0 ft (182.58 m), top of spillway crest. Figures given herein represent total contents. Reservoir was designed for flood control and power development.

COOPERATION.--Records furnished by Grand River Dam Authority.

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	618.72	197,300	
Oct. 31	621.37	227,100	+29,800
Nov. 30	629.41	333,600	+106,500
Dec. 31	622.23	237,300	-96,300
CAL YR 1973	--	--	+33,900
Jan. 31	619.74	208,500	-28,800
Feb. 28	619.32	203,800	-4,700
Mar. 31	619.25	203,000	-800
Apr. 30	619.19	202,400	-600
May 31	619.11	201,500	-900
June 30	619.31	203,700	+2,200
July 31	619.83	209,500	+5,800
Aug. 31	619.75	208,600	-900
Sept. 30	619.71	208,100	-500
WTR YR 1974	--	--	+10,800

07191500 NEOSHO RIVER NEAR CHOUTEAU, OKLA.

LOCATION.--Lat 36°14'13", long 95°13'35", in SE 1/4 SE 1/4 sec.1, T.20 N., R.19 E., Mayes County, at county road bridge between Locust Grove and Pryor, 2.5 mi (4.0 km) downstream from Lake Hudson, 5.0 mi (8.0 km) upstream from Pryor Creek, and 7.5 mi (12.1 km) northeast of Chouteau, and at mile 44.7 (71.9 km).

DRAINAGE AREA.--11,546 mi^2 (29,904 km^2).

PERIOD OF RECORD.--October 1937 to September 1950, October 1963 to current year.

GAGE.--Water-stage recorder. Datum of gage is 551.83 ft (168.198 m) above mean sea level (levels by Corps of Engineers). Prior to Apr. 3, 1941, nonrecording gage at bridge on State Highway 33, 5.7 mi (9.2 km) downstream, at datum 15.46 ft (9.112 m) lower. Auxiliary water-stage recorder since Oct. 4, 1963, at former site and supplemental water-stage recorder since Apr. 6, 1964 at Kerr Dam 2.5 mi (4.0 km) upstream.

AVERAGE DISCHARGE.--24 years, 8,513 ft^3/s (241 m^3/s), 6,168,000 acre-ft/yr (7.61 km^3/yr).

EXTREMES.--Current year: Maximum discharge, 92,800 ft^3/s (2,630 m^3/s) June 10; maximum gage height, 28.80 ft (8.778 m) June 10; minimum daily discharge, 30 ft^3/s (0.85 m^3/s) at times.
Period of record: Maximum discharge, 400,000 ft^3/s (11,328 m^3/s) May 20, 1943, gage height, 45.00 ft (13.716 m), from rating curve extended above 140,000 ft^3/s (3,965 m^3/s) on basis of slope-area measurement of peak flow; minimum daily, 12 ft^3/s (.32 m^3/s) Nov. 13, 1963 (caused by closure of Kerr Dam).

REMARKS.--Records fair. Flow regulated since 1940 by Lake O' The Cherokees (see sta. 07190000), and completely regulated since 1963 by Lake Hudson (see sta. 07191400).

REVISIONS.--WSP 1117: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13,900	26,000	28,500	31,300	13,200	12,300	23,300	12,200	17,600	5,090	100	16,500
2	17,600	26,000	28,000	27,200	15,900	12,800	19,300	14,600	15,900	5,640	3,100	16,800
3	16,300	13,100	27,000	14,900	11,100	11,100	14,000	17,000	9,600	5,530	100	14,600
4	11,500	19,400	34,000	11,900	16,100	14,800	14,300	14,300	9,210	150	30	12,900
5	18,500	13,900	44,500	10,900	11,800	13,200	16,200	6,960	11,000	8,570	30	14,600
6	14,900	17,500	51,000	11,800	16,000	10,700	9,550	10,400	11,200	7,430	30	13,600
7	17,500	15,600	50,500	17,600	16,100	14,500	13,500	1,660	43,700	4,890	10,200	16,000
8	17,600	16,400	41,500	13,300	9,920	6,900	15,600	8,270	68,500	5,880	5,680	10,800
9	14,800	16,700	35,000	17,100	12,900	8,520	15,000	3,540	91,600	3,800	4,050	12,700
10	16,200	14,500	34,000	9,430	5,040	15,500	15,400	382	84,500	2,560	5,910	13,600
11	15,900	15,500	27,000	14,600	13,800	32,900	8,630	121	53,000	2,830	2,340	14,100
12	19,000	17,400	21,500	18,500	15,900	61,000	8,960	3,430	47,300	5,870	4,140	12,100
13	20,000	16,800	26,000	5,070	10,700	85,000	17,300	1,420	45,700	160	1,980	12,700
14	21,000	16,200	24,000	12,700	15,900	72,000	14,200	8,330	43,400	30	3,880	13,400
15	22,000	10,800	27,100	10,900	15,300	56,100	11,600	14,700	41,200	1,200	6,780	13,300
16	23,500	10,300	25,600	12,800	9,950	62,600	15,500	11,900	39,800	6,980	7,590	12,200
17	25,000	12,400	28,400	12,800	7,540	50,200	6,930	8,080	35,100	8,750	6,440	100
18	25,300	10,200	30,100	18,300	15,800	33,700	17,100	13,200	31,000	3,570	4,160	30
19	28,500	14,200	25,800	12,700	18,100	38,800	9,480	7,460	30,000	6,460	5,660	2,160
20	23,900	14,800	33,000	9,390	20,100	39,000	1,680	16,300	30,100	5,450	3,380	6,040
21	10,200	19,700	32,500	14,600	17,000	36,800	142	10,400	30,700	380	3,940	11,100
22	17,400	20,300	32,500	15,300	15,700	29,200	7,080	6,100	31,300	4,690	7,690	3,010
23	14,400	20,300	32,500	13,500	14,500	28,300	5,980	5,600	29,000	1,640	3,710	5,180
24	12,600	24,900	32,200	12,000	12,400	26,400	7,820	1,800	18,300	1,580	5,700	3,970
25	12,500	40,000	33,100	13,000	15,800	24,100	9,410	16,000	13,600	150	2,720	3,260
26	14,400	60,000	34,900	11,400	13,400	23,800	8,060	13,500	12,500	313	2,970	4,810
27	18,400	68,000	34,100	12,900	11,900	25,400	8,790	15,500	11,000	140	893	4,970
28	25,800	55,000	34,000	12,300	14,300	24,900	11,700	16,200	6,340	30	100	1,450
29	25,300	40,000	30,700	14,500	------	26,300	10,900	11,000	7,980	30	30	100
30	25,400	29,500	30,300	13,900	------	27,100	6,790	11,800	7,600	30	4,150	1,700
31	25,300	------	30,800	10,300	------	25,300	------	11,200	------	1,370	2,280	------
TOTAL	584,600	695,400	1,000.1M	436,890	386,150	949,220	344,202	293,353	927,730	101,193	109,763	267,780
MEAN	18,860	23,180	32,260	14,090	13,790	30,620	11,470	9,463	30,920	3,264	3,541	8,926
MAX	28,500	68,000	51,000	31,300	20,100	85,000	23,300	17,000	91,600	8,750	10,200	16,800
MIN	10,200	10,200	21,500	5,070	5,040	6,900	142	121	6,340	30	30	30
AC-FT	1,160M	1,379M	1,984M	866,600	765,900	1,883M	682,700	581,900	1,840M	200,700	217,700	531,100

CAL YR 1973 TOTAL 7,945,490 MEAN 21,770 MAX 72,600 MIN 154 AC-FT 15,760,000
WTR YR 1974 TOTAL 6,096,381 MEAN 16,700 MAX 91,600 MIN 30 AC-FT 12,090,000

07193000 FORT GIBSON LAKE NEAR FORT GIBSON, OKLA.

LOCATION.--Lat 35°52'16", long 95°13'43", in NW 1/4 NW 1/4 sec.18, T.16 N., R.20 E., Cherokee County, in control tower near left end of Fort Gibson Dam on Neosho River, 4.0 mi (6.4 km) north of Fort Gibson, and at mile 7.7 (12.4 km).

DRAINAGE AREA.--12,492 km² (32,354 km²).

PERIOD OF RECORD.--October 1949 to current year. Prior to October 1970 published as Fort Gibson Reservoir near Fort Gibson.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level. Prior to Jan. 13, 1950, nonrecording gage at same site and datum.

EXTREMES.--Current year: Maximum contents, 1,075,000 acre-ft (1.33 km³) June 11, elevation, 577.60 ft (176.052 m); minimum, 325,300 acre-ft (401 hm³) Aug. 1, elevation, 551.82 ft (168.195 m).
Period of record: Maximum contents, 1,278,000 acre-ft (1,576 hm³) May 12, 1961, elevation, 581.88 ft (177.357 m); minimum since first use of power pool, 303,800 acre-ft (375 hm³) May 26, 1955, elevation, 550.56 ft (167.811 m).

REMARKS.--Reservoir is formed by concrete-gravity and earth-fill dam. Regulated storage began Sept. 5, 1949; power pool was first maintained in 1953. Capacity, 1,284,000 acre-ft (1,583 hm³) at elevation 582.0 ft (177.39 m), flood-control pool, 365,200 acre-ft (450 hm³) at elevation 554.0 ft (168.86 m), maximum power pool, and 311,300 acre-ft (384 hm³) at elevation 551.0 ft (167.94 m) (minimum power pool). Figures given herein represent total contents. Reservoir was designed for flood control and power development.

COOPERATION.--Records furnished by Corps of Engineers.

REVISIONS (WATER YEARS).--WSP 1731: 1950(M).

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

551	331.3	566	650.9
555	384.5	572	847.9
560	492.6	578	1,093

CONTENTS, IN THOUSANDS OF ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	506.3	421.8	876.8	410.3	381.7	384.3	407.1	369.4	403.5	382.5	325.3	374.1
2	516.8	416.0	838.9	386.9	383.5	380.9	400.7	374.3	406.5	376.2	331.6	402.1
3	518.1	388.7	836.7	373.2	379.7	377.7	391.7	387.1	392.5	380.9	330.7	403.1
4	508.0	398.1	895.8	372.4	385.9	382.5	386.5	393.9	384.7	376.0	330.7	390.9
5	515.9	390.5	947.7	371.5	401.9	388.9	391.1	384.1	384.3	382.1	328.0	403.9
6	512.5	392.9	974.6	370.5	390.3	387.9	379.9	382.9	398.7	389.1	325.4	387.3
7	483.2	395.1	994.9	386.3	395.5	394.9	383.1	361.4	494.3	386.1	339.1	390.5
8	461.4	396.9	996.2	393.1	389.5	386.9	384.3	356.6	669.4	380.5	341.6	386.7
9	460.7	398.1	983.2	402.1	390.1	382.9	386.3	356.3	889.0	381.1	342.0	385.9
10	465.3	397.5	965.1	390.7	392.7	394.5	389.3	351.7	1,045	374.7	350.5	390.1
11	476.7	394.9	935.7	391.9	374.3	417.4	383.5	352.8	1,066	369.0	354.9	389.9
12	467.6	400.5	884.8	401.1	380.1	461.4	375.6	358.9	1,010	369.6	353.4	389.7
13	468.2	402.9	839.6	382.9	376.6	604.7	378.7	347.8	955.7	361.4	348.3	389.9
14	460.7	403.7	792.5	381.3	379.7	740.1	381.9	366.7	912.1	361.8	348.3	394.1
15	464.3	396.7	749.4	374.9	391.9	806.2	383.3	383.7	859.7	354.2	352.3	395.7
16	473.3	388.5	701.0	376.6	391.7	847.5	386.9	388.1	790.1	358.4	355.5	399.1
17	484.8	391.5	659.2	376.6	376.4	851.2	376.2	383.3	734.6	367.3	360.4	379.3
18	490.2	387.9	619.6	394.9	386.5	812.1	384.5	386.3	684.2	359.7	360.6	358.7
19	500.3	393.3	618.7	400.3	399.1	792.8	383.3	378.9	636.7	360.6	363.3	363.7
20	508.0	413.8	622.9	396.3	410.7	787.0	362.5	384.5	593.2	360.8	358.7	386.3
21	487.8	419.3	603.1	398.7	409.9	768.0	351.9	382.9	545.7	359.9	353.6	391.5
22	476.3	413.2	577.0	399.3	406.5	748.1	346.3	374.7	496.4	357.2	359.5	376.6
23	466.0	406.7	562.8	395.1	400.1	722.5	345.1	365.2	464.3	355.7	354.9	364.8
24	459.1	514.4	608.7	389.1	382.3	679.9	345.8	347.4	431.7	351.9	355.9	359.5
25	459.5	608.1	640.2	384.5	383.3	633.8	353.6	365.4	407.8	349.6	357.0	357.6
26	461.1	720.5	638.1	378.1	384.7	588.9	357.2	380.1	408.6	342.9	355.7	355.3
27	473.5	832.8	611.5	377.0	382.1	546.2	366.3	402.7	402.5	339.3	354.0	361.8
28	474.0	884.1	581.3	376.4	383.3	506.8	373.0	410.5	392.1	337.9	351.2	357.6
29	463.0	884.1	540.1	381.7	------	468.7	373.9	403.1	386.1	331.7	346.7	359.5
30	447.0	873.1	497.6	384.3	------	429.2	370.1	399.3	388.5	329.4	350.1	350.8
31	431.1	------	450.1	379.3	------	412.2	------	395.9	------	330.3	347.2	------
MAX	518.1	884.1	996.2	410.3	410.7	851.2	407.1	410.5	1,066	389.1	363.3	403.9
MIN	431.1	387.9	450.1	370.5	374.3	377.7	345.1	347.4	384.3	329.4	325.3	350.8
(†)	557.27	572.68	558.14	554.74	554.94	556.37	554.26	555.57	555.20	552.10	553.04	553.24
(‡)	-69.2	+442.0	-423.0	-70.8	+4.0	+28.9	-42.1	+25.8	-7.4	-58.2	+16.9	+3.6

CAL YR 1973 .....‡ +61.4
WTR YR 1974 .....‡ -149.5

† Elevation, in feet, at end of month.
‡ Change in contents, in thousands of acre-ft.

07193500 NEOSHO RIVER BELOW FORT GIBSON LAKE, NEAR FORT GIBSON, OKLA.

LOCATION.--Lat 35°51'15", long 95°13'45", in SE 1/4 NW 1/4 sec.19, T.16 N., R.20 E., Cherokee County, on left bank 1.1 mi (1.8 km) downstream from Fort Gibson Dam, 4.5 mi (7.2 km) north of Fort Gibson, and at mile 6.6 (10.6 km).

DRAINAGE AREA.--12,495 mi^2 (32,362 km^2).

PERIOD OF RECORD.--May 1950 to current year. Prior to October 1970 published as Neosho River below Fort Gibson Reservoir, near Fort Gibson.

GAGE.--Water-stage recorder. Datum of gage is 483.75 ft (147.447 m) above mean sea level. May 11, 1950, to Aug. 20, 1951, nonrecording gage and Aug. 21, 1951, to June 11, 1952, water-stage recorder, at site 4.4 mi (7.1 km) downstream at datum 8.00 ft (2.438 m) lower and used as auxiliary gage since June 10, 1971.

AVERAGE DISCHARGE.--20 years (1950-1970), 6,675 ft^3/s (189.0 m^3/s), 4,836,000 acre-ft/yr (5.96 km^3/yr).

EXTREMES.--Current year: Maximum discharge, 76,100 ft^3/s (2,160 m^3/s) June 12, gage height, 21.07 ft (6.422 m); minimum daily, 15 ft^3/s (0.42 m^3/s) at times.
Period of record: Maximum discharge, 223,000 ft^3/s (6,320 m^3/s) May 26, 1957, gage height, 37.60 ft (11.460 m); minimum, 12 ft^3/s (0.34 m^3/s), Oct. 10, 1957, Aug. 23, 1964.
Flood in May 1943 reached a stage of 43.0 ft (13.11 m), from high-water profile by Corps of Engineers.

REMARKS.--Records good. Flow completely regulated by Fort Gibson Lake. (See sta. 07193000). Records of chemical analyses for the current year are published in Part 2 of this report.

COOPERATION.--Gage-height record and 27 discharge measurements furnished by Corps of Engineers, records computed by Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10,800	31,500	36,000	52,100	13,700	14,200	24,400	11,800	15,700	6,750	2,600	6,250
2	10,800	31,200	36,000	41,800	13,600	14,200	21,300	11,800	15,800	8,500	84	11,700
3	15,700	28,300	33,000	23,100	13,600	14,200	20,000	11,500	15,700	6,850	15	17,200
4	16,600	18,300	10,000	12,700	13,700	13,100	14,000	11,500	13,400	3,500	15	22,200
5	13,500	18,200	22,000	11,600	13,700	11,400	13,500	11,500	11,400	5,250	1,270	17,100
6	16,800	16,500	37,500	11,700	13,700	11,600	12,900	11,500	11,400	5,400	1,480	13,300
7	32,400	15,600	40,500	11,400	13,600	11,500	14,300	11,800	13,000	5,200	2,040	13,400
8	28,500	15,600	42,000	11,500	13,700	11,400	13,500	10,000	29,200	8,600	4,210	13,500
9	15,200	15,600	42,000	12,700	13,800	11,500	12,100	5,000	2,580	4,300	4,240	13,500
10	13,200	15,600	41,000	14,500	13,800	11,600	13,300	4,930	8,370	6,000	1,820	13,400
11	15,700	15,700	43,000	14,500	13,900	30,000	14,300	18	46,000	5,600	40	13,500
12	22,400	15,700	46,000	14,600	13,800	35,000	14,400	15	71,300	5,800	4,050	13,500
13	24,600	15,800	44,500	14,600	13,700	11,000	13,300	5,510	69,700	3,900	4,600	13,000
14	29,500	15,800	46,200	14,500	13,900	11,000	13,200	4,540	62,000	15	3,800	12,000
15	25,300	15,700	47,000	14,500	12,800	21,000	12,600	6,880	64,000	5,200	3,990	11,900
16	23,000	14,400	47,000	12,900	13,300	46,000	11,300	11,600	69,000	2,960	5,610	11,900
17	23,200	12,400	47,000	11,500	15,700	52,500	11,300	11,500	64,000	4,700	4,290	12,000
18	23,300	12,300	48,500	11,500	14,400	50,000	11,400	11,600	55,000	6,900	3,830	11,600
19	23,500	12,100	35,500	11,400	14,100	43,000	11,500	11,400	53,000	4,920	4,560	4,410
20	23,300	14,600	33,000	11,500	18,600	40,500	11,300	11,500	50,400	4,000	5,890	6,470
21	23,000	21,800	45,000	14,000	21,500	41,000	7,150	11,500	51,100	2,050	5,370	11,700
22	22,400	27,400	47,500	15,900	21,500	40,500	7,560	11,500	55,100	4,150	6,340	11,600
23	22,000	26,100	45,000	15,900	21,400	43,000	6,410	11,600	47,800	3,100	5,270	11,800
24	18,200	16,100	20,000	15,900	21,100	48,000	7,000	11,200	36,200	2,600	4,800	8,300
25	14,600	11,900	22,500	15,900	17,100	47,000	4,800	11,500	25,400	1,800	2,200	5,880
26	13,600	11,000	37,000	15,900	14,300	44,700	6,200	11,500	15,300	3,490	3,660	5,120
27	17,500	14,900	46,000	14,400	14,200	43,500	4,000	11,500	13,300	2,050	2,480	4,360
28	28,400	32,000	50,300	13,700	14,300	40,700	7,000	14,000	11,700	950	2,280	4,030
29	32,200	37,300	52,300	13,600	------	47,200	12,000	15,700	10,900	3,000	2,250	15
30	35,000	37,200	54,400	13,600	------	48,700	12,000	15,800	6,600	1,080	2,220	6,190
31	35,400	------	55,400	13,700	------	32,400	------	15,700	------	457	3,270	------
TOTAL	669,600	586,600	1,253,1M	497,100	426,500	941,400	358,020	317,393	1,014,4M	129,072	98,574	320,825
MEAN	21,600	19,550	40,420	16,040	15,230	30,370	11,930	10,240	33,810	4,164	3,180	10,690
MAX	35,400	37,300	55,400	52,100	21,500	52,500	24,400	15,800	71,300	8,600	6,340	22,200
MIN	10,800	11,000	10,000	11,400	12,800	11,000	4,000	15	2,580	15	15	15
AC-FT	1,328M	1,164M	2,486M	986,000	846,000	1,867M	710,100	629,500	2,012M	256,000	195,500	636,400

CAL YR 1973 TOTAL 8,631,963 MEAN 23,650 MAX 71,800 MIN 15 AC-FT 17,120,000
WTR YR 1974 TOTAL 6,612,534 MEAN 18,120 MAX 71,300 MIN 15 AC-FT 13,120,000

07195500 ILLINOIS RIVER NEAR WATTS, OKLA.

LOCATION.--Lat 36°07'48", long 94°34'12", in NE 1/4 sec.18, T.19 N., R.26 E., Adair County, near right bank on downstream side of pier of bridge on U.S. Highway 59, 1.5 mi (2.4 km) north of Watts, 4.5 mi (7.2 km) downstream from Cincinnati Creek, and at mile 106.2 (170.9 km).

DRAINAGE AREA.--635 mi^2 (1,645 km^2).

PERIOD OF RECORD.--August 1955 to current year.

GAGE.--Water-stage recorder. Datum of gage is 893.78 ft (272.424 m) above mean sea level.

AVERAGE DISCHARGE.--19 years, 600 ft^3/s (16.99 m^3/s), 12.84 in/yr (326 mm/yr), 434,700 acre-ft/yr (536 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 47,600 ft^3/s (1,350 m^3/s) Nov. 25, gage height, 23.96 ft (7.303 m); minimum daily, 46 ft^3/s (1.30 m^3/s) May 29.
Period of record: Maximum discharge, 68,000 ft^3/s (1,930 m^3/s) July 25, 1960, gage height, 25.96 ft (7.913 m), from rating curve extended above 51,000 ft^3/s (1,440 m^3/s); minimum, 8.6 ft^3/s (0.24 m^3/s) Oct. 26, 1955, Sept. 19, Oct. 14, 1956.

REMARKS.--Records good. Some regulations at low flow by Lake Francis Dam, 0.8 mile (1.29 km) above station. Since July 2, 1957, small diversion above station for municipal water supply for city of Siloam Springs, Ark.

COOPERATION.--Gage-height record and 19 discharge measurements furnished by Corps of Engineers; records computed by Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	611	533	1,690	881	566	620	629	2,580	2,880	435	197	755
2	501	473	1,370	794	538	590	621	2,440	1,210	422	194	3,920
3	433	429	1,420	748	545	552	579	2,220	809	411	200	3,630
4	386	388	13,100	720	515	523	676	1,440	707	391	201	1,450
5	306	357	7,220	680	498	499	601	1,130	1,120	390	199	849
6	315	334	3,240	658	460	487	565	955	2,120	374	206	686
7	322	317	2,250	635	457	467	520	836	15,000	363	213	580
8	311	305	1,810	614	443	450	601	729	18,200	351	215	498
9	284	291	1,540	611	431	435	563	664	24,700	337	285	420
10	264	281	1,280	607	423	441	537	693	8,030	338	322	410
11	282	269	1,190	591	410	3,690	517	631	3,190	327	305	390
12	402	260	1,100	563	400	3,350	648	598	3,220	313	245	403
13	2,520	247	1,010	534	393	1,820	795	588	2,250	305	220	417
14	2,170	257	938	525	386	1,390	629	540	1,670	300	214	439
15	1,050	241	855	528	398	1,240	564	1,490	1,380	219	234	398
16	786	238	791	528	773	2,130	533	1,110	1,180	207	264	382
17	646	246	702	520	842	1,630	515	800	1,030	387	243	368
18	557	226	696	506	646	1,350	507	668	929	450	279	352
19	494	228	921	499	830	1,190	507	598	854	268	273	360
20	442	894	2,050	489	989	1,140	522	565	789	63	257	3,770
21	393	3,320	1,340	476	781	1,460	6,260	550	732	93	234	3,940
22	352	1,500	1,160	455	1,640	1,450	6,020	512	672	120	244	1,730
23	320	1,160	1,110	452	1,320	1,250	2,720	465	632	183	247	1,110
24	310	16,100	3,200	440	1,020	1,130	1,670	461	496	215	226	892
25	286	33,600	2,800	426	852	1,000	1,210	461	465	218	209	717
26	279	13,600	1,890	438	754	891	995	461	520	229	198	982
27	329	7,820	1,530	499	695	851	854	414	513	239	204	779
28	453	3,780	1,290	584	643	803	744	249	501	222	209	663
29	411	2,820	1,140	681	------	751	665	46	482	206	219	602
30	358	2,090	1,030	635	------	715	1,400	89	458	203	227	528
31	404	------	965	592	------	677	------	2,110	------	199	211	------
TOTAL	16,977	92,604	62,628	17,909	18,648	34,972	34,167	27,093	96,739	8,778	7,194	32,420
MEAN	548	3,087	2,020	578	666	1,128	1,139	874	3,225	283	232	1,081
MAX	2,520	33,600	13,100	881	1,640	3,690	6,260	2,580	24,700	450	322	3,940
MIN	264	226	696	426	386	435	507	46	458	63	194	352
CFSM	.86	4.86	3.18	.91	1.05	1.78	1.79	1.38	5.08	.45	.37	1.70
IN.	.99	5.42	3.67	1.05	1.09	2.05	2.00	1.59	5.67	.51	.42	1.90
AC-FT	33,670	183,700	124,200	35,520	36,990	69,370	67,770	53,740	191,900	17,410	14,270	64,310

CAL YR 1973 TOTAL 558,817 MEAN 1,531 MAX 33,600 MIN 68 CFSM 2.41 IN 32.74 AC-FT 1,108,000
WTR YR 1974 TOTAL 450,129 MEAN 1,233 MAX 33,600 MIN 46 CFSM 1.94 IN 26.37 AC-FT 892,800

PEAK DISCHARGE (BASE, 6,500 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
11-25	0915	23.96	47,600	4-21	2000	17.28	16,100
12-4	1730	18.79	20,000	6-9	0345	21.99	32,200
3-11	2030	12.11	7,450	9-21	0115	12.18	7,540

07196000 FLINT CREEK NEAR KANSAS, OKLA.

LOCATION.--Lat 36°11'54", long 94°42'30", in SW 1/4 sec.24, T.20 N., R.24 E., Delaware County, near left bank on downstream side of pier of bridge on State Highway 33, 6.0 mi (9.7 km) southeast of Kansas, 6.0 mi (9.7 km) downstream from Sager Creek, and at mile 2.8 (4.5 km).

DRAINAGE AREA.--110 mi^2 (285 km^2).

PERIOD OF RECORD.--August 1955 to current year.

GAGE.--Water-stage recorder. Datum of gage is 854.59 ft (260.479 m) above mean sea level.

AVERAGE DISCHARGE.--19 years, 114 ft^3/s (3.228 m^3/s), 14.07 in/yr (357 mm/yr), 82,590 acre-ft/yr (102 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 43,600 ft^3/s (1,230 m^3/s) June 8, gage height, 19.42 ft (5.919 m); minimum daily, 36 ft^3/s (0.85 m^3/s) Aug. 5.
Period of record: Maximum discharge, 43,600 ft^3/s (1,230 m^3/s) June 8, 1974, gage height, 19.42 ft (5.919 m); minimum daily, 0.6 ft^3/s (0.017 m^3/s) Oct. 11-13, 1956.

REMARKS.--Records good. Small diversion above station for irrigation.

COOPERATION.--Gage-height record and 21 discharge measurements furnished by Corps of Engineers; records computed by Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	256	203	324	199	127	137	127	135	565	92	42	155
2	220	176	299	183	124	129	118	146	357	87	40	780
3	183	158	661	170	118	124	114	140	281	84	39	606
4	158	140	2,400	158	112	116	110	124	237	84	37	408
5	141	127	819	149	110	112	107	118	215	89	36	337
6	144	113	535	143	106	108	101	108	305	84	39	260
7	135	112	415	137	103	105	97	99	2,910	79	43	203
8	118	108	364	132	100	100	96	92	12,300	75	42	167
9	112	100	330	132	96	96	94	89	8,190	73	61	146
10	106	97	300	132	94	101	90	92	1,130	70	110	129
11	108	92	276	122	90	455	99	85	743	67	72	120
12	158	89	255	118	89	357	105	78	989	66	57	110
13	594	87	237	114	87	293	97	73	526	63	52	106
14	386	85	207	114	87	255	92	455	415	62	49	99
15	288	84	187	116	92	265	89	638	357	59	57	92
16	242	81	173	114	99	344	87	337	311	59	69	94
17	208	79	158	112	101	293	85	276	276	58	57	90
18	180	78	152	112	107	265	85	241	246	56	67	87
19	155	76	281	108	120	246	84	203	215	53	65	103
20	138	219	350	108	122	228	81	167	191	52	57	555
21	120	305	299	106	158	228	84	132	170	50	52	423
22	111	255	270	105	219	215	92	114	152	49	50	311
23	101	232	255	101	219	207	90	103	140	48	49	255
24	94	14,500	516	100	207	199	85	103	129	47	47	224
25	94	4,190	431	97	191	187	81	120	120	48	45	215
26	94	1,450	357	101	176	176	78	158	106	49	44	183
27	241	846	318	105	161	167	76	140	103	46	46	161
28	241	607	287	116	149	155	75	129	105	44	55	155
29	199	447	260	127	------	149	73	120	101	42	52	170
30	176	378	237	129	------	140	110	108	96	41	50	146
31	191	------	219	132	------	132	------	1,110	------	41	47	------
TOTAL	5,692	25,514	12,172	3,892	3,564	6,084	2,802	6,033	31,981	1,917	1,628	6,890
MEAN	184	850	393	126	127	196	93.4	195	1,066	61.8	52.5	230
MAX	594	14,500	2,400	199	219	455	127	1,110	12,300	92	110	780
MIN	94	76	152	97	87	96	73	73	96	41	36	87
CFSM	1.67	7.73	3.57	1.15	1.15	1.78	.85	1.77	9.69	.56	.48	2.09
IN.	1.92	8.63	4.12	1.32	1.21	2.06	.95	2.04	10.82	.65	.55	2.33
AC-FT	11,290	50,610	24,140	7,720	7,070	12,070	5,560	11,970	63,430	3,800	3,230	13,670

CAL YR 1973 TOTAL 125,825 MEAN 345 MAX 14,500 MIN 43 CFSM 3.14 IN 42.55 AC-FT 249,600
WTR YR 1974 TOTAL 108,169 MEAN 296 MAX 14,500 MIN 36 CFSM 2.69 IN 36.58 AC-FT 214,600

PEAK DISCHARGE (BASE, 2,500 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE
11-24	0745	17.32	32,100
12-4	0200	9.36	4,000
6-8	1800	19.42	43,600

07196500 ILLINOIS RIVER NEAR TAHLEQUAH, OKLA.

LOCATION.--Lat 35°55'17", long 94°55'15", in SE 1/4 sec.26, T.17 N., R.22 E., Cherokee County, near center of span on downstream side of pier of bridge 0.2 mi (0.3 km) downstream from U.S. Highway 62, 2.2 mi (3.5 km) northeast of Tahlequah, 6.5 mi (10.5 km) upstream from Baron Fork, and at mile 55.8 (89.8 km).

DRAINAGE AREA.--959 mi^2 (2,482 km^2).

PERIOD OF RECORD.--October 1935 to current year. Monthly discharge only for some periods, published in WSP 1311.

GAGE.--Water-stage recorder. Datum of gage is 664.14 ft (202.430 m) above mean sea level (Corps of Engineers bench mark). Prior to Feb. 23, 1939, nonrecording gage.

AVERAGE DISCHARGE.--39 years, 899 ft^3/s (25.46 m^3/s), 12.73 in/yr (323 mm/yr), 651,300 acre-ft/yr (803 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 66,400 ft^3/s (1,880 m^3/s) June 9, gage height, 23.02 ft (7.016 m); minimum, 182 ft^3/s (5.15 m^3/s) July 23.
Period of record: Maximum discharge, 150,000 ft^3/s (4,250 m^3/s) May 10, 1950, gage height, 27.94 ft (8.516 m), from rating curve extended above 77,000 ft^3/s (2,180 m^3/s) on basis of slope-area measurement of peak flow; minimum daily, 0.1 ft^3/s (2.8 1/s) Oct. 10-14, 1956.
Flood in January 1916 reached a stage of about 26 ft (7.9 m).

REMARKS.--Records good.

REVISIONS.--WSP 1117: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,610	886	3,090	1,510	900	1,070	1,010	1,740	4,530	724	270	572
2	1,590	987	2,560	1,380	867	1,020	946	2,930	4,190	689	267	1,980
3	1,270	980	2,230	1,210	829	958	910	2,970	2,290	663	258	6,050
4	1,020	880	5,500	1,120	815	898	854	2,780	1,660	649	251	5,430
5	845	790	14,300	1,070	788	840	887	2,040	1,410	634	254	2,990
6	751	708	10,300	1,020	756	795	856	1,660	1,740	617	263	2,030
7	691	644	4,730	982	710	760	805	1,410	8,030	599	281	1,470
8	635	594	3,390	954	692	730	751	1,240	25,100	575	286	1,140
9	579	558	2,760	929	669	700	752	1,100	56,600	556	327	956
10	526	527	2,350	923	649	680	780	1,010	27,400	535	396	826
11	509	505	2,030	895	631	862	763	982	11,000	518	475	734
12	538	484	1,840	866	613	3,740	772	925	5,330	504	471	681
13	1,410	470	1,690	831	591	4,180	795	862	4,700	486	413	670
14	4,010	449	1,540	802	579	2,650	968	875	3,560	471	366	646
15	4,270	430	1,430	785	580	2,130	871	1,900	2,930	457	465	632
16	2,530	421	1,310	777	616	2,090	789	2,510	2,510	440	572	634
17	1,900	401	1,200	779	800	2,790	738	1,970	2,180	361	464	604
18	1,550	392	1,110	767	1,070	2,410	718	1,530	1,910	361	514	566
19	1,300	386	1,180	750	976	2,050	704	1,290	1,680	534	498	557
20	1,110	449	1,690	740	1,020	1,830	693	1,120	1,500	488	479	3,470
21	958	862	2,650	724	1,320	1,770	742	1,020	1,340	354	443	5,550
22	832	3,520	2,230	710	1,290	1,940	4,280	936	1,200	235	409	5,440
23	733	2,660	1,940	688	1,930	1,960	6,630	868	1,090	189	380	3,050
24	655	6,840	2,360	672	1,880	1,760	3,090	795	1,020	193	389	2,180
25	595	32,500	4,090	655	1,580	1,620	2,050	831	932	250	370	1,840
26	550	43,600	4,300	649	1,400	1,480	1,560	1,390	803	290	348	1,520
27	567	16,400	3,050	655	1,260	1,360	1,300	1,410	816	301	339	1,530
28	780	12,000	2,470	715	1,120	1,280	1,140	1,180	803	312	362	1,380
29	888	5,450	2,100	819	------	1,210	1,020	960	781	311	357	1,190
30	881	4,000	1,830	925	------	1,130	1,130	644	755	295	348	1,060
31	851	------	1,650	934	------	1,070	------	1,130	------	277	349	------
TOTAL	37,934	139,773	94,900	27,236	26,931	49,763	39,304	44,008	179,790	13,868	11,664	57,378
MEAN	1,224	4,659	3,061	879	962	1,605	1,310	1,420	5,993	447	376	1,913
MAX	4,270	43,600	14,300	1,510	1,930	4,180	6,630	2,970	56,600	724	572	6,050
MIN	509	386	1,110	649	579	680	693	644	755	189	251	557
CFSM	1.28	4.86	3.19	.92	1.00	1.67	1.37	1.48	6.25	.47	.39	1.99
IN.	1.47	5.42	3.68	1.06	1.04	1.93	1.52	1.71	6.97	.54	.45	2.23
AC-FT	75,240	277,200	188,200	54,020	53,420	98,700	77,960	87,290	356,600	27,510	23,140	113,800

CAL YR 1973 TOTAL 872,967 MEAN 2,392 MAX 43,600 MIN 257 CFSM 2.49 IN 33.86 AC-FT 1,732,000
WTR YR 1974 TOTAL 722,549 MEAN 1,980 MAX 56,600 MIN 189 CFSM 2.06 IN 28.03 AC-FT 1,433,000

PEAK DISCHARGE (BASE, 9,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
11-26	0730	21.73	52,300	4-23	0100	12.34	9,840
12-5	2015	15.55	17,200	6-9	0945	23.02	66,400

07197000 BARON FORK AT ELDON, OKLA.

LOCATION.--Lat 35°55'16", long 94°50'18", in SE 1/4 sec.27, T.17 N., R.23 E., Cherokee County, on downstream side of left pier of bridge on State Highway 51, 0.4 mi (0.6 km) southeast of Eldon, 6.0 mi (9.7 km) downstream from Tyner Creek, and at mile 8.8 (14.2 km).

DRAINAGE AREA.--307 mi^2 (795 km^2).

PERIOD OF RECORD.--October 1948 to current year. Prior to October 1970 published as Barren Fork at Eldon.

GAGE.--Water-stage recorder. Datum of gage is 701.14 ft (213.707 m) above mean sea level (levels by Corps of Engineers). Prior to Dec. 14, 1948, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--26 years, 294 ft^3/s (8.326 m^3/s), 12.99 in/yr (330 mm/yr), 213,000 acre-ft/yr (263 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 28,200 ft^3/s (799 m^3/s) Nov. 25, gage height, 21.23 ft (6.471 m); minimum, 33 ft^3/s (0.93 m^3/s) Aug. 5.
Period of record: Maximum discharge, 37,600 ft^3/s (1,070 m^3/s) Apr. 3, 1957, gage height, 20.33 ft (6.197 m), maximum gage height, 21.23 ft (6.471 m),Nov. 25, 1973; minimum, 1,7 ft^3/s (0.048 m^3/s) Oct. 25, 1956.
Flood of Apr. 15, 1945, reached a stage of 23.8 ft (7.25 m), from information by local resident.

REMARKS.--Records good.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	710	262	981	482	239	380	303	1,390	469	126	39	519
2	542	265	859	435	231	354	284	1,400	360	118	41	3,440
3	427	255	847	401	225	331	272	1,280	294	111	37	2,970
4	349	242	6,490	373	216	310	278	973	254	108	35	1,140
5	309	228	2,820	350	208	287	264	794	233	110	34	784
6	282	216	1,700	335	202	270	243	661	243	116	36	600
7	262	205	1,250	321	196	256	228	567	3,630	114	39	488
8	234	195	1,020	307	190	242	220	494	3,310	105	38	408
9	212	188	868	295	184	229	211	436	4,880	99	51	348
10	193	175	757	285	179	226	202	385	1,900	94	79	310
11	198	165	666	275	173	781	209	345	1,080	88	74	282
12	272	156	605	259	169	942	551	308	822	83	66	280
13	1,570	147	566	243	165	719	484	278	659	79	61	349
14	942	140	528	235	162	619	400	254	547	75	56	375
15	840	136	490	231	167	571	342	249	468	73	86	285
16	680	132	436	227	245	619	306	228	432	70	179	240
17	518	130	404	221	323	574	282	210	379	68	144	228
18	438	127	373	216	275	531	268	198	333	65	147	219
19	378	125	415	212	404	503	261	185	298	62	140	212
20	327	336	826	207	512	494	253	174	267	60	131	5,570
21	285	1,940	660	202	449	572	1,790	163	242	57	108	2,350
22	255	894	589	196	809	617	1,810	158	222	55	89	1,110
23	231	864	560	190	738	573	1,170	150	202	52	82	789
24	210	8,050	1,530	185	620	533	877	149	186	51	74	631
25	195	13,700	1,320	180	537	489	714	164	174	51	68	644
26	183	6,640	991	181	484	456	602	195	164	51	63	745
27	179	3,260	828	186	444	424	527	198	155	48	63	613
28	226	2,020	717	211	411	396	464	185	147	46	67	524
29	262	1,440	642	265	------	371	417	171	140	44	65	465
30	243	1,150	582	263	------	346	995	156	133	42	64	403
31	240	------	534	248	------	323	------	383	------	40	65	------
TOTAL	12,192	43,783	31,854	8,217	9,157	14,338	15,227	12,881	22,623	2,361	2,321	27,321
MEAN	393	1,459	1,028	265	327	463	508	416	754	76.2	74.9	911
MAX	1,570	13,700	6,490	482	809	942	1,810	1,400	4,880	126	179	5,570
MIN	179	125	373	180	162	226	202	149	133	40	34	212
CFSM	1.28	4.75	3.35	.86	1.07	1.51	1.65	1.36	2.46	.25	.24	2.97
IN.	1.48	5.31	3.86	1.00	1.11	1.74	1.85	1.56	2.74	.29	.28	3.31
AC-FT	24,180	86,840	63,180	16,300	18,160	28,440	30,200	25,550	44,870	4,680	4,600	54,190

CAL YR 1973 TOTAL 290,035 MEAN 795 MAX 13,700 MIN 52 CFSM 2.59 IN 35.14 AC-FT 575,300
WTR YR 1974 TOTAL 202,275 MEAN 554 MAX 13,700 MIN 34 CFSM 1.80 IN 24.51 AC-FT 401,200

PEAK DISCHARGE (BASE, 6,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
11-25	0515	21.23	28,200	6-8	1930	14.93	8,820
12-4	1000	17.04	12,700	9-3	0045	13.14	6,100
6-7	1400	14.33	7,880	9-20	1615	17.81	14,300

07197500 TENKILLER FERRY LAKE NEAR GORE, OKLA.

LOCATION.--Lat 35°35'48", long 95°02'57", in SE 1/4 SW 1/4 sec.14, T.13 N., R.21 E., Sequoyah County, at gage tower on right bank, 0.6 mile (1.0 km) upstream from Tenkiller Ferry Dam on Illinois River, 6.0 mi (9.7 km) northeast of Gore, and at mile 12.8 (20.6 km).

DRAINAGE AREA.--1,610 mi² (4,170 km²).

PERIOD OF RECORD.--July 1952 to current year. Prior to October 1970 published as Tenkiller Ferry Reservoir near Gore.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level. Prior to Apr. 5, 1953, nonrecording gage at same site and datum.

EXTREMES.--Current year: Maximum contents, 993,700 acre-ft (1.23 km²) Nov. 28, elevation, 654.60 ft (199.522 m); minimum, 570,700 acre-ft (704 hm³) Aug. 30, elevation, 625.20 ft (190.561 m).
Period of record: Maximum contents, 1,217,600 acre-ft (1,500 hm³) June 5, 1957, elevation, 666.36 ft (203.107 m); minimum since conservation pool was first filled, 305,700 acre-ft (377 hm³) Oct. 21, 1954, elevation, 597.50 ft (182.118 m).

REMARKS.--Reservoir is formed by earth dam. Spillway consists of 590-ft (179.8 m) concrete modified ogee weir in right abutment controlled by 10 taintor gates. Outlet works consist of a 19-foot (5.8 m) diameter tunnel in right abutment controlled by two vertical-left gates. A similar tunnel conducts water to two hydroelectric turbines. Closure was made for diversion in July 1950 and regulated storage began in July 1952; conservation pool was first filled Apr. 9, 1953. Capacity, 1,231,000 acre-ft (1,520 hm³) at elevation 667.0 ft (203.302 m), flood-control pool, 791,900 acre-ft (976 hm³) at elevation, 642.0 ft (195.68 m), spillway crest, 628,700 acre-ft at elevation 630.0 ft (192.02 m), maximum power pool, and 283,100 acre-ft (349 hm³) at elevation 594.5 ft (181.20 m), conservation and minimum power pool. Figures given herein represent total contents. Reservoir is used for flood control and for power development.

COOPERATION.--Records furnished by Corps of Engineers.

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

625	568,400	642	791,900
630	628,700	648	883,200
636	706,900	655	1,001,000

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	657,799	700,599	966,699	707,899	671,399	654,599	687,599	686,500	659,899	725,000	607,799	575,399
2	662,199	700,199	953,299	704,799	673,799	655,799	683,799	692,000	669,299	719,399	605,899	589,199
3	665,500	699,599	947,299	701,799	675,299	658,399	680,199	696,000	670,699	713,599	605,599	607,799
4	667,099	699,199	956,299	698,399	675,699	658,399	676,599	698,399	670,699	708,699	605,299	622,099
5	666,399	697,599	973,199	695,000	676,500	659,299	673,099	698,500	670,099	703,000	602,899	629,599
6	669,199	695,799	982,199	691,799	677,899	657,399	675,199	697,500	671,699	697,299	601,799	634,099
7	670,500	694,299	975,099	689,699	676,000	658,000	677,199	695,099	687,099	692,399	599,699	637,799
8	670,000	692,399	964,099	689,899	673,199	657,000	675,299	692,699	724,299	690,099	597,000	641,000
9	670,500	690,299	951,799	687,799	671,000	657,199	673,099	689,199	835,500	687,799	596,399	640,799
10	670,699	687,899	938,099	686,199	670,500	659,699	671,000	685,500	900,899	685,399	597,199	641,500
11	672,699	685,399	923,599	683,099	668,899	660,000	670,500	681,899	917,699	683,099	598,000	640,899
12	676,500	684,099	908,000	678,500	669,299	662,099	669,599	677,699	907,500	681,199	596,099	641,299
13	684,500	682,899	892,899	676,799	670,099	667,899	668,099	673,099	896,799	679,000	594,500	640,799
14	693,699	681,599	877,199	677,699	669,599	674,399	666,699	672,699	885,099	677,000	592,399	642,599
15	701,199	679,099	860,599	676,099	665,599	679,299	665,399	673,199	871,399	675,099	591,199	644,899
16	705,099	676,399	843,799	677,000	663,099	684,899	663,099	674,500	856,399	672,399	589,699	646,000
17	706,899	674,000	826,399	678,099	663,899	691,799	660,799	675,099	840,199	669,399	589,299	646,599
18	708,000	671,899	810,099	677,199	665,399	697,299	658,699	674,500	827,000	663,099	589,299	645,500
19	708,599	670,899	796,000	677,699	666,899	702,599	656,899	673,199	819,399	657,599	587,500	647,699
20	708,699	673,500	781,199	677,000	667,299	705,500	656,699	671,299	811,599	653,299	585,599	668,099
21	708,299	675,799	767,899	674,399	669,299	705,899	664,199	669,699	802,599	648,500	583,699	683,199
22	707,500	680,699	754,000	672,699	669,399	706,199	670,699	667,199	789,799	642,000	582,000	694,799
23	706,299	686,599	743,000	670,199	669,199	706,500	683,099	665,199	772,299	636,699	580,299	698,099
24	705,099	733,699	733,699	666,799	668,899	705,599	686,500	663,000	760,299	633,500	578,799	698,399
25	703,699	837,500	726,799	664,699	666,899	704,299	686,799	661,299	755,599	631,699	578,199	698,000
26	701,599	937,099	718,199	666,399	664,299	702,599	685,699	657,799	750,500	628,099	575,399	696,500
27	702,599	976,699	714,000	668,799	661,399	700,599	683,799	659,099	745,699	625,299	573,000	694,699
28	701,799	993,699	713,299	669,299	658,000	698,399	681,500	656,299	740,299	623,199	571,299	692,500
29	701,099	988,099	713,199	668,899	------	696,299	679,500	654,399	735,099	619,500	571,399	689,599
30	701,199	978,699	712,199	669,199	------	693,699	683,199	652,000	730,299	614,699	570,699	686,299
31	702,199	------	710,199	671,000	------	690,099	------	651,599	------	611,000	570,899	------
MAX	708,699	993,699	982,199	707,899	677,899	706,500	687,599	698,500	917,699	725,000	607,799	698,399
MIN	657,799	670,899	710,199	664,699	658,000	654,599	656,699	651,599	659,899	611,000	570,699	575,399
(†)	635.66	653.76	636.24	633.29	632.30	634.75	634.22	631.81	637.68	628.56	625.22	634.46
(‡)	+50.7	+276.5	-268.5	-39.2	-13.0	+32.1	-6.9	-31.6	+78.7	-119.3	-40.1	+115.4

CAL YR 1973 .....‡ +69.9
WTR YR 1974 .....‡ +34.8

† Elevation, in feet, at end of month.
‡ Change in contents, in thousands of acre-ft.

07198000 ILLINOIS RIVER NEAR GORE, OKLA.

LOCATION.--Lat 35°34'23", long 95°04'07", in NE 1/4 SW 1/4 sec.27, T.13 N., R.21 E., Sequoyah County, on right bank 4.3 mi (6.9 km) downstream from Tenkiller Ferry Dam, 4.5 mi (7.2 km) northeast of Gore, and at mile 8.5 (13.7 km).

DRAINAGE AREA.--1,626 mi^2 (4,211 km^2).

PERIOD OF RECORD.--March 1924 to April 1926, April 1939 to current year. Monthly discharge only for some periods, published in WSP 1311.

GAGE.--Water-stage recorder. Datum of gage is 473.00 ft (144.170 m) above mean sea level. See WSP 1921 for history of changes prior to Feb. 19, 1952.

AVERAGE DISCHARGE.--36 years (1924-25, 1939-74), 1,545 ft^3/s (43.75 m^3/s), 1,119,000 acre-ft/yr (1.38 km^3/yr), adjusted for storage.

EXTREMES.--Current year: Maximum discharge, 12,100 ft^3/s (343 m^3/s) Dec. 3, June 12, gage height, 12.51 ft (3.813 m); minimum daily, 59 ft^3/s (1.67 m^3/s) Mar. 16.
Period of record: Maximum discharge, 180,000 ft^3/s (5,100 m^3/s) May 11, 1950, gage height, 29.6 ft (9.02 m), present site and datum, from floodmark, from rating curve extended above 42,000 ft^3/s (1,190 m^3/s) by velocity-area studies; minimum, 2.0 ft^3/s (0.057 m^3/s) Sept. 16, 1959.

REMARKS.--Records good. Except for 16 mi^2 (41 km^2) intervening area, flow completely regulated since July 1952 by Tenkiller Ferry Lake (see sta. 07197500). 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.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	253	1,960	11,000	3,620	1,330	3,450	3,160	3,540	267	3,330	1,780	152
2	236	1,890	10,900	3,630	258	1,250	3,220	3,720	222	3,330	1,560	308
3	482	1,700	11,100	3,580	411	388	3,200	3,590	1,850	3,350	311	365
4	887	1,670	11,200	3,540	891	1,530	3,210	3,570	2,170	3,340	224	133
5	1,660	1,870	11,000	3,620	893	857	3,130	3,560	2,110	3,350	1,270	374
6	468	2,030	10,900	3,600	520	2,250	94	3,550	2,130	3,340	835	545
7	692	1,910	10,800	2,770	1,960	983	187	3,540	2,290	3,260	1,370	243
8	1,450	1,950	10,800	1,880	2,300	1,740	2,160	3,540	3,260	1,750	1,580	105
9	842	1,950	10,700	2,520	2,190	1,030	2,240	3,550	3,900	1,740	1,590	1,530
10	913	1,840	10,700	2,540	1,330	903	2,240	3,560	3,240	1,680	480	1,220
11	907	2,000	10,600	2,700	1,750	2,350	2,280	3,560	6,660	1,690	211	1,330
12	796	1,540	10,600	3,550	785	3,450	2,300	3,560	12,000	1,420	1,470	1,070
13	1,250	1,500	10,500	2,510	563	3,080	2,280	3,440	11,200	1,520	1,440	1,180
14	907	1,440	10,500	983	1,210	768	2,320	1,880	10,600	1,430	1,470	120
15	1,780	2,000	10,500	2,130	2,680	875	2,290	1,760	10,500	1,400	1,350	107
16	1,770	1,990	10,500	941	2,460	59	2,410	2,120	10,500	1,800	1,400	603
17	1,750	2,030	10,400	851	766	89	2,450	2,210	10,400	1,800	1,230	582
18	1,710	1,690	10,400	1,830	1,390	1,850	2,370	2,120	9,230	3,090	696	1,460
19	1,700	1,300	10,400	980	1,400	2,620	2,200	2,130	5,920	3,110	1,440	657
20	1,700	1,080	10,400	1,590	1,750	2,320	1,660	2,360	5,900	2,690	1,520	1,440
21	1,700	2,030	10,400	2,620	2,320	3,220	2,380	2,160	5,910	2,590	1,470	1,820
22	1,700	2,200	10,300	2,150	2,850	3,140	3,400	2,190	7,540	3,180	1,390	1,380
23	1,700	2,330	10,400	2,310	3,150	3,160	3,370	2,230	9,710	3,000	1,270	2,030
24	1,690	3,250	10,600	2,810	3,130	3,170	3,340	2,180	7,600	1,710	1,140	3,450
25	1,690	2,230	10,400	2,080	3,280	3,220	3,340	2,190	3,350	1,220	838	3,460
26	2,000	2,380	10,400	430	3,400	3,150	3,320	2,320	3,350	1,990	1,750	3,460
27	1,700	3,280	7,470	280	3,380	3,130	3,310	2,270	3,330	1,690	1,710	3,450
28	1,640	7,270	4,440	1,070	3,410	3,150	3,310	2,120	3,320	1,270	1,420	3,430
29	1,590	11,100	3,650	1,610	------	3,120	3,300	2,200	3,320	1,860	427	3,430
30	1,410	11,000	3,630	1,110	------	3,180	3,650	2,110	3,320	2,510	754	3,380
31	1,410	------	3,630	580	------	3,160	------	1,790	------	2,130	349	------
TOTAL	40,383	82,410	299,220	66,415	51,757	66,642	78,121	84,620	165,099	71,570	35,745	42,814
MEAN	1,303	2,747	9,652	2,142	1,848	2,150	2,604	2,730	5,503	2,309	1,153	1,427
MAX	2,000	11,100	11,200	3,630	3,410	3,450	3,650	3,720	12,000	3,350	1,780	3,460
MIN	236	1,080	3,630	280	258	59	94	1,760	222	1,220	211	105
AC-FT	80,100	163,500	593,500	131,700	102,700	132,200	155,000	167,800	327,500	142,000	70,900	84,920

CAL YR 1973 TOTAL 1,459,998 MEAN 4,000 MAX 11,400 MIN 164 AC-FT 2,896,000
WTR YR 1974 TOTAL 1,084,796 MEAN 2,972 MAX 12,000 MIN 59 AC-FT 2,152,000

07228000 CANADIAN RIVER NEAR CANADIAN, TEX.

LOCATION (revised).--Lat 35°56'06", long 100°22'13", Hemphill County, near left bank on downstream side of pier of bridge on U.S. Highways 60 and 83, 500 ft (150 m) downstream from Panhandle and Santa Fe Railway Co. bridge, 1.2 miles (1.9 km) downstream from Red Deer Creek, 1.6 miles (2.6 km) northeast of Canadian, and at mile 433.9 (698.1 km).

DRAINAGE AREA.--22,866 mi^2 (59,222 km^2), of which 4,688 mi^2 (12,142 km^2) is probably noncontributing.

PERIOD OF RECORD.--July 1924 to August 1925 (gage heights only), January 1938 to current year. Prior to April 1938, monthly discharge only, published in WSP 1311.

GAGE.--Water-stage recorder. Datum of gage is 2,301.50 ft (701.497 m) above mean sea level. July 1, 1924, to Aug. 31, 1925, and Apr. 21 to Dec. 15, 1938, nonrecording gage; Dec. 16, 1938, to Sept. 30, 1953, water-stage recorder and nonrecording gages; all at site 300 ft (91 m) upstream at same datum.

AVERAGE DISCHARGE.--26 years (1938-64) prior to completion of Lake Meredith, 549 ft^3/s (15.55 m^3/s), 397,800 acre-ft/yr (490 hm^3/yr); 10 years (1964-74) regulated, 93.5 ft^3/s (2.648 m^3/s), 67,740 acre-ft/yr (83.5 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 4,960 ft^3/s (140 m^3/s) Mar. 11, gage height, 5.57 ft (1.698 m); minimum, 0.10 ft^3/s (0.003 m^3/s) July 14.
Period of record: Maximum discharge, 122,000 ft^3/s (3,460 m^3/s) Sept. 23, 1941, gage height, 9.8 ft (2.99 m), (from graph based on readings), from rating curves for two channels extended above 8,000 and 54,000 ft^3/s (227 and 1,530 m^3/s); no flow at times most years.
Maximum stage 20.0 ft (6.10 m) Oct. 2, 1904. Floods of May 2, 1914, and Oct. 5, 1923, reached stages of 12 ft (3.7 m).

REMARKS.--Records poor. Extreme low flow is maintained by springs which enter river about 600 ft (180 m) above gage. Some regulation and diversions from Lake Meredith 75 miles (121 km) upstream (station 07227900). Water-quality records for the current year are published in Part 2 of the Texas State report.

REVISIONS.--WSP 1341: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	2.4	21	20	51	56	36	33	10	.56	.42	21
2	1.3	2.5	20	18	50	60	36	27	9.1	.38	.46	14
3	1.2	2.4	38	16	46	63	36	20	14	.35	1.3	12
4	1.3	2.5	56	15	42	40	36	19	44	.42	1.9	10
5	1.4	3.9	53	14	38	40	38	20	51	.32	3.0	7.5
6	1.5	5.5	45	13	42	46	36	16	35	.26	3.0	4.8
7	1.5	6.3	40	12	46	44	35	15	28	.26	2.2	3.4
8	1.5	7.5	35	11	50	58	31	13	60	.26	2.2	2.2
9	1.4	7.5	31	11	48	259	31	11	104	.24	2.7	1.9
10	2.4	9.6	28	12	48	2,260	30	14	46	.24	2.7	1.6
11	2.0	8.0	28	13	48	4,150	28	9.1	27	.20	3.7	1.3
12	5.2	8.0	27	14	53	1,270	27	6.3	17	.20	1.8	1.1
13	4.5	8.0	26	15	56	338	24	5.5	14	.22	1.6	1.2
14	3.0	7.5	26	27	53	168	19	3.4	10	.20	1.5	1.2
15	3.0	6.7	24	33	89	120	18	3.0	7.5	.28	1.3	1.3
16	2.7	5.5	24	46	104	100	16	2.2	4.2	.46	1.4	1.4
17	2.5	6.3	23	50	100	86	18	1.9	2.7	.28	1.2	1.4
18	2.5	9.6	20	83	83	80	21	1.5	4.8	.26	1.4	1.6
19	2.5	11	18	107	86	74	20	1.3	3.0	.28	.97	3.7
20	2.5	13	18	77	86	96	121	1.2	1.2	.26	.97	5.5
21	2.2	14	18	71	74	86	223	1.2	.80	.26	.97	5.2
22	1.8	16	20	60	56	74	111	1.1	.88	.28	3.2	3.4
23	1.4	18	28	60	56	77	63	.88	.80	.32	4.2	3.9
24	1.4	19	26	51	48	83	51	.74	.88	.35	6.3	7.1
25	1.4	21	26	44	53	74	40	9.6	.88	.32	33	11
26	1.5	22	38	46	58	68	33	14	.80	.32	19	11
27	1.5	23	36	44	56	63	27	27	.74	.28	22	9.1
28	1.6	23	31	48	51	58	24	142	.74	.32	51	6.7
29	1.9	23	27	52	------	48	22	66	.68	.51	96	5.9
30	2.2	21	27	54	------	48	23	30	.68	.56	60	3.9
31	2.2	------	25	51	------	40	------	14	------	.46	33	------
TOTAL	64.4	333.7	903	1,188	1,671	10,127	1,274	529.92	500.38	9.91	364.39	165.3
MEAN	2.08	11.1	29.1	38.3	59.7	327	42.5	17.1	16.7	.32	11.8	5.51
MAX	5.2	23	56	107	104	4,150	223	142	104	.56	96	21
MIN	1.2	2.4	18	11	38	40	16	.74	.68	.20	.42	1.1
AC-FT	128	662	1,790	2,360	3,310	20,090	2,530	1,050	993	20	723	328

CAL YR 1973 TOTAL 39,027.90 MEAN 107 MAX 7,660 MIN .32 AC-FT 77,410
WTR YR 1974 TOTAL 17,131.00 MEAN 46.9 MAX 4,150 MIN .20 AC-FT 33,980

PEAK DISCHARGE (BASE, 8,900 FT^3/S).--No peak above base.

07228500 CANADIAN RIVER AT BRIDGEPORT, OKLA.

LOCATION.--Lat 35°34'00", long 98°22'45", in SE 1/4 SW 1/4 sec.28, T.13 N., R.11 W., Blaine County, on downstream side of left abutment of Chicago, Rock Island and Pacific Railroad Co. bridge, 1.0 mi (1.6 km) north of Bridgeport, 2.8 mi (4.5 km) upstream from Lumpmouth Creek, and at mile 267.1 (429.8 km).

DRAINAGE AREA.--25,229 mi^2 (65,343 km^2), of which 4,801 mi^2 (12,435 km^2) is probably noncontributing.

PERIOD OF RECORD.--October 1944 to September 1964; October 1969 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,384.25 ft (421.919 m) above mean sea level (levels by Corps of Engineers). Prior to Oct. 1, 1947, at site 0.2 mi (0.3 km) downstream at same datum. Oct. 1, 1947, to Sept. 30, 1948, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--25 years, 415 ft^3/s (11.75 m^3/s), 300,700 acre-ft/yr (371 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 38,700 ft^3/s (1,100 m^3/s) Aug. 28, gage height, 11.19 ft (3.411 m); no flow July 22-31.
Period of record: Maximum discharge, about 150,000 ft^3/s (4,250 m^3/s) June 23, 1948, gage-height, 14.60 ft (4.450 m), from floodmarks, from rating curve extended above 50,000 ft^3/s (1,420 m^3/s), no flow at times in 1946, 1951-56, 1964, 1970, 1974.
Flood in May 1914 reached a stage of about 19.4 ft (5.91 m), a higher stage probably occurred during flood in October 1904.

REMARKS.--Records poor. Occasional slight regulation by Conchas Reservoir in New Mexico, and by Lake Meredith in Texas since 1964. Records of chemical analysis for the current year are published in Part 2 of this report.

REVISION.--WSP 1341: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	48	15	22	52	104	117	117	1,990	150	11	27	156
2	21	14	19	44	101	109	104	3,030	92	11	29	170
3	31	15	12	37	101	105	96	801	174	11	19	300
4	118	15	188	30	99	99	92	267	90	11	12	201
5	150	14	172	27	99	124	87	194	59	31	9.3	176
6	84	20	110	25	97	222	81	208	33	33	11	168
7	52	23	82	24	94	270	76	195	39	31	15	160
8	39	24	76	28	94	223	71	183	1,180	15	11	150
9	35	23	72	35	92	194	69	160	390	6.6	10	123
10	180	22	69	33	92	3,750	64	132	111	3.6	36	118
11	630	23	67	31	90	2,090	681	109	68	2.9	26	127
12	470	22	64	34	90	1,460	746	90	48	2.4	23	126
13	190	21	66	29	88	2,170	165	76	39	2.0	22	124
14	118	21	70	26	88	1,610	128	63	38	1.9	21	129
15	72	19	69	27	174	601	119	57	37	1.7	20	127
16	56	18	68	29	256	362	102	54	33	1.5	19	155
17	49	18	71	32	248	271	87	47	30	1.4	18	131
18	40	15	69	36	200	227	76	41	29	1.3	20	135
19	35	14	67	45	164	156	69	39	26	1.2	18	616
20	31	14	70	62	130	132	162	34	22	1.1	18	2,080
21	27	380	73	130	110	164	1,110	94	20	1.1	17	273
22	25	260	80	190	840	190	297	77	18	0	17	172
23	23	180	76	142	420	179	146	51	17	0	17	155
24	22	114	90	132	260	164	123	41	16	0	16	152
25	21	79	80	124	195	155	105	182	15	0	147	323
26	20	56	72	118	160	167	101	190	14	0	67	223
27	19	42	72	111	140	173	107	149	13	0	5,110	170
28	19	33	71	108	129	169	130	114	13	0	23,400	124
29	18	29	74	113	------	158	303	73	12	0	2,540	89
30	17	26	72	108	------	131	486	57	12	0	207	74
31	16	------	62	106	------	127	------	232	------	0	199	------
TOTAL	2,676	1,569	2,325	2,068	4,755	16,069	6,100	9,030	2,838	182.7	32,121.3	7,227
MEAN	86.3	52.3	75.0	66.7	170	518	203	291	94.6	5.89	1,036	241
MAX	630	380	188	190	840	3,750	1,110	3,030	1,180	33	23,400	2,080
MIN	16	14	12	24	88	99	64	34	12	0	9.3	74
AC-FT	5,310	3,110	4,610	4,100	9,430	31,870	12,100	17,910	5,630	362	63,710	14,330

CAL YR 1973 TOTAL 141,390.0 MEAN 387 MAX 18,900 MIN 3.2 AC-FT 280,400
WTR YR 1974 TOTAL 86,961.0 MEAN 238 MAX 23,400 MIN 0 AC-FT 172,500

PEAK DISCHARGE (BASE, 6,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE
3-10	1530	8.33	6,670
8-28	1900	11.19	38,700

07229100 CANADIAN RIVER NEAR NOBLE, OKLA.

LOCATION.--Lat 35°04'55", long 97°22'52", in N 1/2 sec.14, T.7 N., R.2 W., McClain County, on right bank 80 ft (24.4 m) upstream from the Atchison, Topeka, and Santa Fe Railway Co. bridge, 3.6 mi (5.8 km) upstream from Chouteau Creek, 3.8 mi (6.1 km) south of Noble, and at mile 190.8 (307.0 km).

DRAINAGE AREA.--25,911 mi^2 (67,109 km^2), of which 4,801 mi^2 (12,435 km^2) is probably noncontributing.

PERIOD OF RECORD.--October 1959 to June 1961 (published as "at Purcell"), October 1963 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,045.29 ft (318.604 m) above mean sea level. Oct. 1, 1959, to June 30, 1961, water-stage recorder at site 5.9 mi (9.5 km) downstream at datum 28.15 ft (8.580 m) lower. Oct. 1, 1963, to Feb. 28, 1964, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--12 years, 366 ft^3/s (10.37 m^3/s), 265,200 acre-ft/yr (327 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 14,600 ft^3/s (413 m^3/s) Mar. 11, gage height, 6.72 ft (2.048 m) from high-water mark; minimum daily, 5.0 ft^3/s (0.14 m^3/s) July 29, 30.
Period of record: Maximum discharge, 35,500 ft^3/s (1,010 m^3/s) Sept. 22, 1965, gage height, 8.46 ft (2.579 m); no flow Oct. 8-15, 1963.
Floods in 1904 and 1937 reached a stage of about 18.0 ft (5.49 m), and flood of 1914 reached a stage of 16.9 ft (5.15 m), from information by Corps of Engineers.

REMARKS.--Records good. Extreme low flow sustained by sewage from city of Norman. Occasional slight regulation by reservoirs in Texas and New Mexico.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	156	62	195	130	119	224	200	2,150	515	11	48	318
2	96	56	169	120	113	219	179	7,010	275	11	60	541
3	67	53	260	120	108	201	173	3,370	224	10	30	113
4	148	57	442	110	102	185	142	1,220	207	10	15	110
5	577	56	418	110	98	177	138	700	116	9.7	10	85
6	489	57	306	100	97	161	133	475	185	9.5	9.0	107
7	286	65	258	100	88	144	124	336	381	9.0	8.0	96
8	177	78	200	150	89	133	112	295	757	8.8	7.0	43
9	120	81	179	143	87	130	100	264	4,260	8.5	6.0	26
10	115	76	148	130	95	1,000	96	220	1,300	8.2	520	19
11	557	74	139	130	90	6,700	200	200	771	7.8	771	15
12	2,160	75	156	130	85	1,880	650	170	918	7.6	175	11
13	1,570	73	145	150	83	1,590	950	150	297	7.3	77	29
14	641	70	151	160	90	2,030	450	140	195	7.0	44	8.7
15	406	68	159	188	101	1,720	280	120	134	6.8	44	34
16	242	63	159	201	114	1,160	210	100	83	6.6	45	128
17	181	59	157	218	223	925	170	88	58	6.4	14	66
18	110	61	164	230	295	799	140	81	47	6.2	8.5	50
19	90	48	135	227	281	702	130	74	28	6.2	7.5	51
20	80	994	72	201	238	589	120	67	25	6.0	7.0	1,040
21	70	212	134	178	1,560	589	500	64	23	5.8	6.5	1,130
22	65	125	157	162	1,940	589	2,000	128	21	5.7	6.0	368
23	62	133	188	291	865	702	1,000	198	19	5.6	33	194
24	60	922	171	366	595	600	800	198	17	5.5	8.7	254
25	57	2,100	208	279	444	485	450	269	16	5.4	7.5	311
26	55	800	182	230	334	520	310	311	15	5.3	9.0	430
27	312	500	165	199	285	600	235	402	14	5.2	15	335
28	224	350	165	180	238	500	201	215	13	5.1	2,050	175
29	103	258	162	152	------	400	322	160	12	5.0	7,960	133
30	88	227	166	147	------	300	3,470	101	12	5.0	2,320	150
31	76	------	150	132	------	220	------	312	------	55	660	------
TOTAL	9,440	7,853	5,860	5,364	8,857	26,174	13,985	19,588	10,938	272.2	14,981.7	6,370.7
MEAN	305	262	189	173	316	844	466	632	365	8.78	483	212
MAX	2,160	2,100	442	366	1,940	6,700	3,470	7,010	4,260	55	7,960	1,130
MIN	55	48	72	100	83	130	96	64	12	5.0	6.0	8.7
AC-FT	18,720	15,580	11,620	10,640	17,570	51,920	27,740	38,850	21,700	540	29,720	12,640

CAL YR 1973 TOTAL 280,302.1 MEAN 768 MAX 16,700 MIN 7.3 AC-FT 556,000
WTR YR 1974 TOTAL 129,683.6 MEAN 355 MAX 7,960 MIN 5.0 AC-FT 257,200

PEAK DISCHARGE (BASE, 8,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE
3-11	unknown	6.72	14,600
5-2	1500	6.29	9,750
8-29	1915	6.24	9,280

07229300 WALNUT CREEK AT PURCELL, OKLA.

LOCATION.--Lat 34°59'56", long 97°22'00", in NW 1/4 NW 1/4 sec.13, T.6 N., R.2 W., McClain County, on downstream side of right bank pier of bridge on U.S. Highway 77, at south edge of Purcell, and at mile 1.0 (1.6 km).

DRAINAGE AREA.--202 mi^2 (523 km^2).

PERIOD OF RECORD.--Occasional low-flow measurements, made in water years 1951-55, 1958-65. October 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,017.68 ft (310.189 m) above mean sea level (Oklahoma State Highway Department bench mark).

AVERAGE DISCHARGE.--9 years, 47.7 ft^3/s (1.351 m^3/s), 34,560 acre-ft/yr (42. 6 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 5,820 ft^3/s (165 m^3/s) Apr. 30, gage height, 11.47 ft (3.496 m); minimum daily, 3.0 ft^3/s (0.085 m^3/s) July 27, 28, 31, Aug. 1.
Period of record: Maximum discharge, 17,200 ft^3/s (487 m^3/s) Sept. 23, 1970, gage height, 15.35 ft (4.679 m), from rating curve extended above 8,200 ft^3/s (232 m^3/s), no flow at times in 1966-67.

REMARKS.--Records good.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33	52	94	55	41	51	44	130	37	9.3	3.0	10
2	34	52	93	45	41	52	43	340	30	8.6	11	28
3	32	53	115	40	41	51	44	71	30	8.5	7.5	21
4	49	54	123	40	40	51	43	48	39	10	4.9	15
5	41	55	90	50	40	49	43	42	33	9.0	4.5	10
6	50	57	82	55	41	49	43	40	47	9.8	4.0	9.4
7	46	58	78	50	40	49	44	38	90	8.1	4.0	8.6
8	41	58	80	51	41	50	42	37	35	7.1	3.7	7.9
9	39	57	78	50	43	62	42	36	36	5.7	3.5	7.2
10	41	58	79	50	42	206	43	35	24	5.0	787	7.2
11	128	59	82	45	41	289	124	35	23	4.6	103	7.5
12	153	59	79	48	41	85	67	34	22	4.0	47	6.6
13	115	58	76	49	41	48	49	33	20	3.5	26	11
14	55	60	76	50	41	46	41	33	20	3.7	22	7.0
15	48	62	76	49	40	44	40	33	19	3.6	73	8.4
16	46	621	73	47	41	42	38	33	18	3.7	24	51
17	43	210	74	48	40	42	36	32	17	3.5	18	21
18	42	89	77	48	42	43	36	31	18	3.4	15	13
19	42	90	74	47	43	41	36	30	17	3.4	15	12
20	42	723	60	47	41	44	37	29	15	3.4	14	19
21	42	110	65	46	135	53	37	29	15	3.4	12	16
22	42	80	70	45	79	49	36	30	14	3.4	12	12
23	42	75	79	44	58	47	35	29	14	3.2	11	11
24	43	1,820	87	44	50	46	35	29	14	3.2	12	17
25	45	468	140	44	49	46	35	78	13	3.2	12	55
26	180	120	159	44	50	48	35	67	13	3.1	12	24
27	69	90	71	42	50	46	35	40	13	3.0	19	16
28	62	82	71	42	51	46	37	33	12	3.0	18	13
29	56	84	72	41	------	45	49	29	11	3.3	14	11
30	56	91	71	42	------	44	1,770	27	9.8	3.3	12	9.8
31	53	------	71	42	------	45	------	46	------	3.0	11	------
TOTAL	1,810	5,605	2,615	1,440	1,343	1,909	3,039	1,577	718.8	153.0	1,335.1	465.6
MEAN	58.4	187	84.4	46.5	48.0	61.6	101	50.9	24.0	4.94	43.1	15.5
MAX	180	1,820	159	55	135	289	1,770	340	90	10	787	55
MIN	32	52	60	40	40	41	35	27	9.8	3.0	3.0	6.6
AC-FT	3,590	11,120	5,190	2,860	2,660	3,790	6,030	3,130	1,430	303	2,650	924

CAL YR 1973 TOTAL 47,617.0 MEAN 130 MAX 3,210 MIN 11 AC-FT 94,450
WTR YR 1974 TOTAL 22,010.5 MEAN 60.3 MAX 1,820 MIN 3.0 AC-FT 43,660

PEAK DISCHARGE (BASE, 3,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
11-16	1700	9.87	3,420	11-24	1800	11.30	5,520
11-20	0200	9.75	3,280	4-30	0400	11.47	5,820

07229900 LAKE THUNDERBIRD NEAR NORMAN, OKLA.

LOCATION.--Lat 35°13'15", long 97°13'05", in NW 1/4 SE 1/4 sec.29, T.9 N., R.1 E., Cleveland County, near center of dam on Little River, just downstream from Hog Creek and 13 mi (20.9 km) east of Norman, and at mile 96.4 (115.1 km).

DRAINAGE AREA.-- 256 mi ^{2} (663 km^2).

PERIOD OF RECORD.--March 1965 to current year.

GAGE.--Nonrecording gage at outlet structure and at pump house. Datum of gage is at mean sea level.

EXTREMES.--Current year: Maximum contents, 129,400 acre-ft (160 hm^3) Nov. 26, elevation, 1,040.50 ft (317.144 m); minimum, 112,500 acre-ft (139 hm^3) Sept. 15, elevation, 1,037.81 ft (316.324 m).
Period of record: Maximum contents, 134,600 acre-ft (166 hm^3) May 3, 1973, elevation, 1,041.32 ft (317.394 m), minimum since conservation pool first reached 15,370 acre-ft (19.0 hm^3) Nov. 30, 1965, elevation, 1,011.0 ft (308.153 m).

REMARKS.--Reservoir is formed by an earth dam. Regulated storage began Mar. 1, 1965; minimum conservation pool first filled September 1965. Capacity, 196,200 acre-ft (242 hm^3) at elevation 1,049.4 ft (319.86 m), crest of drop inlet; 119,600 acre-ft (147 hm^3) at elevation 1,039.0 ft (316.687 m), top of conservation pool; 13,640 acre-ft (16.8 hm^3) at elevation 1,010.0 ft (307.848 m), minimum conservation pool. Dead storage, 1,200 acre-ft (1.50 hm^3) below elevation 997.0 ft (303.886 m), sill of gated outlet. Figures given herein represent total contents. Reservoir is used for flood control, irrigation (inactive), and municipal water supplies exported to Del City, Midwest City, and Norman. Records of chemical analyses for the current year are published in Part 2 of this report.

COOPERATION.--Elevations and data on diversions furnished by Central Oklahoma Master Conservancy District.

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

Date	Elevation (feet) †	Contents (acre-feet)	Change in contents (acre-feet)	Diversions (acre-feet)
Sept. 30	1,039.89	125,000	--	--
Oct. 31	1,039.29	121,300	-3,700	477
Nov. 30	1,039.85	124,700	+3,400	559
Dec. 31	1,039.46	122,400	-2,300	768
CAL YR 1973	--	--	+17,100	9,597
Jan. 31	1,039.51	122,700	+300	763
Feb. 28	1,039.25	121,100	-1,600	511
Mar. 31	1,039.10	120,200	-900	827
Apr. 30	1,039.50	122,600	+2,400	887
May 31	1,039.36	121,800	-800	989
June 30	1,039.27	121,200	-600	1,108
July 31	1,038.41	116,100	-5,100	1,336
Aug. 31	1,038.06	114,000	-2,100	1,198
Sept. 30	1,038.00	113,600	-400	1,003
WTR YR 1974			-11,400	10,426

† Elevation at 0800 on following day.

07230000 LITTLE RIVER BELOW LAKE THUNDERBIRD, NEAR NORMAN, OKLA.

LOCATION.--Lat 35°13'14", long 97°13'00", in NE 1/4 SE 1/4 sec.29, T.9 N., R.1 E., Cleveland County, at right bank of outlet channel, 170 ft (51.8 m) upstream from State Highway 9, 1,200 ft (365.8 m) downstream from Lake Thunderbird, 1.0 mi (1.6 km) upstream from Prairie Creek, 13.0 mi (20.9 km) east of Norman, and at mile 96.2 (154.8 km).

DRAINAGE AREA.--257 mi^2 (666 km^2).

PERIOD OF RECORD.--October 1952 to current year. Prior to October 1964, published as Little River below Hog Creek near Norman.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 965.62 ft (294.321 m) above mean sea level. Prior to Nov. 28, 1956, nonrecording gage 800 ft (243.8 m) downstream at same datum. Nov. 28, 1956, to Oct. 14, 1964, water-stage recorder at site 800 ft (243.8 m) downstream at same datum. Oct. 15, 1964, to Sept. 1, 1965, nonrecording gage at site 170 ft (51.8 m) downstream at same datum.

AVERAGE DISCHARGE.--12 years, (1952-64), 58.9 ft^3/s (1.668 m^3/s), 42,640 acre-ft/yr (52.6 hm^3/yr); 9 years, (1965-74), 13.7 ft^3/s (0.388 m^3/s), 9,930 acre-ft/yr (12.2 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 763 ft^3/s (21.6 m^3/s) Nov. 23, gage height, 6.96 ft (2.121 m); minimum daily, 0.37 ft^3/s (0.010 m^3/s) at times.
Period of record: Maximum discharge, 34,600 ft^3/s (980 m^3/s) May 25, 1957, gage height, 28.85 ft (8.793 m), from high-water mark, at site then in use, from rating curve extended above 15,000 ft^3/s (425 m^3/s); no flow at times in 1954-56, 1964.

REMARKS.--Records good. Flow completely regulated by Lake Thunderbird since March 1965 (see sta. 07229900). In prior years occasional small diversions above station for irrigation.

REVISIONS.--WSP 1341: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	189	.37	565	.69	.44	141	.78	.78	.44	.44	.52	.60
2	180	.37	538	.69	.44	141	.78	.88	.52	.44	.69	.98
3	168	.37	520	.69	.44	141	.78	.60	.52	.44	.52	.69
4	158	.37	287	.69	.44	51	.69	.60	.52	.44	.52	.69
5	153	.37	.52	.69	.44	.69	.69	1.8	.52	.44	.60	.60
6	149	.37	.52	.69	62	.69	.69	.44	.52	.44	.60	.60
7	163	.37	.52	.69	99	.52	.69	142	.69	.44	.60	.60
8	159	.37	.52	.69	99	.52	.60	292	.69	.44	.60	.60
9	159	.37	.52	.69	99	.52	.60	292	.52	.44	.69	.60
10	160	.37	.52	.69	99	1.1	.69	295	.44	.44	.88	.60
11	160	.37	.52	.69	96	.78	.88	295	.44	.44	.69	.60
12	95	.37	.52	.69	94	.69	.78	295	.52	.44	.60	.60
13	.37	.37	.52	.69	94	.69	.98	302	.52	.52	.60	.60
14	.44	.37	.52	.69	94	.69	.52	302	.52	.52	.60	.60
15	.44	.44	.52	.69	94	.69	.52	302	.52	.52	.69	.69
16	87	.44	.52	.52	94	.69	.52	302	.52	.60	.69	.78
17	240	.44	.52	.52	94	.69	.52	302	.52	.60	.69	.69
18	234	.44	.52	.60	38	.69	.52	302	.52	.60	.60	.60
19	231	.44	.52	.60	.69	.69	.52	302	.52	.60	.52	.60
20	229	.44	2.7	.52	.60	.69	.52	302	.44	.60	.52	.52
21	223	.60	.69	.52	.78	.78	.52	120	.44	.60	.52	.78
22	213	360	.69	.60	79	.69	.52	.52	.44	.60	.52	.69
23	75	754	.69	.52	141	.69	.44	.69	.44	.60	.52	.69
24	.52	511	.69	.52	141	.69	.44	.52	.44	.60	.52	.69
25	.52	206	.69	.52	141	191	.44	1.9	.44	.60	.69	.88
26	.52	.69	.69	.52	141	285	.44	.52	.44	.60	.69	.78
27	.69	336	.69	.60	141	285	.44	.52	.44	.60	.69	.69
28	.44	673	.69	.52	141	285	.44	.44	.44	.60	.60	.52
29	.44	637	.69	.52	------	114	.88	.44	.44	.52	.60	.52
30	.44	610	.69	.44	------	.78	.88	.44	.44	.52	.60	.52
31	.44	------	.69	.44	------	.78	------	.52	------	.52	.60	------
TOTAL	3,430.26	4,096.11	1,928.09	18.83	2,085.27	1,649.44	18.71	4,158.61	14.82	16.20	18.97	19.60
MEAN	111	137	62.2	.61	74.5	53.2	.62	134	.49	.52	.61	.65
MAX	240	754	565	.69	141	285	.98	302	.69	.60	.88	.98
MIN	.37	.37	.52	.44	.44	.52	.44	.44	.44	.44	.52	.52
AC-FT	6,800	8,120	3,820	37	4,140	3,270	37	8,250	29	32	38	39

CAL YR 1973 TOTAL 36,084.51 MEAN 98.9 MAX 754 MIN .35 AC-FT 71,570
WTR YR 1974 TOTAL 17,454.91 MEAN 47.8 MAX 754 MIN .37 AC-FT 34,620

07230500 LITTLE RIVER NEAR TECUMSEH, OKLA.

LOCATION.--Lat 35°10'25", long 96°55'55", near northwest corner sec.18, T.8 N., R.4 E., Pottawatomie County, on downstream side of center pier of bridge on U.S. Highway 177, 1.5 mi (2.4 km) downstream from Dance Creek, 5.0 mi (8.0 km) south of Tecumseh, and at mile 77.2 (124.2 km).

DRAINAGE AREA.--456 mi^2 (1,181 km^2).

PERIOD OF RECORD.--October 1943 to current year. Monthly discharge only for some periods, published in WSP 1311.

GAGE.--Water-stage recorder. Datum of gage is 898.52 ft (273.869 m) above mean sea level (levels by Corps of Engineers).

AVERAGE DISCHARGE.--21 years (1943-64, 149 ft^3/s (4.22 m^3/s), 107,900 acre-ft/yr (133.0 hm^3/yr); 10 years (1964-74), 78.5 ft^3/s (2.223 m^3/s), 56,870 acre-ft/yr (70.1 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 5,090 ft^3/s (144 m^3/s) Nov. 24, gage height, 15.27 ft (4.654 m); no flow July 28, 29, Aug. 1, 23.
Period of record: Maximum discharge, 32,400 ft^3/s (918 m^3/s) May 25, 1957, gage height, 18.84 ft (5.742 m); maximum gage height, 19.68 ft (5.998 m) May 18, 1949; no flow at times in most years. Flood in 1932 reached a stage of 25.58 ft (7.797 m), from floodmark 1969-72.

REMARKS.--Records good. Flow regulated or diverted since 1965 by Lake Thunderbird, 19.2 mi (30.9 km) upstream. (See sta. 07229900).

REVISIONS.--WSP 1117: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	180	66	477	42	19	162	24	379	111	4.8	0	18
2	173	50	483	38	18	170	21	641	60	4.0	1.1	279
3	177	44	519	36	18	191	21	125	52	3.3	1.1	43
4	182	41	199	35	18	176	18	52	200	23	1.1	9.8
5	180	37	114	37	19	39	17	30	136	8.2	1.1	6.8
6	242	35	87	42	22	24	18	19	157	6.0	1.2	6.8
7	193	33	78	47	100	22	19	18	248	4.8	1.1	6.4
8	186	31	80	54	102	20	17	275	132	4.0	1.1	6.0
9	183	30	77	44	104	22	17	276	203	3.8	1.1	5.6
10	187	29	70	58	103	290	20	282	54	3.3	1.2	5.6
11	1,330	28	73	68	106	311	78	282	33	2.5	1.2	5.6
12	1,340	27	76	62	107	127	49	279	77	2.3	1.1	5.2
13	593	26	71	67	109	78	28	279	31	2.5	1.1	7.7
14	219	25	67	77	107	58	19	279	25	2.7	1.2	6.0
15	169	25	66	70	125	47	19	273	23	2.7	1.2	5.2
16	425	24	59	65	126	40	19	276	19	2.7	1.2	192
17	393	23	59	62	121	38	18	279	17	2.7	1.2	44
18	377	23	64	56	121	35	20	279	20	2.5	.75	12
19	373	50	80	48	61	35	21	279	16	2.3	.60	8.7
20	366	920	77	46	33	34	22	279	13	2.3	.45	12
21	364	242	79	40	183	68	30	242	11	2.3	.45	15
22	309	462	68	37	138	73	23	8.2	10	1.5	.30	8.1
23	52	402	68	32	175	45	20	6.8	10	1.1	0	5.2
24	40	2,930	66	30	163	39	21	77	8.2	.75	.30	15
25	37	2,100	57	28	170	81	22	67	7.7	1.4	1.2	146
26	56	591	54	29	160	229	24	99	8.2	1.5	2.5	31
27	118	671	51	28	160	254	27	85	7.7	.30	25	12
28	54	572	50	27	155	302	33	47	7.3	0	6.8	8.1
29	45	533	50	24	------	274	45	47	6.4	0	3.5	6.0
30	58	490	49	22	------	36	709	51	5.2	1.7	2.7	5.8
31	113	------	43	20	------	27	------	180	------	.60	2.5	------
TOTAL	8,714	10,560	3,511	1,371	2,843	3,347	1,439	5,791.0	1,708.7	101.55	65.35	937.6
MEAN	281	352	113	44.2	102	108	48.0	187	57.0	3.28	2.11	31.3
MAX	1,340	2,930	519	77	183	311	709	641	248	23	25	279
MIN	37	23	43	20	18	20	17	6.8	5.2	0	0	5.2
AC-FT	17,280	20,950	6,960	2,720	5,640	6,640	2,850	11,490	3,390	201	130	1,860

CAL YR 1973 TOTAL 103,039.28 MEAN 282 MAX 3,010 MIN .30 AC-FT 204,400
WTR YR 1974 TOTAL 40,389.20 MEAN 111 MAX 2,930 MIN 0 AC-FT 80,110

PEAK DISCHARGE (BASE, 5,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE
11-24	2000	15.27	5,090

07231000 LITTLE RIVER NEAR SASAKWA, OKLA.

LOCATION.--Lat 34°59'02", long 96°33'01", in NE 1/4 sec.22, T.6 N., R.7 E., Seminole County, near left abutment on downstream side of county road bridge, 2.8 mi (4.5 km) northwest of Sasakwa, 8.7 mi (14.0 km) downstream from Salt Creek, and at mile 24.1 (38.8 km).

DRAINAGE AREA.--865 mi^2 (2,240 km^2).

PERIOD OF RECORD.--September 1942 to current year. Monthly discharge only for some periods, published in WSP 1311.

GAGE.--Water-stage recorder. Datum of gage is 749.21 ft (228.359 m) above mean sea level (levels by Corps of Engineers). Prior to Apr. 11, 1946, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--32 years, 362 ft^3/s (10.25 m^3/s), 262,300 acre-ft/yr (323 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 10,900 ft^3/s (309 m^3/s) Apr. 30, gage height, 22.84 ft (6.962m); minimum daily, 1.1 ft^3/s (0.031 m^3/s) Aug. 23-25.
Period of record: Maximum discharge, 44,600 ft^3/s (1,260 m^3/s) May 11, 1950, gage height, 33.48 ft (10.205 m); no flow at times most years after 1952.

REMARKS.--Records good. Flow regulated by Lake Thunderbird 72.3 mi (116.3 km) upstream since March 1965 (see sta. 07229900). Records of chemical analyses and of water temperatures for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1117: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	471	252	1,220	94	86	259	151	1,550	475	21	1.5	1.9
2	341	192	1,070	92	83	260	99	1,680	373	20	2.7	159
3	290	138	1,180	98	78	259	80	1,040	255	17	21	186
4	255	106	1,460	97	75	254	65	899	787	19	11	104
5	237	89	1,050	103	73	249	58	524	1,230	33	7.7	76
6	1,100	78	743	103	72	233	55	322	597	21	5.0	44
7	556	74	507	96	70	168	55	238	1,510	19	3.5	32
8	343	71	402	97	67	131	57	185	791	17	2.8	25
9	265	67	347	67	82	121	61	156	673	14	1.9	21
10	221	62	304	66	135	122	60	237	422	13	9.7	17
11	1,900	59	284	77	147	260	87	273	344	11	40	15
12	2,210	56	265	109	151	402	116	274	280	9.5	16	13
13	4,640	55	247	83	151	446	96	267	221	8.2	11	12
14	2,640	55	226	101	152	241	93	259	171	7.0	11	10
15	1,950	53	210	96	205	167	78	263	129	5.8	9.6	15
16	1,180	50	193	94	167	140	66	265	101	4.7	6.3	32
17	712	48	182	98	163	124	60	264	80	6.9	3.1	82
18	606	46	180	98	197	117	58	260	72	6.4	2.6	66
19	548	50	553	96	226	114	58	254	65	5.1	2.0	68
20	485	3,800	339	94	187	116	151	247	56	4.3	1.6	48
21	437	2,820	217	89	687	193	528	238	49	3.3	1.3	40
22	403	1,660	219	81	581	162	146	235	42	3.0	1.2	36
23	375	1,300	193	75	431	145	93	211	38	2.4	1.1	29
24	324	6,300	184	71	333	133	72	155	35	2.2	1.1	27
25	178	9,020	164	68	284	119	63	253	32	2.2	1.1	77
26	117	8,230	148	68	273	110	57	1,950	30	2.2	1.2	94
27	322	5,020	138	69	265	130	55	1,430	28	1.9	3.0	70
28	237	2,900	128	178	260	244	59	1,100	26	1.8	13	66
29	169	1,810	124	135	------	289	70	605	25	1.6	10	46
30	148	1,460	118	106	------	294	7,490	324	23	1.6	3.9	35
31	564	------	113	95	------	261	------	339	------	1.6	2.6	------
TOTAL	24,224	45,921	12,708	2,894	5,681	6,263	10,237	16,297	8,960	286.7	209.5	1,546.9
MEAN	781	1,531	410	93.4	203	202	341	526	299	9.25	6.76	51.6
MAX	4,640	9,020	1,460	178	687	446	7,490	1,950	1,510	33	40	186
MIN	117	46	113	66	67	110	55	155	23	1.6	1.1	1.9
AC-FT	48,050	91,080	25,210	5,740	11,270	12,420	20,310	32,330	17,770	569	416	3,070

CAL YR 1973 TOTAL 277,153.0 MEAN 759 MAX 9,020 MIN 1.7 AC-FT 549,700
WTR YR 1974 TOTAL 135,228.1 MEAN 370 MAX 9,020 MIN 1.1 AC-FT 268,200

PEAK DISCHARGE (BASE, 5,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE
10-13	0130	15.58	5,290
11-26	0245	21.92	9,790
4-30	0530	22.84	10,900

07231500 CANADIAN RIVER AT CALVIN, OKLA.

LOCATION.--Lat 34°58'32", long 96°14'24", in NE 1/4 SW 1/4 sec.22, T.6 N., R.10 E., Hughes County, near left bank on downstream side of pier of bridge on U.S. Highway 75, 0.5 mi (0.8 km) northeast of Calvin, 2.5 mi (4.0 km) upstream from Shawnee Creek, 8.5 mi (13.7 km) downstream from Little River, and at mile 93.9 (151.1 km).

DRAINAGE AREA.--27,952 mi^2 (72,396 km^2), of which 4,801 mi^2 (12,435 km^2) is probably noncontributing.

PERIOD OF RECORD.--January 1905 to December 1908 (gage heights and discharge measurements only except for period July 1905 to December 1906), October 1938 to September 1942, July 1944 to current year. Monthly discharge only for some periods, published in WSP 1311. Gage-height records collected in this vicinity since 1904 are contained in reports of U.S. Weather Bureau.

GAGE.--Water-stage recorder and nonrecording gage. Datum of gage is 684.72 ft (208.703 m) above mean sea level. January 1905 to December 1908, nonrecording gage at site 0.8 mi (1.3 km) upstream at datum 2.00 ft (0.611 m) higher. Oct. 1, 1938, to Aug. 12, 1944, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--35 years (1905-6, 1938-42, 1944-74), 1,632 ft^3/s (46.22 m^3/s), 1,182,000 acre-ft/yr (1.46 km^3/yr).

EXTREMES.--Current year: Maximum discharge, 67,000 ft^3/s (1,900 m^3/s) Nov. 24, gage height, 10.19 ft (3.106 m); minimum daily, 12 ft^3/s (0.34 m^3/s) Aug. 3.
Period of record: Maximum discharge, 174,000 ft^3/s (4,930 m^3/s) May 11, 1950, gage height, 17.35 ft (5.288 m); maximum gage height, 21.00 ft (6.401 m), Aug. 7, 1906. from floodmark, site and datum then in use; no flow at times in 1939, 1954, 1956, 1966-67.

REMARKS.--Records fair. Occasional slight regulation by dams in New Mexico and Texas. Records of chemical analyses and of water temperatures for the current year are published in Part 2 of this report.

COOPERATION.--Gage height record and 34 discharge measurements furnished by Corps of Engineers; records computed by Geological Survey.

REVISIONS (WATER YEARS).--WSP 1341: Drainage area. WSP 1391: 1941.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,960	2,160	2,500	540	561	727	795	15,700	1,910	109	18	1,210
2	1,220	1,170	2,370	473	499	727	636	9,790	1,550	91	18	2,030
3	1,000	1,030	3,050	450	499	758	545	8,530	1,100	80	12	1,690
4	906	934	4,630	440	467	707	485	4,820	4,460	89	18	889
5	847	814	3,330	443	434	676	439	2,770	4,680	160	35	465
6	2,110	707	2,680	460	387	647	353	2,070	1,890	170	47	308
7	3,590	656	2,190	460	373	628	353	1,570	6,000	115	41	208
8	1,860	610	1,700	470	347	497	317	1,200	3,790	82	41	186
9	1,260	610	1,510	470	340	458	312	991	4,820	76	34	190
10	991	563	1,390	470	386	1,760	233	936	4,770	66	50	180
11	5,280	480	1,240	480	450	3,670	699	981	2,580	56	436	157
12	7,080	413	1,170	500	447	10,800	579	999	1,390	62	1,070	134
13	16,400	406	1,170	500	410	4,780	1,160	924	1,300	56	485	134
14	7,610	373	1,010	523	470	3,640	1,310	799	911	56	239	112
15	4,520	373	920	588	507	3,810	1,100	720	666	47	159	140
16	2,750	340	833	631	564	3,640	769	681	560	47	112	207
17	1,750	340	828	642	524	2,330	555	634	511	37	81	412
18	1,350	312	768	609	521	1,290	488	590	436	37	97	617
19	1,140	300	1,280	652	707	1,070	450	548	383	37	71	597
20	955	11,600	1,510	638	769	1,140	428	505	323	37	63	1,320
21	824	9,720	1,050	633	2,130	1,960	2,890	477	258	29	45	1,780
22	719	3,470	973	604	6,250	1,540	1,850	448	210	28	33	2,010
23	622	2,150	954	568	4,410	1,140	1,480	425	182	23	33	1,190
24	531	37,400	973	489	2,010	997	1,720	377	164	23	28	555
25	461	39,000	873	449	1,370	934	972	672	149	23	22	1,170
26	340	19,400	811	589	984	758	593	8,710	137	23	28	2,390
27	1,110	8,980	706	739	848	658	456	3,270	132	23	51	1,140
28	3,250	4,580	643	832	748	759	427	2,120	123	23	83	720
29	1,530	3,090	602	1,140	------	907	412	1,490	122	18	124	901
30	1,260	2,680	590	916	------	937	34,800	907	113	18	3,200	665
31	2,520	------	608	654	------	919	------	675	------	18	2,780	------
TOTAL	77,746	154,661	44,862	18,052	28,412	55,264	57,606	75,329	45,620	1,759	9,554	23,707
MEAN	2,508	5,155	1,447	582	1,015	1,783	1,920	2,430	1,521	56.7	308	790
MAX	16,400	39,000	4,630	1,140	6,250	10,800	34,800	15,700	6,000	170	3,200	2,390
MIN	340	300	590	440	340	458	233	377	113	18	12	112
AC-FT	154,200	306,800	88,980	35,810	56,360	109,600	114,300	149,400	90,490	3,490	18,950	47,020

CAL YR 1973 TOTAL 1,086,822 MEAN 2,978 MAX 39,000 MIN 47 AC-FT 2,156,000
WTR YR 1974 TOTAL 592,572 MEAN 1,623 MAX 39,000 MIN 12 AC-FT 1,175,000

PEAK DISCHARGE (BASE, 25,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE
11-24	2045	10.19	67,000
4-30	0815	9.69	61,900

07232500 BEAVER RIVER NEAR GUYMON, OKLA.
(Headwater of the North Canadian River)

LOCATION.--Lat 36°43'24", long 101°29'30", in NW 1/4 SW 1/4 sec.18, T.3 N., R.15 E., Texas County, near center of span on downstream side of pier of bridge on U.S. Highway 64 at Dry Sand Draw, 1.2 mi (1.9 km) upstream from Goff Creek, 2.5 mi (4.0 km) north of Guymon, and at mile 650.7 (1,047.0 km). Records include flow of Dry Sand Draw.

DRAINAGE AREA.--2,139 mi^2 (5,540 km^2) includes that of Dry Sand Draw, of which 964 mi^2 (2,497 km^2) is probably noncontributing.

PERIOD OF RECORD.--October 1937 to current year. Monthly discharge only for some periods, published in WSP 1311. Prior to October 1970 published as North Canadian River near Guymon.

GAGE.--Water-stage recorder. Datum of gage is 2,970.93 ft (905.539 m) above mean sea level (levels by Corps of Engineers).

AVERAGE DISCHARGE.--37 years, 26.5 ft^3/s (0.750 m^3/s), 19,200 acre-ft/yr (23.7 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 1,120 ft^3/s (31.7 m^3/s) Aug. 9, gage height, 9.21 ft (2.807 m); no flow at times.
Period of record: Maximum discharge, 55,400 ft^3/s (1,570 m^3/s) June 15, 1964, gage height, 13.68 ft (4.170 m); maximum gage height, 13.82 ft (4.212 m), Sept. 23, 1941, from floodmark; no flow at times in most years.

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

REVISIONS.--WSP 1117: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.89	4.3	3.1	5.6	7.9	5.2	2.9	73		0	.09
2	0	.70	3.9	3.2	5.2	7.6	5.3	2.9	43		0	0
3	0	1.2	5.6	2.5	5.2	7.3	5.2	2.3	34		0	0
4	0	1.5	7.5	1.8	5.4	7.0	5.8	2.7	3.3		0	0
5	0	1.8	5.4	2.0	5.6	8.0	5.3	2.7	1.8		0	0
6	0	2.4	6.7	1.9	3.7	8.5	5.2	2.4	1.1		0	0
7	0	2.4	6.3	2.3	4.7	8.9	4.2	1.9	2.2		0	.25
8	0	2.6	7.2	2.6	8.6	9.1	4.0	1.8	200		4.6	.06
9	.03	2.8	6.0	2.4	8.4	13	3.7	1.7	134		304	0
10	.36	2.4	5.8	2.6	7.4	23	3.3	1.4	32		54	0
11	.48	2.7	6.8	2.3	6.9	17	2.8	.67	15		26	0
12	.43	3.1	6.1	2.9	6.3	13	2.8	.84	14		90	0
13	.43	3.0	5.2	4.5	6.1	11	3.1	.39	11		22	0
14	.43	3.2	6.4	10	6.2	12	3.2	.11	9.3		11	.21
15	.50	3.0	6.1	25	6.4	11	2.9	0	7.2		5.4	3.5
16	.48	3.4	6.0	15	6.7	10	3.0	0	6.0		3.2	4.8
17	.59	3.6	7.7	8.5	6.7	9.9	3.2	0	5.6		2.2	4.5
18	.56	3.5	5.9	9.0	6.4	8.8	3.4	0	5.2		58	3.2
19	.41	3.7	3.8	9.4	6.3	8.4	3.7	0	4.4		26	2.2
20	0	3.9	3.1	9.3	6.6	7.8	3.6	0	2.4		7.0	50
21	0	3.9	3.6	8.1	5.6	8.4	2.7	0	2.7		3.0	17
22	.01	4.6	7.3	6.8	5.7	8.9	2.6	0	2.3		2.0	3.3
23	0	4.8	5.9	7.0	6.6	6.9	2.6	0	1.8		1.2	2.4
24	.02	4.7	6.8	7.3	5.5	8.4	2.6	0	3.3		.50	2.1
25	.06	4.8	4.4	7.4	6.7	8.0	2.8	0	2.0		.05	2.0
26	.19	5.3	6.0	6.7	8.0	7.4	5.0	0	1.5		0	1.7
27	.22	5.0	7.9	5.6	7.6	7.0	3.0	0	.90		0	1.4
28	.34	4.9	6.7	6.8	7.4	6.6	2.8	0	.09		0	1.4
29	.52	5.1	4.8	8.3	------	5.8	3.0	0	0		1.0	1.1
30	.50	4.5	3.5	6.4	------	6.1	2.9	0	0		5.0	.97
31	.78	------	2.7	6.1	------	5.8	------	0	------		.50	------
TOTAL	7.34	99.39	175.4	196.8	177.5	288.5	108.9	24.71	619.09	0	626.65	102.18
MEAN	.24	3.31	5.66	6.35	6.34	9.31	3.63	.80	20.6	0	20.2	3.41
MAX	.78	5.3	7.9	25	8.6	23	5.8	2.9	200	0	304	50
MIN	0	.70	2.7	1.8	3.7	5.8	2.6	0	0	0	0	0
AC-FT	15	197	348	390	352	572	216	49	1,230	0	1,240	203

CAL YR 1973 TOTAL 2,578.58 MEAN 7.06 MAX 200 MIN 0 AC-FT 5,110
WTR YR 1974 TOTAL 2,426.46 MEAN 6.65 MAX 304 MIN 0 AC-FT 4,810

PEAK DISCHARGE (BASE, 2,400 FT^3/S).--No peak above base.

07234000 BEAVER RIVER AT BEAVER, OKLA.
(Headwater of the North Canadian River)

LOCATION.--Lat 36°49'20", long 100°31'05", in SW 1/4 sec.7, T.4 N., R.24 E., Beaver County, near right bank on downstream side of pier of bridge on U.S. Highway 270 at Beaver, 1.5 mi (2.4 km) downstream from Home Creek, 5 mi (8.0 km) upstream from Clear Creek, and at mile 576.0 (926.8 km).

DRAINAGE AREA.--7,955 mi^2 (20,603 km^2), of which 4,270 mi^2 (11,059 km^2) is probably noncontributing.

PERIOD OF RECORD.--March 1904 to December 1905 (gage heights only), October 1937 to current year. Monthly discharge only for some periods, published in WSP 1311. Published as Beaver Creek at Beaver 1904-5, and October 1937 to September 1970 as North Canadian River at Beaver.

GAGE.--Water-stage recorder. Datum of gage is 2,368.16 ft (721.815 m) above mean sea level (levels by Corps of Engineers). Mar. 29, 1904, to Dec. 31, 1905, nonrecording gage in same vicinity at different datum. Mar. 1, 1938, to Sept. 30, 1946, water-stage recorder at present site at datum 3.0 ft (9.91 m) higher.

AVERAGE DISCHARGE.--37 years, 112 ft^3/s (3.172 m^3/s), 81,140 acre-ft/yr (100 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 95 ft^3/s (2.69 m^3/s) June 11, gage height, 3.98 ft (1.213 m); no flow at times.
Period of record: Maximum discharge, 70,000 ft^3/s (1,980 m^3/s) Oct. 8, 1946, by slope-area measurement of peak flow in overflow section and extension of rating curve for main channel above 42,000 ft^3/s (1,190 m^3/s); maximum gage height, 14.55 ft (4.435 m) Oct. 8, 1946; no flow at times in each year.

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

REVISIONS.--WSP 1341: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.11	.33	7.8	28	19	12	1.1	.02			
2	0	.21	.37	7.0	26	18	10	.90	.07			
3	.01	.23	.61	6.1	23	16	11	.72	1.1			
4	.02	.27	.57	3.7	22	16	11	.69	1.6			
5	.05	.28	.59	2.4	22	17	11	.63	1.1			
6	.02	.31	.87	1.7	16	17	9.9	.63	.84			
7	0	.28	1.2	1.5	18	16	9.2	.58	1.4			
8	0	.28	1.6	2.0	17	20	7.8	.60	11			
9	.01	.24	1.7	2.1	19	23	7.0	.59	66			
10	.13	.34	1.2	1.8	18	46	6.4	.60	38			
11	.38	.41	1.1	1.7	16	71	5.6	.52	84			
12	.26	.45	1.5	.93	17	72	5.2	.54	75			
13	.23	.47	2.1	2.9	16	60	5.4	.42	58			
14	.17	.47	1.6	3.2	17	57	5.0	.31	44			
15	.16	.54	2.3	3.7	17	52	5.0	.50	31			
16	.13	.60	3.0	4.3	18	47	4.6	.46	19			
17	.17	.33	3.5	9.0	17	44	4.5	.56	10			
18	.15	.24	3.2	23	19	41	4.7	.59	6.1			
19	.14	.23	3.0	33	17	34	3.9	.44	4.1			
20	.13	.28	2.6	43	18	33	3.5	.31	2.4			
21	.16	.28	1.9	29	18	29	2.8	.27	1.1			
22	.14	.27	2.5	23	16	30	2.3	.25	.48			
23	.11	.26	2.7	20	16	27	2.1	.17	.23			
24	.09	.25	2.7	17	17	24	1.6	.90	.82			
25	.11	.28	3.2	16	18	25	1.4	1.3	.38			
26	0	.28	3.8	15	18	24	1.5	.85	.02			
27	0	.28	4.4	14	17	21	1.1	.56	0			
28	0	.33	5.7	16	18	19	1.2	.10	0			
29	.02	.28	13	21	------	18	1.2	0	0			
30	.10	.28	19	26	------	15	1.0	.03	0			
31	.09	------	9.1	27	------	14	------	0	------			------
TOTAL	2.98	9.36	100.94	384.83	519	965	158.9	16.12	457.76	0	0	0
MEAN	.096	.31	3.26	12.4	18.5	31.1	5.30	.52	15.3	0	0	0
MAX	.38	.60	19	43	28	72	12	1.3	84	0	0	0
MIN	0	.11	.33	.93	16	14	1.0	0	0	0	0	0
AC-FT	5.9	19	200	763	1,030	1,910	315	32	908	0	0	0

CAL YR 1973 TOTAL 23,080.25 MEAN 63.2 MAX 2,450 MIN 0 AC-FT 45,780
WTR YR 1974 TOTAL 2,614.89 MEAN 7.16 MAX 84 MIN 0 AC-FT 5,190

PEAK DISCHARGE (BASE, 4,000 FT^3/S).--No peak above base.

07234100 CLEAR CREEK NEAR ELMWOOD, OKLA.

LOCATION.--Lat 36°38'42", long 100°30'07", in SW 1/4 SW 1/4 sec.8, T.2 N., R.24 E., Beaver County, on downstream side of right pile bent of county road bridge, 1,000 ft (304.8 m) downstream from small irrigation dam, 2.8 mi (4.5 km) northeast of Elmwood, and at mile 16.9 (27.2 km).

DRAINAGE AREA.--170 mi^2 (440 km^2).

PERIOD OF RECORD.--October 1965 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 2,550 ft (777 m), from topographic map.

AVERAGE DISCHARGE.--9 years, 9.69 ft^3/s (0.274 m^3/s), 7,020 acre-ft/yr (8.66 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 30 ft^3/s (0.85 m^3/s) Aug. 10, gage height, 2.66 ft (0.811 m); no flow July 24, 28.
Period of record: Maximum discharge, 20,000 ft^3/s (566 m^3/s) Oct. 16, 1969, gage height, 13.97 ft (4.258 m), from floodmark, from rating curve extended above 12,500 ft^3/s (343 m^3/s) on basis of slope-area measurement at gage height 13.15 ft (4.008 m); no flow part of July 14, 18, 19, 1970, Oct. 5, 1971, and July 24, 28, 1974.

REMARKS.--Records good. Small diversions for irrigation above station.

REVISIONS (WATER YEAR).--WSP 2121: 1966.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.5	2.6	2.9	3.1	2.8	2.9	3.0	1.5	1.5	.23	.07	1.8
2	2.4	2.6	2.9	3.3	2.8	2.9	3.0	1.6	1.1	.84	.02	2.6
3	2.4	2.6	3.4	3.3	2.8	2.9	3.2	1.5	2.0	.94	.03	2.0
4	2.4	2.7	3.4	3.4	2.8	3.0	3.2	1.2	2.3	.81	.15	1.9
5	2.5	2.6	3.0	3.4	2.9	3.0	3.0	1.2	2.1	.78	.68	1.8
6	2.6	2.6	2.9	3.4	2.9	3.0	2.9	1.5	2.0	1.5	.90	1.7
7	2.5	2.6	2.9	3.4	2.8	2.9	3.1	1.0	2.6	1.5	.75	1.7
8	2.4	2.6	2.9	3.4	2.7	3.1	3.0	.92	2.7	1.5	.77	1.6
9	2.5	2.6	2.9	3.4	2.9	3.5	2.9	.82	2.2	1.6	1.1	1.6
10	2.7	2.6	2.9	3.4	2.9	4.7	2.8	.79	2.0	2.0	8.4	1.7
11	2.8	2.6	2.9	3.4	2.9	3.4	2.8	.70	1.9	2.4	2.9	1.6
12	2.6	2.6	3.0	3.4	2.8	3.1	2.7	.70	1.8	1.6	2.8	1.6
13	2.6	2.7	2.9	3.1	2.8	2.9	2.7	.64	1.9	1.5	2.4	1.6
14	2.6	2.8	3.0	2.8	2.9	2.9	2.7	.54	1.8	2.4	2.3	1.5
15	2.5	2.8	2.9	3.3	2.9	3.0	2.5	1.3	1.8	2.7	2.1	1.5
16	2.6	2.8	2.9	3.3	2.9	2.8	2.5	.71	1.7	2.0	2.1	1.6
17	2.6	2.8	2.9	2.9	2.9	2.9	2.5	.98	1.6	1.7	2.0	1.6
18	2.5	2.9	3.0	2.9	3.2	2.9	2.6	1.6	1.7	.49	2.0	1.6
19	2.5	3.0	3.2	2.8	2.9	2.8	2.7	1.6	1.6	.37	1.8	1.5
20	2.5	3.2	3.6	2.8	2.9	3.0	2.6	1.2	1.4	.60	1.5	1.5
21	2.5	3.0	3.5	2.8	3.2	2.8	2.5	1.1	1.2	.42	1.5	1.4
22	2.5	2.9	2.4	2.9	2.7	2.9	2.6	1.7	.43	.40	1.9	1.2
23	2.5	2.9	2.9	2.8	2.9	2.9	2.5	1.5	.30	.30	2.3	1.2
24	2.4	2.9	3.0	2.8	2.8	2.8	2.6	.47	.40	0	2.1	1.3
25	2.5	2.9	2.9	2.8	2.8	2.8	2.4	1.6	.32	.15	1.9	1.2
26	2.6	2.9	3.0	2.8	2.9	3.0	2.2	1.7	.20	.01	1.8	1.2
27	2.6	3.0	2.8	2.8	2.8	3.0	1.6	1.6	.13	.01	2.0	1.2
28	2.6	2.9	3.0	2.8	2.8	3.1	1.3	1.5	.27	0	2.2	1.3
29	2.7	2.9	3.1	2.8	------	3.1	1.6	1.6	.10	.02	1.9	1.2
30	2.6	2.9	3.2	2.8	------	3.0	1.6	1.6	.11	.17	1.8	1.2
31	2.6	------	3.1	2.8	------	3.0	------	1.6	------	.31	1.7	------
TOTAL	78.8	83.5	93.3	95.1	80.3	94.0	77.3	37.97	41.16	29.25	55.87	46.4
MEAN	2.54	2.78	3.01	3.07	2.87	3.03	2.58	1.22	1.37	.94	1.80	1.55
MAX	2.8	3.2	3.6	3.4	3.2	4.7	3.2	1.7	2.7	2.7	8.4	2.6
MIN	2.4	2.6	2.4	2.8	2.7	2.8	1.3	.47	.10	0	.02	1.2
AC-FT	156	166	185	189	159	186	153	75	82	58	111	92

CAL YR 1973 TOTAL 2,077.10 MEAN 5.69 MAX 201 MIN 1.7 AC-FT 4,120
WTR YR 1974 TOTAL 812.95 MEAN 2.23 MAX 8.4 MIN 0 AC-FT 1,610

PEAK DISCHARGE (BASE, 500 FT^3/S).--No peak above base.

07236000 WOLF CREEK NEAR FARGO, OKLA.

LOCATION.--Lat 36°23'57", long 99°37'22", in SE 1/4 NE 1/4 sec.11, T.22 N., R.23 W., Ellis County, near right bank on downstream side of pier of county road bridge, 800 ft (243.8 m) downstream from Boggy Creek, 1.2 mi (1.9 km) downstream from Sixteen Mile Creek, 1.5 mi (2.4 km) north of Fargo, and at mile 18.7 (30.1 km).

DRAINAGE AREA.--1,624 mi^2 (4,206 km^2), of which 258 mi^2 (616 km^2) is probably noncontributing.

PERIOD OF RECORD.--October 1942 to current year. Monthly discharge only for some periods, published in WSP 1311.

GAGE.--Water-stage recorder. Datum of gage is 2,044.35 ft (623.118 m) above mean sea level (levels by Corps of Engineers). Prior to Oct. 1, 1962, at same site at datum 10.00 ft (3,048 m) higher.

AVERAGE DISCHARGE.--32 years, 67.9 ft^3/s (1.923 m^3/s), 49,190 acre-ft/yr (60.7 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 911 ft^3/s (25.8 m^3/s) Mar. 11, gage height, 12.19 ft (3.716 m); minimum daily, 1.4 ft^3/s (0.040 m^3/s) July 17.
Period of record: Maximum discharge, 81,600 ft^3/s (2,310 m^3/s) June 23, 1957, gage height, 20.0 ft (6.096 m), present datum, from floodmarks, from rating curve extended above 7,000 ft^3/s (198 m^3/s) on basis of contracted-opening measurement of peak flow; no flow at times in most years.
Maximum stage known since at least 1913, that of June 23, 1957, from information by local residents.

REMARKS.--Records good.

REVISIONS.--WSP 1117: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	17	27	23	36	33	49	46	17	5.6	1.5	35
2	11	17	28	21	35	33	48	50	16	5.4	1.5	36
3	11	17	39	19	34	34	46	45	16	4.9	1.5	46
4	11	19	120	15	33	34	45	41	20	4.6	1.8	38
5	11	20	49	17	34	34	45	39	21	4.4	3.1	35
6	11	21	36	19	36	35	46	38	19	4.2	68	33
7	11	22	31	21	36	35	45	36	19	3.5	25	30
8	10	22	29	25	38	74	43	37	20	3.1	8.8	27
9	9.8	22	28	23	37	51	42	34	19	2.9	18	25
10	20	22	27	25	36	198	39	32	17	2.6	21	24
11	209	22	27	22	36	671	40	31	16	2.2	16	23
12	39	22	26	19	37	253	38	31	15	2.0	44	20
13	19	21	26	23	37	77	36	29	15	1.7	26	20
14	15	20	27	29	36	68	35	27	14	1.6	18	20
15	15	20	27	40	36	62	36	27	14	1.5	13	20
16	15	20	27	54	38	59	36	26	13	1.5	9.9	20
17	14	21	26	50	38	57	36	24	13	1.4	7.8	20
18	14	21	27	50	37	56	37	22	12	1.6	6.7	20
19	14	24	21	50	37	55	37	21	11	2.1	6.1	21
20	14	44	18	47	36	55	44	21	8.9	2.1	4.5	21
21	14	39	21	44	35	54	39	20	8.5	2.1	3.0	20
22	13	30	27	43	34	54	40	19	8.0	2.6	3.5	18
23	13	29	32	40	34	51	39	20	8.1	3.1	8.1	19
24	13	28	31	39	33	51	36	26	8.3	2.3	18	20
25	12	28	29	38	33	52	34	74	8.1	3.0	21	21
26	13	28	29	38	34	54	33	43	8.1	2.3	81	21
27	13	28	29	38	33	56	33	26	7.6	2.0	108	19
28	13	28	29	38	33	52	33	20	6.6	1.8	569	19
29	13	27	28	38	------	51	48	17	5.7	1.8	87	18
30	14	27	28	37	------	52	66	16	5.7	1.9	63	18
31	16	------	25	37	------	53	------	16	------	1.6	45	------
TOTAL	633.8	726	974	1,022	992	2,554	1,224	954	390.6	83.4	1,308.8	727
MEAN	20.4	24.2	31.4	33.0	35.4	82.4	40.8	30.8	13.0	2.69	42.2	24.2
MAX	209	44	120	54	38	671	66	74	21	5.6	569	46
MIN	9.8	17	18	15	33	33	33	16	5.7	1.4	1.5	18
AC-FT	1,260	1,440	1,930	2,030	1,970	5,070	2,430	1,890	775	165	2,600	1,440

CAL YR 1973 TOTAL 15,464.4 MEAN 42.4 MAX 447 MIN 1.4 AC-FT 30,670
WTR YR 1974 TOTAL 11,589.6 MEAN 31.8 MAX 671 MIN 1.4 AC-FT 22,990

PEAK DISCHARGE (BASE, 2,000 FT^3/S).--No peak above base.

07236500 FORT SUPPLY LAKE NEAR FORT SUPPLY, OKLA.

LOCATION.--Lat 36°33'14", long 99°34'16", in NE 1/4 SE 1/4 sec.17, T.24 N., R.22 W., Woodward County, in control tower at left end of Fort Supply Dam on Wolf Creek, 2.0 mi (3.2 km) southeast of Fort Supply and at mile 5.5 (8.8 km).

DRAINAGE AREA.--1,735 mi^2 (4,494 km^2), of which 241 mi^2 (624 km^2) is probably noncontributing.

PERIOD OF RECORD.--June 1942 to current year. Prior to October 1970, published as Fort Supply Reservoir near Fort Supply.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level.

EXTREMES.--Current year: Maximum contents, 16,230 acre-ft (20.0 hm^3) Jan. 14, elevation, 2,005.20 ft (611.185 m); minimum, 11,720 acre-ft (14.5 hm^3) Aug. 22, elevation, 2,002.79 ft (610.450 m).
Period of record: Maximum contents, 99,500 acre-ft corrected (123 hm^3), June 25, 1957, elevation, 2,026.97 ft (617.820 m) corrected, from capacity table then in use; no contents at times November 1942 to January 1943.

REMARKS.--Reservoir is formed by an earth dam. Regulated storage began May 4, 1942; conservation pool first filled in June 1942. Capacity, 100,700 acre-ft (124 hm^3) at elevation 2,028.0 ft (618.134 m), crest of spillway and 13,890 acre-ft (17.1 hm^3) at elevation 2,004.0 ft (610.819 m), conservation pool, designated in 1965. No storage below elevation 1,987.0 ft (605.688 m). Figures given herein represent total contents. Reservoir is used for flood control and conservation. Revised capacity table, based on survey in 1969, used since Oct. 1, 1972.

COOPERATION.--Records furnished by Corps of Engineers.

REVISIONS.--WSP 1117: Drainage area.

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

2002	10,430	2005	15,830
2003	12,080	2006	17,890
2004	13,890		

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11,840	12,490	13,420	15,550	14,730	14,080	14,500	14,670	14,210	13,680	12,010	13,530
2	11,890	12,430	13,550	15,590	14,420	14,060	14,460	14,730	14,230	13,610	11,950	13,850
3	11,740	12,450	13,680	15,650	14,100	14,000	14,380	14,710	14,250	13,440	11,930	13,950
4	11,740	12,430	13,830	15,710	13,930	13,970	14,360	14,710	14,270	13,400	11,890	14,020
5	11,760	12,470	13,970	15,750	13,930	13,930	14,400	14,730	14,310	13,390	11,980	14,060
6	11,760	12,520	14,080	15,790	13,930	13,890	14,420	14,610	14,330	13,330	11,960	14,080
7	11,780	12,540	14,190	15,810	13,980	13,890	14,360	14,350	14,350	13,260	12,000	14,120
8	11,890	12,560	14,190	15,870	14,080	13,930	14,330	14,150	14,360	13,180	12,000	14,120
9	11,830	12,570	14,290	15,910	14,120	14,040	14,290	14,020	14,380	13,130	12,000	14,140
10	11,890	12,610	14,420	15,950	14,170	14,580	14,190	13,980	14,400	13,060	12,000	14,170
11	12,120	12,640	14,420	15,990	14,210	15,280	14,100	13,980	14,400	12,990	12,080	14,140
12	12,260	12,680	14,420	16,110	14,250	15,930	14,120	13,910	14,420	12,930	12,070	14,100
13	12,330	12,720	14,540	16,230	14,290	16,070	14,040	13,890	14,440	12,860	12,080	14,120
14	12,400	12,720	14,540	15,950	14,310	16,090	14,040	13,850	14,420	12,790	12,120	14,120
15	12,410	12,720	14,590	15,550	14,360	15,910	14,040	13,830	14,400	12,750	12,080	14,140
16	12,450	12,720	14,670	15,240	14,420	15,770	14,080	13,810	14,400	12,700	11,980	14,140
17	12,470	12,750	14,730	14,940	14,480	15,550	14,100	13,800	14,360	12,640	11,930	14,150
18	12,500	12,770	14,730	14,630	14,500	15,240	14,080	13,800	14,360	12,590	11,910	14,190
19	12,500	12,840	14,750	14,360	14,520	15,040	14,170	13,780	14,360	12,520	11,880	14,210
20	12,500	12,950	14,790	14,080	14,480	14,770	14,310	13,740	14,270	12,470	11,830	14,210
21	12,500	13,020	14,810	14,060	14,440	14,560	14,290	13,720	14,230	12,400	11,740	14,230
22	12,500	13,040	14,830	14,140	14,400	14,290	14,350	13,760	14,120	12,340	11,740	14,230
23	12,500	13,080	14,850	14,210	14,360	14,380	14,360	13,850	14,100	12,310	11,830	14,270
24	12,500	13,150	14,890	14,310	14,330	14,500	14,360	13,970	14,080	12,270	11,830	14,270
25	12,470	13,260	15,080	14,440	14,290	14,560	14,400	14,000	14,020	12,380	11,830	14,290
26	12,430	13,240	15,240	14,460	14,270	14,610	14,460	14,020	13,980	12,340	11,830	14,330
27	12,450	13,260	15,340	14,520	14,140	14,690	14,420	14,060	13,930	12,310	12,680	14,270
28	12,450	13,290	15,340	14,590	14,120	14,690	14,420	14,100	13,870	12,240	12,880	14,330
29	12,450	13,310	15,390	14,670	------	14,590	14,420	14,120	13,760	12,170	13,200	14,330
30	12,430	13,330	15,450	14,750	------	14,670	14,520	14,150	13,680	12,140	13,400	14,330
31	12,430	------	15,510	14,830	------	14,560	------	14,190	------	12,080	13,520	------
MAX	12,500	13,330	15,510	16,230	14,730	16,090	14,520	14,730	14,440	13,680	13,520	14,330
MIN	11,740	12,430	13,420	14,060	13,930	13,890	14,040	13,720	13,680	12,080	11,740	13,530
(†)	2,003.20	2,003.70	2,004.8	2,004.49	2,004.12	2,004.35	2,004.33	2,004.16	2,003.89	2,003.00	2,003.80	2,004.23
(‡)	+600	+900	+2,180	-680	-710	+440	-40	-330	-510	-1,600	+1,440	+810

CAL YR 1973 .....‡ +490
WTR YR 1974 .....‡ +2,500

† Elevation, in feet, at end of month.
‡ Change in contents, in acre-ft.

07237000 WOLF CREEK NEAR FORT SUPPLY, OKLA.

LOCATION.--Lat 36°34'00", long 99°33'05", in SE 1/4 SE 1/4 sec.9, T.24 N., R.22 W., Woodward County, near left bank on downstream side of pier of bridge on U.S. Highway 270, 1.0 mi (1.6 km) southeast of Fort Supply, 1.6 mi (2.6 km) downstream from Fort Supply Dam, and at mile 3.9 (6.3 km).

DRAINAGE AREA.--1,739 mi^2 (4,504 km^2), of which 241 mi^2 (624 km^2) is probably noncontributing.

PERIOD OF RECORD.--October 1937 to current year. Prior to Oct. 1, 1941, published as "near Supply".

GAGE.--Water-stage recorder. Datum of gage is 1,958.38 ft (596.914 m) above mean sea level (levels by Corps of Engineers). See WSP 1921 for history of changes prior to Sept. 30, 1962.

AVERAGE DISCHARGE.--37 years, 67.3 ft^3/s (1.906 m^3/s), 48,760 acre-ft/yr (60.1 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 218 ft^3/s (6.17 m^3/s) Jan. 15, gage height, 6.89 ft (2.100 m); no flow Oct. 29.
Period of record: Maximum discharge, 14,200 ft^3/s (403 m^3/s) June 24, 1939, gage height, 15.60 ft (4.775 m), present datum, from rating curve extended above 8,000 ft^3/s (227 m^3/s); no flow at times in most years.
A stage of 19.6 ft (5.97 m), present datum, was reached prior to October 1937, from information by State Highway Department.

REMARKS.--Records good. Flow completely regulated since May 1942 by Fort Supply Lake (see sta. 07236500).

REVISIONS.--WSP 1117: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.9	1.2	1.8	1.5	81	44	49	21	2.0	.83	.56	1.2
2	1.9	1.4	2.3	1.2	198	44	49	21	1.3	.67	.61	11
3	2.1	1.3	3.8	1.2	202	44	48	20	1.3	.80	.52	3.5
4	2.1	1.8	2.8	1.3	166	44	48	20	2.3	.73	.52	2.5
5	2.5	2.1	.92	1.1	13	44	48	20	1.3	.80	1.2	2.3
6	2.8	2.1	.64	1.2	1.9	43	48	91	1.2	.76	2.2	2.1
7	3.0	2.1	.74	1.6	1.4	44	47	154	1.7	.90	1.2	2.2
8	3.8	2.9	.90	2.0	1.1	45	47	154	2.1	.74	.95	2.0
9	4.0	5.2	1.8	1.6	.87	47	47	85	1.4	.71	1.7	1.9
10	5.6	4.1	1.9	1.5	.65	51	47	22	2.7	.91	1.4	2.1
11	5.6	2.7	2.1	1.4	5.6	47	46	21	4.2	.88	3.0	2.1
12	3.3	2.1	2.1	1.3	15	79	43	21	5.2	.75	1.4	2.1
13	3.8	1.9	2.0	1.6	15	188	24	22	8.4	.44	1.2	1.9
14	3.8	2.4	2.1	75	15	190	23	21	3.1	.47	1.2	2.0
15	3.8	2.1	1.7	215	15	191	22	15	1.3	.41	1.2	1.9
16	3.5	2.1	1.6	211	15	190	22	2.6	1.2	.40	1.0	2.1
17	2.3	2.3	1.7	210	15	188	21	2.4	1.3	.49	1.2	2.4
18	1.4	2.2	1.8	209	16	190	21	2.8	1.4	.52	1.2	2.2
19	1.4	2.2	1.6	207	33	189	23	2.3	1.0	.45	1.4	3.2
20	1.5	2.2	1.3	205	47	191	30	2.2	.94	.44	1.1	5.9
21	1.9	.83	1.5	123	47	191	22	2.1	.90	.47	1.2	3.3
22	1.9	.57	1.2	9.0	46	145	21	2.3	.87	.48	1.8	2.8
23	2.1	.71	.94	4.5	45	40	20	3.1	1.1	.58	3.1	2.9
24	2.2	.72	1.2	2.6	44	31	20	2.3	1.3	.52	2.8	2.8
25	2.2	1.2	1.3	2.0	44	27	20	2.8	1.2	3.1	2.0	2.7
26	2.7	1.2	1.4	1.8	44	25	20	1.5	1.2	1.2	1.6	2.5
27	3.1	1.0	1.4	1.6	44	23	19	1.3	.98	.74	15	2.0
28	2.0	1.3	1.1	1.5	44	34	21	.76	.87	.53	10	2.3
29	0	1.3	1.1	1.3	------	50	22	.93	.71	.52	2.5	1.6
30	.16	1.5	1.1	1.2	------	50	20	1.5	.80	.74	1.8	1.4
31	.58	------	1.4	1.2	------	50	------	1.7	------	.68	1.5	------
TOTAL	78.94	56.73	49.24	1,500.2	1,215.52	2,759	958	740.59	55.27	22.66	68.06	80.9
MEAN	2.55	1.89	1.59	48.4	43.4	89.0	31.9	23.9	1.84	.73	2.20	2.70
MAX	5.6	5.2	3.8	215	202	191	49	154	8.4	3.1	15	11
MIN	0	.57	.64	1.1	.65	23	19	.76	.71	.40	.52	1.2
AC-FT	157	113	98	2,980	2,410	5,470	1,900	1,470	110	45	135	160

CAL YR 1973 TOTAL 14,484.39 MEAN 39.7 MAX 213 MIN 0 AC-FT 28,730
WTR YR 1974 TOTAL 7,585.11 MEAN 20.8 MAX 215 MIN 0 AC-FT 15,050

07237500 NORTH CANADIAN RIVER AT WOODWARD, OKLA.

LOCATION.--Lat 36°26'18", long 99°16'40", in SE 1/4 SE 1/4 sec.25, T.23 N., R.20 W., Woodward County, near right bank on downstream side of pier of bridge on State Highway 15, 200 ft (61.0 m) downstream from The Atchison, Topeka and Santa Fe Railway Co. bridge, 6.0 mi (9.7 km) east of Woodward, 7.2 mi (11.6 km) upstream from Indian Creek, 27.5 mi (44.2 km) downstream from Wolf Creek, and at mile 460.2 (740.5 km).

DRAINAGE AREA.--11,589 mi^2 (30,016 km^2), of which 4,812 mi^2 (12,463 km^2) is probably noncontributing.

PERIOD OF RECORD.--October 1903 to September 1905 (gage heights only), October 1905 to June 1906, October 1938 to current year. Monthly discharge only for some periods, published in WSP 1311. Published as Canadian River (North Fork) near Woodward 1903-6. Gage-height records collected in this vicinity since 1919 are contained in reports of U.S. Weather Bureau.

GAGE.--Water-stage recorder. Datum of gage is 1,830.43 ft (557.915 m) above mean sea level. Prior to July 1906, nonrecording gage at railway bridge 200 ft (61.0 m) upstream at different datum. Oct. 1, 1938, to Oct. 26, 1943, nonrecording gage and Oct. 27, 1943, to July 12, 1951, water-stage recorder, at site 7.8 mi (12.6 km) upstream at datum 37.01 ft (11.281 m) higher than present datum.

AVERAGE DISCHARGE.--36 years (1938-74), 209 ft^3/s (5.919 m^3/s), 151,400 acre-ft/yr (187 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 1,220 ft^3/s (34.6 m^3/s) Jan. 16, gage height, 6.76 ft (2.060 m); no flow at times.
Period of record: Maximum discharge, 42,000 ft^3/s (1,190 m^3/s) Oct. 10, 1946, gage height, 9.80 ft (2.987 m), site and datum then in use; no flow at times in most years.
Flood of Oct. 12, 1923, reached a stage of 11.0 ft (3.35 m), site and datum then in use; from reports of U.S. Weather Bureau.

REMARKS.--Records good except for winter periods, which are fair. Some regulation since May 1942 by Fort Supply Lake on Wolf Creek 33 mi (5.3 km) upstream (see sta. 07236500).

REVISIONS (WATER YEARS).--WSP 1341: Drainage area. WSP 1731: 1951(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.5	4.6	6.0	7.0	33	66	91	77	29	3.1	0	56
2	3.9	4.3	6.7	6.4	49	64	89	80	29	2.6	0	105
3	3.3	4.3	19	5.4	176	62	89	69	29	2.2	0	158
4	3.0	4.7	25	3.5	191	61	89	64	37	1.9	0	172
5	2.4	4.8	19	4.2	153	60	88	61	34	2.0	0	78
6	2.0	5.1	15	5.2	70	60	90	58	32	2.4	8.8	49
7	1.6	5.3	14	6.6	49	59	88	65	47	1.5	1.3	36
8	1.0	5.4	13	8.4	43	62	87	137	37	.89	.99	27
9	1.2	5.4	12	7.4	41	98	89	141	31	.77	7.6	20
10	10	5.2	11	6.4	39	223	89	112	26	.98	2.5	16
11	61	5.3	11	5.6	38	231	89	58	24	.58	8.5	15
12	49	5.3	11	4.7	36	493	85	49	23	.11	4.4	12
13	29	5.4	10	6.6	42	575	82	47	46	0	1.9	12
14	14	5.3	9.8	15	44	445	63	42	36	0	11	11
15	9.5	4.9	9.6	25	45	392	59	40	26	0	4.6	11
16	7.3	4.7	9.3	210	45	357	57	37	20	0	2.2	12
17	6.3	4.8	9.6	173	45	335	57	32	17	0	1.7	12
18	5.7	4.8	9.6	130	45	324	55	28	16	0	1.4	11
19	5.1	6.3	10	90	47	308	56	25	14	0	1.4	12
20	4.7	12	12	71	49	299	112	21	12	0	.73	13
21	4.7	10	10	59	53	282	113	19	11	0	.38	11
22	4.4	8.1	9.4	53	61	285	160	19	9.5	0	.67	11
23	4.1	7.1	9.4	50	62	207	110	19	8.3	0	7.9	11
24	4.1	6.9	11	49	61	105	93	33	7.8	0	4.8	13
25	3.9	6.8	9.9	46	65	92	82	42	7.5	21	2.8	14
26	4.0	6.8	11	42	64	88	76	32	6.9	4.9	1.9	12
27	3.8	6.5	11	40	66	86	72	32	6.1	2.1	139	12
28	4.1	6.6	11	38	67	82	69	33	4.7	.93	119	12
29	4.1	6.7	11	36	------	85	84	33	4.1	.08	436	11
30	4.4	6.5	11	35	------	95	81	31	3.7	.10	161	11
31	4.3	------	8.5	33	------	96	------	29	------	0	86	------
TOTAL	270.4	179.9	355.8	1,272.4	1,779	6,077	2,544	1,565	634.6	48.14	1,018.47	956
MEAN	8.72	6.00	11.5	41.0	63.5	196	84.8	50.5	21.2	1.55	32.9	31.9
MAX	61	12	25	210	191	575	160	141	47	21	436	172
MIN	1.0	4.3	6.0	3.5	33	59	55	19	3.7	0	0	11
AC-FT	536	357	706	2,520	3,530	12,050	5,050	3,100	1,260	95	2,020	1,900

CAL YR 1973 TOTAL 64,705.53 MEAN 177 MAX 2,830 MIN 0 AC-FT 128,300
WTR YR 1974 TOTAL 16,700.71 MEAN 45.8 MAX 575 MIN 0 AC-FT 33,130

PEAK DISCHARGE (BASE, 3,500 FT^3/S).--No peak above base.

07238000 NORTH CANADIAN RIVER NEAR SEILING, OKLA.

LOCATION.--Lat 36°11'06", long 98°55'15", in NW 1/4 sec.28, T.20 N., R.16 W., Major County, near center of span on downstream side of pier of bridge on U.S. Highway 60, 2.0 mi (3.2 km) upstream from Seiling Creek, 2.2 mi (3.5 km) north of Seiling, 2.8 mi (4.5 km) downstream from Deep Creek, and at mile 422.6 (680.0 km).

DRAINAGE AREA.--12,261 mi^2 (31,756 km^2), of which 4,847 mi^2 (12,554 km^2) is probably noncontributing.

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

GAGE.--Water-stage recorder. Datum of gage is 1,675.42 ft (510.668 m) above mean sea level (levels by Corps of Engineers). July 1, 1946, to Aug. 17, 1964, at site 60 ft (18.3 m) downstream and prior to Oct. 1, 1954, at datum 5.00 ft (1.524 m) higher.

AVERAGE DISCHARGE.--28 years, 230 ft^3/s (6.514 m^3/s), 166,600 acre-ft/yr (205 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 15,200 ft^3/s (430 m^3/s) Aug. 28, gage height, 14.28 ft (4.353 m); no flow at times.
Period of record: Maximum discharge, 33,000 ft^3/s (935 m^3/s) May 19, 1951, gage height, 15.61 ft (4.758 m), present datum; maximum gage height, 16.00 ft (4.877 m) Oct. 11, 1946, present datum; no flow at times in most years.

REMARKS.--Records good. Some regulation by Fort Supply Lake on Wolf Creek 70.6 mi (113.6 km) upstream. (See sta. 07236500).

REVISIONS (WATER YEARS).--WSP 1341: Drainage area. WSP 1731: 1951(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.96	20	27	23	60	88	136	219	44	4.5	0	185
2	.85	20	27	19	58	88	132	262	40	3.9	0	768
3	.67	19	29	16	56	88	130	191	34	3.7	0	409
4	.51	19	54	10	135	91	125	149	29	2.4	0	265
5	.35	20	76	14	163	90	122	131	26	1.2	0	223
6	.27	21	62	18	154	90	122	119	26	.90	0	142
7	.20	22	55	21	96	89	122	111	25	.70	0	101
8	.14	23	48	24	78	91	119	105	25	.50	0	80
9	.10	24	45	20	70	93	116	144	25	.30	2.4	68
10	.40	23	42	22	64	212	114	155	24	.10	17	59
11	876	23	41	17	63	820	151	140	24	.09	3.6	52
12	536	24	40	16	61	437	123	102	23	.08	.9	44
13	225	24	38	20	59	533	116	92	78	.08	.4	39
14	137	24	37	25	60	523	110	86	74	.06	.3	35
15	92	23	36	35	71	444	102	80	54	.06	.2	33
16	70	22	35	45	76	399	99	76	38	.04	.1	34
17	57	21	35	60	77	368	97	75	29	.02	.1	31
18	40	22	35	110	75	351	95	74	26	0	.1	30
19	32	22	33	202	73	337	95	72	22	0	0	29
20	28	27	32	180	72	323	1,720	68	17	0	0	30
21	26	33	33	184	73	314	512	62	15	0	0	29
22	23	33	31	182	79	305	284	56	15	0	.2	26
23	22	31	47	143	82	301	252	53	14	0	23	25
24	21	30	45	94	84	241	191	81	13	0	25	25
25	20	28	40	80	83	175	165	648	12	0	13	27
26	20	28	39	76	83	156	147	254	11	0	2.6	24
27	19	28	37	71	85	150	138	131	9.4	0	3,040	23
28	19	29	37	68	86	144	125	88	7.8	0	5,890	22
29	18	28	37	66	------	137	334	68	6.6	0	720	20
30	19	27	37	63	------	131	397	53	5.6	0	497	18
31	19	------	28	61	------	138	------	48	------	0	296	------
TOTAL	2,323.45	738	1,238	1,985	2,276	7,747	6,491	3,993	792.4	18.63	10,531.9	2,896
MEAN	75.0	24.6	39.9	64.0	81.3	250	216	129	26.4	.60	340	96.5
MAX	876	33	76	202	163	820	1,720	648	78	4.5	5,890	768
MIN	.10	19	27	10	56	88	95	48	5.6	0	0	18
AC-FT	4,610	1,460	2,460	3,940	4,510	15,370	12,870	7,920	1,570	37	20,890	5,740

CAL YR 1973 TOTAL 85,967.75 MEAN 236 MAX 2,940 MIN 0 AC-FT 170,500
WTR YR 1974 TOTAL 41,030.38 MEAN 112 MAX 5,890 MIN 0 AC-FT 81,380

PEAK DISCHARGE (BASE, 3,500 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE
8-28	0215	14.28	15,200

07238500 CANTON LAKE NEAR CANTON, OKLA.

LOCATION.--Lat 36°05'03", long 98°36'05", in SE 1/4 NE 1/4 sec.32, T.19 N., R.13 W., Blaine County, near right end of Canton Dam on North Canadian River, 2.0 mi (3.2 km) northwest of Canton, and at mile 394.3 (634.4 km).

DRAINAGE AREA.--12,483 mi^2 (32,331 km^2), of which 4,883 mi^2 (12,647 km^2) is probably noncontributing.

PERIOD OF RECORD.--April 1948 to current year. Prior to October 1970 published as Canton Reservoir near Canton.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level.

EXTREMES.--Current year: Maximum contents, 125,900 acre-ft (155 hm^3) Mar. 23, elevation, 1,616.42 ft (492.685 m); minimum, 79,470 acre-ft (98.0 hm^3) Sept. 30, elevation, 1,610.05 ft (490.743 m).
Period of record: Maximum contents, 258,600 acre-ft (319 hm^3) May 25, 1951, elevation, 1,628.05 ft (496.230 m); minimum since conservation pool was first filled, 867 acre-ft (1.07 hm^3) May 5, 1955, elevation, 1,585.66 ft (483.309 m), from capacity table then in use.

REMARKS.--Reservoir is formed by an earth dam. Regulated storage began Apr. 15, 1948; conservation pool was first filled July 4, 1948. Capacity, 383,800 acre-ft (473 hm^3) at elevation 1,638.0 ft (499.26 m) (flood-control pool), 116,000 acre-ft (143 hm^3) at elevation 1,615.2 ft (492.31 m) (Normal water-supply pool, designated in 1965), 99,400 acre-ft (123 hm^3) at elevation 1,613.0 ft (492 m) (crest of spillway), and 18,460 acre-ft (22.8 hm^3) at elevation 1,596.5 ft (486.61 m) (conservation pool). Dead storage, 4 acre-ft (4,930 m^3) at elevation 1,582.0 ft (482.19 m) (invert of bypass gates). Figures given herein represent total contents. Reservoir was designed for flood control, irrigation, and conservation, but owing to a lack of facilities, it is not being used for irrigation at this time. Revised capacity table, based on survey in 1966, used since Oct. 1, 1967. Records of chemical analyses for current year are published in part 2 of this report.

COOPERATION.--Records furnished by Corps of Engineers.

REVISIONS.--WSP 1341: Drainage area.

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

1,610	79,160	1,615	114,500
1,611	85,580	1,616	122,500
1,613	99,400	1,617	130,800

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	105,399	107,199	106,599	107,799	111,899	115,899	119,699	117,399	117,199	112,899	106,199	115,799
2	105,000	107,099	106,599	107,699	111,899	116,000	118,099	117,399	117,099	112,500	106,099	115,299
3	105,599	106,799	107,599	107,799	112,000	115,699	117,000	116,699	117,199	112,299	105,699	114,599
4	105,299	106,899	107,199	107,799	111,799	116,299	115,699	115,500	117,199	112,199	105,500	113,399
5	105,099	106,699	107,199	107,799	112,799	116,500	115,299	113,899	116,699	112,000	105,799	112,000
6	105,000	106,500	107,099	107,799	112,599	116,399	114,500	112,899	117,199	111,699	105,699	110,299
7	104,699	106,599	107,099	107,899	112,699	116,599	115,099	113,199	117,099	111,399	105,500	108,699
8	104,500	106,599	107,399	107,799	112,799	116,899	114,799	113,399	117,199	111,099	105,299	107,000
9	104,500	106,500	107,299	108,299	112,799	118,599	114,500	114,000	117,000	110,799	106,099	105,299
10	107,099	106,500	107,199	108,299	112,899	119,500	115,699	113,899	116,799	110,599	106,000	103,199
11	107,699	106,399	107,399	108,299	112,899	120,599	116,799	114,299	116,799	110,199	105,899	101,599
12	108,399	105,899	107,399	108,299	113,099	121,399	117,000	113,899	116,699	110,000	105,699	100,199
13	108,699	106,299	107,299	108,299	113,199	122,000	117,299	113,899	116,599	109,799	105,599	98,439
14	108,799	106,599	107,299	108,299	113,599	122,799	116,699	114,299	116,599	109,599	105,299	96,509
15	109,000	106,500	107,500	108,299	114,500	123,399	116,299	114,099	116,599	109,299	105,000	94,959
16	108,699	106,099	107,199	108,399	114,599	123,599	116,000	113,899	116,500	109,199	105,000	93,419
17	108,699	106,399	107,399	108,599	114,500	124,299	115,699	114,099	116,399	109,000	104,599	91,699
18	108,699	106,500	108,099	109,099	115,099	124,799	115,699	114,199	116,299	108,699	104,599	90,189
19	108,599	106,699	107,899	109,399	115,000	124,699	115,299	114,099	116,000	108,500	104,299	90,669
20	108,500	106,699	107,399	109,699	115,599	124,799	116,199	113,899	115,799	108,299	103,899	91,009
21	108,299	106,500	107,500	110,099	115,699	124,899	118,099	113,899	115,500	108,099	103,799	90,879
22	108,299	106,500	107,599	110,500	115,099	125,599	118,000	113,899	115,299	108,000	104,299	90,879
23	107,899	106,799	107,699	110,799	116,000	125,199	116,899	115,000	115,099	108,000	105,000	90,739
24	108,099	106,699	108,000	111,199	115,199	125,199	116,099	115,000	114,799	107,699	105,000	89,109
25	108,000	106,500	107,599	111,299	115,199	125,199	115,699	116,799	114,599	107,699	104,899	87,569
26	108,099	106,699	107,799	111,399	115,099	125,099	115,199	116,599	114,299	107,500	104,699	85,909
27	107,899	106,899	107,399	111,500	115,599	124,899	115,000	117,099	114,099	107,299	108,000	84,399
28	107,699	106,799	108,000	111,599	115,699	125,099	115,399	117,099	113,799	107,099	109,000	82,649
29	107,500	106,500	107,699	111,699	------	124,399	116,099	117,199	113,399	106,899	116,299	81,049
30	107,500	106,599	108,299	111,799	------	122,899	116,199	117,199	113,099	106,899	117,099	79,469
31	107,399	------	107,799	111,699	------	121,299	------	117,399	------	106,199	116,599	------
MAX	109,000	107,199	108,299	111,799	116,000	125,599	119,699	117,399	117,199	112,899	117,099	115,799
MIN	104,500	105,899	106,599	107,699	111,799	115,699	114,500	112,899	113,099	106,199	103,799	79,469
(†)	1,614.08	1,613.96	1,614.14	1,614.65	1,615.16	1,615.86	1,615.22	1,615.37	1,614.83	1,613.93	1,615.27	1,610.05
(‡)	+1,800	-800	+1,200	+3,900	+4,000	+5,600	-5,100	+1,200	-4,300	-6,900	+10,400	-37,130

CAL YR 1973 .....‡ +35,240
WTR YR 1974 .....‡ -26,130

† Elevation in feet, at end of month.
‡ Change in contents, in acre-ft.

07239000 NORTH CANADIAN RIVER AT CANTON, OKLA.

LOCATION.--Lat 36°04'45", long 98°35'25", in NE 1/4 SW 1/4 sec.33, T.19 N., R.13 W., Blaine County, on right bank 2,700 ft (823.0 m) downstream from Canton Dam, 1.5 mi (2.4 km) northwest of Canton, 4.8 mi (7.7 km) upstream from Minnehaha Creek, and at mile 393.8 (633.6 km).

DRAINAGE AREA.--12,484 mi^2 (22,334 km^2), of which 4,883 mi^2 (12,647 km^2) is probably noncontributing.

PERIOD OF RECORD.--October 1937 to current year. Monthly discharge only for some periods, published in WSP 1311. Gage-height records collected in this vicinity since 1914 are contained in reports of U.S. Weather Bureau.

GAGE.--Water-stage recorder. Datum of gage is 1,562.50 ft (476.250 m) above mean sea level (Corps of Engineers bench mark). Oct. 1, 1937, to Jan. 5, 1955, water-stage recorder at site 2.5 mi (4.0 km) downstream at datum 1.91 ft (0.582 m) lower prior to Oct. 1, 1950, and at datum 6.91 ft (2.106 m) lower thereafter.

AVERAGE DISCHARGE.--37 years, 203 ft^3/s (5.749 m^3/s), 147,100 acre-ft/yr (181 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 1,290 ft^3/s (36.5 m^3/s) Sept. 6, gage hieght, 9.36 ft (2.853 m); minimum daily, 1.7 ft^3/s (0.048 m^3/s) Jan. 4.
Period of record: Maximum discharge, 24,800 ft^3/s (702 m^3/s) Oct. 12, 1946, gage height, 12.83 ft (3.911 m), site and datum then in use; no flow at times in most years.
Flood of Oct. 13, 1923, reached a stage of 16.8 ft (5.121 m), at site 300 ft (91.4 m) upstream from former site at datum 1.91 ft (0.582 m) lower than present datum, from reports of U.S. Weather Bureau.

REMARKS.--Records good. Flow partly regulated by Fort Supply Lake (see station 07236500) for period May 1942 to April 1948 and completely regulated thereafter by Canton Lake (see station 07238500).

REVISIONS.--WSP 1341: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.3	4.5	5.7	3.7	3.8	5.2	937	509	18	14	8.7	900
2	3.7	4.1	6.1	2.4	3.8	5.2	945	303	19	14	8.7	879
3	3.5	3.9	7.2	2.0	3.8	5.1	935	472	20	13	8.7	938
4	3.4	3.9	6.3	1.7	4.1	5.0	640	922	19	13	8.7	1,020
5	3.3	3.9	6.9	2.4	4.5	4.8	251	919	18	13	8.7	1,010
6	3.3	4.1	9.0	2.8	4.1	4.4	244	404	18	12	8.7	1,150
7	3.3	4.6	7.9	3.2	4.1	4.3	240	34	19	12	8.7	1,210
8	3.3	5.0	6.5	3.0	4.5	5.0	188	30	18	12	10	1,070
9	3.4	4.9	6.0	3.3	4.5	6.4	79	29	17	11	13	1,080
10	4.1	4.8	5.8	3.2	4.9	13	16	29	20	11	12	1,100
11	13	4.8	6.1	2.5	5.2	7.5	20	27	20	10	11	984
12	6.0	5.0	5.5	2.0	5.5	4.2	115	26	16	10	11	987
13	6.0	5.0	4.9	2.1	5.5	8.3	248	28	16	9.0	9.5	978
14	6.0	5.0	5.2	2.2	5.5	122	244	28	15	9.0	10	969
15	6.0	5.2	5.1	2.3	9.6	122	243	25	17	8.6	10	960
16	6.0	4.9	5.1	2.3	6.2	123	243	23	19	8.5	9.7	957
17	6.0	5.2	5.2	2.7	5.5	122	170	24	18	8.2	9.3	950
18	6.9	6.2	5.2	2.7	5.2	193	112	21	20	8.1	9.2	889
19	7.4	6.3	5.4	2.7	4.8	247	88	19	22	8.1	9.0	547
20	7.4	5.6	4.5	2.7	4.8	245	14	20	19	8.1	9.1	28
21	7.4	5.2	5.2	2.8	4.3	242	9.6	18	17	9.4	8.9	20
22	7.4	5.5	5.5	2.8	4.2	242	393	17	17	10	9.5	15
23	7.4	5.5	5.5	2.7	4.7	240	904	20	17	10	12	281
24	7.4	5.5	5.3	2.7	4.1	239	732	20	16	10	9.5	852
25	5.9	5.5	5.1	2.7	4.8	239	259	21	16	10	9.5	848
26	3.3	5.7	5.0	2.7	5.3	238	254	19	16	9.7	13	841
27	3.7	6.1	4.9	2.7	5.5	239	249	20	15	9.7	24	826
28	3.5	6.5	5.2	2.6	5.3	238	251	23	15	9.4	167	832
29	3.9	6.2	4.8	2.6	------	449	248	20	15	8.7	642	821
30	4.1	6.1	4.5	2.6	------	942	320	19	14	8.7	911	817
31	4.1	------	4.0	3.8	------	934	------	18	------	8.7	911	------
TOTAL	163.4	154.7	174.6	82.6	138.1	5,494.4	9,591.6	4,107	526	316.9	2,911.1	24,759
MEAN	5.27	5.16	5.63	2.66	4.93	177	320	132	17.5	10.2	93.9	825
MAX	13	6.5	9.0	3.8	9.6	942	945	922	22	14	911	1,210
MIN	3.3	3.9	4.0	1.7	3.8	4.2	9.6	17	14	8.1	8.7	15
AC-FT	324	307	346	164	274	10,900	19,020	8,150	1,040	629	5,770	49,110

CAL YR 1973 TOTAL 55,007.4 MEAN 151 MAX 1,120 MIN 2.6 AC-FT 109,100
WTR YR 1974 TOTAL 48,419.4 MEAN 133 MAX 1,210 MIN 1.7 AC-FT 96,040

07239500 NORTH CANADIAN RIVER NEAR EL RENO, OKLA.

LOCATION.--Lat 35°33'44", long 97°57'32", on east line of sec.32, T.13 N., R.7 W., Canadian County, near left bank on downstream side of pier of bridge on U.S. Highway 81, 2.0 mi (3.2 km) north of courthouse in El Reno, 2.2 mi (3.5 km) downstream from Target Creek, and at mile 307.4 (494.6 km).

DRAINAGE AREA.--13,042 mi^2 (33,779 km^2), of which 4,899 mi^2 (12,688 km^2) is probably noncontributing.

PERIOD OF RECORD.--October 1902 to April 1908, October 1937 to current year. Monthly discharge only for some periods, published in WSO 1311. Gage-height records collected at site 1 mi (1.6 km) upstream March 1914 to March 1934 and at present site thereafter are contained in reports of U.S. Weather Bureau. Published as Canadian River (North Fork) near El Reno 1902-4.

GAGE.--Water-stage recorder. Datum of gage is 1,299.02 ft (395.941 m) above mean sea level (U.S. Weather Bureau bench mark). October 1902 to April 1908, nonrecording gage at site about 50 ft (15.2 m) downstream at different datum.

AVERAGE DISCHARGE.--42 years (1902-7, 1937-74), 226 ft^3/s (6.400 m^3/s), 163,700 acre-ft/yr (202 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 2,050 ft^3/s (58.1 m^3/s) May 2, gage height, 9.28 ft (2.829 m); minimum daily, 1.3 ft^3/s (0.037 m^3/s) July 28.
Period of record: Maximum discharge, 15,000 ft^3/s (425 m^3/s) Oct. 28, 1941, gage height, 15.98 ft (4.871 m); maximum gage height, 18.20 ft (5.547 m) Sept. 21, 1965; no flow at times in most years.
Flood of Oct. 15, 1923, reached an elevation of 1,326.3 ft (404.256 m) above mean sea level at railroad bridge 1 mi (1.6 km) above station, from reports of U.S. Weather Bureau.

REMARKS.--Records good. Some regulation by Fort Supply Lake (see station 07236500) for period May 1942 to April 1948 and by Canton Lake (see station 07238500) thereafter.

REVISIONS.--WSP 1341: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	55	18	27	20	17	43	824	471	381	22	9.8	581
2	41	17	24	20	16	38	877	1,730	209	20	9.2	672
3	33	16	34	20	15	36	863	884	126	18	7.8	700
4	192	16	171	19	15	36	870	579	156	30	5.6	710
5	101	16	142	20	15	33	831	559	198	27	4.5	716
6	48	16	72	22	15	31	497	890	110	22	4.5	785
7	35	17	51	23	14	29	273	854	96	18	4.9	791
8	27	17	42	26	15	29	235	481	838	16	4.1	839
9	24	17	36	17	15	30	220	218	888	15	3.6	903
10	21	17	32	17	15	152	180	164	367	13	8.7	854
11	199	17	31	16	15	1,160	139	140	201	13	20	847
12	303	17	29	16	14	476	127	123	131	11	12	891
13	246	17	27	18	13	220	149	112	92	10	11	828
14	109	17	25	25	12	156	105	104	77	9.5	7.8	828
15	73	16	24	55	13	130	166	95	66	9.0	6.3	820
16	56	15	23	59	18	149	184	90	59	9.2	5.1	837
17	45	15	22	43	20	164	182	82	58	8.5	3.7	833
18	38	15	22	30	21	162	182	78	57	7.6	1.9	812
19	34	15	22	31	23	158	166	73	50	7.0	1.9	776
20	31	22	25	32	28	166	134	67	45	6.2	1.6	1,050
21	28	33	36	27	573	228	228	244	40	5.5	1.6	1,090
22	26	27	35	28	369	233	257	183	37	4.8	1.6	447
23	24	23	22	27	179	228	129	96	35	4.3	2.6	237
24	22	47	22	24	110	224	188	82	33	3.6	7.8	178
25	21	230	25	20	76	222	671	174	32	3.1	7.1	345
26	20	125	25	19	60	220	582	162	30	2.5	6.2	768
27	19	68	30	19	52	220	283	118	29	1.7	8.0	824
28	19	46	35	20	47	220	224	89	27	1.3	43	816
29	19	35	30	19	------	217	239	61	25	2.0	101	771
30	18	29	25	19	------	213	309	47	23	20	89	789
31	19	------	23	17	------	320	------	293	------	20	248	------
TOTAL	1,946	996	1,189	768	1,795	5,943	10,314	9,343	4,516	360.8	649.9	22,338
MEAN	62.8	33.2	38.4	24.8	64.1	192	344	301	151	11.6	21.0	745
MAX	303	230	171	59	573	1,160	877	1,730	888	30	248	1,090
MIN	18	15	22	16	12	29	105	47	23	1.3	1.6	178
AC-FT	3,860	1,980	2,360	1,520	3,560	11,790	20,460	18,530	8,960	716	1,290	44,310

CAL YR 1973 TOTAL 87,901.0 MEAN 241 MAX 2,860 MIN 1.7 AC-FT 174,400
WTR YR 1974 TOTAL 60,158.7 MEAN 165 MAX 1,730 MIN 1.3 AC-FT 119,300

PEAK DISCHARGE (BASE, 3,100 FT^3/S).--No peak above base.

07240000 LAKE HEFNER CANAL NEAR OKLAHOMA CITY, OKLA.

LOCATION.--Lat 35°33'11", long 98°37'11", in SW 1/4 SW 1/4 sec.34, T.13 N., R.4 W., Oklahoma County, attached to left wing wall just downstream from outlet of inverted siphon, 2,600 ft (792.5 m) upstream from Lake Hefner, 3.0 mi (4.8 km) northeast of Bethany, and 7.6 mi (12.2 km) northwest of the State Capitol in Oklahoma City.

PERIOD OF RECORD.--March 1944 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,200.96 ft (336.053 m) above mean sea level. Prior to Apr. 8, 1947, nonrecording gage at site 2.7 mi (4.3 km) upstream at different datum. Apr. 8, 1947, to Apr. 30, 1950, water-stage recorder at site 3.0 mi (4.8 km) upstream at different datum. May 1, 1950, to May 19, 1954, water-stage recorder and concrete control at present site and datum. May 20, 1954, to Apr. 25, 1957, water-stage recorder and concrete control at site 2,500 ft (762.0 m) downstream at datum 2.80 ft (0.853 m) lower than present datum, also used as auxiliary gage after Apr. 25, 1957.

EXTREMES.--Period of record: Maximum daily discharge, 1,500 ft^3/s (42.5 m^3/s) May 28, 1955; no flow at times in each year.

REMARKS.--Records fair. Use of canal began in March 1944. Canal diverts water from North Canadian River just upstream from Lake Overholser (see sta. 07240500) and delivers water to Lake Hefner, capacity, 80,600 acre-ft (99.4 hm^3), for municipal water supply of Oklahoma City. Subsequent to April 1950, small ground-water seepage, when head gates are closed, included in records.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.25			0	0	0	395	0	4.4	2.9	0
2	90	.10			0	0	0	467	0	4.4	2.9	0
3	101	.02			0	0	0	288	0	4.4	2.8	0
4	1.5	0			0	0	0	10	0	4.4	3.0	0
5	1.0	0			0	0	0	5.0	0	4.4	2.9	0
6	.90	0			0	0	0	1.5	0	4.4	2.9	0
7	.85	0			0	0	0	.70	0	4.4	2.7	0
8	.82	0			0	32	0	0	258	4.4	2.6	0
9	.78	0			0	1,060	0	0	25	4.4	3.0	0
10	.69	0			0	589	0	0	65	4.4	3.8	0
11	5.3	0			0	1,230	0	0	131	4.4	2.8	0
12	3.6	0			0	488	0	0	6.0	4.4	2.8	0
13	2.2	0			0	10	0	0	5.8	4.4	2.8	0
14	1.1	0			0	3.0	0	0	5.6	4.4	2.9	0
15	.70	0			0	1.5	0	0	5.0	4.4	2.9	0
16	.45	0			0	.50	0	0	4.8	4.4	3.0	0
17	.43	0			0	0	0	0	4.6	4.4	2.8	0
18	.39	0			0	0	0	0	4.5	4.3	2.7	0
19	.33	0			0	0	0	0	4.4	4.3	2.7	0
20	.26	0			0	0	0	0	4.4	4.3	2.6	0
21	.22	0			497	0	0	0	4.4	4.3	2.5	.02
22	.23	0			911	0	0	0	4.4	4.2	2.5	561
23	.21	0			357	0	0	0	4.4	3.8	3.1	288
24	.20	0			190	0	0	0	4.4	3.5	2.3	273
25	.13	0			3.0	0	0	0	4.4	3.4	2.5	287
26	.19	0			1.5	0	0	0	4.4	3.3	2.8	463
27	.51	0			.50	0	0	0	4.4	3.3	4.8	622
28	.22	0			0	0	0	0	4.4	3.3	2.4	709
29	.14	0			------	0	0	0	4.4	3.4	.60	710
30	.34	0			------	0	322	0	4.4	3.2	.10	713
31	.65	------			------	0	------	0	------	3.0	0	------
TOTAL	215.34	.37	0	0	1,960.00	3,414.00	322	1,167.20	568.1	126.4	81.10	4,626.02
MEAN	6.95	.012	0	0	70.0	110	10.7	37.7	18.9	4.08	2.62	154
MAX	101	.25	0	0	911	1,230	322	467	258	4.4	4.8	713
MIN	0	0	0	0	0	0	0	0	0	3.0	0	0
AC-FT	427	.7	0	0	3,890	6,770	639	2,320	1,130	251	161	9,180

CAL YR 1973 TOTAL 15,053.33 MEAN 41.2 MAX 1,100 MIN 0 AC-FT 29,860
WTR YR 1974 TOTAL 12,480.53 MEAN 34.2 MAX 1,230 MIN 0 AC-FT 24,760

07240500 LAKE OVERHOLSER NEAR OKLAHOMA CITY, OKLA.

LOCATION.--Lat 35°29'11", long 97°39'58", on north line of SW 1/4 sec.30, T.12 N., R.4 W., Oklahoma County, at control tower at left end of dam on North Canadian River, 2.9 mi (4.7 km) upstream from Mustang Creek, 9.0 mi (14 km) west of State Capitol in Oklahoma City, and at mile 281.5 (453.9 km).

DRAINAGE AREA.--13,221 mi² (34,242 km²), of which 4,899 mi² (12,688 km², [illegible] contributing.

PERIOD OF RECORD.--October 1937 to current year.

GAGE.--Nonrecording gage. Datum of gage is at mean sea level (levels by Oklahoma City Water Department). Prior to Oct. 1, 1955, at same site at datum 1,065.77 ft (324.847 m) elevation. Oct. 1, 1955, to Sept. 30, 1962, water-stage recorder at same site and present datum.

EXTREMES.--Current year: Maximum contents, 16,700 acre-ft (20.6 hm³) Oct. 24, elevation, 1,242.00 ft (378.562 m); minimum, 7,980 acre-ft (9.8 hm³) Sept. 5, elevation, 1,236.20 ft (376.794 m).
Period of record: Maximum contents, 20,900 acre-ft (25.8 hm³) June 14, 1944, elevation, 1,242.67 ft (378,766 m), from capacity table then in use; minimum observed, 1,870 acre-ft (2.31 hm³) May 14, 1955, elevation, 1,230.62 ft (375.093 m).

REMARKS.--Reservoir is formed by Ambursen-type dam flanked by long earth-fill sections. Storage began in 1917. Dam was partly washed out in 1923 and rebuilt in 1924. Capacity, 17,100 acre-ft (21.1 hm³) below elevation 1,242.27 ft (378.644 m), top of spillway gates. Dead storage, 1,400 acre-ft (1.73 hm³) below elevation 1,229.77 ft (374.834 m), sill of outlet works. Figures given herein represent total contents. Water diverted for municipal water supply by Oklahoma City. Revised capacity table used since Oct. 1, 1950.

COOPERATION.--Elevations and capacity table furnished by Oklahoma City Water Department.

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

Date	Elevation (feet) †	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	1,240.80	14,860	--
Oct. 31	1,241.20	15,480	+620
Nov. 30	1,240.80	14,860	-620
Dec. 31	1,240.60	14,560	-300
CAL YR 1973	--	--	+4,100
Jan. 31	1,240.85	14,940	+380
Feb. 28	1,241.20	15,480	+540
Mar. 31	1,241.00	15,170	-310
Apr. 30	1,240.90	15,020	-150
May 31	1,240.65	14,630	-390
June 30	1,240.25	14,020	-610
July 31	1,237.90	10,460	-3,560
Aug. 31	1,236.43	8,260	-2,200
Sept. 30	1,241.05	15,240	+6,980
WTR YR 1974	--	--	+380

† Elevation at 0800 on following day.

07241000 NORTH CANADIAN RIVER BELOW LAKE OVERHOLSER, NEAR OKLAHOMA CITY, OKLA.

LOCATION.--Lat 35°28'46", long 97°39'47", in southeast corner of SW 1/4 sec.30, T.12 N., R.4 W., Oklahoma County, on left bank 200 ft (61 m) upstream from bridge on State Highway 4, 0.5 mi (0.8 km) downstream from Lake Overholser, 2.4 mi (3.9 km) upstream from Mustang Creek, 9.1 mi (14.6 km) southwest of State Capitol in Oklahoma City, and at mile 281.0 (452.1 km).

DRAINAGE AREA.--13,222 mi^2 (34,245 km^2), of which 4,899 mi^2 (12,688 km^2) is probably noncontributing.

PERIOD OF RECORD.--October 1952 to September 1968, October 1969 to September 1972, current year.

GAGE.--Water-stage recorder. Datum of gage is 1,194.66 ft (364.132 m) above mean sea level. Prior to Oct. 1, 1961, at datum 10.00 ft (3.048 m) higher and through Mar. 24, 1971 at site 200 ft (61 m) downstream.

AVERAGE DISCHARGE.--20 years (1953-68, 1970-72, 1974), 91.1 ft^3/s (2.580 m^3/s), 66,000 acre-ft/yr (81.4 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 3,570 ft^3/s (101 m^3/s) June 6, gage height, 23.43 ft (7.141 m); minimum daily, 0.84 ft^3/s (0.024 m^3/s) Apr. 25.
Period of record: Maximum discharge, 8,020 ft^3/s (227 m^3/s) Oct. 5, 1959; maximum gage height, 24.62 ft (7.504 m) Sept. 23, 1965; no flow at times in 1952-57.
Maximum stage known, 40.9 ft (12.47 m), present datum, in October 1923 (from information by State Highway Department).

REMARKS.--Records fair. Some regulation by Canton Lake (see sta. 07238500) and by Lake Overholser (see sta. 07240500). Diversions above station into Lake Hefner Canal (see sta. 0724000).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.8	17	37	21	4.4	6.7	367	302	358	25	1.6	226
2	6.9	32	38	22	5.5	6.4	561	868	273	25	1.8	446
3	6.4	30	43	16	4.4	5.8	579	952	222	12	1.6	461
4	12	43	58	9.3	4.4	11	631	517	132	6.7	1.4	449
5	6.9	26	194	9.3	6.4	6.7	683	446	433	18	1.4	97
6	147	14	149	9.0	57	6.1	631	441	2,860	17	1.6	1.2
7	189	14	138	9.3	6.7	6.1	457	614	2,620	17	1.8	1.0
8	6.1	27	151	9.3	6.7	69	239	623	528	16	1.6	537
9	5.6	29	97	9.0	22	59	216	418	299	16	2.5	610
10	23	31	56	12	5.5	44	217	165	177	8.2	2.9	705
11	287	30	55	13	4.9	1,180	218	148	166	1.4	1.8	654
12	968	22	46	13	4.4	1,420	194	89	132	1.4	1.8	814
13	529	17	32	13	4.4	379	134	49	112	1.4	1.7	737
14	245	23	46	15	5.8	242	141	62	51	1.3	2.5	698
15	104	30	49	14	10	76	76	67	56	1.4	1.8	718
16	6.9	21	38	13	5.2	207	180	64	73	1.5	1.4	345
17	40	16	16	15	4.4	153	203	45	28	1.4	1.6	78
18	31	15	48	15	27	71	165	30	46	1.4	1.6	68
19	5.0	30	259	15	11	186	176	274	30	1.3	1.3	77
20	5.1	55	38	15	14	163	174	139	33	1.3	1.3	138
21	5.0	32	23	15	185	280	127	274	31	1.3	1.3	703
22	131	28	24	15	33	223	256	351	28	1.3	1.3	77
23	48	55	23	15	29	302	181	302	19	1.4	1.8	77
24	91	66	23	15	76	203	1.3	160	22	1.4	1.4	83
25	40	121	23	15	6.7	203	.84	99	22	1.4	1.8	74
26	8.2	146	26	15	7.0	204	279	340	21	1.4	1.3	70
27	75	138	25	15	7.6	203	405	176	29	1.4	1.3	69
28	52	119	24	15	7.0	205	215	109	27	1.4	1.3	120
29	28	57	36	6.7	------	261	243	90	26	1.4	1.4	103
30	27	37	36	5.0	------	213	138	88	26	1.5	64	93
31	34	------	45	4.2	------	211	------	260	------	1.4	55	------
TOTAL	3,170.9	1,321	1,896	403.1	565.4	6,805.8	8,088.14	8,562	8,880	190.0	166.9	9,329.2
MEAN	102	44.0	61.2	13.0	20.2	220	270	276	296	6.13	5.38	311
MAX	968	146	259	22	185	1,420	683	952	2,860	25	64	814
MIN	5.0	14	16	4.2	4.4	5.8	.84	30	19	1.3	1.3	1.0
AC-FT	6,290	2,620	3,760	800	1,120	13,500	16,040	16,980	17,610	377	331	18,500

WTR YR 1974 TOTAL 49,378.44 MEAN 135 MAX 2,860 MIN .84 AC-FT 97,940

07241550 NORTH CANADIAN RIVER NEAR HARRAH, OKLA.

LOCATION.--Lat 35°30'01", long 97°11'37", in SW 1/4 NW 1/4 sec.22, T.12 N., R.1 E., Oklahoma County, near left bank on downstream side of pier of county road bridge, 2.2 mi (3.5 km) northwest of Harrah, 3.8 mi (6.1 km) downstream from Choctaw Creek, and at mile 230.0 (370.1 km).

DRAINAGE AREA.--13,501 mi^2 (34,968 km^2), of which 4,899 mi^2 (12,688 km^2) is probably noncontributing.

PERIOD OF RECORD.--October 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,055.60 ft (321.774 m) above mean sea level.

AVERAGE DISCHARGE.--6 years, 272 ft^3/s (7.703 m^3/s), 197,100 zcre-ft/yr (243 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 7,630 ft^3/s (216 m^3/s) June 9, gage height, 18.14 ft (5.529 m); minimum daily, 33 ft^3/s (0.93 m^3/s) Aug. 21.
Period of record: Maximum discharge, 7,630 ft^3/s (216 m^3/s) June 9, 1974, gage height, 18.14 ft (5.529 m); minimum, 23 ft^3/s (0.65 m^3/s) Aug. 8, 1972.

REMARKS.--Records good. Some regulation by Canton Lake (see station 07238500) and by Lake Overholser (see sta. 07240500), where diversions are made into Lake Hefner Canal (see sta. 07240000). Low flow sustained by part of sewage effluent from Oklahoma City. Records of chemical analyses and of water temperatures for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	249	196	190	242	99	123	312	1,950	1,140	130	77	121
2	213	137	179	185	97	120	408	2,880	533	130	78	892
3	187	135	191	130	94	115	689	1,700	493	129	86	900
4	168	136	489	107	92	109	708	1,340	516	130	76	460
5	260	138	303	114	93	107	757	1,060	370	148	72	447
6	162	146	209	110	96	108	853	896	307	114	73	279
7	231	137	184	107	103	107	810	785	500	111	74	118
8	307	133	201	107	114	106	628	881	2,810	108	74	82
9	175	131	190	106	99	971	449	981	6,420	107	74	222
10	134	140	182	103	96	964	382	790	5,140	107	114	524
11	312	137	185	102	95	2,360	654	524	2,340	104	323	639
12	908	134	182	107	94	1,340	817	369	996	100	95	734
13	1,470	134	177	107	94	1,730	390	337	628	96	73	717
14	1,120	129	166	108	93	770	303	271	500	93	69	742
15	482	125	161	107	146	593	284	326	416	89	99	723
16	358	128	166	108	236	231	248	271	336	89	97	908
17	295	131	165	108	119	374	233	254	283	91	67	727
18	266	125	160	109	103	349	333	252	211	89	44	160
19	249	134	149	108	177	252	288	236	220	87	38	63
20	237	1,190	243	107	175	145	294	236	183	86	34	54
21	224	707	221	106	639	394	689	212	158	83	33	144
22	212	263	165	104	1,010	469	417	900	202	79	36	566
23	198	185	156	109	342	408	350	512	180	81	217	227
24	196	271	150	112	180	426	377	975	166	80	200	141
25	155	1,570	200	100	186	345	203	824	153	86	76	473
26	190	595	195	99	146	328	165	1,220	165	81	66	303
27	151	339	172	99	132	307	183	558	158	79	68	140
28	287	299	281	96	125	326	582	427	156	77	225	112
29	171	271	258	97	------	333	723	302	146	74	96	98
30	160	230	192	97	------	340	2,980	264	137	76	74	153
31	140	------	173	122	------	323	------	478	------	79	72	------
TOTAL	9,867	8,526	6,235	3,523	5,075	14,973	16,509	23,011	25,963	3,013	2,900	11,869
MEAN	318	284	201	114	181	483	550	742	865	97.2	93.5	396
MAX	1,470	1,570	489	242	1,010	2,360	2,980	2,880	6,420	148	323	908
MIN	134	125	149	96	92	106	165	212	137	74	33	54
AC-FT	19,570	16,910	12,370	6,990	10,070	29,700	32,750	45,640	51,500	5,980	5,750	23,540

CAL YR 1973 TOTAL 188,279 MEAN 516 MAX 4,880 MIN 37 AC-FT 373,500
WTR YR 1974 TOTAL 131,464 MEAN 360 MAX 6,420 MIN 33 AC-FT 260,800

PEAK DISCHARGE (BASE, 4,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE
6-9	0245	18.14	7,630

07242000 NORTH CANADIAN RIVER NEAR WETUMKA, OKLA.

LOCATION.--Lat 35°15'53", long 96°12'25", in center of SW 1/4 sec.12, T.9 N., R.10 E., Hughes County, near left bank on downstream side of pier of bridge on U.S. Highway 75, 2.3 mi (3.7 km) upstream from Wewoka Creek, 2.5 mi (4.0 km) northeast of Wetumka, and at mile 84.4 (135.8 km).

DRAINAGE AREA.--14,290 mi^2 (37,011 km^2), of which 4,899 mi^2 (12,688 km^2) is probably noncontributing.

PERIOD OF RECORD.--October 1937 to current year. Monthly discharge only for some periods, published in WSP 1311.

GAGE.--Water-stage recorder. Datum of gage is 683.28 ft (208.264 m) above mean sea level. Prior to Jan. 19, 1939, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--37 years, 676 ft^3/s (19.14 m^3/s), 489,800 acre-ft/yr (604 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 13,500 ft^3/s (382 m^3/s) Nov. 25, gage height, 11.40 ft (3.475 m); minimum, 82 ft^3/s (2.32 m^3/s) Aug. 9.
Period of record: Maximum discharge, 66,000 ft^3/s (1,870 m^3/s) Apr. 15, 1945, gage height, 26.40 ft (8.047 m); no flow Aug. 27 to Oct. 11, 1954, Aug. 25 to Oct. 22, 1956.
Flood in October 1923 reached a stage of 26.9 ft (8.20 m), from information by Corps of Engineers.

REMARKS.--Records fair. Some regulation by Lake Overholser (see sta. 07240500) and other dams upstream. Records of chemical analyses and of water temperatures for the current year are published in Part 2 of this report.

COOPERATION.--Gage-height record and 31 discharge measurements furnished by Corps of Engineers; records computed by Geological Survey.

REVISIONS (WATER YEARS).--WSP 977: 1942. WSP 1341: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,820	597	1,170	388	254	411	470	1,100	569	343	99	207
2	1,060	468	1,000	369	243	376	463	2,000	625	324	98	1,170
3	765	370	913	343	242	356	470	3,030	588	308	90	2,300
4	626	328	1,560	337	241	336	442	2,870	1,020	304	87	1,620
5	552	316	1,460	341	236	325	426	2,670	2,140	304	87	1,380
6	584	301	1,050	340	234	304	545	2,170	1,220	294	86	1,010
7	730	292	929	342	241	291	668	1,660	4,560	290	93	724
8	594	287	823	346	237	277	687	1,310	4,220	274	95	648
9	523	284	703	349	232	267	744	1,070	9,360	267	94	540
10	460	282	617	353	233	278	774	929	7,150	253	157	431
11	2,150	273	574	335	240	512	802	895	3,670	238	205	321
12	3,260	266	560	280	253	1,520	821	954	3,820	227	168	291
13	6,080	269	535	292	246	1,600	642	869	3,690	217	165	444
14	3,200	273	525	323	240	1,720	631	721	3,950	213	164	589
15	1,820	270	490	336	882	1,590	853	666	2,810	204	241	663
16	1,610	261	467	343	420	1,380	610	558	1,540	197	198	768
17	1,180	250	444	357	343	943	476	503	1,180	188	170	962
18	845	252	418	347	338	766	424	465	974	180	199	1,150
19	705	250	547	339	472	580	405	442	837	170	179	982
20	585	3,540	953	331	469	559	371	407	740	162	159	910
21	501	3,860	692	318	658	635	412	385	653	156	137	611
22	452	1,740	588	303	1,030	617	437	366	580	153	117	465
23	421	1,730	560	298	883	557	419	352	536	148	110	394
24	380	5,970	599	283	1,130	556	412	343	498	141	102	385
25	351	11,900	544	268	1,110	622	579	477	461	141	96	597
26	332	10,600	492	260	703	562	447	831	439	133	96	987
27	400	5,720	456	267	518	559	418	1,060	417	122	164	849
28	438	3,200	427	352	444	548	412	1,160	394	117	228	605
29	380	2,030	413	381	------	512	338	1,050	371	112	177	634
30	377	1,500	399	301	------	501	732	721	354	109	153	451
31	480	------	389	269	------	490	------	629	------	106	138	------
TOTAL	33,661	57,679	21,297	10,091	12,772	20,550	16,330	32,663	59,366	6,395	4,352	23,088
MEAN	1,086	1,923	687	326	456	663	544	1,054	1,979	206	140	770
MAX	6,080	11,900	1,560	388	1,130	1,720	853	3,030	9,360	343	241	2,300
MIN	332	250	389	260	232	267	338	343	354	106	86	207
AC-FT	66,770	114,400	42,240	20,020	25,330	40,760	32,390	64,790	117,800	12,680	8,630	45,800

CAL YR 1973 TOTAL 521,555 MEAN 1,429 MAX 12,300 MIN 99 AC-FT 1,035,000
WTR YR 1974 TOTAL 298,244 MEAN 817 MAX 11,900 MIN 86 AC-FT 591,600

PEAK DISCHARGE (BASE, 5,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-13	0700	9.60	6,960	6-7	abt 1000	9.90	7,040
11-20	1430	8.96	5,630	6-9	abt 1700	11.10	9,870
11-25	abt 0900	11.40	13,500				

07242350 DEEP FORK NEAR ARCADIA, OKLA.

LOCATION.--Lat 35°39'10", long 97°20'58", on south line of SW 1/4 sec.30, T.14 N., R.1 W., Oklahoma County, on left bank at downstream side of county road bridge, 1.6 mi (2.6 km) upstream from Coffee Creek, 1.6 mi (2.6 km) southwest of Arcadia, and at mile 212.8 (342.4 km).

DRAINAGE AREA.--108 mi ^{2} (280 km^2).

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

GAGE.--Water-stage recorder. Altitude of gage is 950 ft (289.6 m), from topographic map.

AVERAGE DISCHARGE.--5 years, 62.4 ft^3/s (1.767 m^3/s), 45,210 acre-ft/yr (55.7 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 9,550 ft^3/s (270 m^3/s) June 8, gage height, 24.14 ft (7.358 m); minimum daily, 23 ft^3/s (0.65 m^3/s) Feb. 7, 8, Aug. 21, 22.
Period of record: Maximum discharge, 9,550 ft^3/s (270 m^3/s) June 8, 1974, gage height 24.14 ft (7.358 m); minimum daily, 16 ft^3/s (0.45 m^3/s) at times in 1969-70.

REMARKS.--Records good. Low flow sustained by part of sewage effluent from Oklahoma City. Records of chemical analyses and of water temperatures for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	82	28	39	32	24	37	30	177	117	40	29	48
2	79	32	38	38	25	37	28	234	72	37	38	156
3	74	27	96	30	25	36	30	114	95	37	33	52
4	126	25	207	29	24	36	28	89	226	42	34	37
5	88	27	71	29	25	36	29	79	134	39	34	33
6	101	28	57	33	25	33	29	72	72	36	35	32
7	73	29	50	30	23	34	33	68	71	36	36	33
8	64	28	48	33	23	44	30	60	4,410	34	37	33
9	60	29	45	33	24	457	29	49	735	34	38	32
10	58	27	43	31	24	858	30	50	136	32	159	32
11	322	27	43	31	23	467	200	47	124	30	41	32
12	162	28	40	29	24	115	50	43	106	30	30	31
13	148	32	39	29	23	88	34	41	56	30	31	31
14	79	28	38	26	24	74	31	60	55	32	29	30
15	72	26	36	29	55	64	27	48	52	35	32	32
16	64	24	36	29	41	53	30	41	49	40	33	121
17	53	24	36	30	28	48	28	40	45	33	31	47
18	48	26	37	27	44	45	29	40	47	34	26	37
19	46	31	37	27	96	41	33	36	46	35	24	40
20	43	355	35	28	30	38	57	35	44	39	24	57
21	39	67	36	25	546	79	90	240	44	39	23	66
22	37	51	36	26	168	50	53	457	44	39	23	38
23	36	44	37	26	70	39	43	154	45	39	701	37
24	36	440	35	25	52	34	40	848	43	41	50	40
25	35	262	32	25	44	33	40	761	44	35	36	148
26	30	80	31	26	44	33	43	172	41	25	33	40
27	50	77	34	28	42	32	49	126	41	24	135	34
28	36	67	35	25	40	31	43	115	40	25	70	37
29	30	49	33	25	------	31	350	105	40	24	39	33
30	31	45	32	24	------	31	898	94	39	30	37	30
31	30	------	30	25	------	30	------	629	------	29	37	------
TOTAL	2,232	2,063	1,442	883	1,636	3,064	2,464	5,124	7,113	1,055	1,958	1,449
MEAN	72.0	68.8	46.5	28.5	58.4	98.8	82.1	165	237	34.0	63.2	48.3
MAX	322	440	207	38	546	858	898	848	4,410	42	701	156
MIN	30	24	30	24	23	30	27	35	39	24	23	30
AC-FT	4,430	4,090	2,860	1,750	3,250	6,080	4,890	10,160	14,110	2,090	3,880	2,870

CAL YR 1973 TOTAL 35,430 MEAN 97.1 MAX 1,850 MIN 22 AC-FT 70,280
WTR YR 1974 TOTAL 30,483 MEAN 83.5 MAX 4,410 MIN 23 AC-FT 60,460

PEAK DISCHARGE (BASE, 2,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
11-24	2130	11.49	2,270	6-8	1630	24.14	9,550
4-30	0500	15.30	3,430	8-23	0745	13.63	2,660
5-24	0200	15.89	3,620				

07243000 DRY CREEK NEAR KENDRICK, OKLA.

LOCATION.--Lat 35°46'55", long 96°51'20", in NW 1/4 NW 1/4 sec.14, T.15 N., R.4 E., Lincoln County, near left bank on downstream side of county road bridge, 1.0 mi (1.6 km) downstream from Beaver Creek and 4.5 mi (7.2 km) west of Kendrick.

DRAINAGE AREA.--69.0 mi^2 (178.7 km^2).

PERIOD OF RECORD.--October 1955 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 825 ft (251.5 m), from topographic map.

AVERAGE DISCHARGE.--19 years, 19.8 ft^3/s (0.561 m^3/s) 14,340 acre-ft/yr (17.7 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 15,000 ft^3/s (425 m^3/s) June 8, gage height, 18.48 ft (5.633 m); no flow Aug. 4-8, 15-22.
Period of record: Maximum discharge, 15,000 ft^3/s (425 m^3/s) June 8, 1974, gage height 18.48 ft (5.633 m); no flow at times in most years.

REMARKS.--Records fair. Records of chemical analyses and 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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.1	7.0	15	9.5	6.8	12	14	796	34	7.9	.70	237
2	6.4	6.7	15	9.2	6.9	12	13	1,020	20	7.6	.50	2,580
3	6.5	5.9	127	9.1	6.7	12	13	93	19	7.2	.30	68
4	6.7	6.0	228	8.4	6.5	11	12	51	61	8.1	0	15
5	6.2	6.0	22	7.1	6.6	9.9	12	41	32	3.8	0	6.4
6	6.7	6.0	13	5.0	6.5	9.7	12	34	143	3.2	0	3.1
7	6.4	6.4	13	5.0	6.1	9.4	12	30	71	2.9	0	3.0
8	5.9	6.4	13	4.6	6.6	10	11	27	3,420	2.8	0	3.0
9	5.3	6.4	13	4.3	6.6	83	11	25	2,410	2.7	2.0	3.0
10	5.1	6.4	14	9.2	6.3	1,240	12	22	91	2.4	12	3.1
11	101	6.4	14	17	6.1	773	120	21	70	2.3	.97	3.1
12	325	6.4	14	17	6.3	97	22	18	43	2.2	.70	2.9
13	88	6.3	14	16	6.4	60	15	17	36	2.2	.50	2.9
14	19	7.4	15	12	6.3	58	12	24	33	2.1	.20	2.8
15	13	6.7	15	9.7	25	43	12	17	30	2.0	0	3.1
16	11	6.4	15	9.3	17	37	11	14	28	2.0	0	10
17	9.5	3.3	15	9.3	10	33	11	12	26	1.9	0	6.4
18	8.8	1.4	16	9.1	60	31	11	11	24	1.7	0	6.2
19	8.3	31	16	8.4	184	26	11	10	22	1.7	0	5.8
20	7.9	1,110	16	8.2	18	27	70	9.3	20	1.5	0	10
21	7.6	44	15	7.8	197	38	24	11	18	1.4	0	8.3
22	7.3	16	14	7.6	107	33	13	9.9	16	1.2	0	7.2
23	7.2	11	14	7.2	36	25	9.9	21	15	1.1	47	7.0
24	6.7	809	14	7.0	21	21	8.9	65	14	1.2	6.2	21
25	6.4	198	12	7.0	17	21	8.5	177	13	1.2	.83	70
26	6.4	33	12	7.5	17	20	8.3	37	12	1.2	.28	13
27	6.4	21	11	7.5	15	19	8.1	22	11	1.0	.34	8.1
28	6.4	19	11	7.3	13	19	8.1	17	9.4	1.0	.33	6.4
29	6.4	15	10	7.3	------	18	212	15	8.9	.90	.26	5.6
30	6.6	15	10	7.3	------	16	586	14	8.1	.90	.27	5.3
31	7.0	------	9.3	7.1	------	16	------	234	------	.90	.21	------
TOTAL	728.2	2,429.5	755.3	268.0	827.7	2,840.0	1,303.8	2,915.2	6,758.4	80.20	73.59	3,126.7
MEAN	23.5	81.0	24.4	8.65	29.6	91.6	43.5	94.0	225	2.59	2.37	104
MAX	325	1,110	228	17	197	1,240	586	1,020	3,420	8.1	47	2,580
MIN	5.1	1.4	9.3	4.3	6.1	9.4	8.1	9.3	8.1	.90	0	2.8
AC-FT	1,440	4,820	1,500	532	1,640	5,630	2,590	5,780	13,410	159	146	6,200

CAL YR 1973 TOTAL 16,730.81 MEAN 45.8 MAX 1,110 MIN 0 AC-FT 33,190
WTR YR 1974 TOTAL 22,106.59 MEAN 60.6 MAX 3,420 MIN 0 AC-FT 43,850

PEAK DISCHARGE (BASE, 2,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
11-20	0245	12.75	3,100	5-1	2330	13.34	3,400
11-24	1930	12.12	2,850	6-8	2300	18.48	15,000
3-10	2245	12.99	3,200	9-2	0945	15.58	6,690

07243500 DEEP FORK NEAR BEGGS, OKLA.

LOCATION.--Lat 35°40'15", long 96°04'08", on line between secs. 19 and 20, T.14 N., R.12 E., Okmulgee County, near left bank on downstream side of pier of county road bridge, 3.0 mi (4.8 km) upstream from Adams Creek, 4.0 mi (6.4 km) south of Beggs, 8.0 mi (12.9 km) downstream from Flat Rock (Checkerboard) Creek, and at mile 85.0 (136.8 km).

DRAINAGE AREA.--2,018 mi^2 (5,227 km^2).

PERIOD OF RECORD.--September 1938 to current year.

GAGE.--Water-stage recorder. Datum of gage is 632.55 ft (192.801 m) above mean sea level. Prior to Aug. 29, 1939, nonrecording gage at site 450 ft (137.2 m) downstream at same datum. Aug. 29, 1939, to June 22, 1953, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--36 years, 813 ft^3/s (23.02 m^3/s), 589,000 acre-ft/yr (726 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 30,900 ft^3/s (875 m^3/s) June 13, gage height, 30.69 ft (9.354 m); minimum, 22 ft^3/s (0.62 m^3/s) Aug. 9.
Period of record: Maximum discharge, 66,800 ft^3/s (1,890 m^3/s) May 11, 1943, gage height, 34.55 ft (10.531 m); no flow at times in 1939, 1954, 1956.

REMARKS.--Records good. Records of chemical analyses and of water temperatures 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 YEARSO.--WSP 957: 1941. WSP 1117: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,160	184	4,180	284	247	1,220	437	2,910	2,050	503	44	263
2	1,280	172	3,900	252	229	1,030	400	2,920	2,000	420	41	1,380
3	1,360	161	3,660	211	214	884	370	2,890	1,730	347	36	2,770
4	1,440	151	3,420	172	201	707	343	2,690	1,470	272	33	2,980
5	1,410	144	2,790	170	190	616	314	2,540	2,150	239	29	2,940
6	1,240	134	1,980	170	180	603	302	2,630	2,580	218	27	2,870
7	1,030	123	1,350	170	177	481	272	3,050	3,280	200	28	2,910
8	773	117	1,140	170	173	428	259	3,590	5,530	184	26	3,140
9	584	114	1,050	170	166	394	247	4,140	22,200	171	43	3,490
10	481	113	972	170	153	388	242	4,470	29,300	162	337	3,830
11	1,160	111	898	180	151	1,440	258	4,230	27,000	152	374	3,950
12	2,340	110	807	180	158	2,280	418	3,590	27,700	143	247	3,760
13	3,180	104	711	190	159	2,160	429	1,900	31,000	129	168	2,980
14	2,980	102	623	201	161	1,940	354	1,330	26,400	115	118	1,300
15	2,440	98	541	209	173	1,960	337	2,270	19,700	101	112	743
16	1,620	96	477	233	476	2,090	336	1,710	14,200	88	130	647
17	1,330	96	433	266	477	2,250	315	922	10,400	81	135	731
18	1,310	97	395	287	421	2,410	305	636	8,280	75	107	610
19	1,270	97	1,070	298	732	2,470	295	536	7,010	70	102	450
20	1,170	2,070	1,530	290	1,180	2,320	288	470	5,940	65	86	388
21	983	3,270	1,080	274	1,530	1,890	274	418	4,750	61	74	393
22	789	3,170	691	259	2,290	1,520	298	376	4,040	57	63	391
23	610	2,450	593	249	2,180	1,160	351	361	3,410	53	54	349
24	485	3,720	636	240	1,720	902	340	361	2,250	50	61	310
25	401	5,540	567	231	1,380	749	365	486	1,430	41	132	487
26	343	7,440	490	224	1,330	664	351	1,100	1,080	36	134	1,010
27	305	6,890	430	239	1,330	622	323	1,110	895	32	94	883
28	272	5,870	385	296	1,320	582	305	949	772	30	89	663
29	245	5,030	355	383	------	553	285	1,130	682	34	117	668
30	218	4,470	332	348	------	518	1,870	1,320	595	44	157	662
31	200	------	319	286	------	479	------	1,540	------	45	168	------
TOTAL	34,409	52,244	37,805	7,302	19,098	37,710	11,283	58,575	269,824	4,218	3,366	47,948
MEAN	1,110	1,741	1,220	236	682	1,216	376	1,890	8,994	136	109	1,598
MAX	3,180	7,440	4,180	383	2,290	2,470	1,870	4,470	31,000	503	374	3,950
MIN	200	96	319	170	151	388	242	361	595	30	26	263
AC-FT	68,250	103,600	74,990	14,480	37,880	74,800	22,380	116,200	535,200	8,370	6,680	95,100

CAL YR 1973 TOTAL 644,984 MEAN 1,767 MAX 10,900 MIN 29 AC-FT 1,279,000
WTR YR 1974 TOTAL 583,782 MEAN 1,599 MAX 31,000 MIN 26 AC-FT 1,158,000

PEAK DISCHARGE (BASE, 3,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-13	1030	15.39	3,290	6-13	1045	30.69	30,900
11-26	1515	21.75	8,030	9-11	0630	17.42	3,970
5-10	1100	17.95	4,500				

07244800 EUFAULA LAKE NEAR BROOKEN, OKLA.

LOCATION.--Lat 35°18'25", long 95°21'45", in SW 1/4 sec.25, T.10 N., R.18 E., McIntosh County, in intake structure near left end of dam on Canadian River, 4.0 mi (6.4 km) northeast of Brooken and at mile 27.0 (43.4 km).

DRAINAGE AREA.--47,522 mi^2 (123,082 km^2), of which 9,700 mi^2 (25,123 km^2) is probably noncontributing.

PERIOD OF RECORD.--February 1964 to current year. Prior to October 1970 published as Eufaula Reservoir near Brooken.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level.

EXTREMES.--Current year: Maximum contents, 3,500,000 acre-ft (4.32 km^3) Nov. 27, elevation, 594.88 ft (181.319 m); minimum, 1,909,000 acre-ft (2.35 km^3) Aug. 30, elevation, 580.59 ft (176.964 m).
Period of record: Maximum contents, 3,791,000 acre-ft (4.67 km^3) Apr. 25, 1973, elevation, 596.95 ft (181.950 m); minimum since power pool first filled, 1,181,800 acre-ft (1,460 hm^3) Nov. 4, 1964, elevation, 570.23 ft (173.806 m).

REMARKS.--Reservoir is formed by an earth dam having a gated, concrete, ogee-type spillway weir controlled by 11, 40-foot (12.2 m) taintor gates. Closure for diversion was made Feb. 1, 1963 and regulated storage began Feb. 10, 1964; minimum power pool was first filled June 17, 1964. Capacity, 3,798,000 acre-ft (4.68 km^3) at elevation 597.0 ft (181.966 m), top of flood control pool, 2,329,000 acre-ft (2.87 km^3) at elevation 585.0 ft (178.308 m), top of power pool, and 864,800 acre-ft (1.07 km^3) at elevation 565.0 ft (172.212 m), bottom of power pool. Dead storage is negligible. Figures given herein represent total contents. Reservoir is used for flood control, sediment control, power development, and other water uses. Revised capacity table, based on survey 1969, used since Oct. 1, 1972.

COOPERATION.--Records furnished by Corps of Engineers.

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

580	1,858	589	2,763
583	2,131	592	3,124
586	2,434	595	3,516

CONTENTS, IN THOUSANDS OF ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,171	2,456	3,339	2,463	2,356	2,440	2,404	2,677	2,435	2,484	2,037	1,936
2	2,179	2,442	3,281	2,447	2,355	2,451	2,395	2,748	2,432	2,465	2,030	1,981
3	2,180	2,446	3,259	2,428	2,359	2,445	2,401	2,741	2,424	2,449	2,023	2,010
4	2,182	2,447	3,256	2,417	2,358	2,442	2,388	2,715	2,433	2,441	2,021	2,027
5	2,183	2,444	3,249	2,414	2,362	2,437	2,374	2,703	2,458	2,425	2,016	2,036
6	2,199	2,439	3,207	2,418	2,360	2,440	2,364	2,692	2,499	2,408	2,016	2,042
7	2,212	2,432	3,167	2,410	2,361	2,439	2,367	2,678	2,574	2,391	2,011	2,049
8	2,218	2,428	3,128	2,411	2,347	2,440	2,347	2,663	2,608	2,376	2,003	2,053
9	2,219	2,423	3,087	2,396	2,348	2,442	2,336	2,648	2,699	2,359	2,004	2,056
10	2,217	2,418	3,040	2,385	2,350	2,474	2,325	2,633	2,719	2,346	2,016	2,085
11	2,251	2,419	3,000	2,370	2,349	2,529	2,331	2,618	2,743	2,330	2,018	2,118
12	2,294	2,415	2,976	2,362	2,350	2,553	2,329	2,600	2,770	2,312	2,012	2,153
13	2,360	2,412	2,931	2,365	2,351	2,571	2,340	2,591	2,802	2,303	2,003	2,175
14	2,410	2,411	2,908	2,366	2,352	2,585	2,333	2,566	2,828	2,297	2,000	2,186
15	2,424	2,389	2,873	2,369	2,352	2,598	2,329	2,553	2,846	2,288	1,993	2,191
16	2,434	2,385	2,835	2,367	2,361	2,612	2,321	2,545	2,866	2,272	1,986	2,197
17	2,437	2,385	2,802	2,364	2,366	2,622	2,318	2,534	2,846	2,259	1,984	2,207
18	2,438	2,380	2,769	2,348	2,375	2,627	2,311	2,522	2,814	2,244	1,981	2,205
19	2,434	2,373	2,755	2,336	2,369	2,628	2,307	2,507	2,780	2,228	1,973	2,204
20	2,437	2,424	2,727	2,338	2,370	2,635	2,317	2,490	2,745	2,215	1,961	2,241
21	2,441	2,473	2,702	2,334	2,404	2,624	2,342	2,478	2,706	2,205	1,954	2,277
22	2,441	2,496	2,671	2,332	2,405	2,611	2,341	2,466	2,664	2,189	1,943	2,300
23	2,438	2,520	2,657	2,330	2,431	2,597	2,342	2,449	2,630	2,169	1,941	2,305
24	2,433	2,880	2,649	2,321	2,438	2,577	2,335	2,434	2,605	2,153	1,940	2,316
25	2,426	3,193	2,629	2,318	2,434	2,559	2,334	2,433	2,584	2,138	1,938	2,328
26	2,424	3,421	2,619	2,323	2,432	2,538	2,331	2,447	2,565	2,121	1,924	2,335
27	2,430	3,500	2,583	2,328	2,437	2,515	2,335	2,455	2,550	2,109	1,918	2,332
28	2,434	3,478	2,562	2,336	2,434	2,496	2,334	2,448	2,532	2,099	1,921	2,338
29	2,430	3,436	2,537	2,343	------	2,473	2,339	2,436	2,517	2,078	1,914	2,339
30	2,435	3,390	2,516	2,350	------	2,446	2,558	2,427	2,502	2,064	1,909	2,334
31	2,445	------	2,486	2,352	------	2,430	------	2,430	------	2,048	1,913	------
MAX	2,445	3,500	3,339	2,463	2,438	2,635	2,558	2,748	2,866	2,484	2,037	2,339
MIN	2,171	2,373	2,486	2,318	2,347	2,430	2,307	2,427	2,424	2,048	1,909	1,936
(†)	586.11	594.05	586.50	585.22	586.01	585.97	587.17	585.97	586.65	582.12	580.63	585.04
(‡)	+279	+945	-904	-134	+82	-4	+128	-128	+72	-454	-135	+421

CAL YR 1973 .....‡ +239
WTR YR 1974 .....‡ +168

† Elevation in feet, at end of month.
‡ Change in contents, in thousands of acre-ft.

07245000 CANADIAN RIVER NEAR WHITEFIELD, OKLA.

LOCATION.--Lat 35°15'45", long 95°14'19", in SE 1/4 SE 1/4 sec.12, T.9 N., R.19 E., Haskell County, near right bank on downstream side of pier of bridge on State Highway 2, 0.8 mi (1.3 km) north of Whitefield, 5.5 mi (8.8 km) upstream from Taleka (Snake) Creek, 8.2 mi (13.2 km) downstream from Eufaula Dam, and at mile 18.8 (30.2 km).

DRAINAGE AREA.--47,576 mi^2 (123,222 km^2), of which 9,700 mi^2 (25,123 km^2) is probably noncontributing.

PERIOD OF RECORD.--July 1938 to current year. Monthly discharge only for some periods, published in WSP 1311.

GAGE.--Water-stage recorder. Datum of gage is 478.16 ft (145.743 m) above mean sea level. Prior to Jan. 11, 1939, nonrecording gage and Jan. 11, 1939, to Dec. 10, 1941, June 12, 1947, to Sept. 30, 1948, water-stage recorder, all at site 2.1 mi (3.4 km) downstream at datum 2.80 ft (0.853 m) lower. Dec. 11, 1941, to June 11, 1947, water-stage recorder at present site and datum.

AVERAGE DISCHARGE.--36 years, 5,471 ft^3/s (154.9 m^3/s), 3,964,000 acre-ft/yr (4.89 km^3/yr).

EXTREMES.--Current year: Maximum discharge, 42,300 ft^3/s (1,200 m^3/s) June 17, gage height, 12.88 ft (3.926 m); minimum daily, 80 ft^3/s (2.27 m^3/s) Sept. 8.
Period of record: Maximum discharge, 281,000 ft^3/s (7,960 m^3/s) May 10, 1943, gage height, 25.5 ft (7.77 m); minimum daily, 0.4 ft^3/s (.011 m^3/s) Oct. 8, 1956.
Maximum stage known since 1898, that of May 10, 1943, from information by local resident.

REMARKS.--Records good. Prior to February 1964, occasional slight regulation by Conchas Lake in New Mexico and, except for 54 mi^2 (140 km^2) of intervening area, completely regulated thereafter by Eufaula Lake (see sta. 07244800). Records of chemical analyses and of water temperatures for the current year are published in Part 2 of this report.

COOPERATION.--Gage height record and 34 discharge measurements furnished by Corps of Engineers; records computed by Geological Survey.

REVISIONS.--WSP 1177: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	332	2,370	36,700	13,900	1,430	2,680	14,000	14,100	6,890	8,450	6,280	346
2	670	4,530	37,000	10,800	288	2,120	7,350	14,800	6,680	8,670	3,690	1,010
3	2,350	1,350	37,800	10,700	215	2,300	5,130	22,400	8,030	8,470	1,320	205
4	1,760	689	29,800	7,650	1,910	2,970	5,570	31,800	7,690	8,290	209	119
5	1,610	2,470	22,300	2,320	400	4,360	7,470	20,700	7,730	8,290	1,060	684
6	1,160	3,180	27,000	1,110	122	2,400	5,370	14,200	8,580	8,240	1,310	342
7	128	4,190	26,500	4,590	1,270	1,190	5,210	13,700	9,520	7,980	1,270	94
8	935	3,040	26,200	4,080	6,420	2,920	5,600	13,600	13,500	8,380	3,250	80
9	2,220	3,160	26,000	6,480	1,310	900	5,580	13,600	14,000	7,930	3,510	1,950
10	2,400	2,580	25,900	8,050	131	1,250	5,180	13,500	13,800	5,630	1,740	3,130
11	1,080	1,390	24,400	7,250	181	4,450	5,580	13,500	13,800	8,120	642	4,140
12	182	1,740	21,200	4,740	978	14,400	5,470	13,400	14,900	7,620	3,420	5,250
13	279	3,510	19,500	1,190	765	10,000	3,390	13,800	14,100	5,020	4,280	949
14	148	2,640	19,500	1,510	666	3,010	2,680	14,300	16,000	2,480	4,200	180
15	5,430	7,880	19,300	1,040	6,370	4,480	3,390	13,900	21,400	5,270	3,750	139
16	3,460	3,130	19,200	1,970	1,490	1,090	5,230	8,440	21,200	5,860	3,210	808
17	4,310	1,460	19,000	2,240	125	312	2,670	8,980	29,000	5,910	3,150	684
18	4,580	1,690	19,000	10,100	1,190	4,630	4,350	8,820	37,800	7,640	1,640	3,020
19	5,360	3,330	19,200	5,640	1,710	4,370	3,340	8,710	29,400	7,520	3,790	3,690
20	1,630	3,200	18,900	2,680	1,330	7,280	640	8,210	29,400	5,650	4,560	2,660
21	608	2,430	18,800	3,780	3,760	13,900	364	11,100	29,200	4,860	4,760	1,650
22	2,570	1,350	18,800	3,020	7,400	14,100	6,890	6,680	29,100	6,460	3,740	787
23	3,550	3,550	19,000	2,780	4,280	14,100	3,840	8,380	24,800	7,290	937	2,320
24	3,750	10,300	19,400	5,120	268	14,100	5,860	8,270	18,500	10,100	217	649
25	4,350	3,290	18,800	2,140	6,850	14,700	3,000	7,800	14,200	6,060	858	1,430
26	3,950	7,290	16,900	684	5,360	14,600	3,340	7,750	13,800	7,430	4,660	3,140
27	1,130	15,000	14,300	256	3,320	14,500	680	7,610	9,000	6,410	3,670	4,800
28	684	29,400	14,300	1,010	2,470	14,400	108	7,730	8,890	4,780	1,290	1,990
29	2,380	36,800	14,200	1,030	------	14,300	3,350	8,410	8,850	7,330	2,990	438
30	1,780	36,500	14,200	1,140	------	14,300	8,380	7,980	8,880	8,030	2,160	4,280
31	2,670	------	14,100	236	------	14,300	------	7,450	------	7,240	785	------
TOTAL	67,446	203,439	677,200	129,236	62,009	234,412	139,012	373,620	488,640	217,410	82,348	50,964
MEAN	2,176	6,781	21,850	4,169	2,215	7,562	4,634	12,050	16,290	7,013	2,656	1,699
MAX	5,430	36,800	37,800	13,900	7,400	14,700	14,000	31,800	37,800	10,100	6,280	5,250
MIN	128	689	14,100	236	122	312	108	6,680	6,680	2,480	209	80
AC-FT	133,800	403,500	1,343M	256,300	123,000	465,000	275,700	741,100	969,200	431,200	163,300	101,100

CAL YR 1973 TOTAL 4,346,805 MEAN 11,910 MAX 37,800 MIN 98 AC-FT 8,622,000
WTR YR 1974 TOTAL 2,725,736 MEAN 7,468 MAX 37,800 MIN 80 AC-FT 5,406,000

07245500 SALLISAW CREEK NEAR SALLISAW, OKLA.

LOCATION.--Lat 35°27'52", long 94°51'43", in SW 1/4 sec.34, T.12 N., R.23 E., Sequoyah County, on downstream side of right pier of abandoned county road bridge, 300 ft (91.4 m) upstream from U.S. Highway 64, 400 ft (121.9 m) downstream from water-supply dam of city of Sallisaw, 3.5 mi (5.6 km) west of Sallisaw, 5 mi (8 km) upstream from Little Sallisaw Creek, and at mile 9.0 (14.5 km).

DRAINAGE AREA.--182 mi^2 (471 km^2).

PERIOD OF RECORD.--October 1942 to current year.

GAGE.--Water-stage recorder. Datum of gage is 474.78 ft (142.713 m) above mean sea level. Prior to Aug. 20, 1953, and as supplementary gage since Feb. 21, 1958, water-stage recorder at site 400 ft (121.9 m) upstream at datum 15.22 ft (4.630 m) higher. Aug. 20, 1953, to Apr. 9, 1963, water-stage recorder at present site at datum 2.00 ft (0.610 m) higher.

AVERAGE DISCHARGE.--32 years, 197 ft^3/s (5.579 m^3/s), 142,700 acre-ft/yr (176 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 9,260 ft^3/s (262 m^3/s) Nov. 24, gage height, 13.17 ft (4.014 m); minimum daily, 1.6 ft^3/s (0.045 m^3/s) Aug. 8.
Period of record: Maximum discharge, 110,000 ft^3/s (3,115 m^3/s) Apr. 15, 1945, gage height, 11.25 ft (3.429 m), site and datum then in use, from rating curve extended above 23,000 ft^3/s (651 m^3/s) on basis of contracted-opening measurements at gage heights 7.96 and 11.25 ft (2.462 and 3.429 m); no flow at times in 1943, 1954, 1956, 1960, 1963, 1964.

REMARKS.--Records good. Small diversion above station for municipal water supply of city of Sallisaw.

COOPERATION.--Gage-height record and 30 discharge measurements furnished by Corps of Engineers; records computed by Geological Survey.

REVISIONS.--WSP 1117: Draingage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	343	148	1,340	228	172	228	191	1,270	77	37	1.8	361
2	243	138	1,190	201	158	208	176	1,370	65	34	4.3	3,060
3	179	128	1,410	184	145	191	175	1,010	54	31	2.8	1,830
4	169	116	3,380	168	132	176	159	673	48	29	1.9	984
5	133	102	2,060	157	123	162	146	471	45	41	1.7	754
6	130	91	1,710	149	116	152	133	363	153	31	1.7	503
7	138	85	1,460	141	109	139	124	297	2,370	26	1.7	374
8	127	78	1,250	133	102	128	115	248	1,390	23	1.6	234
9	103	69	1,090	126	96	121	108	214	2,560	21	14	167
10	85	62	974	131	90	208	100	185	1,430	18	262	142
11	187	55	883	122	85	1,640	213	164	810	15	103	130
12	531	50	750	112	81	1,020	511	144	526	13	69	109
13	2,040	46	578	108	78	680	382	124	319	12	53	198
14	1,450	43	473	105	75	450	295	108	216	11	65	190
15	987	39	327	102	104	370	241	96	150	10	62	131
16	660	37	252	98	209	309	203	85	1,070	9.0	274	131
17	417	34	201	94	214	254	177	74	789	8.0	201	142
18	304	32	164	92	199	221	158	66	526	7.0	149	132
19	234	31	302	91	335	2,430	144	57	341	6.3	112	111
20	184	567	423	88	388	1,250	135	49	253	5.5	81	2,580
21	151	990	333	86	693	1,430	509	44	199	4.7	58	1,790
22	125	642	285	84	1,010	1,040	1,330	39	161	4.1	43	1,170
23	108	1,560	342	79	719	878	796	35	132	3.4	34	822
24	92	6,020	1,690	75	528	768	589	33	108	3.0	28	560
25	80	4,250	1,240	72	407	640	434	138	89	3.1	23	637
26	69	3,400	851	85	338	429	346	122	75	2.9	20	600
27	95	2,140	565	99	290	336	254	93	63	2.7	18	412
28	166	1,780	430	200	256	283	205	74	54	2.6	30	301
29	134	1,620	356	225	------	251	174	61	47	2.3	26	237
30	110	1,500	299	209	------	222	1,530	52	41	2.2	23	181
31	156	------	262	189	------	204	------	76	------	2.1	20	------
TOTAL	9,930	25,853	26,870	4,033	7,252	16,818	10,053	7,835	14,161	420.9	1,785.5	18,973
MEAN	320	862	867	130	259	543	335	253	472	13.6	57.6	632
MAX	2,040	6,020	3,380	228	1,010	2,430	1,530	1,370	2,560	41	274	3,060
MIN	69	31	164	72	75	121	100	33	41	2.1	1.6	109
AC-FT	19,700	51,280	53,300	8,000	14,380	33,360	19,940	15,540	28,090	835	3,540	37,630

CAL YR 1973 TOTAL 191,339.3 MEAN 524 MAX 6,020 MIN 7.2 AC-FT 379,500
WTR YR 1974 TOTAL 143,984.4 MEAN 394 MAX 6,020 MIN 1.6 AC-FT 285,600

PEAK DISCHARGE (BASE, 4,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
11-24	1845	13.17	9,260	6-7	1130	8.85	4,000
12-4	0415	9.76	4,980	9-2	1630	9.43	4,670
3-19	0445	9.46	4,540	9-20	1215	9.18	4,340

07247500 FOURCHE MALINE NEAR RED OAK, OKLA.

LOCATION.--Lat 34°54'44", long 95°09'20", in NW 1/4 NW 1/4 sec.13, T.5 N., R.20 E., Latimer County, on downstream side of left abutment of county road bridge, 0.1 mi (0.2 km) downstream from Little Fourche Maline, 5.0 mi (8.0 km) southwest of Red Oak, and at mile 41.2 (66.3 km).

DRAINAGE AREA.--122 mi^2 (316 km^2).

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 540.80 ft (164.836 m) above mean sea level. Prior to Apr. 25, 1939, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--36 years, 130 ft^3/s (3.682 m^3/s) 14.47 in/yr (368 mm/yr), 94,180 acre-ft/yr (116 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 17,800 ft^3/s (504 m^3/s) Nov. 24, gage height, 20.55 ft (6.264 m); minimum, 0.93 ft^3/s (0.026 m^3/s) July 23, 24.
Period of record: Maximum discharge, 41,500 ft^3/s (1,175 m^3/s) May 19, 1960, gage height, 24.70 ft (7.556 m), from floodmarks, from rating curve extended above 25,000 ft^3/s (709 m^3/s); no flow at times in most years.
Flood in June 1935 reached a stage of 25.4 ft (7.742 m), from floodmarks.

REMARKS.--Records good. Some regulation by several flood retarding structures.

COOPERATION.--Gage-height record and 30 discharge measurements furnished by Corps of Engineers; records computed by Geological Survey.

REVISIONS (WATER YEARS).--WSP 1117: Drainage area. WSP 1631: 1940.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	89	1,080	78	90	134	61	2,390	88	4.3	2.3	6.8
2	17	53	1,020	65	74	55	53	1,570	52	3.5	1.7	389
3	13	33	1,080	58	62	42	320	1,110	32	2.6	1.5	468
4	10	23	1,840	51	51	35	213	904	95	2.9	1.3	130
5	8.5	18	1,180	48	45	53	130	746	670	3.1	1.2	54
6	36	15	921	47	40	64	92	594	376	3.0	1.3	33
7	22	12	789	45	37	35	71	411	2,110	2.8	1.4	22
8	12	11	673	42	33	31	59	228	1,710	2.7	1.4	16
9	9.7	9.0	505	40	30	30	48	119	1,060	2.7	1.5	13
10	8.0	8.3	419	38	28	191	48	79	765	2.4	3.0	598
11	13	8.1	350	36	26	2,060	199	62	474	1.9	4.3	2,000
12	39	7.4	243	31	24	1,410	554	52	308	1.6	4.1	1,050
13	402	7.1	103	28	23	901	284	44	148	1.4	4.2	718
14	210	6.9	69	28	22	828	158	37	88	1.3	2.9	472
15	92	7.3	59	28	34	1,000	100	33	61	2.6	4.0	297
16	66	6.9	50	27	40	715	73	30	48	8.2	3.3	243
17	46	6.6	44	26	35	451	64	24	39	4.0	2.8	265
18	33	6.4	39	26	31	245	68	21	32	2.5	3.4	251
19	25	6.7	294	28	39	247	48	19	26	2.0	3.1	160
20	19	114	329	33	36	222	39	16	21	1.8	2.6	676
21	15	113	192	31	131	430	42	14	16	1.6	4.9	1,010
22	12	71	141	28	361	336	152	15	13	1.3	9.9	539
23	9.5	860	218	25	252	267	179	16	11	.98	2.7	298
24	8.2	7,150	1,060	22	154	240	196	15	8.6	1.1	2.1	181
25	6.6	6,820	666	20	103	179	110	23	7.2	1.3	1.9	264
26	6.7	2,630	398	21	81	146	51	289	5.9	1.7	1.9	280
27	8.4	1,670	242	44	70	125	39	121	5.0	1.5	2.5	181
28	12	1,270	162	320	140	109	33	54	4.4	1.4	2.4	121
29	10	1,170	130	277	------	96	51	32	4.2	1.2	2.5	88
30	9.9	1,120	108	172	------	81	2,880	22	4.3	3.6	2.4	67
31	102	------	93	117	------	70	------	56	------	3.3	2.7	------
TOTAL	1,307.5	23,322.7	14,497	1,880	2,092	10,828	6,415	9,146	8,282.6	76.28	87.2	10,890.8
MEAN	42.2	777	468	60.6	74.7	349	214	295	276	2.46	2.81	363
MAX	402	7,150	1,840	320	361	2,060	2,880	2,390	2,110	8.2	9.9	2,000
MIN	6.6	6.4	39	20	22	30	33	14	4.2	.98	1.2	6.8
CFSM	.35	6.37	3.84	.50	.61	2.86	1.75	2.42	2.26	.02	.02	2.98
IN.	.40	7.11	4.42	.57	.64	3.30	1.96	2.79	2.53	.02	.03	3.32
AC-FT	2,590	46,260	28,750	3,730	4,150	21,480	12,720	18,140	16,430	151	173	21,600

CAL YR 1973 TOTAL 111,478.20 MEAN 305 MAX 7,150 MIN 1.7 CFSM 2.50 IN 33.99 AC-FT 221,100
WTR YR 1974 TOTAL 88,825.08 MEAN 243 MAX 7,150 MIN .98 CFSM 1.99 IN 27.08 AC-FT 176,200

PEAK DISCHARGE (BASE, 3,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE
11-24	2100	20.55	17,800
4-30	1730	16.69	4,550

07248000 WISTER LAKE NEAR WISTER, OKLA.

LOCATION.--Lat 34°56'10", long 94°43'10", in SE 1/4 NE 1/4 sec.1, T.5 N., R.24 E., LeFlore County, in control tower near right end of Wister Dam on Poteau River, 2.0 mi (3.2 km) south of Wister, 2.7 mi (4.3 km) upstream from Casten Creek, and at mile 60.9 (98.0 km).

DRAINAGE AREA.--993 mi^2 (2,572 km^2).

PERIOD OF RECORD.--October 1949 to current year. Prior to October 1970 published as Wister Reservoir near Wister.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level.

EXTREMES.--Current year: Maximum contents, 324,600 acre-ft (400 hm^3) June 12, elevation, 497.66 ft (151.687 m); minimum, 26,590 acre-ft (32.8 hm^3) May 22, elevation, 471.48 ft (143.707 m).
Period of record: Maximum contents, 507,400 acre-ft (626 hm^3) May 27, 1957, elevation, 505.73 ft (154.147 m); minimum since conservation pool was first filled, 4,020 acre-ft (5.0 hm^3) Oct. 16, 1961, elevation, 456.97 ft (139.284 m).

REMARKS.--Reservoir is formed by an earth dam. Regulated storage began Oct. 4, 1949, conservation pool was first filled Dec. 19, 1949. Capacity, 429,600 acre-ft (530 hm^3) at elevation 502.5 ft (153.16 m) crest of spillway and 29,950 acre-ft (36.9 hm^3) at elevation 471.6 ft (143.74 m) conservation pool. Figures given herein represent total contents. Reservoir is used for flood control and recreation. Revised capacity table, based on 1972 survey, used since Oct. 1, 1973.

COOPERATION.--Records furnished by Corps of Engineers.

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

471	24,720	486	139,900
476	49,020	492	224,000
481	87,030	498	331,300

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36,619	35,640	204,299	115,599	31,489	37,019	59,619	124,899	49,439	98,929	59,829	59,689
2	37,119	35,539	198,299	106,799	31,619	36,129	55,489	157,099	49,989	86,579	59,689	62,359
3	36,920	35,099	212,099	97,649	31,530	34,909	57,390	170,799	50,420	78,629	59,479	64,209
4	36,030	34,619	240,899	88,599	31,399	33,769	56,159	173,799	55,159	74,519	59,269	65,639
5	35,149	34,200	252,799	79,750	31,090	32,619	53,519	170,500	67,479	71,419	59,129	66,399
6	34,579	33,399	258,299	71,179	30,829	31,579	50,229	162,199	76,939	69,589	58,989	66,859
7	33,729	32,299	255,899	62,869	30,519	31,530	46,939	151,899	154,299	67,789	58,920	66,939
8	32,939	31,049	249,299	55,359	30,000	31,049	43,129	140,699	231,199	66,099	58,849	66,789
9	31,979	30,000	241,199	48,780	29,530	30,299	39,469	128,699	294,799	65,189	59,129	67,709
10	31,090	29,319	232,699	42,799	29,069	31,530	35,689	117,000	316,799	64,810	59,479	70,539
11	30,560	28,609	225,599	38,689	28,489	69,909	33,539	105,000	323,599	64,289	59,479	85,129
12	30,219	27,909	216,899	35,590	27,989	89,059	33,450	92,629	323,000	63,840	59,759	90,269
13	35,060	27,509	206,099	31,890	27,469	99,329	33,310	79,489	316,199	63,469	59,689	89,339
14	41,810	27,379	196,099	28,239	27,179	106,500	31,979	66,479	306,000	63,170	59,619	86,029
15	44,079	27,259	185,199	27,019	27,509	112,599	29,869	54,170	295,699	62,950	59,689	81,489
16	44,759	27,259	174,599	27,019	27,509	114,199	28,899	43,239	284,599	62,799	59,619	77,529
17	44,979	27,340	164,199	27,019	27,509	111,699	28,569	38,179	273,799	62,729	59,200	76,349
18	44,869	27,340	154,199	26,979	27,549	108,000	27,950	35,590	262,099	62,429	59,619	73,449
19	44,530	27,789	150,899	27,259	27,750	103,899	27,869	32,890	250,799	62,140	59,479	69,199
20	44,079	29,789	149,199	27,299	27,909	100,500	28,280	30,219	239,199	61,849	59,409	71,099
21	43,349	32,159	142,599	27,670	29,700	97,750	28,689	27,590	228,199	61,479	59,269	76,259
22	42,579	35,590	135,099	27,909	32,390	94,729	30,129	26,780	215,399	61,340	59,129	80,699
23	41,869	45,899	132,599	27,950	35,009	92,059	32,429	26,780	202,799	61,119	58,920	79,489
24	41,060	91,209	153,399	27,989	36,079	88,409	33,819	26,780	189,500	61,119	58,849	75,099
25	40,149	147,299	162,199	27,869	36,769	84,679	34,859	30,560	176,299	60,829	58,709	71,259
26	39,319	182,299	162,799	27,989	37,170	80,439	34,959	42,140	163,199	60,759	58,780	68,409
27	38,590	201,500	157,000	28,200	37,319	76,009	33,869	45,500	149,599	60,549	59,129	67,169
28	37,619	209,699	149,500	28,859	37,319	75,009	32,569	46,769	136,299	60,399	59,200	66,939
29	36,719	211,199	141,099	30,049	------	72,719	33,769	47,530	123,599	60,189	59,129	66,019
30	35,879	208,099	132,699	30,959	------	68,099	95,019	48,119	111,099	60,189	59,129	64,739
31	35,640	------	124,500	31,310	------	64,359	------	48,899	------	59,899	58,989	------
MAX	44,979	211,199	258,299	115,599	37,319	114,199	95,019	173,799	323,599	98,929	59,829	90,269
MIN	30,219	27,259	124,500	26,979	27,179	30,299	27,869	26,780	49,439	59,899	58,709	59,689
(†)	473.54	490.98	484.68	472.61	473.88	478.27	481.85	475.98	483.45	477.66	477.53	478.32
(‡)	-140	+172,460	-83,600	93,190	+6,010	+27,040	+30,660	-46,120	+62,200	-51,200	-910	+5,750

CAL YR 1973 .....‡ +93,320
WTR YR 1974 .....‡ +28,960

Note.--Contents, in acre-ft, from revised capacity table, Dec. 31, 1972, 31,180. Sept. 30, 1973, 35,780.

† Elevation, in feet, at end of month.
‡ Change in contents, in acre-ft.

07248500 POTEAU RIVER NEAR WISTER, OKLA.

LOCATION.--Lat 34°56'15", long 94°42'54", in NW 1/4 NW 1/4 sec.6, T.5 N., R.25 E., Leflore County, on left bank of outflow channel 700 ft (213.4 m) downstream from Wister Dam, 2.2 mi (3.5 km) southeast of Wister, 2.6 mi (4.2 km) upstream from Caston Creek, and at mile 60.8 (97.8 km).

DRAINAGE AREA.--993 mi^2 (2,572 km^2).

PERIOD OF RECORD.--May 1938 to current year. Monthly discharge only for some periods, published in WSP 1311. Prior to May 21, 1951, records below about 500 ft^3/s (14.2 m^3/s) include flow from Caston Creek, drainage area, 70 mi^2 (181 km^2).

GAGE.--Water-stage recorder. Datum of gage is 445.43 ft (135.767 m) above mean sea level. See WSP 1921 for history of changes prior to June 28, 1953.

AVERAGE DISCHARGE.--36 years, 1,142 ft^3/s (32.34 m^3/s), 827,400 acre-ft/yr (1.02 km^3/yr).

EXTREMES.--Current year: Maximum discharge, 6,380 ft^3/s (181 m^3/s) May 7, gage height, 7.93 ft (2.417 m); minimum daily, 8.7 ft^3/s (0.25 m^3/s) Feb. 20.

Period of record: Maximum discharge, 78,600 ft^3/s (2,230 m^3/s) May 16, 1945, gage height, 37.16 ft (11.326 m), site and datum then in use; no flow at times in 1938-39, 1943, 1947, 1953-54, 1961, 1964. Flood in June 1935 reached a stage of 43.0 ft (13.11 m) at site and datum used in 1938, estimated as 38.5 ft (11.73 m) at site and datum used during 1939-47, on basis of fall determined for flood in 1943.

REMARKS.--Records good. Flow completely regulated by Wister Lake since October 1949. (See sta. 07248000).

COOPERATION.--Gage-height record and 17 discharge measurements furnished by Corps of Engineers; records computed by Geological Survey.

REVISIONS (WATER YEARS).--WSP 1117: Drainage area. WSP 1241: 1939, 1943(M), 1945(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	530	4,260	4,630	460	601	2,380	32	60	5,620	17	11
2	19	530	4,660	4,570	460	901	2,340	32	64	5,470	17	11
3	292	530	3,660	4,510	459	896	2,340	525	55	3,890	17	11
4	546	529	28	4,430	460	889	2,330	2,670	23	1,830	17	10
5	542	526	24	4,350	459	882	2,310	4,610	22	1,500	17	10
6	535	739	840	4,270	460	876	2,280	5,860	471	831	16	10
7	533	870	3,020	4,170	458	873	2,250	6,300	240	830	16	10
8	529	865	4,940	4,050	458	871	2,220	6,200	27	781	16	9.5
9	526	740	5,310	3,980	455	867	2,180	6,090	29	386	15	9.5
10	523	521	5,280	3,880	454	797	2,140	5,980	27	157	15	10
11	524	514	5,210	3,070	452	11	2,100	5,860	1,070	157	15	10
12	522	510	5,200	2,390	450	12	2,100	5,730	3,190	157	14	1,560
13	526	359	5,150	2,350	450	12	2,090	5,940	5,170	158	13	3,260
14	548	220	5,110	2,300	308	13	2,090	6,080	6,140	160	12	3,250
15	556	153	5,060	1,160	219	13	2,070	5,840	6,110	83	12	3,220
16	559	101	5,010	444	220	1,590	1,240	5,610	6,050	15	12	3,190
17	562	101	4,950	443	219	2,810	749	3,300	5,990	15	12	3,180
18	561	101	4,900	441	219	2,800	744	1,520	5,950	55	12	3,160
19	560	100	3,420	443	108	2,790	434	1,490	5,890	72	12	3,140
20	558	100	3,810	442	8.7	2,770	230	1,470	5,830	69	12	1,700
21	556	101	4,800	441	188	2,760	230	1,450	5,310	69	12	808
22	553	102	4,750	443	352	2,740	230	542	6,010	16	12	816
23	551	105	4,410	443	357	2,720	233	61	5,950	16	12	2,150
24	550	54	103	443	361	2,700	237	59	5,870	17	12	3,140
25	546	9.5	1,340	442	360	2,680	237	61	6,090	17	12	3,110
26	546	9.6	3,010	441	362	2,650	493	62	6,200	17	12	3,090
27	544	9.0	4,490	441	361	2,630	925	64	6,110	17	12	1,950
28	542	588	4,820	444	361	1,210	917	65	6,000	17	11	1,060
29	538	2,270	4,790	426	------	1,570	913	65	5,880	17	11	1,060
30	528	3,700	4,730	460	------	2,430	200	65	5,750	17	11	1,060
31	529	------	4,690	460	------	2,400	------	64	------	17	11	------
TOTAL	15,522	15,587.1	121,775	61,207	9,938.7	47,764	41,232	83,697	111,578	22,473	417	44,016.0
MEAN	501	520	3,928	1,974	355	1,541	1,374	2,700	3,719	725	13.5	1,467
MAX	562	3,700	5,310	4,630	460	2,810	2,380	6,300	6,200	5,620	17	3,260
MIN	18	9.0	24	426	8.7	11	200	32	22	15	11	9.5
AC-FT	30,790	30,920	241,500	121,400	19,710	94,740	81,780	166,000	221,300	44,580	827	87,310

CAL YR 1973 TOTAL 773,193.1 MEAN 2,118 MAX 6,710 MIN 9.0 AC-FT 1,534,000
WTR YR 1974 TOTAL 575,206.8 MEAN 1,576 MAX 6,300 MIN 8.7 AC-FT 1,141,000

07250550 ARKANSAS RIVER AT DAM NO. 13, NEAR VAN BUREN, ARK.

LOCATION.--Lat 35°20'56", long 94°17'54", in sec.28, T.8 N., R.31 W., Sebastian County, in Dam No. 13 control house on right bank, and at mile 308.9 (497.0 km).

DRAINAGE AREA.--150,547 mi^2 (389,917 km^2), of which 22,241 mi^2 (54,604 km^2) is probably noncontributing.

PERIOD OF RECORD.--October 1927 to current year. Prior to October 1969, published as 07250500 Arkansas River at Van Buren. Gage-height records collected at Fort Smith, 16.3 mi (26.2 km) upstream from 1879 to December 1955, are contained in reports of National Weather Service.

GAGE.--Water-stage and gate position recorder. Datum of gage is at mean sea level (levels by Corps of Engineers). Prior to Oct. 1, 1934, nonrecording gage, and Oct. 1, 1934, to Dec. 20, 1969, recording gage at site 7.9 mi (12.7 km) upstream at datum 372.36 ft (113.495 m) higher.

AVERAGE DISCHARGE.--47 years, 31,310 ft^3/s (887 m^3/s), 22,680,000 acre-ft/yr (28,000 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 259,000 ft^3/s (7,330 m^3/s) Nov. 25, tailwater elevation, 397.72 ft (121.225 m); minimum daily discharge, 252 ft^3/s (7.14 m^3/s) Aug. 4.
Period of record: Maximum discharge, 850,000 ft^3/s (24,100 m^3/s) May 12, 1943, gage height, 38.0 ft (11.58 m), from floodmark, site and datum then in use; maxiumu gage height, 38.10 ft (11.613 m), former site and datum, Apr. 16, 1945; minimum daily discharge, 16 ft^3/s (0.45 m^3/s) Dec. 7, 1970.
Maximum stage since at least 1833, that of Apr. 16, 1945, and maximum discharge since at least 1833, that of May 12, 1943. Flood in June 1833 reached a stage of 38 ft (11.6 m) on Fort Smith gage, from records collected by National Weather Service. Flood of Apr. 16, 1927, reached a stage of 35.0 ft (10.67 m), former site and datum, from information by local resident.

REMARKS.--Records good. Beginning Apr. 26, 1970, daily discharge computed from relation between discharge, head, and gate openings. Flow regulated by many locks, dams, and reservoirs upstream. Water-quality records for the current year are published in Part 2 of the Arkansas State report.

COOPERATION.--One discharge measurement furnished by Corps of Engineers.

REVISIONS (WATER YEARS).--WSP 1211: 1934-36. WSP 1561: 1954. WRD Ark. 1970: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40,100	80,800	115,000	107,000	43,900	46,500	111,000	94,600	75,300	35,800	16,800	24,700
2	42,000	80,800	115,000	105,000	44,000	41,300	107,000	103,000	54,600	45,100	13,200	51,000
3	43,600	80,800	117,000	94,300	41,600	36,800	104,000	106,000	47,700	41,200	5,790	64,800
4	44,900	75,800	134,000	61,800	37,400	44,300	76,100	88,200	54,100	40,900	252	61,600
5	45,100	67,200	131,000	43,000	32,200	42,800	63,000	76,800	55,900	35,600	2,660	60,100
6	46,300	56,700	118,000	48,600	39,800	40,700	49,400	80,300	58,000	39,900	3,700	48,400
7	45,900	49,200	115,000	53,400	33,100	41,500	43,200	74,500	94,800	43,900	4,030	41,500
8	45,700	46,500	109,000	48,600	31,700	43,200	41,300	67,700	136,000	35,400	6,480	41,700
9	45,200	52,300	110,000	51,200	36,800	41,100	39,700	69,000	148,000	34,200	14,700	41,900
10	37,300	46,000	110,000	48,900	38,900	41,700	39,900	62,800	164,000	33,700	33,900	41,900
11	48,000	41,000	110,000	50,500	28,400	72,000	42,700	45,300	170,000	34,800	7,820	45,200
12	75,000	41,400	110,000	58,300	23,500	114,000	51,300	43,800	153,000	32,900	10,200	46,100
13	112,000	40,200	110,000	53,900	22,300	121,000	50,700	43,700	145,000	32,400	20,300	46,400
14	132,000	41,000	109,000	48,400	29,800	128,000	48,500	46,700	148,000	32,200	16,400	44,400
15	137,000	41,000	109,000	45,000	27,900	132,000	42,500	54,800	150,000	30,100	15,900	40,000
16	134,000	41,000	108,000	35,200	33,100	131,000	41,400	57,800	148,000	19,800	18,200	26,900
17	129,000	30,700	108,000	38,700	31,400	128,000	40,600	47,500	147,000	21,500	14,400	22,300
18	131,000	20,500	108,000	38,100	30,400	130,000	38,900	46,900	147,000	23,300	16,000	30,000
19	133,000	20,300	109,000	43,500	29,000	135,000	39,600	44,200	148,000	25,200	14,700	26,300
20	132,000	27,800	111,000	44,200	32,000	136,000	36,500	43,800	148,000	24,300	16,100	50,500
21	126,000	57,200	109,000	43,500	50,500	136,000	34,200	43,600	148,000	14,500	14,200	55,700
22	120,000	61,100	108,000	43,200	74,300	135,000	35,800	43,600	144,000	22,700	20,600	52,800
23	113,000	74,900	108,000	43,200	63,700	133,000	37,700	43,100	142,000	21,100	19,300	45,900
24	107,000	146,000	120,000	41,500	66,100	132,000	28,100	42,600	132,000	9,370	15,400	41,400
25	98,000	249,000	119,000	41,100	54,200	131,000	24,900	47,400	108,000	17,500	19,700	36,000
26	84,200	232,000	113,000	41,100	44,400	129,000	30,500	64,000	62,400	24,400	23,100	45,500
27	75,800	186,000	108,000	40,600	45,600	127,000	30,800	75,900	57,900	15,700	14,200	47,400
28	76,900	141,000	108,000	39,400	53,800	127,000	30,100	76,900	49,200	8,270	8,210	45,000
29	76,500	122,000	108,000	40,000	------	126,000	32,800	77,700	43,800	15,900	4,450	43,500
30	75,800	117,000	108,000	37,100	------	130,000	63,300	77,600	26,500	18,500	7,280	14,000
31	77,600	------	108,000	41,100	------	125,000	------	77,000	------	11,500	13,500	------
TOTAL	2,629.9M	2,367.2M	3,483.0M	1,569.4M	1,119.8M	3,077.9M	1,455.5M	1,966.8M	3,306.2M	841,640	411,472	1,282.9M
MEAN	84,840	78,910	112,400	50,630	39,990	99,290	48,520	63,450	110,200	27,150	13,270	42,760
MAX	137,000	249,000	134,000	107,000	74,300	136,000	111,000	106,000	170,000	45,100	33,900	64,800
MIN	37,300	20,300	108,000	35,200	22,300	36,800	24,900	42,600	26,500	8,270	252	14,000
AC-FT	5,216M	4,695M	6,909M	3,113M	2,221M	6,105M	2,887M	3,901M	6,558M	1,669M	816,200	2,545M

CAL YR 1973 TOTAL 30,801,100 MEAN 84,390 MAX 249,000 MIN 320 AC-FT 61,090,000
WTR YR 1974 TOTAL 23,511,712 MEAN 64,420 MAX 249,000 MIN 252 AC-FT 46,640,000

07299570 RED RIVER NEAR QUANAH, TEX.

LOCATION.--Lat 34°24'47", long 99°44'03", Hardeman County, on right bank at downstream side of bridge on State Highway 283, 8 miles (13 km) north of Quanah, 30 miles (48 km) upstream from Salt Fork Red River, and at mile 1,030 (1,657 km).

DRAINAGE AREA.--8,321 mi^2 (21,551 km^2), of which 4,769 mi^2 (12,352 km^2) is probably noncontributing.

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

GAGE.--Water-stage recorder. Datum of gage is 1,412.97 ft (430.673 m) above mean sea level.

AVERAGE DISCHARGE.--14 years (1960-74), 142 ft^3/s (4.021 m^3/s), 102,900 acre-ft/yr (127 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 26,400 ft^3/s (748 m^3/s) May 25, gage height, 11.80 ft (3.597 m); minimum, 0.01 ft^3/s (0.0003 m^3/s) July 14.
Period of record: Maximum discharge, 64,000 ft^3/s (1,810 m^3/s) June 7, 1960, gage height, 16.00 ft (4.877 m), from rating curve extended above 32,000 ft^3/s (906 m^3/s); no flow at times.
Maximum stage since at least 1891 occurred in 1896, about 23 ft (7.0 m); second highest stage occurred June 1, 1957, 21.2 ft (6.46 m), from information by local resident.
Maximum stage since at least 1891 occurred in 1896, about 23 ft (7.0 m); second highest stage occurred June 1, 1957, 21.2 ft (6.46 m), from information by local resident.

REMARKS.--Records poor. Several small diversions above station for irrigation.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	65	1.8	2.9	2.5	5.1	3.7	16	2,100	34	.57	.47	25
2	47	.63	2.8	2.5	5.1	3.2	16	1,240	49	.31	.68	12
3	45	1.3	3.2	2.5	4.6	2.8	12	202	187	.38	.31	5.8
4	169	2.2	3.2	2.5	4.6	2.8	11	60	2,240	1.3	.20	3.9
5	164	2.2	5.1	3.0	4.2	2.5	11	54	870	.48	1.1	3.1
6	89	2.9	4.0	3.5	3.7	2.2	9.9	944	342	.47	1.1	2.1
7	71	4.4	3.7	3.7	3.2	3.2	9.1	765	241	.38	1.1	2.0
8	58	4.7	4.0	8.6	2.8	4.6	8.0	450	134	.12	.80	1.7
9	25	4.9	4.0	6.5	3.2	7.4	8.2	260	145	.31	1.1	1.6
10	18	5.0	3.8	5.0	3.7	56	7.8	123	169	.20	4.2	1.8
11	120	4.8	4.0	5.0	3.7	862	18	78	131	.05	6.7	1.2
12	80	5.4	4.2	5.0	4.2	639	5.7	41	80	.03	22	1.2
13	120	5.6	3.6	7.0	4.6	333	2.9	25	289	.03	352	1.2
14	69	5.5	3.7	16	4.6	218	2.1	13	87	.02	90	.83
15	58	4.9	3.6	17	4.6	156	2.9	6.8	41	.68	39	5.7
16	44	3.9	3.4	15	4.6	116	2.4	4.2	28	.80	12	16
17	26	3.6	4.3	15	5.1	94	2.4	2.8	25	.47	2.2	28
18	19	3.7	5.0	15	5.6	83	2.6	1.7	18	.47	.38	22
19	14	3.9	3.9	13	5.6	68	4.5	1.5	13	.20	.20	620
20	9.1	4.6	3.5	13	5.1	66	4.9	1.1	8.7	.31	.16	964
21	7.4	3.2	3.5	11	3.7	76	1.6	1,760	6.8	.38	.09	1,180
22	4.6	2.9	4.5	9.4	2.8	70	.53	3,630	5.6	.16	.94	550
23	3.4	3.9	8.3	8.0	2.8	60	.46	218	4.6	.31	7.1	254
24	2.4	7.6	7.3	8.7	2.2	51	.52	134	2.8	.47	322	855
25	1.6	12	6.5	8.0	3.2	44	.56	9,580	1.9	.31	760	1,660
26	1.9	12	6.3	8.0	2.8	43	.59	7,450	1.2	.31	396	725
27	2.3	8.8	5.0	7.4	2.8	37	.89	266	.57	.31	345	329
28	1.9	6.1	4.6	6.8	3.7	34	510	65	.56	.31	239	207
29	1.7	4.3	4.5	7.4	------	27	522	54	.67	.31	228	134
30	1.9	3.2	4.7	6.8	------	20	906	50	.57	.68	102	84
31	1.7	------	4.0	5.6	------	20	------	41	------	.47	51	------
TOTAL	1,340.9	139.93	135.1	248.4	111.9	3,205.4	2,100.55	29,621.1	5,156.97	11.60	2,986.83	7,697.13
MEAN	43.3	4.66	4.36	8.01	4.00	103	70.0	956	172	.37	96.3	257
MAX	169	12	8.3	17	5.6	862	906	9,580	2,240	1.3	760	1,660
MIN	1.6	.63	2.8	2.5	2.2	2.2	.46	1.1	.56	.02	.09	.83
AC-FT	2,660	278	268	493	222	6,360	4,170	58,750	10,230	23	5,920	15,270

CAL YR 1973 TOTAL 42,722.79 MEAN 117 MAX 4,480 MIN 0 AC-FT 84,740
WTR YR 1974 TOTAL 52,755.81 MEAN 145 MAX 9,580 MIN .02 AC-FT 104,600

PEAK DISCHARGE (BASE, 5,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE
5-21	2200	10.20	15,000
5-25	2000	11.80	26,400

07300000 SALT FORK RED RIVER NEAR WELLINGTON, TEX.

LOCATION.--Lat 34°57'27", long 100°13'14", Collingsworth County, near center of stream on downstream side of bridge on U.S. Highway 83, 4 miles (6 km) downstream from Fort Worth and Denver (Burlington) Railway Co. bridge, 4.5 miles (7.2 km) south of Lutie, and 7.2 miles (11.6 km) north of Wellington.

DRAINAGE AREA.--1,222 mi^2 (3,165 km^2), of which 209 mi^2 (541 km^2) is probably noncontributing.

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

GAGE.--Water-stage recorder. Datum of gage is 1,941.41 ft (591.742 m) above mean sea level.

AVERAGE DISCHARGE.--15 years (1952-67) prior to completion of Greenbelt Reservoir, 68.9 ft^3/s (1.951 m^3/s), 49,920 acre-ft/yr (61.6 hm^3/yr); 7 years (1967-74) regulated, 40.1 ft^3/s (1.136 m^3/s), 29,050 acre-ft/yr (35.8 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 3,080 ft^3/s (87.2 m^3/s) May 21, gage height, 5.99 ft (1.826 m); minimum, 0.62 ft^3/s (0.018 m^3/s) June 1.
Period of record: Maximum discharge, 146,000 ft^3/s (4,130 m^3/s) May 16, 1957, gage height, 19.00 ft (5.791 m), from rating curve extended above 11,000 ft^3/s (312 m^3/s) on basis of slope-area measurement of 63,400 ft^3/s (1,800 m^3/s); minimum, 0.1 ft^3/s (0.003 m^3/s) June 19, 1952.

REMARKS.--Records fair. Flow partly regulated since August 1967 by Greenbelt Reservoir (station 07299840). Water-quality records for the current year are published in Part of the Texas State report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	12	14	15	20	14	22	450	1.6	3.7	4.8	4.8
2	26	10	15	10	20	13	22	216	2.7	3.2	4.7	3.7
3	26	11	17	10	20	13	25	47	30	3.2	5.0	3.7
4	308	12	16	10	19	13	26	19	81	4.2	5.3	3.7
5	94	12	16	11	18	12	29	13	84	4.2	6.8	4.2
6	57	13	17	10	16	12	26	12	22	3.7	12	4.8
7	39	15	18	10	14	12	25	19	8.4	3.7	9.5	5.5
8	30	14	16	12	15	14	23	20	52	10	6.7	5.5
9	22	14	18	12	16	72	23	18	176	5.5	6.0	5.5
10	37	14	18	10	18	580	26	14	43	3.7	12	4.8
11	52	14	18	10	18	201	24	12	37	4.2	8.5	3.2
12	41	14	19	10	18	81	20	11	61	4.2	7.3	3.7
13	31	15	17	12	18	52	19	10	54	4.8	6.2	4.2
14	26	16	17	20	18	50	16	7.9	23	3.7	6.8	4.2
15	23	14	18	30	19	46	16	7.6	15	4.2	6.0	8.4
16	22	12	18	68	20	40	16	7.5	11	4.2	4.5	20
17	22	14	18	62	23	36	15	7.0	10	3.7	4.2	14
18	22	16	18	41	22	35	13	6.6	16	3.5	4.3	13
19	19	20	13	39	20	27	14	6.4	8.4	3.8	3.6	266
20	18	20	15	35	22	28	16	31	6.9	3.7	2.0	530
21	17	19	19	33	22	35	12	1,010	6.9	3.3	2.7	137
22	16	16	20	33	18	35	11	206	6.9	3.2	5.5	91
23	14	17	18	33	16	35	9.3	261	6.9	3.1	9.3	97
24	14	17	24	26	13	31	8.4	237	10	3.1	10	145
25	13	16	23	26	13	29	8.4	363	8.4	3.2	6.2	137
26	14	16	23	25	13	32	8.4	356	7.7	3.0	6.2	88
27	12	16	22	25	13	33	8.4	190	5.5	3.0	14	45
28	12	15	22	25	13	27	91	62	5.5	3.3	13	23
29	12	13	23	25	------	24	468	19	2.7	4.0	8.4	20
30	14	14	24	25	------	23	388	13	3.2	4.7	6.2	20
31	13	------	20	22	------	24	------	2.7	------	4.0	5.5	------
TOTAL	1,094	441	574	735	495	1,679	1,428.9	3,654.7	806.7	123.0	213.2	1,715.9
MEAN	35.3	14.7	18.5	23.7	17.7	54.2	47.6	118	26.9	3.97	6.88	57.2
MAX	308	20	24	68	23	580	468	1,010	176	10	14	530
MIN	12	10	13	10	13	12	8.4	2.7	1.6	3.0	2.0	3.2
AC-FT	2,170	875	1,140	1,460	982	3,330	2,830	7,250	1,600	244	423	3,400

CAL YR 1973 TOTAL 20,850.8 MEAN 57.1 MAX 5,040 MIN 4.7 AC-FT 41,360
WTR YR 1974 TOTAL 12,960.4 MEAN 35.5 MAX 1,010 MIN 1.6 AC-FT 25,710

07300500 SALT FORK RED RIVER AT MANGUM, OKLA.

LOCATION.--Lat 34°51'32", long 99°30'28", in SW 1/4 SE 1/4 sec.34, T.5 N., R.22 W., Greer County, near left bank on downstream side of pier of bridge on State Highway 34, 0.5 mi (0.8 km) south of Mangum, 13.0 mi (21 km) downstream from Fish Creek, and at mile 35.5 (57.1 km).

DRAINAGE AREA.--1,566 mi^2 (4,056 km^2), of which 209 mi^2 (541 km^2) is probably noncontributing.

PERIOD OF RECORD.--April 1905 to June 1906, October 1937 to current year. Monthly discharge only for some periods, published in WSP 1311.

GAGE.--Water-stage recorder. Datum of gage is 1,490.87 ft (454.417 m) above mean sea level (levels by Bureau of Reclamation). Apr. 11, 1905, to June 30, 1906, nonrecording gage at site 0.2 mi (0.3 km) upstream at different datum. Oct. 1, 1937, to Nov. 8, 1938, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--37 years (1937-74), 87.2 ft^3/s (2.470 m^3/s), 63,180 acre-ft/yr (77.9 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 14,200 ft^3/s (402 m^3/s) Sept. 20, gage height 11.75 ft (3.581 m); no flow at times.
Period of record: Maximum discharge, 72,000 ft^3/s (2,039 m^3/s) May 16, 1957, gage height, 14.55 ft (4.435 m); maximum gage height 14.7 ft (4.48 m) June 16, 1938; no flow at times in each year.

REMARKS.--Records good.

REVISIONS (WATER YEARS).--WSP 1211: Drainage area. WSP 1241: 1938.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	15	13	14	19	15	9.1	2,770	13		0	.75
2	13	15	13	12	18	15	9.1	1,230	12		0	.42
3	9.8	15	14	11	18	14	8.5	226	34		0	.36
4	16	15	14	10	18	13	8.0	91	43		0	.23
5	173	15	18	9.8	17	13	8.0	62	37		0	.10
6	106	15	18	10	16	12	8.0	54	33		1.3	0
7	69	15	16	13	16	11	7.8	45	27		.04	0
8	48	18	16	18	17	11	7.5	41	19		0	0
9	37	19	16	10	13	13	7.5	30	14		0	0
10	29	18	16	9.0	15	77	7.5	18	11		36	0
11	170	18	17	10	16	313	79	15	19		32	0
12	142	25	17	11	15	66	18	12	14		4.2	0
13	75	18	17	12	15	45	11	10	9.6		0	0
14	50	18	17	13	16	36	5.3	7.0	8.8		0	0
15	39	17	16	15	16	34	3.1	5.4	26		0	.72
16	31	15	16	22	16	35	2.2	5.4	15		0	3.4
17	26	14	16	64	21	31	1.6	3.4	7.9		0	.96
18	23	13	16	58	20	29	1.3	2.3	4.5		0	.66
19	22	15	15	48	22	25	1.2	1.5	1.9		0	258
20	20	18	15	39	21	24	1.8	.80	.60		0	3,380
21	19	16	15	34	20	27	1.5	830	0		0	415
22	18	16	13	30	18	25	1.2	395	0		0	89
23	17	14	14	27	18	22	1.1	123	0		0	53
24	16	18	27	25	16	20	.65	305	0		0	374
25	16	18	22	24	15	20	.38	228	1.4		.37	395
26	16	18	18	23	14	21	.22	118	.02		.01	204
27	15	18	22	22	14	19	1.9	93	0		232	119
28	15	15	20	22	14	18	66	55	0		70	79
29	15	14	20	22	------	16	376	28	0		8.8	56
30	15	14	18	22	------	13	2,760	19	0		2.5	44
31	15	------	17	21	------	12	------	14	------		1.4	------
TOTAL	1,294.8	492	522	680.8	474	1,045	3,414.45	6,837.80	351.72	0	388.62	5,473.60
MEAN	41.8	16.4	16.8	22.0	16.9	33.7	114	221	11.7	0	12.5	182
MAX	173	25	27	64	22	313	2,760	2,770	43	0	232	3,380
MIN	9.8	13	13	9.0	13	11	.22	.80	0	0	0	0
AC-FT	2,570	976	1,040	1,350	940	2,070	6,770	13,560	698	0	771	10,860

CAL YR 1973 TOTAL 35,282.11 MEAN 96.7 MAX 7,070 MIN 0 AC-FT 69,980
WTR YR 1974 TOTAL 20,974.79 MEAN 57.5 MAX 3,380 MIN 0 AC-FT 41,600

PEAK DISCHARGE (BASE, 6,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE
5-1	1230	10.71	6,760
9-20	1330	11.75	14,200

07301300 NORTH FORK RED RIVER NEAR SHAMROCK, TEX.

LOCATION.--Lat 35°15'51", long 100°14'29", Wheeler County, on left bank at downstream side of bridge on U.S. Highway 83, 2.5 miles (4.0 km) north of Shamrock, 16 miles (26 km) upstream from Oklahoma-Texas State line, and 23 miles (37 km) downstream frim McClellan Creek.

DRAINAGE AREA.--1,082 mi^2 (2,802 km^2), of which 379 mi^2 (982 km^2) is probably noncontributing.

PERIOD OF RECORD.--1951-63 (occasional low-flow measurements), February 1964 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,165.55 ft (660.060 m) above mean sea level.

AVERAGE DISCHARGE.--10 years, 24.5 ft^3/s (0.694 m^3/s), 17,750 acre-ft/yr (21.9 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 4,080 ft^3/s (116 m^3/s) May 25, gage height, 4.62 ft (1.408 m); no flow for long periods.
Period of record: Maximum discharge, 11,200 ft^3/s (317 m^3/s) June 7, 1967, gage height, 5.80 ft (1.768 m), from rating curve extended above 3,800 ft^3/s (108 m^3/s); no flow at times.
Maximum stage since at least 1915, 16.1 ft (4.91 m) in May 1957, from information by State Highway Department and local residents.

REMARKS.--Records poor. Some regulation by Lake McClellan, capacity, 5,000 acre-ft (6.16 hm^3) 41 miles (66 km) upstream.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.09	.06	.70	5.0	10	3.9	.04	172	0			0
2	.06	.02	1.6	2.0	9.0	3.3	.05	174	.01			0
3	.04	.06	4.4	1.6	8.0	1.0	.03	23	.17			0
4	61	.11	55	1.2	6.0	.11	.02	8.5	2.8			0
5	18	.11	45	1.4	5.0	.08	.02	3.3	.95			0
6	9.4	.18	31	1.6	4.0	.04	.02	.58	.04			0
7	3.0	.26	32	1.6	3.0	.06	0	.03	36			0
8	.77	.22	30	1.6	1.9	.09	0	.01	63			0
9	.21	.23	27	1.2	2.2	90	0	0	3.8			0
10	7.9	.20	27	1.2	9.0	839	0	0	.07			0
11	72	.23	27	1.2	11	436	0	0	0			0
12	27	.34	27	1.0	12	163	0	0	0			0
13	12	.23	27	2.0	11	78	0	0	0			0
14	2.9	.15	21	5.0	11	73	0	0	0			0
15	1.5	.08	19	10	47	68	0	0	0			0
16	.78	.10	19	12	37	61	0	0	0			0
17	.35	.10	18	10	33	37	0	0	0			0
18	.26	.11	18	10	23	34	0	0	0			0
19	.19	.16	17	10	14	12	0	0	0			0
20	.15	2.2	15	10	18	11	.01	0	0			3.1
21	.13	21	15	9.0	23	15	0	0	0			39
22	.11	33	15	9.0	5.1	28	0	0	0			3.2
23	.08	25	14	8.0	3.3	23	0	0	0			1.7
24	.06	23	13	8.0	1.2	13	0	.09	0			21
25	.07	18	12	9.0	.63	8.5	0	943	0			100
26	.09	15	12	9.0	1.3	18	0	133	0			22
27	.06	8.9	12	10	2.1	17	0	10	0			2.6
28	.06	3.0	11	9.0	4.5	7.7	.36	.35	0			.07
29	.07	1.3	11	8.0	------	.85	135	.02	0			0
30	.08	.37	11	8.0	------	.44	36	0	0			0
31	.08	------	10	9.0	------	.10	------	0	------			------
TOTAL	218.49	153.72	597.70	185.6	316.23	2,042.17	171.55	1,467.88	106.84	0	0	192.67
MEAN	7.05	5.12	19.3	5.99	11.3	65.9	5.72	47.4	3.56	0	0	6.42
MAX	72	33	55	12	47	839	135	943	63	0	0	100
MIN	.04	.02	.70	1.0	.63	.04	0	0	0	0	0	0
AC-FT	433	305	1,190	368	627	4,050	340	2,910	212	0	0	382

CAL YR 1973 TOTAL 14,812.23 MEAN 40.6 MAX 1,260 MIN 0 AC-FT 29,380
WTR YR 1974 TOTAL 5,452.85 MEAN 14.9 MAX 943 MIN 0 AC-FT 10,820

PEAK DISCHARGE (BASE, 3,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE
5-25	1200	4.62	4,080

07301500 NORTH FORK RED RIVER NEAR CARTER, OKLA.

LOCATION.--Lat 35°10'05", long 99°30'25", in NW 1/4 SE 1/4 sec.15, T.8 N., R.22 W., Beckham County, near left bank on downstream side of pier of bridge on State Highway 34, 3.0 mi (4.8 km) south of Carter, 10.8 mi (17.4 km) downstream from Timber Creek, and at mile 110.5 (177.8 km).

DRAINAGE AREA.--2,337 mi^2 (6,053 km^2), of which 399 mi^2 (1,033 km^2) is probably noncontributing.

PERIOD OF RECORD.--October 1944 to September 1962. Annual maximum and occasional low-flow measurements, water years 1963-64. August 1964 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,673.71 ft (510.147 m) above mean sea level,

AVERAGE DISCHARGE.--28 years (1944-62, 1964-74), 117 ft^3/s (3.313 m^3/s), 84,770 acre-ft/yr (105 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 1,710 ft^3/s (48.4 m^3/s) Oct. 11, gage height 6.91 ft (2.106 m); no flow June 30 to Sept. 18.
Period of record: Maximum discharge, 53,400 ft^3/s (1,512 m^3/s) May 26, 1959, gage height, 13.42 ft (4.090 m); no flow at times in most years.

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

REVISIONS.--WSP 1211: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35	18	42	32	55	48	17	722	36			0
2	25	17	44	30	54	46	15	674	34			0
3	15	16	45	26	52	42	14	195	26			0
4	25	17	47	25	51	42	13	151	27			0
5	31	18	65	26	49	40	12	103	25			0
6	97	21	49	35	48	37	11	75	23			0
7	60	21	47	42	45	36	10	55	20			0
8	34	22	43	51	44	38	9.4	41	24			0
9	21	23	40	45	42	76	9.2	31	134			0
10	20	23	36	36	44	458	10	23	81			0
11	1,130	24	35	40	45	623	78	18	34			0
12	405	26	37	46	44	548	99	15	17			0
13	183	28	35	55	44	182	48	13	11			0
14	130	30	33	71	52	122	29	12	9.2			0
15	96	29	33	100	58	85	20	10	7.4			0
16	75	28	33	115	68	68	14	9.1	5.4			0
17	56	29	32	100	88	56	13	8.2	4.3			0
18	48	30	32	195	94	50	13	7.2	4.2			0
19	41	32	26	130	94	42	12	6.4	2.9			71
20	38	36	18	109	82	44	16	5.7	2.2			207
21	33	39	27	81	78	46	21	17	2.1			253
22	28	37	33	72	68	46	14	15	1.6			65
23	25	40	40	65	62	44	13	12	1.2			25
24	22	40	44	59	60	42	14	9.4	1.0			29
25	19	40	39	57	56	46	11	237	.84			57
26	19	39	39	56	52	44	10	386	.52			51
27	18	38	47	56	48	36	9.3	129	.44			53
28	18	50	51	55	50	31	8.7	92	.18			30
29	17	37	48	58	------	28	92	60	0			15
30	17	41	50	57	------	23	242	47	0			10
31	18	------	33	55	------	20	------	38	------			------
TOTAL	2,799	889	1,223	1,980	1,627	3,089	897.6	3,217.0	535.48	0	0	866
MEAN	90.3	29.6	39.5	63.9	58.1	99.6	29.9	104	17.8	0	0	28.9
MAX	1,130	50	65	195	94	623	242	722	134	0	0	253
MIN	15	16	18	25	42	20	8.7	5.7	0	0	0	0
AC-FT.	5,550	1,760	2,430	3,930	3,230	6,130	1,780	6,380	1,060	0	0	1,720

CAL YR 1973 TOTAL 46,030.12 MEAN 126 MAX 4,030 MIN 0 AC-FT 91,300
WTR YR 1974 TOTAL 17,123.08 MEAN 46.9 MAX 1,130 MIN 0 AC-FT 33,960

PEAK DISCHARGE (BASE, 3,200 FT^3/S).--No peak above base.

07302500 LAKE ALTUS AT LUGERT, OKLA.

LOCATION.--Lat 34°53'15", long 99°17'47", in SW 1/4 SE 1/4 sec.22, T.5 N., R.20 W., Kiowa County, on upstream face of Altus Dam on North Fork Red River, 1.0 mi (1.6 km) west of Lugert, 2.6 mi (4.2 km) upstream from Elm Fork of North Fork, and at mile 73.5 (118.3 km).

DRAINAGE AREA.--2,515 mi^2 (6,514 km^2), of which 399 mi^2 (1,033 km^2) is probably noncontributing.

PERIOD OF RECORD.--December 1943 to September 1950 (monthly records only), October 1950 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Bureau of Reclamation). Prior to Nov. 19, 1948, nonrecording or float gage at same site and datum.

EXTREMES.--Current year: Maximum contents, 86,960 acre-ft (107 hm^3) May 31, elevation, 1,550.30 ft (472.531 m); minimum, 39,390 acre-ft (48.6 hm^3) Sept. 14, elevation, 1,537.67 ft (468.682 m).
Period of record: Maximum contents, 170,600 acre-ft (210 hm^3) May 19, 1951, elevation 1,562.10 ft (476.128 m); minimum after initial storage, 4,690 acre-ft (5.78 hm^3) Aug. 25, 1944, elevation, 1,520.2 ft (463.357 m).

REMARKS.--Reservoir is formed by concrete and coursed masonry dam. Storage began in December 1943. Capacity, 134,600 acre-ft (166 hm^3) at elevation 1,559.0 ft (475.18 m) crest of uncontrolled spillway and 72,500 acre-ft (89.4 hm^3) at elevation 1,547.0 ft (471.53 m) crest of controlled spillway. Dead storage, 1,660 acre-ft (2.05 hm^3) below elevation 1,517.5 ft (462.53 m) sill of headgate at irrigation canal. Figures given herein represent total contents. Reservoir is used for flood control, municipal water supply for city of Altus, and irrigation of about 48,000 acres (194 km^2). Revised capacity table used since Jan. 1, 1969.

COOPERATION.--Data on diversions furnished by Bureau of Reclamation.

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

1,537	37,440	1,544	60,400
1,539	43,400	1,547	72,500
1,541	49,840	1,551	90,280

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	60,000	65,120	65,260	65,790	68,320	69,460	75,030	79,750	86,820	82,060	50,410	40,180
2	59,850	65,080	65,300	65,750	68,400	69,500	75,200	83,140	86,680	81,390	49,470	40,070
3	60,220	65,080	65,600	65,750	68,440	69,380	75,200	83,960	86,680	80,720	48,680	39,980
4	60,920	65,120	65,530	65,790	68,360	69,300	75,110	84,500	86,820	80,230	47,990	39,920
5	60,960	65,040	65,380	65,750	68,670	69,220	74,990	84,780	86,490	79,400	47,470	39,770
6	60,810	65,040	65,490	65,790	68,510	69,060	74,570	84,950	86,730	78,570	47,010	39,800
7	60,890	64,930	65,530	65,750	68,510	68,630	74,990	84,960	86,770	77,580	46,660	39,770
8	60,920	64,970	65,530	65,750	68,550	68,750	74,860	85,100	86,730	76,380	46,140	39,770
9	60,890	64,930	65,490	65,830	68,590	69,100	74,570	85,200	86,540	75,030	45,820	39,770
10	61,220	64,890	65,420	65,900	68,630	69,610	74,570	85,240	86,400	73,490	45,860	39,680
11	62,010	64,930	65,340	65,900	68,630	71,410	74,940	85,380	86,490	72,020	45,820	39,480
12	63,710	64,850	65,230	65,940	68,630	72,380	75,200	85,100	86,400	70,730	45,820	39,740
13	64,050	65,040	65,190	65,980	68,710	72,910	75,620	85,010	86,350	69,500	45,660	39,500
14	64,850	65,150	65,260	66,020	68,830	73,280	75,320	85,330	86,350	68,280	45,570	39,390
15	65,000	65,120	65,300	66,060	68,830	73,530	75,280	85,060	86,310	67,120	45,440	39,590
16	65,080	64,970	65,340	66,060	68,900	73,740	75,320	85,060	86,170	66,090	45,470	39,560
17	65,190	65,080	65,380	66,170	68,590	73,940	75,150	85,100	85,980	65,080	45,380	39,530
18	65,190	65,080	65,720	66,320	69,020	74,150	75,280	84,960	85,840	63,520	45,030	39,480
19	65,120	65,190	65,560	66,740	68,830	74,230	75,110	85,010	85,520	62,570	44,490	40,010
20	65,230	65,150	65,380	67,010	69,420	74,570	75,200	84,870	85,380	61,780	43,590	40,510
21	65,340	65,120	65,420	67,160	69,300	74,480	75,490	84,920	85,200	61,000	42,570	41,320
22	65,260	65,150	65,300	67,350	69,020	74,740	75,530	84,740	85,200	60,180	41,200	41,650
23	65,230	65,190	65,560	67,430	69,380	74,650	75,530	84,370	85,010	59,300	40,010	41,720
24	65,260	65,380	65,640	67,540	69,260	74,650	75,450	84,090	84,960	58,200	39,950	42,290
25	65,150	65,380	65,490	67,700	69,220	74,780	75,400	85,240	84,870	57,260	39,740	42,510
26	65,260	65,420	65,490	67,660	69,060	74,900	75,200	86,260	84,690	56,160	39,680	42,600
27	65,340	65,450	65,530	67,850	69,340	74,860	75,400	86,400	84,460	54,990	40,480	42,720
28	65,260	65,420	65,680	67,930	69,380	75,150	75,700	86,540	83,910	54,040	40,420	42,660
29	65,080	65,380	65,680	68,050	------	75,150	76,340	86,870	83,360	52,720	40,390	42,630
30	65,260	65,380	65,790	68,120	------	75,200	77,620	86,870	82,780	52,140	40,270	42,630
31	64,970	------	65,940	68,200	------	75,360	------	86,820	------	51,220	40,210	------
MAX	65,340	65,450	65,940	68,200	69,420	75,360	77,620	86,870	86,820	82,060	50,410	42,720
MIN	59,850	64,850	65,190	65,750	68,320	68,630	74,570	79,750	82,780	51,220	39,680	39,390
(†)	1,545.07	1,545.18	1,545.33	1,545.92	1,546.22	1,547.69	1,548.22	1,550.27	1,549.39	1,541.41	1,537.95	1,538.75
(‡)	+5,050	+410	+560	+2,260	+1,180	+5,980	+2,260	+9,200	-4,040	-31,560	-11,010	+2,420
(++)	0	0	624	0	0	757	0	1,090	4,400	29,080	11,230	0

CAL YR 1973 .....++ 39,750 ‡ +51,470
WTR YR 1974 .....++ 47,180 ‡ -17,290

† Elevation in feet, at end of montth.
‡ Change in contents, in acre-ft.
++ Total diversions, in acre-ft.

07303000 NORTH FORK RED RIVER BELOW ALTUS DAM, NEAR LUGERT, OKLA.

LOCATION.--Lat 34°53'26", long 99°18'22", in SW 1/4 sec.22, T.15 N., R.20 W., Greer County, on right bank 3,500 ft (1,067 m) downstream from Altus Dam, 1.9 mi (3.1 km) upstream from Elm Fork of North Fork, 2.0 mi (3.2 km) west of Lugert, and at mile 72.8 (117.1 km).

DRAINAGE AREA.--2,515 mi^2 (6,514 km^2), of which 399 mi^2 (1,033 km^2) is probably noncontributing.

PERIOD OF RECORD.--March 1930 to December 1932 (published as "at Lugert Dam"), December 1943 to September 1950 (published as spill from Lake Altus), October 1950 to September 1962, August 1964 to current year. Monthly discharge only for some periods, published in WSP 1311.

GAGE.--Water-stage recorder. Datum of gage is 1,471.81 ft (448.608 m) above mean sea level. Mar. 19, 1930, to Dec. 21, 1932, nonrecording gage at former Lugert Dam, 0.7 mi (1.1 km) upstream at datum 1,504.31 ft (458.514 m) above mean sea level, unadjusted.

EXTREMES.--Current year: No flow during year.
Period of record: Maximum discharge, 16,100 ft^3/s (456 m^3/s) May 18, 1951, gage height, 12.70 ft (3.87 m); no flow at times in each year.
Flood of May 16, 1928, reached a stage of 14.5 ft (4.42 m), site and datum then in use, discharge, 14,300 ft^3/s (405 m^3/s).

REMARKS.--Records good. Some regulation at low flow by Lugert Lake prior to December 1943 capacity, 13,500 acre-ft (16.6 hm^3) and completely regulated thereafter by Lake Altus (see sta. 07302500). Diversions at Lake Altus bypass most of streamflow. Seepage from Altus Dam not included except for period March 1951 to January 1953.

REVISIONS.--WSP 1311: Drainage area.

07303400 ELM FORK OF NORTH FORK RED RIVER NEAR CARL, OKLA.

LOCATION.--Lat 35°00'42", long 99°54'12", in SW 1/4 NW 1/4 sec.12, T.6 N., R.26 W., Harmon County, near left bank on downstream side of pier of bridge on State Highway 30, 4.0 mi (6.4 km) northeast of Carl, and at mile 54.0 (86.9 km).

DRAINAGE AREA.--416 mi^2 (1,077 km^2).

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

GAGE.--Water-stage recorder. Datum of gage is 1,714.95 ft (552.717 m) above mean sea level (State Highway Department bench mark).

AVERAGE DISCHARGE.--15 years, 39.2 ft^3/s (1.110 m^3/s), 28,400 acre-ft/yr (35.0 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 2,380 ft^3/s (67.4 m^3/s) May 21, gage height, 5.33 ft (1.625 m); minimum daily, 0.52 ft^3/s (0.015 m^3/s) July 28, 29,31, Aug. 1.
Period of record: Maximum discharge, 17,900 ft^3/s (507 m^3/s) Apr. 27, 1962, gage height, 11.45 ft (3.490 m), from rating curve extended above 1,000 ft^3/s (28.3 m^3/s) on basis of slope-area measurement of peak flow; no flow Sept. 4, 1964.

REMARKS.--Records good except for period Oct. 1 to Dec. 31 which is fair. Records of chemical analyses and of water temperatures for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1731: Drainage area:

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	19	17	8.5	18	19	12	881	23	8.8	.52	19
2	21	19	17	8.2	18	19	11	314	25	8.4	.55	14
3	18	18	17	8.2	18	18	11	110	59	8.2	.57	9.7
4	150	18	18	9.3	18	19	11	65	58	8.2	.69	7.5
5	180	18	18	13	17	17	11	42	32	7.9	24	5.2
6	80	19	18	17	18	16	10	32	23	7.4	18	3.6
7	40	19	17	21	18	16	10	23	20	7.3	3.7	3.3
8	29	20	17	24	19	17	9.3	19	21	6.7	3.1	3.1
9	22	20	16	16	21	24	9.3	15	19	6.6	3.1	2.7
10	20	19	15	13	20	651	11	12	18	6.0	5.1	2.7
11	740	19	15	10	21	295	88	11	17	6.0	3.3	2.4
12	300	19	15	8.6	24	100	42	9.9	16	5.8	3.1	2.2
13	80	19	15	12	22	62	30	9.7	14	5.3	2.9	1.9
14	52	19	14	19	22	49	27	8.8	13	5.3	2.6	1.7
15	39	18	14	25	26	39	26	7.7	11	28	2.3	3.6
16	31	17	13	31	29	34	23	6.9	9.7	16	1.9	5.0
17	27	17	13	29	24	29	19	6.3	9.0	6.0	1.7	4.5
18	25	17	13	24	24	26	17	5.5	9.0	2.8	1.7	4.1
19	24	18	14	23	23	23	17	4.7	7.8	21	1.4	601
20	23	20	16	23	23	26	22	6.8	6.4	16	1.2	1,090
21	22	19	11	23	21	28	16	865	5.2	14	.99	401
22	22	18	14	21	20	26	14	114	4.9	12	38	163
23	21	18	17	20	20	23	14	49	5.1	1.0	12	95
24	21	20	17	19	19	23	14	34	5.8	.89	72	78
25	20	19	15	18	20	23	14	524	5.6	.72	160	82
26	20	19	14	18	20	19	15	152	5.1	.69	61	39
27	21	18	14	18	20	18	16	71	8.1	.59	52	25
28	20	18	13	18	20	16	32	44	10	.52	54	19
29	20	17	13	18	------	14	264	31	9.2	.52	41	15
30	20	17	13	17	------	13	644	26	8.8	.54	31	12
31	20	------	11	18	------	12	------	25	------	.52	24	------
TOTAL	2,153	555	464	550.8	583	1,714	1,459.6	3,525.3	478.7	219.69	627.42	2,716.2
MEAN	69.5	18.5	15.0	17.8	20.8	55.3	48.7	114	16.0	7.09	20.2	90.5
MAX	740	20	18	31	29	651	644	881	59	28	160	1,090
MIN	18	17	11	8.2	17	12	9.3	4.7	4.9	.52	.52	1.7
AC-FT	4,270	1,100	920	1,090	1,160	3,400	2,900	6,990	950	436	1,240	5,390

CAL YR 1973 TOTAL 22,644.90 MEAN 62.0 MAX 2,780 MIN 5.0 AC-FT 44,920
WTR YR 1974 TOTAL 15,046.71 MEAN 41.2 MAX 1,090 MIN .52 AC-FT 29,850

PEAK DISCHARGE (BASE, 2,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE
5-21	0730	5.33	2,380
9-20	1400	5.31	2,350

07303500 ELM FORK OF NORTH FORK RED RIVER, NEAR MANGUM, OKLA.

LOCATION.--Lat 34°55'36", long 99°30'00", on east line sec.10, T.5 N., R.22 W., Greer County, at bridge on U.S. Highway 283, 3.0 mi (4.8 km) north of Mangum, 5.0 mi (8.0 km) downstream from Haystack Creek, and at mile 17.8 (28.6 km).

DRAINAGE AREA.--838 mi^2 (2,170 km^2).

PERIOD OF RECORD.--April 1905 to March 1908 (published as Elm Fork of Red River), March 1930 to September 1931, October 1937 to September 1947, April 1965 to September 1967, August 1968 to current year. Monthly discharge for some periods, published in WSP 1311. Occasional low-flow measurements, water years 1954, 1958-60, 1962-64, April to September 1965.

GAGE.--Water-stage recorder. Datum of gage is 1,520.77 ft (463.531 m) above mean sea level (Bureau of Reclamation bench mark). Apr. 12, 1905, to Mar. 31, 1908, nonrecording gage at unknown datum. Mar. 16, 1930, to Sept. 30, 1947, and April 1965 to Sept. 30, 1967, at datum 10.00 ft (3.048 m) higher.

AVERAGE DISCHARGE.--21 years (1905-7, 1930-31, 1937-47, 1965-67, 1968-74), 99.7 ft^3/s (2.824 m^3/s), 72,230 acre-ft/yr (89.1 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 7,780 ft^3/s (220 m^3/s) May 1, gage height, 21.53 ft (6.562 m); minimum daily, 0.60 ft^3/s (0.017 m^3/s) Aug. 4.
Period of record: Maximum discharge, 30,600 ft^3/s (867 m^3/s) May 12, 1947, gage height, 23.52 ft (7.169 m), present datum; maximum gage height, 15.0 ft (4.57 m) May 27, 1905, datum then in use; no flow at times in 1939-40, 1945-46, 1964, 1970-71.
Flood in spring of 1921 reached a stage of 26.4 ft (8.05 m), present datum, from information by State Highway Department.

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

REVISIONS (WATER YEARS).--WSP 1087: 1940(M). WSP 1311: 1906-8, 1931(M), drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38	29	25	16	21	19	21	3,730	32	6.5	.69	11
2	31	28	25	14	21	19	20	3,970	31	5.9	.70	9.6
3	28	28	25	14	21	19	20	381	29	5.6	.63	9.0
4	214	28	26	16	21	19	19	130	89	4.9	.60	7.9
5	277	28	28	19	20	18	19	80	47	4.9	29	6.8
6	140	28	28	22	19	18	19	59	16	4.8	60	6.1
7	63	29	26	18	20	17	19	48	20	4.1	13	6.2
8	43	30	25	25	20	18	18	41	29	3.6	10	5.5
9	34	30	24	19	20	25	18	37	38	3.1	7.4	5.7
10	30	29	23	16	20	167	18	33	22	2.8	20	5.6
11	1,060	29	23	19	20	946	332	30	21	2.6	35	5.1
12	749	29	23	28	20	179	137	27	20	2.4	8.7	4.4
13	140	29	22	24	20	83	48	26	18	2.4	4.8	4.3
14	91	29	21	23	21	57	31	24	18	2.3	3.5	4.2
15	69	28	21	29	20	48	25	22	18	2.1	2.8	6.0
16	59	26	20	23	20	41	22	21	18	2.1	2.3	36
17	52	26	20	29	23	37	20	20	18	2.1	1.9	22
18	46	26	20	29	23	35	20	19	16	1.9	1.6	12
19	43	27	21	26	21	32	20	18	15	1.9	1.2	614
20	41	30	24	25	20	31	21	19	14	1.7	.96	3,690
21	39	29	16	25	19	32	57	1,430	13	1.9	.79	2,360
22	36	28	22	24	19	31	32	775	12	1.7	.80	251
23	35	28	26	22	19	29	23	107	12	1.5	2.7	105
24	33	30	25	22	18	28	22	61	12	1.5	23	232
25	32	29	22	22	18	27	21	399	12	1.4	77	1,160
26	31	29	21	22	18	27	20	1,120	10	1.2	86	304
27	32	28	21	22	19	27	20	110	8.6	1.2	742	148
28	31	27	20	22	19	25	21	57	8.0	.99	78	105
29	30	26	20	22	------	23	195	40	7.0	.90	35	86
30	30	25	20	22	------	22	3,460	36	6.6	.80	19	75
31	30	------	21	22	------	21	------	34	------	.70	15	------
TOTAL	3,607	845	704	681	560	2,120	4,738	12,904	630.2	81.49	1,284.07	9,297.4
MEAN	116	28.2	22.7	22.0	20.0	68.4	158	416	21.0	2.63	41.4	310
MAX	1,060	30	28	29	23	946	3,460	3,970	89	6.5	742	3,690
MIN	28	25	16	14	18	17	18	18	6.6	.70	.60	4.2
AC-FT	7,150	1,680	1,400	1,350	1,110	4,210	9,400	25,600	1,250	162	2,550	18,440

CAL YR 1973 TOTAL 40,800.60 MEAN 112 MAX 4,920 MIN 9.2 AC-FT 80,930
WTR YR 1974 TOTAL 37,452.16 MEAN 103 MAX 3,970 MIN .60 AC-FT 74,290

PEAK DISCHARGE (BASE, 2,400 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
5-1	2330	21.53	7,780	8-27	0930	16.81	2,860
5-21	1730	17.25	3,060	9-20	2000	20.58	6,470

07304500 ELK CREEK NEAR HOBART, OKLA.

LOCATION.--Lat 34°54'51", long 99°06'49", in NE 1/4 NE 1/4 sec.17, T.5 N., R.18 W., Kiowa County, near right bank on downstream side of pier of county road bridge, 7.0 mi (11.3 km) downstream from Little Elk Creek, 7.5 mi (12 km) south of Hobart, and at mile 10.9 (17.5 km).

DRAINAGE AREA.--549 mi^2 (1,422 km^2).

PERIOD OF RECORD.--September 1904 to March 1908, October 1949 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,429.4 ft (435.68 m) above mean sea level. See WSP 1920 for history of changes prior to Apr. 28, 1954.

AVERAGE DISCHARGE.--28 years (1904-7, 1949-74), 68.0 ft^3/s (1.926 m^3/s), 49,270 acre-ft/yr (60.7 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 2,340 ft^3/s (66.3 m^3/s) May 2, gage height, 19.25 ft (5.867 m); minimum daily, 0.89 ft^3/s (0.025 m^3/s) Sept. 14.
Period of record: Maximum discharge, 22,400 ft^3/s (634 m^3/s) Oct. 4, 1955, gage height, 30.75 ft (9.373 m), from floodmarks, from rating curve extended above 5,300 ft^3/s (150 m^3/s) on basis of field estimate of peak flow; no flow at times in most years.
Flood of June 9, 1907, reached a stage of 28.9 ft (8.81 m), datum then in use.

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

REVISIONS (WATER YEARS).--WSP 1211: Drainage area. WSP 1241: 1905.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	23	26	21	13	16	16	1,070	45	7.9	1.1	11
2	35	21	25	21	12	16	16	1,990	35	7.6	1.1	31
3	35	26	24	20	12	16	16	1,270	27	6.7	1.0	28
4	682	22	24	18	13	16	15	298	23	6.7	1.0	14
5	206	20	37	19	12	15	16	182	19	6.1	1.0	12
6	80	27	26	20	12	14	15	128	18	5.7	2.2	8.6
7	79	23	23	17	16	14	14	87	17	5.2	2.1	2.5
8	70	21	22	17	15	13	13	60	16	4.6	2.1	2.5
9	66	21	21	18	12	14	14	51	16	4.2	2.1	2.3
10	64	23	22	17	12	138	14	32	52	3.8	67	1.8
11	1,350	23	21	16	12	725	20	28	36	3.6	44	1.8
12	578	22	20	15	15	414	155	27	28	3.3	15	1.2
13	130	22	20	15	15	146	70	25	18	3.1	6.8	.94
14	62	23	21	15	15	113	28	22	18	2.9	4.0	.89
15	44	23	19	15	15	93	23	26	17	2.7	3.7	2.1
16	40	25	24	17	20	88	22	22	16	2.5	3.7	3.0
17	41	25	21	20	19	62	18	21	15	2.3	3.6	3.9
18	44	23	18	22	17	50	17	22	16	2.2	3.7	5.8
19	42	26	18	20	16	46	15	22	16	2.1	3.6	39
20	39	27	43	19	19	52	14	22	16	2.0	3.5	465
21	37	27	29	18	16	43	93	23	13	1.8	3.4	296
22	35	28	18	16	25	33	26	67	12	1.7	3.1	76
23	32	29	19	18	20	27	21	60	11	1.7	3.0	46
24	30	32	21	17	16	24	15	27	10	1.6	2.9	55
25	29	41	20	14	16	22	13	488	9.7	1.5	13	225
26	30	36	20	14	15	20	11	757	9.7	1.4	13	97
27	31	31	19	13	15	19	11	216	9.3	1.4	27	42
28	36	31	20	13	16	18	13	127	9.0	1.3	14	31
29	24	29	20	15	------	18	54	117	8.6	1.2	14	25
30	24	27	19	13	------	17	726	82	8.6	1.2	15	21
31	23	------	20	13	------	17	------	61	------	1.1	11	------
TOTAL	4,054	777	700	526	431	2,319	1,514	7,430	564.9	101.1	291.7	1,551.33
MEAN	131	25.9	22.6	17.0	15.4	74.8	50.5	240	18.8	3.26	9.41	51.7
MAX	1,350	41	43	22	25	725	726	1,990	52	7.9	67	465
MIN	23	20	18	13	12	13	11	21	8.6	1.1	1.0	.89
AC-FT	8,040	1,540	1,390	1,040	855	4,600	3,000	14,740	1,120	201	579	3,080

CAL YR 1973 TOTAL 54,218.62 MEAN 149 MAX 4,820 MIN .61 AC-FT 107,500
WTR YR 1974 TOTAL 20,260.03 MEAN 55.5 MAX 1,990 MIN .89 AC-FT 40,190

PEAK DISCHARGE (BASE, 2,200 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE
5-2	2300	19.25	2,340

07305000 NORTH FORK RED RIVER NEAR HEADRICK, OKLA.

LOCATION.--Lat 34°38'04", long 99°05'47", in NW 1/4 NE 1/4 sec.21, T.2 N., R.18 W., Tillman County, near left bank on downstream side of pier of bridge on U.S. Highway 62, 2.5 mi (4.0 km) east of Headrick, 12.9 mi (20.8 km) upstream from Otter Creek, and at mile 33.0 (53.1 km).

DRAINAGE AREA.--4,244 mi^2 (10,992 km^2), of which 399 mi^2 (1,033 km^2) is probably noncontributing.

PERIOD OF RECORD.--April 1905 to March 1908, October 1937 to current year. Monthly discharge only for some periods, published in WSP 1311. Prior to July 1905, published as "near Snyder".

GAGE.--Water-stage recorder. Datum of gage is 1,294.83 ft (394.664 m) above mean sea level (Bureau of Reclamation bench mark). Prior to July 18, 1905, nonrecording gage at site 0.2 mi (0.3 km) downstream at different datum. July 18, 1905, to Mar. 30, 1908, nonrecording gage at Navajo damsite 10.4 mi (16.7 km) upstream at different datum. Oct. 1, 1937, to Jan. 29, 1969, water-stage recorder at present site at datum 5.0 ft (1.52 m) higher.

AVERAGE DISCHARGE.--39 years (1905-7, 1937-74), 299 ft^3/s (8.468 m^3/s), 216,600 acre-ft/yr (267 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 8,860 ft^3/s (251 m^3/s) May 3, gage height, 12.42 ft (3.786 m); minimum daily, 3.6 ft^3/s (0.10 m^3/s) Aug. 23.
Period of record: Maximum discharge, 30,700 ft^3/s (869 m^3/s) Oct. 5, 1955, gage height, 16.50 ft (5.029 m) present datum; no flow at times in most years.
A stage of 21.1 ft (6.43 m) present datum occurred sometime prior to 1927, from information by State Highway Department.

REMARKS.--Records good. Flow regulated since December 1943 by storage and diversion at Lake Altus, 39.5 mi (63.6 km) above station (see sta. 07302500). Diversions for irrigation of about 48,000 acres (194 km^2) above station; some return flow may re-enter at Stinking Creek, 16 mi (26 km) below station. Records of chemical analyses and of water temperatures for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1211: Drainage area. WSP 1241: 1905-7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	233	69	67	57	64	54	76	4,760	115	25	6.3	44
2	159	65	66	49	64	54	73	6,010	62	25	6.3	34
3	122	65	68	46	62	53	72	7,490	52	24	6.3	29
4	197	65	66	60	61	52	70	2,110	43	24	8.1	51
5	2,570	67	67	90	61	51	68	830	35	24	7.1	37
6	994	67	68	97	60	51	66	566	188	24	7.1	31
7	524	69	77	83	60	50	66	427	168	24	8.1	26
8	294	70	74	64	60	50	65	342	111	24	29	23
9	180	69	71	54	60	51	63	280	97	23	24	21
10	133	70	69	50	60	53	63	228	113	23	30	18
11	649	70	68	54	60	136	72	182	121	22	49	18
12	3,480	72	70	63	60	1,320	72	141	93	20	97	15
13	2,190	70	69	72	61	893	392	118	78	16	53	14
14	727	72	68	86	62	375	208	93	68	15	39	13
15	404	72	69	94	60	265	127	77	62	14	26	14
16	286	70	68	84	60	236	101	72	55	14	18	26
17	221	69	67	80	60	219	95	64	55	13	14	21
18	188	70	69	81	61	192	91	54	53	13	11	22
19	154	70	70	81	61	166	84	49	50	13	9.6	43
20	129	73	53	81	60	154	88	46	43	12	7.2	349
21	112	75	69	79	60	158	79	45	41	9.1	5.2	3,060
22	100	73	96	74	60	135	132	238	38	8.6	4.0	4,050
23	93	75	80	73	59	127	137	1,300	37	8.0	3.6	913
24	85	81	71	74	59	115	96	389	34	5.1	5.3	698
25	81	85	75	72	59	120	81	222	33	8.1	4.7	1,590
26	77	87	75	72	58	109	77	852	32	8.1	7.9	1,970
27	75	85	74	71	56	98	70	1,740	29	6.7	51	874
28	85	77	73	69	55	87	242	583	29	6.7	612	433
29	85	73	72	67	------	84	123	319	27	6.7	292	347
30	75	71	71	66	------	80	352	219	26	6.7	104	206
31	72	------	68	66	------	78	------	166	------	5.9	65	------
TOTAL	14,774	2,166	2,188	2,209	1,683	5,666	3,401	30,012	1,988	471.7	1,610.8	14,990
MEAN	477	72.2	70.6	71.3	60.1	183	113	968	66.3	15.2	52.0	500
MAX	3,480	87	96	97	64	1,320	392	7,490	188	25	612	4,050
MIN	72	65	53	46	55	50	63	45	26	5.1	3.6	13
AC-FT	29,300	4,300	4,340	4,380	3,340	11,240	6,750	59,530	3,940	936	3,200	29,730

CAL YR 1973 TOTAL 149,762.8 MEAN 410 MAX 8,650 MIN 9.8 AC-FT 297,100
WTR YR 1974 TOTAL 81,159.5 MEAN 222 MAX 7,490 MIN 3.6 AC-FT 161,000

07305500 WEST OTTER CREEK AT SNYDER LAKE, NEAR MOUNTAIN PARK, OKLA.

LOCATION.--Lat 34°43'55", long 98°59'12", in NE 1/4 SE 1/4 sec.16, T.3 N., R.17 W., Kiowa County, on left bank 700 ft (213.4 m) downstream from Snyder Dam on West Otter Creek, 0.7 mi (1.1 km) upstream from small tributary, 3.0 mi (4.8 km) northwest of Mountain Park, and at mile 30.1 (48.4 km) corrected.

DRAINAGE AREA.--132 mi^2 (342 km^2).

PERIOD OF RECORD.--April 1903 to March 1908, October 1951 to September 1971, July 1972 to current year. Published as Otter Creek near Mountain Park 1903-8 and as Otter Creek at Snyder Lake, near Mountain Park 1951-60. Monthly discharge only for some periods, published in WSP 1311.

GAGE.--Water-stage recorder. Datum of gage is 1,344.00 ft (409.651 m) above mean sea level. April 1903 to March 1908, nonrecording gage at site 1.8 mi (2.9 km) downstream at different datum. October 1951 to September 1971 at intake tower at Snyder Lake, 700 ft (213.4 m) upstream at datum 1,360.99 ft (414.830 m).

AVERAGE DISCHARGE.--26 years (1903-7, 1951-71, 1973-1974), 23.0 ft^3/s (0.651 m^3/s), 16,660 acre-ft/yr (20.5 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 867 ft^3/s (24.6 m^3/s) Sept. 25, gage height, 7.75 ft (2.362 m); no flow at times.
Period of record: Maximum discharge, 14,200 ft^3/s (40.2 m^3/s) June 6, 1953, gage height, 19.50 ft (5.944 m), from floodmarks, from rating curve extended above 1,600 ft^3/s (45.3 m^3/s) on basis of contracted-opening and flow-over-dam measurements of peak flow; no flow at times in most years.

REMARKS.--Records poor. The city of Snyder diverted about 130 acre-ft (160,000 m^3) annually prior to October 1958 and none thereafter.

REVISIONS (WATER YEARS).--WSP 1731: 1960(M). WSP 1920: 1959-60.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.0	0	.34	.70	.87	.29	0	483	0	0	0	3.5
2	3.1	0	.29	.64	.76	.21	0	552	0	0	0	.10
3	1.1	0	.45	.59	.67	.16	0	535	.38	0	0	0
4	294	0	.43	.68	.69	.13	1.0	520	.08	0	0	0
5	357	0	.29	.58	.17	.03	0	498	0	0	0	0
6	63	.02	.01	.50	.30	0	0	465	0	0	0	0
7	19	.15	0	.45	.62	0	0	251	0	0	0	0
8	10	.22	0	.41	.41	0	0	78	0	0	0	0
9	5.4	.37	0	.52	.38	0	0	244	0	0	0	0
10	.99	.41	0	.59	.13	.11	0	84	0	0	0	0
11	429	.47	.10	.72	.35	.01	0	27	0	0	0	0
12	185	.50	.13	.86	.22	0	0	9.5	0	0	0	0
13	38	.45	.19	.98	.38	0	0	4.4	0	0	0	0
14	15	.48	.14	1.1	1.0	0	0	2.7	.08	0	0	0
15	9.0	.97	.13	1.4	2.8	0	0	1.8	.15	0	0	0
16	5.0	1.1	0	1.4	1.6	.13	0	1.3	0	0	0	0
17	2.3	.53	0	1.4	1.0	.59	0	.92	.08	0	0	0
18	1.2	0	3.6	1.1	.75	.80	0	.75	.15	0	0	0
19	2.2	.45	3.1	.98	.75	.72	0	.60	.08	0	0	19
20	1.1	.76	1.8	.94	.75	.20	.02	.38	0	0	0	508
21	.58	.87	1.3	.97	1.2	.15	0	0	0	0	0	631
22	.46	.89	1.3	.55	2.7	2.6	0	0	0	0	0	538
23	.10	.75	1.5	.13	1.4	1.9	0	0	0	0	0	430
24	0	1.0	1.5	.63	1.1	.36	0	0	0	.04	1.1	136
25	.92	1.2	1.5	.62	.81	.10	0	0	0	0	70	512
26	.15	.81	1.5	.64	.62	0	0	0	0	0	2.1	847
27	.02	.77	1.2	.70	.50	.07	0	.15	0	0	74	840
28	1.6	.52	.69	.67	.37	.07	72	0	0	0	68	655
29	.67	.51	.88	.67	------	.07	109	0	0	0	63	485
30	.35	.43	.51	.60	------	0	440	0	0	0	57	317
31	.04	------	.36	.87	------	0	------	0	------	0	35	------
TOTAL	1,450.28	14.63	23.24	23.59	23.30	8.70	622.02	3,759.50	1.00	.04	370.2	5,921.60
MEAN	46.8	.49	.75	.76	.83	.28	20.7	121	.033	.001	11.9	197
MAX	429	1.2	3.6	1.4	2.8	2.6	440	552	.38	.04	74	847
MIN	0	0	0	.13	.13	0	0	0	0	0	0	0
AC-FT	2,880	29	46	47	46	17	1,230	7,460	2.0	.08	734	11,750

CAL YR 1973 TOTAL 18,207.85 MEAN 49.9 MAX 1,630 MIN 0 AC-FT 36,120
WTR YR 1974 TOTAL 12,218.10 MEAN 33.5 MAX 847 MIN 0 AC-FT 24,230

07308500 RED RIVER NEAR BURKBURNETT, TEX.

LOCATION.--Lat 34°06'30", long 98°32'00", Wichita County, on downstream side of bridge on U.S. Highways 277 and 281, 2 miles (3 km) northeast of Burkburnett, and at mile 933 (1,501 km).

DRAINAGE AREA.--20,570 mi^2 (53,280 km^2), of which 5,936 mi^2 (15,374 km^2) is probably noncontributing.

PERIOD OF RECORD.--July 1924 to August 1925 (monthly discharge only), December 1959 to current year.

GAGE.--Water-stage recorder. Datum of gage is 952.57 ft (290.343 m) above mean sea level. July 11, 1924, to Aug. 31, 1925, nonrecording gage at site 1,000 ft (305 m) downstream at same datum.

AVERAGE DISCHARGE.--14 years (1960-74), 766 ft^3/s (21.69 m^3/s), 555,000 acre-ft/yr (684 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 25,500 ft^3/s (722 m^3/s) Sept. 27, gage height, 10.92 ft (3.328 m); minimum, 12 ft^3/s (0.34 m^3/s) July 28.
Period of record: Maximum discharge, 62,800 ft^3/s (1,780 m^3/s) Oct. 19, 1965, gage height, 11.46 ft (3.493 m); no flow at times.
Flood of June 3, 1957, reached a stage of 13.54 ft (4.127 m), from levels to floodmarks. According to local residents, higher stages occurred in 1891 and June 1941.

REMARKS.--Records fair. Many small diversions for irrigation above station. Water-quality records for the current year are published in Part 2 of the Texas State report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,680	265	244	159	151	130	159	5,910	1,130	125	24	730
2	1,270	247	234	80	145	126	142	7,750	783	114	24	388
3	934	250	233	50	147	122	131	11,000	690	100	24	272
4	716	245	284	60	151	122	114	10,500	2,480	89	25	212
5	1,030	233	252	100	150	121	108	8,360	11,800	89	32	159
6	2,500	231	215	150	139	122	108	4,600	7,470	86	46	115
7	3,310	231	206	160	137	120	90	4,190	2,480	79	53	96
8	1,860	231	202	160	141	123	80	2,980	1,850	70	41	86
9	1,530	221	198	140	139	215	82	2,270	1,280	64	46	80
10	1,220	222	204	120	138	867	88	1,700	910	58	51	70
11	1,300	219	206	100	135	1,370	124	1,330	690	51	81	68
12	2,890	216	199	50	139	1,220	110	1,220	635	48	494	55
13	4,080	217	183	100	143	1,030	98	930	612	48	336	47
14	4,030	218	180	143	140	1,930	90	733	477	50	297	39
15	2,460	210	178	159	132	1,510	117	582	913	55	223	38
16	1,650	204	173	189	140	967	269	482	955	62	193	92
17	1,130	205	178	198	145	677	252	401	580	68	162	108
18	913	203	180	201	142	562	173	334	439	62	134	100
19	771	208	161	204	137	470	142	294	365	57	112	108
20	670	193	80	214	140	423	148	261	303	50	85	4,340
21	586	207	120	233	201	378	138	236	256	42	63	13,600
22	490	211	194	221	202	341	270	222	223	36	44	15,200
23	432	238	151	207	171	299	300	1,310	204	34	47	9,960
24	408	312	158	196	146	284	170	1,190	191	28	49	4,840
25	347	552	175	182	141	268	124	1,630	180	23	53	14,700
26	325	549	174	178	138	261	142	10,900	169	19	740	21,500
27	304	417	168	164	131	247	114	15,900	163	16	1,010	20,800
28	306	318	169	159	130	232	92	7,140	157	13	703	5,460
29	278	290	170	158	------	208	257	3,050	145	16	1,540	2,510
30	269	262	167	157	------	189	2,620	2,140	134	20	1,600	1,560
31	269	------	158	153	------	179	------	1,440	------	24	1,420	------
TOTAL	39,958	7,825	5,794	4,745	4,091	15,113	6,852	110,985	38,664	1,696	9,752	117,333
MEAN	1,289	261	187	153	146	488	228	3,580	1,289	54.7	315	3,911
MAX	4,080	552	284	233	202	1,930	2,620	15,900	11,800	125	1,600	21,500
MIN	269	193	80	50	130	120	80	222	134	13	24	38
AC-FT	79,260	15,520	11,490	9,410	8,110	29,980	13,590	220,100	76,690	3,360	19,340	232,700

CAL YR 1973 TOTAL 532,864 MEAN 1,460 MAX 19,300 MIN 30 AC-FT 1,057,000
WTR YR 1974 TOTAL 362,808 MEAN 994 MAX 21,500 MIN 13 AC-FT 719,600

PEAK DISCHARGE (BASE, 9,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
5-27	1400	10.17	17,600	9-22	1400	9.91	16,300
6-5	1430	9.94	12,900	9-27	0400	10.92	25,500

07311000 EAST CACHE CREEK NEAR WALTERS, OKLA.

LOCATION.--Lat 34°21'44", long 98°16'56", on south line of SE 1/4 SE 1/4 sec.19, T.2 S., R.10 W., Cotton County at right bank on downstream side of bridge on State Highway 53, 1.8 mi (2.9 km) east of Walters, 12.2 mi (19.6 km) upstream from West Cache Creek, and at mile 19.7 (31.7 km).

DRAINAGE AREA.--675 mi^2 (1,748 km^2).

PERIOD OF RECORD.--May 1938 to December 1963; October 1969 to current year. Prior to October 1969, published as Cache Creek near Walters.

GAGE.--Water-stage recorder. Datum of gage is 938.2 ft (285.963 m) above mean sea level (State Highway Department bench mark). Prior to Jan. 8, 1939, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--30 years (1939-63, 1969-74) 168 ft^3/s (4.758 m^3/s), 121,700 acre-ft/yr acre-ft/yr (150 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 3,160 ft^3/s (89.5 m^3/s) Sept. 25, gage height, 25.15 ft (7.666 m); minimum, 3.9 ft^3/s (0.11 m^3/s) July 24.
Period of record: Maximum discharge, 28,200 ft^3/s (799 m^3/s) May 18, 1951, gage height, 29.72 ft (9.059 m); no flow at times in 1939-40.
Flood in 1906 reached a stage about the same as on May 18, 1951, and on May 17, 1947, gage height, 29.62 ft (9.028 m), from information by local residents.

REMARKS.--Records fair. Flow partly regulated by Lake Lawtonka, capacity, 42,300 acre-ft (52.2 hm^3) prior to late 1953, and 63,000 acre-ft (77.7 hm^3) thereafter on Medicine Creek, by Lake Thomas capacity, 8,300 acre-ft (10.2 hm^3) on Little Medicine Creek, and since March 1961 by Lake Ellsworth, capacity, 94,500 acre-ft (117 hm^3) on East Cache Creek. Low flow sustained by sewage from cities of Lawton and Walters. Records of chemical analyses and of water temperatures for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	55	22	24	38	19	24	51	542	26	13	6.3	13
2	45	17	22	43	20	21	45	1,050	28	10	5.4	12
3	40	18	21	48	20	16	42	1,780	37	13	7.6	72
4	33	18	20	50	19	14	42	1,540	35	15	7.0	28
5	75	23	71	49	19	13	40	670	108	13	8.7	18
6	83	17	62	48	19	14	68	218	65	11	7.7	16
7	54	15	43	48	18	12	57	176	35	11	7.5	15
8	38	20	31	54	18	10	42	136	27	12	8.7	11
9	27	16	27	45	20	10	36	117	23	11	9.7	10
10	26	14	25	40	26	446	53	102	26	9.9	12	10
11	51	15	24	39	21	1,010	59	91	21	13	58	9.9
12	244	14	28	36	19	1,360	160	82	19	11	128	9.0
13	404	15	26	37	20	327	94	71	18	9.5	43	8.1
14	344	13	24	27	20	200	54	64	16	12	28	8.1
15	135	14	24	26	19	193	40	58	14	13	82	6.8
16	77	14	23	27	20	275	44	53	16	15	68	8.9
17	54	15	25	28	20	1,460	44	56	15	14	28	35
18	42	16	24	28	20	1,340	34	46	23	11	17	33
19	37	17	22	27	19	208	34	41	35	7.3	13	21
20	32	20	21	27	19	118	37	37	23	6.3	11	90
21	28	17	49	25	33	112	34	35	22	7.2	11	149
22	25	22	106	24	266	163	33	75	19	9.0	12	58
23	23	25	62	24	169	104	32	68	15	6.2	13	35
24	22	144	49	23	73	66	32	41	13	4.0	11	495
25	21	348	42	22	40	116	34	266	13	4.1	10	2,920
26	22	294	42	25	29	98	29	284	14	5.7	10	1,720
27	27	128	40	22	27	57	27	175	16	7.0	19	182
28	27	67	37	19	23	51	26	79	15	5.9	31	74
29	27	48	37	19	------	49	27	48	14	6.9	57	50
30	40	32	44	20	------	45	203	35	13	6.9	26	38
31	27	------	40	21	------	45	------	30	------	7.5	16	------
TOTAL	2,185	1,458	1,135	1,009	1,055	7,977	1,553	8,066	764	301.4	772.6	6,155.8
MEAN	70.5	48.6	36.6	32.5	37.7	257	51.8	260	25.5	9.72	24.9	205
MAX	404	348	106	54	266	1,460	203	1,780	108	15	128	2,920
MIN	21	13	20	19	18	10	26	30	13	4.0	5.4	6.8
AC-FT	4,330	2,890	2,250	2,000	2,090	15,820	3,080	16,000	1,520	598	1,530	12,210

CAL YR 1973 TOTAL 60,119.7 MEAN 165 MAX 2,200 MIN 9.7 AC-FT 119,200
WTR YR 1974 TOTAL 32,431.8 MEAN 88.9 MAX 2,920 MIN 4.0 AC-FT 64,330

PEAK DISCHARGE (BASE, 2,400 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE
9-25	1145	25.15	3,160

07311200 BLUE BEAVER CREEK NEAR CACHE, OKLA.
(Hydrologic bench-mark station)

LOCATION.--Lat 34°37'24", long 98°33'48", in NE 1/4 NE 1/4 sec.28, T.2 N., R.13 W., Comanche County, on downstream side of right bank pier of bridge on U.S. Highway 62, 3,000 ft (914.4 m) upstream from St. Louis-San Francisco Railway Co. bridge, 4.0 mi (6.4 km) east of Cache, and at mile 12.0 (19.3 km).

DRAINAGE AREA.--24.6 mi^2 (63.7 km^2).

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

GAGE.--Water-stage recorder. Datum of gage is 1,215.26 ft (370.411 m) above mean sea level.

AVERAGE DISCHARGE.--10 years, 8.24 ft^3/s (0.233 m^3/s), 5,970 acre-ft/yr (7.36 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 2,080 ft^3/s (58.9 m^3/s) May 1, gage height, 11.20 ft (3.414 m); no flow at times.
Period of record: Maximum discharge, 3,050 ft^3/s (86.4 m^3/s) May 6, 1969, gage height, 12.17 ft (3.709 m) from floodmarks, from rating curve extended above 250 ft^3/s (7.08 m^3/s) on basis of conveyance studies; no flow at times each year.

REMARKS.--Records good. Minor regulation by Lake Rush, Lake Jed Johnson, and Lake Ketch, combined surface-area 132 acres (534,000 m^2). 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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.9	4.6	4.0	4.0	1.3	3.3	5.7	467	1.8	.03		0
2	7.6	4.0	4.0	4.0	1.3	3.1	5.4	273	1.6	.02		0
3	7.4	3.7	8.7	4.0	1.2	2.7	5.4	109	1.7	.01		0
4	9.0	3.5	13	3.8	1.2	2.6	5.1	65	3.2	.02		0
5	14	3.1	8.7	3.8	1.2	2.3	5.2	45	2.2	.01		0
6	14	3.1	8.0	3.7	1.2	2.3	5.1	32	1.6	.01		0
7	11	3.1	7.2	3.7	1.2	2.2	4.8	24	1.5	0		0
8	8.4	2.9	7.2	3.5	1.2	18	4.4	18	1.5	0		0
9	7.1	2.6	6.7	3.2	1.2	151	4.6	13	1.2	0		0
10	6.1	2.6	6.4	3.1	1.2	413	4.4	9.7	1.1	0		0
11	28	2.3	6.4	3.0	1.1	309	6.7	8.3	1.0	0		0
12	37	2.3	6.4	3.0	1.2	96	5.8	7.0	.93	0		0
13	57	2.0	5.6	2.9	1.2	48	5.0	6.2	.93	0		0
14	39	2.0	5.6	2.5	1.2	34	4.2	5.5	.87	0		0
15	29	1.8	5.6	2.5	1.2	27	4.2	4.8	.85	0		0
16	23	1.7	5.1	2.5	1.2	22	4.0	4.2	.78	0		0
17	18	1.5	5.1	2.4	1.2	17	3.8	3.8	.95	0		0
18	14	1.4	5.1	2.4	1.2	15	3.6	3.3	.56	0		0
19	12	1.8	4.6	2.4	1.2	14	3.5	3.0	.25	0		0
20	10	2.2	5.6	2.2	1.1	13	3.2	2.7	.22	0		0
21	9.0	1.8	6.4	2.1	2.4	13	3.0	4.6	.18	0		0
22	8.0	1.7	5.9	2.1	12	11	2.8	3.9	.15	0		0
23	7.3	1.5	5.4	2.2	11	9.4	2.7	2.9	.15	0		0
24	6.4	9.1	5.1	1.9	9.0	10	2.6	4.1	.14	0		.07
25	5.9	8.7	4.6	1.8	6.2	8.8	2.5	4.9	.13	0		31
26	5.6	5.6	4.6	1.7	4.0	7.8	2.3	4.0	.12	0		7.4
27	5.9	4.9	4.4	1.6	3.8	7.0	2.3	2.9	.11	0		2.6
28	5.9	4.4	4.4	1.5	3.6	6.5	2.1	2.4	.09	0		1.0
29	5.6	4.2	4.4	1.4	------	6.1	14	2.0	.07	0		.51
30	5.6	4.2	4.2	1.4	------	6.4	164	1.8	.05	0		.28
31	5.1	------	4.0	1.3	------	6.4	------	1.9	------	0		------
TOTAL	431.8	98.3	182.4	81.6	76.0	1,287.9	292.4	1,139.9	25.93	.10	0	42.86
MEAN	13.9	3.28	5.88	2.63	2.71	41.5	9.75	36.8	.86	.003	0	1.43
MAX	57	9.1	13	4.0	12	413	164	467	3.2	.03	0	31
MIN	5.1	1.4	4.0	1.3	1.1	2.2	2.1	1.8	.05	0	0	0
AC-FT	856	195	362	162	151	2,550	580	2,260	51	.2	0	85

CAL YR 1973 TOTAL 9,172.67 MEAN 25.1 MAX 1,010 MIN 0 AC-FT 18,190
WTR YR 1974 TOTAL 3,659.19 MEAN 10.0 MAX 467 MIN 0 AC-FT 7,260

PEAK DISCHARGE (BASE, 500 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE
3-10	1900	10.43	1,400
5-1	1800	11.20	2,080

07311500 DEEP RED RUN NEAR RANDLETT, OKLA.

LOCATION.--Lat 34°13'15", long 98°27'10", in SW 1/4 SW 1/4 sec.10, T.4 S., R.12 W., Cotton County, near right bank on downstream side of pier of bridge on U.S. Highway 277, 2.8 mi (4.5 km) north of Randlett, and at mile 4.8 (7.7 km).

DRAINAGE AREA.--617 mi^2 (1,598 km^2).

PERIOD OF RECORD.--October 1949 to current year.

GAGE.--Water-stage recorder and sharp-crested weir. Datum of gage is 924.49 ft (281.785 m) above mean sea level (State Highway Department bench mark). Prior to Nov. 10, 1949, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--25 years, 111 ft^3/s (3.144 m^3/s), 80,420 acre-ft/yr (99.2 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 8,650 ft^3/s (245 m^3/s) Sept. 25, gage height, 23.66 ft (7.212 m); no flow July 30-Aug. 11.
Period of record: Maximum discharge, 48,700 ft^3/s (1,370 m^3/s) Sept. 22, 1969, gage height, 27.51 ft (8.385 m), from rating curve extended above 13,000 ft^3/s (368 m^3/s) on basis of contracted-opening measurement of peak flow; no flow at times in most years.
Flood in 1908 reached a stage somewhat exceeding 27 ft (8.2 m), from information by local residents.

REMARKS.--Records good.

REVISIONS (WATER YEARS).--WSP 1211: Drainage area. WSP 1631: 1956. WSP 1920: 1951.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34	6.5	18	4.3	3.8	6.7	7.1	505	9.1	.63	0	2.3
2	23	5.3	14	4.3	3.7	6.0	6.4	607	6.4	.56	0	1.6
3	16	5.1	12	4.4	4.1	5.5	5.8	648	5.5	.47	0	1.1
4	12	5.0	33	4.8	3.8	5.0	5.2	417	5.6	.39	0	.8
5	9.4	4.7	179	5.1	3.5	4.9	4.9	59	375	.40	0	.6
6	8.3	4.6	77	5.0	3.4	4.6	4.7	30	679	.39	0	.5
7	7.8	4.5	34	4.9	3.2	4.5	4.5	20	165	.43	0	.4
8	8.0	4.4	22	4.9	3.1	4.3	4.1	15	38	.46	0	.4
9	9.9	4.3	16	4.9	3.1	43	3.2	11	22	.46	0	.3
10	8.6	4.3	13	5.1	2.7	718	4.2	8.8	14	.39	0	.3
11	50	4.0	11	5.1	2.7	1,150	5.4	7.2	9.6	.40	0	.3
12	572	4.5	9.5	6.1	2.7	1,810	5.1	6.0	6.9	.47	1.2	.3
13	910	4.2	8.7	5.0	2.9	1,570	6.7	5.4	5.1	.59	8.0	.3
14	579	3.8	7.7	4.9	2.9	120	7.5	4.6	4.0	.61	6.9	.3
15	142	3.6	7.2	4.9	2.9	48	6.2	3.9	3.4	.68	3.2	.3
16	55	3.3	6.9	4.9	2.9	34	5.4	3.3	2.8	.65	1.8	.4
17	32	3.3	6.6	5.2	2.8	26	4.8	3.1	2.4	.63	3.1	.6
18	23	3.5	6.2	5.2	3.1	22	4.4	3.4	2.3	.63	1.9	1.2
19	18	3.7	5.9	5.0	3.1	19	4.0	3.1	2.1	.63	2.2	1.8
20	15	3.3	5.3	5.0	3.2	17	4.6	2.8	1.9	.59	1.7	571
21	12	2.9	5.2	4.7	9.4	15	5.5	2.5	1.6	.43	1.3	379
22	10	2.9	4.9	4.7	89	14	4.7	2.5	1.4	.37	.94	106
23	8.0	2.9	4.9	4.7	152	13	4.6	2.3	1.2	.32	.76	27
24	7.0	37	4.8	4.4	40	12	4.2	2.3	.96	.27	.84	177
25	6.9	356	4.7	4.4	21	10	4.0	2.6	.83	.22	.68	6,340
26	6.6	767	4.6	4.4	14	9.7	3.8	594	.77	.18	.57	5,610
27	6.3	388	4.6	4.1	10	9.4	3.5	1,170	.66	.13	1.6	2,920
28	5.9	69	4.5	4.1	7.8	9.4	3.4	315	.68	.10	4.8	1,100
29	5.9	34	4.5	4.1	------	9.2	40	41	.63	.06	1.4	102
30	6.6	23	4.4	4.0	------	8.4	522	22	.63	0	4.5	34
31	8.2	------	4.4	4.1	------	7.7	------	14	------	0	3.6	------
TOTAL	2,616.4	1,768.6	544.5	146.7	406.8	5,736.3	699.9	4,531.8	1,369.46	12.54	50.99	17,379.8
MEAN	84.4	59.0	17.6	4.73	14.5	185	23.3	146	45.6	.40	1.64	579
MAX	910	767	179	6.1	152	1,810	522	1,170	679	.68	8.0	6,340
MIN	5.9	2.9	4.4	4.0	2.7	4.3	3.2	2.3	.63	0	0	.30
AC-FT	5,190	3,510	1,080	291	807	11,380	1,390	8,990	2,720	25	101	34,470

CAL YR 1973 TOTAL 86,222.40 MEAN 236 MAX 6,770 MIN 2.2 AC-FT 171,000
WTR YR 1974 TOTAL 35,263.79 MEAN 96.6 MAX 6,340 MIN 0 AC-FT 69,950

PEAK DISCHARGE (BASE, 2,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE
3-12	2245	19.88	2,340
9-25	1500	23.66	8,650

07313500 BEAVER CREEK NEAR WAURIKA, OKLA.

LOCATION.--Lat 34°13'00", long 98°02'57", on north line of NW 1/4 NW 1/4 sec.16, T.4 S., R.8 W., Jefferson County, on left bank on downstream side of bridge on State Highway 5, 4.5 mi (7.2 km) northwest of Waurika, 6.2 mi (10.0 km) upstream from Cow Creek, and at mile 25.8 (41.5 km).

DRAINAGE AREA.--563 mi^2 (1,458 km^2).

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

GAGE.--Water-stage recorder. Datum of gage is 874.17 ft (266.447 m) above mean sea level (State Highway Department bench mark). Prior to Apr. 5, 1966, water-stage recorder at same site at datum 5.00 ft (1.524 m) higher.

AVERAGE DISCHARGE.--21 years, 102 ft^3/s (2.889 m^3/s), 73,900 acre-ft/yr (91.1 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 2,480 ft^3/s (70.2 m^3/s) Sept. 26, gage height, 22.44 ft (6.840 m); no flow Sept. 6-15.
Period of record: Maximum discharge, 32,200 ft^3/s (912 m^3/s) May 20, 1955, gage height, 27.42 ft (8.358 m), present datum; no flow at times in most years.
Flood of May 18, 1951, reached a stage of 27.7 ft (8.44 m), present datum, from floodmark, discharge 65,300 cfs (1,850 m^3/s) by contracted-opening measurement of peak flow. A similar stage was reached prior to 1889, from information by local resident.

REMARKS.--Records poor. Some effect from construction work at Waurika Lake .8 mi (.24 m) upstream.

REVISIONS (WATER YEARS).--WSP 1731: 1954(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35	25	55	38	25	25	24	1,010	46	4.7	4.7	11
2	30	25	43	36	25	25	24	464	46	4.7	4.7	12
3	27	25	38	36	25	25	24	274	46	5.6	4.7	7.4
4	25	27	36	36	25	25	23	120	24	5.6	4.7	4.7
5	23	25	40	39	25	25	20	97	18	2.6	4.7	.20
6	23	23	38	37	25	25	49	73	11	2.0	4.7	0
7	23	23	36	39	25	25	35	71	34	3.2	4.7	0
8	22	23	36	40	25	25	25	68	61	4.7	4.7	0
9	22	24	36	42	25	25	20	56	34	4.7	4.7	0
10	22	25	36	43	24	213	35	32	26	4.7	4.7	0
11	104	25	34	45	24	646	25	26	19	4.7	368	0
12	341	25	34	49	24	577	40	24	16	4.7	472	0
13	515	24	36	42	24	151	98	22	215	4.7	82	0
14	370	24	37	40	24	80	58	14	137	4.7	48	0
15	117	24	37	42	24	40	30	2.0	61	4.7	16	0
16	59	24	37	62	24	35	20	3.2	38	4.7	13	.74
17	35	24	37	46	24	30	50	19	19	4.7	14	.74
18	30	24	37	40	24	28	30	19	30	4.7	11	.45
19	27	23	36	35	24	35	20	14	82	4.7	6.4	.45
20	25	27	36	32	24	50	55	12	34	4.7	4.7	69
21	25	205	34	30	80	35	55	11	4.0	4.7	4.0	61
22	25	75	33	28	182	28	52	7.4	30	4.7	4.7	48
23	25	50	33	28	162	25	30	8.7	14	4.7	4.7	41
24	25	291	33	26	87	25	69	8.4	7.4	4.7	299	87
25	25	1,090	34	26	40	25	53	91	2.0	4.7	61	1,790
26	25	1,490	36	25	30	25	32	683	2.6	4.7	9.7	2,390
27	25	283	40	25	27	25	30	585	4.7	4.7	34	1,480
28	25	174	37	25	25	24	30	108	4.7	4.7	182	382
29	25	110	39	25	------	24	30	65	4.7	4.7	115	118
30	25	75	39	25	------	24	816	71	4.7	4.7	64	51
31	26	------	39	25	------	24	------	48	------	4.7	1.1	------
TOTAL	2,151	4,332	1,152	1,107	1,122	2,394	1,902	4,106.7	1,075.8	141.2	1,861.3	6,554.68
MEAN	69.4	144	37.2	35.7	40.1	77.2	63.4	132	35.9	4.55	60.0	218
MAX	515	1,490	55	62	182	646	816	1,010	215	5.6	472	2,390
MIN	22	23	33	25	24	24	20	2.0	2.0	2.0	1.1	0
AC-FT	4,270	8,590	2,280	2,200	2,230	4,750	3,770	8,150	2,130	280	3,690	13,000

CAL YR 1973 TOTAL 66,541.20 MEAN 182 MAX 3,460 MIN 1.1 AC-FT 132,000
WTR YR 1974 TOTAL 27,899.68 MEAN 76.4 MAX 2,390 MIN 0 AC-FT 55,340

PEAK DISCHARGE (BASE, 2,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE
11-26	0945	21.39	2,140
9-26	2030	22.44	2,480

07315500 RED RIVER NEAR TERRAL, OKLA.

LOCATION.--Lat 33°52'43", long 97°56'03", Jefferson County, near left bank on downstream side of pier of bridge on U.S. Highway 81, 0.5 mile (0.8 km) downstream from Chicago, Rock Island, and Pacific Railroad Co. bridge, 1.2 miles (1.9 km) south of Terral, 3.6 miles (5.8 km) downstream from Little Wichita River, and at mile 872 (1,403 km).

DRAINAGE AREA.--28,723 mi^2 (74,393 km^2), of which 5,936 mi^2 (15,374 km^2) is probably noncontributing.

PERIOD OF RECORD.--January 1938 to current year. Monthly discharge only for some periods, published in WSP 1311.

GAGE.--Water-stage recorder. Datum of gage is 770.31 ft (234.790 m) above mean sea level. Prior to Jan. 12, 1939, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--36 years, 2,175 ft^3/s (61.60 m^3/s), 1,576,000 acre-ft/yr (1.94 km^3/yr).

EXTREMES.--Current year: Maximum discharge, 34,000 ft^3/s (963 m^3/s) Sept. 27, gage height, 18.50 ft (5.639 m); minimum, 173 ft^3/s (4.90 m^3/s) July 14.
Period of record: Maximum discharge, 197,000 ft^3/s (5,580 m^3/s) June 8, 1941, gage height, 28.12 ft (8.571 m); minimum, 43 ft^3/s (1.22 m^3/s) Mar. 15, 1939.
Maximum stage since at least 1891, that of June 8, 1941. Flood of May 19, 1935, reached a stage of 27.2 ft (8.29 m); floods in 1891 and May 1, 1908, are reported to have reached about the same stage.

REMARKS.--Records good. Flow partly regulated by seven major upstream reservoirs (total capacity, 1,279,800 acre-ft or 1.58 km^3). Principal diversions are from Wichita River for irrigation of about 30,000 acres (12,000 hm^2) in the vicinity of Wichita Falls, Tex., and from North Fork Red River for irrigation of about 48,000 acres (19,000 hm^2) in vicinity of Altus, Okla. Many small diversions for irrigation above station. Water-quality records for the current year are published in Part 2 of the Texas State report.

REVISIONS.--WSP 1211: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3,360	700	811	250	341	393	402	13,400	1,390	235	178	1,320
2	2,380	683	703	240	341	360	376	14,500	1,180	222	185	1,060
3	1,830	648	639	240	325	337	368	14,700	1,050	213	193	710
4	1,480	615	586	240	337	325	345	13,500	1,020	208	202	535
5	1,270	600	572	250	325	310	310	12,200	2,010	206	213	529
6	1,230	597	638	270	318	299	285	9,000	10,500	192	219	421
7	2,500	596	741	290	303	296	278	5,340	6,630	193	231	355
8	4,930	589	634	320	299	292	292	4,590	2,690	205	237	316
9	2,910	575	556	350	299	285	274	3,730	1,530	204	286	280
10	2,350	522	516	250	299	292	257	2,150	1,180	191	326	257
11	2,230	498	497	250	296	7,930	264	1,700	923	189	304	238
12	3,200	486	487	300	296	12,400	314	1,390	743	189	369	222
13	10,600	485	472	330	296	7,640	337	1,270	647	181	749	205
14	10,800	468	457	376	296	4,570	402	1,120	710	177	814	196
15	8,510	457	448	397	292	2,630	410	1,000	659	175	644	193
16	4,910	439	441	385	288	2,170	352	895	525	183	478	564
17	3,210	436	437	385	292	1,570	310	788	611	208	446	1,200
18	2,500	426	432	397	292	1,300	307	730	617	244	381	1,020
19	2,150	442	416	393	288	1,940	372	665	510	208	333	930
20	1,940	503	340	393	292	1,910	352	611	482	202	287	605
21	1,760	485	360	410	389	1,040	442	572	424	194	243	1,180
22	1,610	608	377	410	710	802	1,160	540	372	186	222	1,520
23	1,500	504	373	397	1,250	704	972	510	337	181	210	8,100
24	1,410	2,350	427	406	1,100	653	617	491	322	178	198	7,210
25	1,320	9,090	411	393	828	617	505	1,220	303	180	264	8,850
26	1,250	10,000	400	385	578	550	402	1,630	285	178	311	24,400
27	1,140	7,440	398	372	464	540	337	10,800	278	180	267	32,900
28	894	2,930	392	360	410	530	329	11,600	264	178	672	22,700
29	794	1,500	385	356	------	482	356	5,400	254	180	1,320	5,940
30	754	994	376	352	------	450	7,040	2,700	241	178	1,170	4,090
31	729	------	367	345	------	428	------	1,790	------	178	1,510	------
TOTAL	87,451	46,666	15,089	10,492	11,844	54,045	18,767	140,532	38,687	6,016	13,462	128,046
MEAN	2,821	1,556	487	338	423	1,743	626	4,533	1,290	194	434	4,268
MAX	10,800	10,000	811	410	1,250	12,400	7,040	14,700	10,500	244	1,510	32,900
MIN	729	426	340	240	288	285	257	491	241	175	178	193
AC-FT	173,500	92,560	29,930	20,810	23,490	107,200	37,220	278,700	76,740	11,930	26,700	254,000

CAL YR 1973 TOTAL 1,067,512 MEAN 2,925 MAX 32,200 MIN 289 AC-FT 2,117,000
WTR YR 1974 TOTAL 571,097 MEAN 1,565 MAX 32,900 MIN 175 AC-FT 1,133,000

PEAK DISCHARGE (BASE, 21,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE
9-27	1330	18.50	34,000

07315700 MUD CREEK NEAR COURTNEY, OKLA.

LOCATION.--Lat 34°00'20", long 97°34'00", in NW 1/4 SE 1/4 sec.25, T.6 S., R.4 W., Jefferson County, on downstream side of bridge on State Highway 89, 4.0 mi (6.4 km) downstream from North Mud Creek, 6.0 mi (9.7 km) northwest of Courtney, and at mile 11.5 (18.5 km).

DRAINAGE AREA.--572 mi^2 (1,481 km^2).

PERIOD OF RECORD.--October 1960 to current year.

GAGE.--Water-stage recorder and sharp-crested weir. Datum of gage is 730.00 ft (222.504 m) above mean sea level (State Highway Department bench mark). Prior to Oct. 1, 1968, auxiliary water-stage recorder 2.0 mi (3.2 km) downstream from base gage.

AVERAGE DISCHARGE.--14 years, 107 ft^3/s (3.030 m^3/s), 77,520 acre-ft/yr (95.6 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 33,400 ft^3/s (946 m^3/s) May 1, gage height, 31.37 ft (9.562 m); minimum daily, 0.11 ft^3/s (0.003 m^3/s) July 29.
Period of record: Maximum discharge, 33,400 ft^3/s (946 m^3/s) May 1, 1974, gage height, 31.37 ft (9.562 m); no flow at times in most years.
Flood in May 1957, reached a stage of 30.6 ft (9.33 m).

REMARKS.--Records fair.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	50	19	131	23	16	17	22	19,100	18	1.3	.50	17
2	27	15	103	23	16	17	21	5,180	15	1.2	2.0	22
3	18	13	89	23	15	17	19	3,550	14	1.3	1.5	25
4	13	12	82	22	14	17	18	3,020	15	30	1.0	10
5	11	11	79	22	14	16	17	1,660	25	147	.70	6.4
6	477	11	68	21	14	16	16	325	20	15	.50	6.5
7	520	11	57	21	14	15	16	166	165	5.3	.40	3.6
8	37	11	50	20	13	14	15	126	58	2.8	.30	2.4
9	21	10	46	21	13	13	15	101	69	1.8	5.0	1.8
10	17	9.9	43	21	12	13	15	84	31	1.3	60	1.3
11	178	9.2	41	21	12	21	17	70	17	.83	35	1.0
12	506	8.8	39	19	12	426	19	59	15	.63	20	.7
13	1,110	8.3	37	19	12	968	19	50	12	.52	12	.5
14	1,370	8.1	36	19	12	1,070	39	42	9.7	.43	8.0	.4
15	1,370	8.0	35	18	13	211	27	34	7.7	.34	4.1	.3
16	1,780	7.8	33	19	13	95	19	30	7.1	.30	2.3	415
17	459	7.6	32	20	13	68	16	24	8.4	.27	1.3	275
18	78	7.5	31	20	13	53	14	18	6.7	.24	.93	46
19	51	24	30	20	13	44	13	13	6.7	.22	.67	31
20	40	412	29	20	13	39	13	10	5.5	.20	.52	109
21	33	197	28	19	23	37	14	6.9	4.7	.18	.42	38
22	28	251	28	19	96	34	179	5.2	4.3	.17	.32	95
23	25	70	27	18	332	32	547	4.3	4.4	.16	.36	43
24	22	807	27	17	154	31	226	3.8	3.7	.15	.36	96
25	19	5,380	26	17	54	28	35	5.8	3.5	.14	.28	1,390
26	18	10,500	26	16	28	26	9.9	271	3.3	.13	.26	2,670
27	17	4,100	25	16	23	25	6.0	492	3.7	.12	2.0	2,520
28	16	2,530	25	18	19	23	4.5	424	4.2	.12	14	2,300
29	17	961	24	20	------	24	9.2	86	4.6	.11	4.1	543
30	15	206	24	17	------	24	4,970	41	3.1	1.0	1.9	56
31	23	------	24	16	------	23	------	25	------	.70	2.0	------
TOTAL	8,366	25,626.2	1,375	605	996	3,457	6,370.6	35,027.0	565.3	213.96	182.72	10,725.9
MEAN	270	854	44.4	19.5	35.6	112	212	1,130	18.8	6.90	5.89	358
MAX	1,780	10,500	131	23	332	1,070	4,970	19,100	165	147	60	2,670
MIN	11	7.5	24	16	12	13	4.5	3.8	3.1	.11	.26	.30
AC-FT	16,590	50,830	2,730	1,200	1,980	6,860	12,640	69,480	1,120	424	362	21,270

CAL YR 1973 TOTAL 124,635.07 MEAN 341 MAX 10,500 MIN .26 AC-FT 247,200
WTR YR 1974 TOTAL 93,510.68 MEAN 256 MAX 19,100 MIN .11 AC-FT 185,500

PEAK DISCHARGE (BASE, 1,300 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-16	0715	23.92	2,040	5-1	0145	31.37	33,400
11-26	0030	29.69	17,800	9-26	0945	24.80	2,940

07316000 RED RIVER NEAR GAINESVILLE, TEX.

LOCATION.--Lat 33°43'40", long 97°09'35", in SW 1/4 sec.36, T.9 S., R.1 E., Love County, Okla., near center of span on downstream side of bridge on U.S. Highway 77, 0.2 mi (0.3 km) downstream from Gulf, Colorado and Santa Fe Railway Co. bridge, 5.0 mi (8.0 km) downstream from Fish Creek, 7.0 mi (11.0 km) north of Gainesville, and at mile 791.5 (1,273.5 km).

DRAINAGE AREA.--30,782 mi^2 (79,725 km^2) of which 5,936 mi^2 (15,374 km^2) is probably noncontributing.

PERIOD OF RECORD.--May 1936 to current year. Monthly discharge only for some periods, published in WSP 1311.

GAGE.--Water-stage recorder. Datum of gage is 627.91 ft (191.387 m) above mean sea level. Prior to Jan. 17, 1939, and Feb. 13, 1965 to Nov. 14, 1966, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--38 years, 2,726 ft^3/s (77.20 m^3/s), 1,975,000 acre-ft/yr (2.44 km^3/yr).

EXTREMES.--Current year: Maximum discharge, 38,700 ft^3/s (1,100 m^3/s) Sept. 28, gage height, 17.89 ft (5.453 m); maximum gage height, 18.40 ft (5.608 m) May 2; minimum discharge, 180 ft^3/s (5.10 m^3/s) July 29, Aug. 5.
Period of record: Maximum discharge, 168,000 ft^3/s (4,758 m^3/s) June 9, 1941, gage height, 24.15 ft (7.361 m); maximum gage height, 26.53 ft (8.086 m) May 21, 1951; minimum discharge, 48 ft^3/s (1.36 m^3/s) Jan. 27, 1940.

REMARKS.--Records fair. Flow slightly regulated by Lake Kemp, in Texas, since 1943 by Lake Altus (see sta. 07302500), since 1946 by Lake Kickapoo, and since 1967 by Lake Arrowhead and Moss Lake, also in Texas.

COOPERATION.--Gage-height record and 46 discharge measurements furnished by Corps of Engineers; records computed by Geological Survey.

REVISIONS.--WSP 1211: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6,250	940	2,560	507	504	648	665	16,000	3,520	354	186	1,310
2	4,380	905	1,720	493	497	594	613	30,100	2,630	328	187	2,010
3	2,640	864	1,510	504	487	560	592	19,400	1,980	312	194	2,060
4	1,970	847	1,380	476	480	540	543	17,100	1,640	324	191	1,380
5	1,580	805	1,230	425	472	509	503	15,600	1,590	341	185	908
6	1,450	774	1,100	422	465	477	486	13,100	1,390	344	194	704
7	2,640	758	1,020	427	437	470	477	9,640	8,840	374	213	565
8	3,240	751	996	451	407	460	439	6,830	12,900	312	232	495
9	3,300	731	1,040	472	394	450	416	4,930	6,700	283	242	428
10	3,750	714	996	512	404	445	414	5,390	3,830	272	269	406
11	2,970	682	916	519	399	442	479	3,620	2,610	267	289	382
12	3,770	662	861	525	399	487	489	2,820	2,200	260	401	581
13	8,580	652	823	536	399	7,280	463	2,270	1,630	248	436	458
14	14,000	659	798	521	380	7,940	452	1,930	1,310	243	341	368
15	12,800	655	776	515	370	6,760	460	1,710	1,140	240	678	299
16	9,760	588	745	492	360	4,320	544	1,510	1,150	238	858	606
17	7,440	559	726	523	360	2,860	589	1,360	1,140	230	781	1,900
18	5,240	559	712	547	350	2,330	530	1,190	975	221	598	2,680
19	4,260	559	722	544	350	1,820	471	1,060	1,010	220	500	2,190
20	3,520	2,020	675	553	346	1,750	436	1,050	1,020	233	436	1,550
21	3,010	3,720	669	558	800	2,370	728	1,080	869	239	385	2,170
22	2,770	2,860	651	559	700	2,120	719	1,020	783	249	350	2,110
23	2,480	2,430	623	559	600	1,410	634	950	698	239	320	7,420
24	2,260	3,020	603	559	900	1,140	1,410	900	611	232	281	10,800
25	2,040	13,000	576	559	1,500	1,050	1,570	877	537	226	276	13,500
26	1,900	29,200	565	556	1,100	970	1,080	906	514	228	279	26,400
27	1,700	25,000	565	551	655	908	839	1,590	470	202	461	35,600
28	1,580	14,000	565	539	749	851	708	7,280	435	193	527	37,400
29	1,390	7,530	550	524	------	807	619	11,600	399	187	691	23,600
30	1,100	4,690	533	526	------	773	650	7,140	377	183	666	7,950
31	995	------	513	516	------	713	------	4,950	------	183	1,390	------
TOTAL	124,765	121,134	27,719	15,970	15,264	54,254	19,018	194,903	64,898	8,005	13,037	188,230
MEAN	4,025	4,038	894	515	545	1,750	634	6,287	2,163	258	421	6,274
MAX	14,000	29,200	2,560	559	1,500	7,940	1,570	30,100	12,900	374	1,390	37,400
MIN	995	559	513	422	346	442	414	877	377	183	185	299
AC-FT	247,500	240,300	54,980	31,680	30,280	107,600	37,720	386,600	128,700	15,880	25,860	373,400

CAL YR 1973 TOTAL 1,489,736 MEAN 4,081 MAX 50,000 MIN 396 AC-FT 2,955,000
WTR YR 1974 TOTAL 847,197 MEAN 2,321 MAX 37,400 MIN 183 AC-FT 1,680,000

PEAK DISCAHRGE (BASE, 24,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE
11-26	abt 2000	18.10	38,500
5-2	0315	18.40	35,900
9-28	2130	17.89	38,700

07316500 WASHITA RIVER NEAR CHEYENNE, OKLA.

LOCATION.--Lat 35°37'35", long 99°40'05", in SE 1/4 sec.5, T.13 N., R.23 W., Roger Mills County, near left bank on downstream side of pier of bridge on U.S. Highway 283, 0.5 mi (0.8 km) downstream from Sergeant Major Creek, 1.0 mi (1.6 km) north of Cheyenne, 5.2 mi (8.4 km) upstream from Dead Indian Creek, and at mile 543.9 (875.1 km).

DRAINAGE AREA.--794 mi^2 (2,056 km^2).

PERIOD OF RECORD.--October 1937 to current year. Monthly discharge only for some periods, published in WSP 1311.

GAGE.--Water-stage recorder. Datum of gage is 1,905.98 ft (580.943 m) above mean sea level (levels by Corps of Engineers). May 1, 1938, to Nov. 16, 1946, and Oct. 1, 1947, to Jan. 11, 1948, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--37 years, 30.7 ft^3/s (0.869 m^3/s), 22,240 acre-ft/yr (27.4 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 592 ft^3/s (16.8 m^3/s) Oct. 11, gage height, 4.22 ft (1.286 m); no flow at times.

Period of record: Maximum discharge, 69,800 ft^3/s (1,977 m^3/s) Apr. 29, 1954, gage height, 15.24 ft (4.645 m); from rating curve extended above 27,000 ft^3/s (765 m^3/s) on basis of contracted-opening measurement of peak flow; no flow at times in most years.

Flood of Apr. 3, 1934, reached a stage of 1.0 ft (0.30 m) lower than that in 1954 at site on upstream side of highway fill.

REMARKS.--Records good. Some regulation by numerous flood-retarding structures. Records of chemical analyses for current year are published in Part 2 of this report.

REVISIONS.--WSP 1211: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.63	1.9	2.7	2.1	9.2	11	19	65	4.0		0	
2	.56	1.8	2.8	2.4	8.9	11	17	82	4.0		0	
3	.49	1.7	17	2.9	8.5	10	17	58	29		0	
4	.42	1.7	18	3.3	8.6	10	17	47	10		0	
5	.42	1.8	15	3.9	9.1	10	16	40	9.0		0	
6	.42	2.1	10	4.3	8.3	10	15	34	4.9		0	
7	.42	2.4	8.4	3.7	7.7	9.7	14	29	3.5		0	
8	.35	2.6	7.9	3.9	8.0	10	13	25	3.4		0	
9	.35	2.3	6.9	3.3	8.3	8.8	14	22	2.1		0	
10	11	2.4	6.4	2.8	9.0	109	15	18	1.3		0	
11	163	2.5	6.4	2.4	9.1	94	27	14	.70		0	
12	11	3.1	6.0	3.0	9.6	74	17	13	.38		0	
13	12	3.0	5.5	3.5	9.3	63	13	12	.04		0	
14	8.3	2.8	5.4	4.4	9.7	56	11	9.9	0		0	
15	6.2	2.4	5.0	5.4	12	50	10	8.7	0		0	
16	5.3	2.4	4.8	6.6	13	44	9.6	7.5	0		0	
17	4.4	2.4	5.0	9.7	13	41	9.0	6.3	0		0	
18	3.8	2.4	5.2	11	14	39	9.0	5.9	0		0	
19	3.6	3.0	4.8	14	14	37	10	5.0	0		0	
20	3.2	4.1	5.1	12	12	35	31	4.5	0		0	
21	2.9	3.8	5.1	12	11	33	31	4.3	0		0	
22	2.4	3.5	5.4	13	11	32	25	4.3	0		0	
23	2.3	3.2	6.1	14	11	30	20	4.1	0		.24	
24	1.9	3.3	5.7	12	9.2	28	17	6.5	0		0	
25	1.8	3.3	5.1	11	9.7	27	15	13	0		0	
26	1.8	3.3	5.4	11	11	27	13	13	0		0	
27	1.7	3.0	5.7	10	11	26	13	13	0		0	
28	1.9	2.7	5.9	10	11	24	21	7.6	0		0	
29	1.9	2.4	4.5	9.7	------	23	53	5.2	0		0	
30	2.0	2.7	3.6	9.2	------	22	50	4.3	0		0	
31	2.0	------	2.9	8.9	------	21	------	4.0	------		0	------
TOTAL	258.46	80.0	203.7	225.4	286.2	1,025.5	561.6	586.1	72.32	0	.24	0
MEAN	8.34	2.67	6.57	7.27	10.2	33.1	18.7	18.9	2.41	0	.008	0
MAX	163	4.1	18	14	14	109	53	82	29	0	.24	0
MIN	.35	1.7	2.7	2.1	7.7	8.8	9.0	4.0	0	0	0	0
AC-FT	513	159	404	447	568	2,030	1,110	1,160	143	0	.5	0

CAL YR 1973 TOTAL 4,314.89 MEAN 11.8 MAX 163 MIN 0 AC-FT 8,560
WTR YR 1974 TOTAL 3,299.52 MEAN 9.04 MAX 163 MIN 0 AC-FT 6,540

PEAK DISCHARGE (BASE, 1,100 FT^3/S).--No peak above base.

07317500 SANDSTONE CREEK SUBWATERSHED NO. 16A (SANDSTONE CREEK) NEAR CHEYENNE, OKLA.

LOCATION.--Lat 35°28'10", long 99°40'10", in SW 1/4 SE 1/4 sec.31, T.12 N., R.23 W., Roger Mills County, near center of upstream side of dam on Sandstone Creek, 5.2 mi (8.4 km) east of Grimes and 10 mi (16 km) south of Cheyenne.

DRAINAGE AREA.--8.78 mi^2 (22.74 km^2), of which 3.62 mi^2 (9.38 km^2) is probably noncontributing.

PERIOD OF RECORD.--January 1952 to current year, June 1974 (discontinued). Prior to October 1960 monthly discharge and contents only, published in WSP 1731.

GAGE.--Water-stage recorder and recording rain gage. Datum of gage is 2,069.14 ft (630.674 m) above mean sea level (U.S. Soil Conservation Service bench mark).

AVERAGE DISCHARGE.--21 years (1952-1973), 0.38 ft^3/s (0.011 m^3/s), 275 acre-ft/yr (339,000 m^3/yr).

EXTREMES.--Period October to June: Maximum outflow, 15.2 ft^3/s (0.430 m^3/s), gage height, 70.55 ft (21.504m), May 1; no outflow at times.
Maximum inflow, 114 ft^3/s (3.23 m^3/s) average for 5-minute interval Oct. 10 computed from outflow and change in reservoir contents, adjusted for rainfall on reservoir surface during time of peak inflow.
Period of record: Maximum outflow, 70 ft^3/s (2 m^3/s) May 26, 1959, gage height, 81.41 ft (24.814 m); no outflow at times. Maximum inflow, 2,710 ft^3/s (76.7 m^3/s) average for 5-minute interval May 26, 1959, computed from outflow and change in reservoir contents, adjusted for rainfall on reservoir surface during time of peak flow.

REMARKS.--Records good. Records of discharge are outflow from reservoir, determined from stage-discharge relation for outlet structure. Reservoir is formed by earth dam; storage began Dec. 7, 1951. Outlet structure is a drop inlet with an encasement of trash racks and retaining wall with 24-inch (0.610 m) concrete pipe. There is an 8-inch (0.203 m) diameter iron drain pipe with gate valve at outlet structure. Crest of drop inlet is at gage height 69.89 ft (21.303 m). Crest of emergency earthen spillway is at gage height 102.0 ft (31.09 m). Original capacity at crest of emergency spillway, 2,030 acre-ft (2.50 hm^3) and at outlet structure, 270 acre-ft (333,000 m^3). Storage data given herein are based on capacity curves interpolated successively for each period of storm runoff based on periodic surveys.

COOPERATION.--Elevations and contents furnished by Soil Conservation Service.

POOL WATER BUDGET, IN ACRE FEET, PERIOD OCTOBER 1973 TO JUNE 1974

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
Outflow	9.0	2.6	2.3	7.9	3.5	18.7	3.0	11.4	0
(†)	164.5	165.3	164.9	165.9	164.9	164.7	165.9	142.6	134.9
(++)	2.36	0.58	0.14	0.40	0.20	2.36	2.72	3.16	0.84

CAL YR 1973:	Outflow	269.0	++	26.76
PERIOD 1974:	Outflow	58.4	++	12.76

† Contents, in acre-feet, at end of month.
++ Precipitation, in inches, during month at raing gage 21 R. 5.1 miles northwest of dam.

07318000 SANDSTONE CREEK SUBWATERSHED NO. 16 (SANDSTONE CREEK) NEAR CHEYENNE, OKLA.

LOCATION.--Lat 35°28'50", long 99°36'40", in SE 1/4 SE 1/4 sec.27, T.12 N., R.23 W., Roger Mills County, near center of upstream side of dam on Sandstone Creek, 2.2 mi (3.5 km) northeast of Berlin and 9.0 mi (14.5 km) southeast of Cheyenne.

DRAINAGE AREA.--11.47 mi^2 (29.71 km^2), excludes that of subwatershed No. 16A, 8.78 mi^2 (22.74 km^2).

PERIOD OF RECORD.--October 1952 to current year, June 1974 (discontinued). Prior to October 1960 monthly discharge and contents only, published in WSP 1731.

GAGE.--Water-stage recorder and recording rain gage. Datum of gage is 1,925.96 ft (587.033 m) above mean sea level (U.S. Soil Conservation Service bench mark).

AVERAGE DISCHARGE.--21 years (1952-73), 0.79 ft^3/s (0.022 m^3/s), 572 acre-ft/yr (705,000 m^3/yr).

EXTREMES.--Period October to June: No outflow; maximum gage height, 53.23 ft (16.225 m) Oct. 11; maximum inflow, 141 ft^3/s (3.99 m^3/s), average for 5 minute interval, Oct. 11, computed from outflow and change in reservoir contents, adjusted for rainfall on reservoir surface during time of peak inflow.

Period of record: Maximum outflow, 168 ft^3/s (4.76 m^3/s) May 23, 1954, gage height, 75.08 ft (22.884 m); no outflow most of time. Maximum inflow known, 18,900 ft^3/s (535 m^3/s), average for 5-minute interval May 23, 1954, computed from outflow and change in reservoir contents, adjusted for rainfall on reservoir surface during time of peak inflow.

REMARKS.--Records good. Records of discharge are outflow from reservoir, determined from stage-discharge relation for outlet structure and rated gate-valve openings. Reservoir is formed by earth dam; storage began in August 1952. Outlet structure is a drop-inlet with an encasement of trash racks and retaining wall with a 34-inch (0.86 m) concrete pipe. There is a 12-inch (0.30 m) diameter iron drain pipe with gate valve at outlet structure. Crest of drop inlet is at gage height 65.62 ft (20.001 m). Crest of emergency earthen spillway is at gage height 81.7 ft (24.90 m). Original capacity at crest of emergency spillway, 4,450 acre-ft (5.49 hm^3) and at outlet structure, 1,460 acre-ft (1.80 hm^3). Storage data given herein are based on capacity curve interpolated successively for each period of storm runoff based on periodic surveys.

COOPERATION.--Elevations and contents furnished by Soil Conservation Service.

POOL WATER BUDGET, IN ACRE FEET, PERIOD OCTOBER 1973 TO JUNE 1974

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
Outflow	0	0	0	0	0	0	0	0	0
(†)	90.7	88.6	85.2	80.2	77.4	74.2	73.3	74.2	73.7
(++)	3.16	.26	.28	.46	.18	2.30	2.06	3.00	1.32

CAL YR 1973: Outflow 849.8 ++ 11.42
PERIOD 974: Outflow 0 ++ 13.02

† Contents, in acre-feet, at end of month.
++ Precipitation, in inches, during month at rain gage 23 R. 3.6 miles west of dam.

07318500 SANDSTONE CREEK SUBWATERSHED NO. 14 (SANDSTONE CREEK TRIBUTRAY) NEAR CHEYENNE, OKLA.

LOCATION.--Lat 35°28'40", long 99°36'10", in SW 1/4 NE 1/4 sec.35, T.12 N., R.23 W., Roger Mills County, near center of upstream side of dam on unnamed tributary to Sandstone Creek, 2.5 mi (4.0 km) northeast of Berlin and 11 mi (17.7 km) southeast of Cheyenne.

DRAINAGE AREA.--1.02 mi^2 (2.64 km^2).

PERIOD OF RECORD.--October 1952 to June 1974 (discontinued). Prior to October 1960 monthly discharge and contents only, published in WSP 1731.

GAGE.--Water-stage recorder and recording rain gage. Datum of gage is 1,896.32 ft (578.000 m) above mean sea level (U.S. Soil Conservation Service bench mark).

AVERAGE DISCHARGE.--21 years (1952-1973), .007 ft^3/s (0.0002 mi^3/s), 5.1 acre-ft/yr (6,290 m^3/yr).

EXTREMES.--Period October to June: No outflow; maximum gage height, 10.22 ft (3.115 m) Oct. 11; maximum inflow,144 ft^3/s (4.08 m^3/s) average for 5-minute interval Oct. 10, computed for outflow and change in reservoir contents, adjusted for rainfall on reservoir surface during time of peak flow.
Period of record: Maximum outflow, 6.3 ft^3/s (0.18 m^3/s) June 7, 1961, gage height, 90.35 ft (27.539 m); no outflow most of time. Maximum inflow known, 1,160 ft^3/s (32.9 m^3/s) average for 5-minute interval Apr. 18, 1957, computed from outflow and change in reservoir contents, adjusted for rainfall on reservoir surface during time of peak inflow.

REMARKS.--Records fair. Records of discharge are outflow from reservoir, determined from stage-discharge relation for outlet structure. Reservoir is formed by earth dam; storage began in September 1951. Outlet structure is open end of 12-inch (0.30 m) concrete pipe with encasement of trash racks and retaining wall with invert at gage height 88.04 ft (26.835 m). There is a 6-inch (0.15 m) diameter iron drain pipe with gate valve in face of dam. Crest of emergency earthen spillway is at gage height 98.0 ft (29.87 m). Original capacity at crest of emergency spillway, 311 acre-ft (383,000 m^3) and at outlet pipe, 117 acre-ft (144,000 m^3). Storage data given herein are based on capacity curve interpolated successively for each period of storm runoff based on periodic surveys.

COOPERATION.--Elevations and contents furnished by Soil Conservation Service.

POOL WATER BUDGET, IN ACRE FEET, PERIOD OCTOBER 1973 TO JUNE 1974

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE
Outflow	0	0	0	0	0	0	0	0	0
(†)	38.3	26.6	18.9	13.6	8.9	5.9	5.4	9.5	2.6
(++)	3.68	0.14	0.86	0.36	0.22	1.62	2.08	4.04	1.44

CAL YR 1973: Outflow 0 ++ 29.24
PERIOD 1974: Outflow 0 ++ 14.44

† Contents, in acre-feet, at end of month.
++ Precipitation, in inches, during month at rain gage 15 R. 1.9 miles south of dam.

07319000 SANDSTONE CREEK SUBWATERSHED NO. 17 (CURRENT CREEK) NEAR CHEYENNE, OKLA.

LOCATION.--Lat 35°30'30", long 99°36'40", in NE 1/4 NE 1/4 sec.22, T.12 N., R.23 W., Roger Mills County, near center of upstream side of dam on Currant Creek, 4.0 mi (6.4 km) northeast of Berlin and 7.5 mi (12.1 km) southeast of Cheyenne.

DRAINAGE AREA.--10.13 mi^2 (26.24 km^2).

PERIOD OF RECORD.--October 1952 to June 1974 (discontinued). Prior to October 1960 monthly discharge and contents only, published in WSP 1731.

GAGE.--Water-stage recorder and recording rain gage. Datum of gage is 1,888.17 ft (575.514 m) above mean sea level (U.S. Soil Conservation Service bench mark).

AVERAGE DISCHARGE.--21 years (1952-1973), 0.78 ft^3/s (0.022 m^3/s), 565 acre-ft/yr (697,000 m^3/yr).

EXTREMES.--Period October to June: Maximum outflow, 21.6 ft^3/s (0.612 m^3/s) May 1; no outflow at times. Maximum inflow, 973 ft^3/s (27.6 m^3/s) average for 5-minute interval Oct. 10 computed from outflow and change in reservoir contents, adjusted for rainfall on reservoir surface during time of peak flow.
Period of record: Maximum outflow, 104 ft^3/s (2.94 m^3/s) May 26, 1959, gage height, 109.42 ft (33.351 m); no outflow most of time. Maximum inflow known, 6,030 ft^3/s (171 m^3/s) average for 5-minute interval Apr. 29, 1954, computed from outflow and change in reservoir contents, adjusted for rainfall on reservoir surface during time of peak inflow.

REMARKS.--Records good. Records of discharge are outflow from reservoir, determined from stage-discharge relation for outlet structure and rated gate-valve openings. Reservoir is formed by earth dam; storage began in September 1951. Outlet structure is a drop inlet with encasement of trash racks and retaining wall with 28-inch (0.71 m) concrete pipe. There is a 12-inch (0.30 m) diameter iron drain pipe with gate valve at outlet structure. Crest of drop inlet is at gage height 96.99 ft (29.563 m). Crest of emergency earthen spillway is at gage height 123.0 ft (37.49 m). Original capacity at crest of emergency spillway, 3,620 acre-ft (4.46 hm^3) and at outlet structure, 477 acre-ft (588,000 m^3). Storage data given herein are based on capacity curve interpolated successively for each period of storm runoff based on periodic surveys.

COOPERATION.--Elevations and contents furnished by Soil Conservation Service.

POOL WATER BUDGET, IN ACRE FEET, PERIOD OCTOBER 1973 TO JUNE 1974

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
Outflow	12.7	13.2	30.4	39.3	15.3	38.9	12.8	38.7	0
(†)	274.6	280.2	280.2	280.6	275.9	276.3	239.8	267.8	234.1
(++)	3.24	0.32	0.42	0.32	0.20	2.64	1.84	2.98	0.74

CAL YR 1973:	Outflow	526.2	++	26.58
PERIOD 1974:	Outflow	201.3	++	12.70

† Contents, in acre-feet, at end of month.
++ Precipitation, in inches, during month at rain gage 28 R. 4.5 miles west of dam.

07320000 SANDSTONE CREEK SUBWATERSHED NO. 10A (SANDSTONE CREEK TRIBUTARY) NEAR ELK CITY, OKLA.

LOCATION.--Lat 35°28'00", long 99°33'20", in SW 1/4 SW 1/4 sec.32, T.12 N., R.22 W., Beckham County, near center of upstream side of dam on unnamed tributary to Sandstone Creek, 4.0 mi (6.4 km) northeast of Berlin and 8.0 mi (12.9 km) northwest of Elk City.

DRAINAGE AREA.--2.87 mi^2 (7.43 km^2).

PERIOD OF RECORD.--October 1951 to June 1974 (discontinued). Prior to October 1960 monthly discharge and contents only, published in WSP 1731.

GAGE.--Water-stage recorder and recording rain gage. Datum of gage is 1,921.13 ft (585.560 m) above mean sea level (U.S. Soil Conservation Service bench mark).

AVERAGE DISCHARGE.--22 years (1951-1973), .028 ft^3/s (0.001 m^3/s), 20 acre-ft/yr (24,700 m^3/yr).

EXTREMES.--Period October to June: No outflow; maximum gage height, 70.96 ft (21.629 m) Oct. 11; maximum inflow, 274 ft^3/s (7.76 m^3/s) average for 5-minute interval Oct. 10, computed for outflow and change in reservoir contents, adjusted for rainfall on reservoir surface during time of peak flow.

Period of record: Maximum outflow, 6.6 ft^3/s (0.19 m^3/s) July 5, 1951; maximum gage height, 83.63 ft (25.490 m) June 7, 1961; no outflow most of time. Maximum inflow known, 1,700 ft^3/s (48.1 m^3/s) average for 5-minute interval Aug. 16, 1968, computed from outflow and change in reservoir contents, adjusted for rainfall on reservoir surface during time of peak inflow.

REMARKS.--Records good. Records of discharge are outflow from reservoir, determined from stage-discharge relation for outlet structure and rated gate-valve openings. Reservoir is formed by earth dam; storage began in April 1951. Outlet structure is a 15-inch (0.38 m) concrete pipe with an encasement of trash racks and retaining wall with invert at gage height 79.52 ft (24.238 m). There is a 6-inch (0.15 m) diameter iron drain pipe with gate valve in face of dam. Crest of emergency earthen spillway is at gage height 90.0 ft (27.43 m). Original capacity at crest of emergency spillway, 1,048 acre-ft (1.29 hm^3) and at outlet structure, 445 acre-ft (549,000 m^3). Storage data given herein are based on capacity curve interpolated successively for each period of storm runoff based on periodic surveys.

COOPERATION.--Elevations and contents furnished by Soil Conservation Service.

POOL WATER BUDGET, IN ACRE FEET, PERIOD OCTOBER 1973 TO JUNE 1974

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
Outflow	0	0	0	0	0	0	0	0	0
(†)	69.7	57.6	41.7	38.3	29.4	39.7	33.7	43.9	29.8
(++)	2.26	0.20	0.32	0.64	0.28	1.64	1.40	4.28	1.76

CAL YR 1973:	Outflow	0	++	26.68
PERIOD 1974:	Outflow	0	++	12.78

† Contents, in acre-feet, at end of month.
++ Precipitation, in inches, during month at rain gage 14 R. 2.87 miles southwest of dam.

07320500 SANDSTONE CREEK SUBWATERSHED NO. 6 (EAST BRANCH SANDSTONE CREEK) NEAR ELK CITY, OKLA.

LOCATION.--Lat 35°29'10", long 99°30'10", in NW 1/4 SW 1/4 sec.26, T.12 N., R.22 W., Beckham County, near center of upstream side of dam on East Branch Sandstone Creek, 7.5 mi (12.1 km) northeast of Berlin and 8.0 (12.9) northwest of Elk City.

DRAINAGE AREA.--6.46 mi^2 (16.73 km^2).

PERIOD OF RECORD.--October 1952 to June 1974 (discontinued). Prior to October 1960 monthly discharge and contents only, published in WSP 1731.

GAGE.--Water-stage recorder and recording rain gage. Datum of gage is 1,874.32 ft (571.293 m) above mean sea level (U.S. Soil Conservation Service bench mark).

AVERAGE DISCHARGE.--21 years (1952-1973), 0.086 ft^3/s (0.002 m^3/s) 62 acre-ft/yr (76,400 m^3/yr).

EXTREMES.--Period October to June: No outflow, maximum gage height, 75.86 ft (23.006 m) Oct. 11; maximum inflow, 160 ft^3/s (4.53 m^3/s) average for 5-minute interval Oct. 10, computed from outflow and change in reservoir contents, adjusted for rainfall on reservoir surface during time of peak flow.
Period of record: Maximum outflow, 46 ft^3/s (1.30 m^3/s) May 26, 1959, gage height, 87.80 ft (26.761 m); no outflow most of the time. Maximum inflow known, 1,870 ft^3/s (53.0 m^3/s) average for 5-minute interval May 3, 1957, computed from outflow and change in reservoir contents, adjusted for rainfall on reservoir surface during time of peak inflow.

REMARKS.--Records fair. Records of discharge are outflow from reservoir, determined from stage-discharge relation for outlet structure, and rated gate-value openings. Reservoir is formed by earth dam; storage began in April 1951. Outlet structure is 21-inch (0.53 m) concrete pipe with an encasement of trash racks and retaining wall with invert at gage height 83.02 ft (25.304 m). There is a 6-inch (0.15 m) diameter iron drain pipe with gage at crest of emergency spillway, 2,060 acre-ft (2.54 hm^3), and at outlet structure, 605 acre-ft (746,000 m^3). Storage data given herein are based on capacity curve interpolated successively for each period of storm runoff based on periodic surveys.

COOPERATION.--Elevations and contents furnished by Soil Conservation Service.

POOL WATER BUDGET, IN ACRE FEET, PERIOD OCTOBER 1973 TO JUNE 1974

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
Outflow	0	0	0	0	0	0	0	0	0
(†)	148.2	132.7	121.7	116.4	104.0	98.7	89.0	99.6	109.9
(++)	2.10	0.20	0.54	0.40	0.30	1.62	1.90	3.68	1.48

CAL YR 1973: Outflow 0 ++ 28.86
PERIOD 1974: Outflow 0 ++ 12.22

† Contents, in acre-feet, at end of month.
++ Precipitation, in inches, during month at rain gage 7 R. 2.6 miles southwest of dam.

07321000 SANDSTONE CREEK SUBWATERSHED NO. 5 (EAST BRANCH SANDSTONE CREEK TRIBUTARY) NEAR ELK CITY, OKLA.

LOCATION.--Lat 35°29'30", long 99°29'20", in SE 1/4 NE 1/4 sec.26, T.12 N., R.22 W., Beckham County, near center of upstream side of dam on unnamed tributary of East Branch Sandstone Creek, 7.0 mi (11.3 km) northwest of Elk City and 8.5 mi (13.7 km) northeast of Berlin.

DRAINAGE AREA.--3.89 mi^2 (10.08 km^2).

PERIOD OF RECORD.--October 1952 to June 1974 (discontinued). Prior to October 1960 monthly discharge and contents only, published in WSP 1731.

GAGE.--Water-stage recorder and recording rain gage. Datum of gage is 1,893.15 ft (577.032 m) above mean sea level (U.S. Soil Conservation Service bench mark).

AVERAGE DISCHARGE.--21 years (1952-1973), 0.085 ft^3/s (0.002 m^3/s), 62 acre-ft/yr (76,400 m^3/yr).

EXTREMES.--Period October to June: No outflow; maximum gage height, 64.55 ft (19.675 m) Oct. 11; maximum inflow, 116 ft^3/s (3.29 m^3/s) average for 5-minute interval Oct. 10, computed from outflow and change in reservoir contents, adjusted for rainfall on reservoir surface during time of peak inflow.
Period of record: Maximum outflow, 13 ft^3/s (0.37 m^3/s) May 26, 1959, Aug. 16-18, 1968; maximum gage height, 75.22 ft (22.927 m) Aug. 17, 1968; no outflow most of time. Maximum inflow known, 2,850 ft^3/s (80.7 m^3/s) average for 5-minute interval Aug. 16, 1968, computed from outflow and change in reservoir contents, adjusted for rainfall on reservoir surface during time of peak inflow.

REMARKS.--Records good. Records of discharge are outflow from reservoir, determined from stage-discharge relation for outlet structure. Reservoir is formed by earth dam; storage began in March 1951. Outlet structure is an encasement of trash racks and retaining wall connected to an 18-inch (0.46 m) concrete pipe with invert at gage height 67.91 ft (20.699 m). There is a 6-inch (0.15 m) diameter iron drain pipe with gate valve in face of dam. Crest of emergency earthen spillway is at gage height 84.0 ft (25.60 m). Original capacity at crest of emergency spillway, 1,147 acre-ft (1.41 hm^3), and at outlet pipe, 326 acre-ft (402,000 m^3). Storage data given herein are based on capacity curve, interpolated successively for each period of storm runoff based on periodic surveys.

COOPERATION.--Elevations and contents furnished by Soil Conservation Service.

POOL WATER BUDGET, IN ACRE FEET, PERIOD OCTOBER 1973 TO JUNE 1974

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
Outflow	0	0	0	0	0	0	0	0	0
(†)	126.0	105.7	88.5	75.2	62.3	58.7	50.0	62.3	50.6
(++)	1.52	0.12	0.26	0.30	0.28	1.66	2.16	3.80	1.80

CAL YR 1973: Outflow 0 ++ 28.24
PERIOD 1974: Outflow 0 ++ 11.90

† Contents, in acre-feet, at end of month.
++ Precipitation, in inches, during month at rain gage 5 R. 2.5 miles southeast of dam.

07321500 SANDSTONE CREEK SUBWATERSHED NO. 3 (EAST BRANCH SANDSTONE CREEK TRIBUTARY) NEAR ELK CITY, OKLA.

LOCATION.--Lat 35°30'40", long 99°30'40", on south line of SW 1/4 SE 1/4 sec.15, T.12 N., R.22 W., Roger Mills County, near center of upstream side of dam on unnamed tributary to East Branch Sandstone Creek, 7.5 mi (12.1 km) northeast of Berlin and 9.0 mi (14.5 km) northwest of Elk City.

DRAINAGE AREA.--0.62 mi^2 (1.61 km^2).

PERIOD OF RECORD.--October 1952 to June 1974 (discontinued). Prior to October 1960 monthly discharge and contents only, published in WSP 1731.

GAGE.--Water-stage recorder and recording rain gage. Datum of gage is 1,828.43 ft (557.305 m) above mean sea level (U.S. Soil Conservation Service bench mark).

AVERAGE DISCHARGE.--21 years (1952-1973), 0.006 ft^3/s (0.0002 m^3/s), 43 acre-ft/yr (5,300 m^3/yr).

EXTREMES.--Period October to June: No outflow; maximum gage height, 75.28 ft (22.903 m) Oct. 11; maximum inflow, 8.71 ft^3/s (0.247 m^3/s) average for 5-minute interval Oct. 11, computed from outflow and change in reservoir contents, adjusted for rainfall on reservoir surface during time of peak inflow.
Period of record: Maximum outflow, 4.7 ft^3/s (0.13 m^3/s) May 26, 1959, gage height, 88.76 ft (27.054 m); no outflow most of time. Maximum inflow known, 1,780 ft^3/s (50.4 m^3/s) average for 5-minute interval Apr. 18, 1957, computed from outflow and change in reservoir contents, adjusted for rainfall on reservoir surface during time of peak inflow.

REMARKS.--Records good. Records of discharge are outflow from reservoir, determined from stage-discharge relation for outlet structure. Reservoir is formed by earth dam; storage began in April 1951. Outlet structure is an encasement of trash racks and retaining wall connected to a 12-inch (0.30 m) concrete pipe with invert at gage height 82.08 ft (25.018 m). There is a 6-inch (0.15 m) diameter iron drain pipe with control gage valve in face of dam. Crest of emergency earthen spillway is at gage height 92.0 ft (28.042 m). Original capacity at crest of emergency spillway, 148.2 acre-ft (183,000 m^3) and at outlet pipe, 56.3 acre-ft (69,400 m^3). Storage data given herein are based on capacity curve interpolated successively for each period of storm runoff based on periodic surveys.

COOPERATION.--Elevations and contents furnished by Soil Conservation Service.

POOL WATER BUDGET, IN ACRE FEET, PERIOD OCTOBER 1973 TO JUNE 1974

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
Outflow	0	0	0	0	0	0	0	0	0
(†)	1.3	0.1	0	0	0	0	0	0.1	0
(++)	2.00	0.32	0.30	0.46	0.34	1.46	1.60	3.10	1.82

CAL YR 1973:	Outflow	0	++	30.78
PERIOD 1974:	Outflow	0	++	11.40

† Contents, in acre-feet, at end of month.
++ Precipitation, in inches, during month at rain gage 2 R. 1.5 miles northeast of dam.

07322000 SANDSTONE CREEK SUBWATERSHED NO. 9 (EAST BRANCH SANDSTONE CREEK TRIBUTARY) NEAR ELK CITY, OKLA.

LOCATION.--Lat 35°29'40", long 99°32'00", in NW 1/4 SW 1/4 sec.28, T.12 N., R.22 W., Beckham County, near center of upstream side of dam on unnamed tributary of East Branch Sandstone Creek, 7.5 mi (12.1 km) northeast of Berlin and 9.0 mi (14.5 km) northwest of Elk City.

DRAINAGE AREA.--3.50 mi^2 (9.07 km^2), of which 0.37 mi^2 (0.96 km^2) is noncontributing.

PERIOD OF RECORD.--October 1951 to June 1974 (discontinued). Prior to October 1960 monthly discharge and contents only, published in WSP 1731.

GAGE.--Water-stage recorder and recording rain gage. Datum of gage is 1,864.85 ft (568.406 m) above mean sea level (U.S. Soil Conservation Service bench mark).

AVERAGE DISCHARGE.--22 years (1951-1973), 0.051 ft^3/s (0.001 m^3/s), 37 acre ft/yr (45,600 m^3/yr).

EXTREMES.--Period October to June: No outflow, maximum gage height, 70.47 ft (21.479 m) Oct. 10; maximum inflow, 261 ft^3/s (7.39 m^3/s) average for 5-minute interval Oct. 10, computed for outflow and change in reservoir contents, adjusted for rainfall on reservoir surface during time of peak flow.

Period of record: Maximum outflow, 17 ft^3/s (0.48 m^3/s) May 26, 1959, July 6, 1961; maximum gage height, 81.30 ft (24.780 m) May 26, 1959; no outflow most of time. Maximum inflow known, 2,420 ft^3/s (68.5 m^3/s) average for 5-minute interval June 8, 1971, computed from outflow and change in reservoir contents, adjusted for rainfall on reservoir surface during time of peak inflow.

REMARKS.--Records good. Records of discharge are outflow from reservoir, determined from stage-discharge relation of outlet structure. Reservoir is formed by earth dam; storage began in March 1951. Outlet structure is the open end of a 15-inch (0.38 m) concrete pipe on an encasement of trash racks and retaining wall at gage height 71.94 ft (21.927 m). There is a 6-inch (0.15 m) diameter iron drain pipe with gate valve in face of dam. Crest of emergency earthen spillway is at gage height 92.0 ft (28.04 m). Original capacity at crest of emergency spillway, 1,250 acre-ft (1.54 hm^3), and at outlet pipe, 252 acre-ft (311,000 m^3). Storage data given herein are based on capacity curve interpolated successively for each period of storm runoff based on periodic surveys.

COOPERATION.--Elevations and contents furnished by Soil Conservation Service.

POOL WATER BUDGET, IN ACRE FEET, PERIOD OCTOBER 1973 TO JUNE 1974

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
Outflow	0	0	0	0	0	0	0	0	0
(†)	94.9	80.9	71.4	63.8	54.7	50.2	38.8	41.0	32.9
(++)	2.10	0.20	0.54	0.40	0.30	1.62	1.90	3.68	1.48

CAL YR 1973:	Outflow	0	++	28.86
PERIOD 1974:	Outflow	0	++	12.22

† Contents, in acre-feet, at end of month.
++ Precipitation, in inches, during month at rain gage 7 R. 2.3 miles south of dam.

07323000 SANDSTONE CREEK NEAR CHEYENNE, OKLA.

LOCATION.--Lat 35°33'10", long 99°31'50", on south line of SE 1/4 SE 1/4 sec.34, T.13 N., R.22 W., Roger Mills County, near left bank on downstream side of pier on county road bridge, 4.5 mi (7.2 km) upstream from Wildcat Creek, 9.1 mi (14.6 km) southeast of Cheyenne, and at mile 6.0 (9.7 km).

DRAINAGE AREA.--87.1 mi^2 (225.6 km^2), of which 4.0 mi^2 (10.4 km^2) is probably noncontributing.

PERIOD OF RECORD.--April 1951 to June 1974 (discontinued). Monthly discharge only for some periods, published in WSP 1731.

GAGE.--Water-stage recorder. Datum of gage is 1,795.62 ft (547.305 m) above mean sea level (U.S. Soil Conservation Service bench mark).

AVERAGE DISCHARGE.--22 years (1952-73), 6.33 ft^3/s (0.179 m^3/s), 4,590 acre-ft/yr (5.66 hm^3/yr).

EXTREMES.--Period October to June: Maximum discharge, 1,100 ft^3/s (31.2 m^3/s) Oct. 11, gage height, 7.96 ft (2.426 m); minimum, 0.36 ft^3/s (0.010 m^3/s) June 30.
Period of record: Maximum discharge, 6,360 ft^3/s (180 m^3/s) Apr. 30, 1954, gage height, 13.64 ft (4.157 m); from rating curve extended above 1,200 ft^3/s (34.0 m^3/s) on basis of slope-area measurement of peak flow; maximum gage height, 16.42 ft (5.005 m), May 26, 1959; no flow at times in 1951-57, 1964, 1970-71.

REMARKS.--Records fair. Flow from 65.6 mi^2 (169.9 km^2) regulated by 22 flood-retarding structures combined original capacity, about 21,100 acre-ft (26.0 hm^3). Some diversions for irrigation above station.

REVISIONS (WATER YEARS).--WSP 1711: 1959.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.5	5.7	4.6	3.0	4.9	3.8	4.6	33	2.7			
2	3.7	5.6	5.4	2.7	5.0	3.8	4.4	17	2.6			
3	3.8	5.6	6.0	3.2	4.9	3.6	4.3	7.9	2.5			
4	3.7	5.4	6.2	3.0	4.9	3.9	4.2	6.7	3.1			
5	3.6	5.4	5.6	3.5	5.1	3.6	4.1	6.0	2.8			
6	3.8	5.3	5.3	4.0	5.0	3.5	4.1	5.6	2.3			
7	3.6	5.3	5.6	3.5	5.0	4.7	4.2	5.3	2.5			
8	3.5	5.1	5.9	4.4	4.9	3.8	3.9	5.0	3.7			
9	3.3	5.0	5.3	3.5	5.0	4.7	3.9	5.0	2.8			
10	42	5.1	5.1	3.2	5.1	19	4.2	5.1	2.5			
11	155	5.3	5.6	3.0	5.3	18	6.0	5.0	2.6			
12	13	5.4	5.4	3.1	5.4	13	6.0	4.9	2.5			
13	9.2	5.4	5.1	3.5	5.0	10	5.6	4.7	2.5			
14	8.4	5.4	4.9	4.7	5.0	9.6	4.9	4.4	2.5			
15	8.1	5.3	4.7	5.2	5.6	9.0	4.3	4.2	2.5			
16	7.5	5.0	4.7	5.6	5.1	8.2	4.3	4.2	2.4			
17	7.1	4.9	4.7	5.4	5.0	8.2	4.4	4.2	2.3			
18	7.1	4.7	5.7	5.4	5.0	7.9	4.6	4.2	2.2			
19	7.0	4.9	5.3	5.3	4.9	7.5	4.6	4.1	1.7			
20	6.8	4.6	4.6	5.1	4.2	7.0	5.3	3.9	1.3			
21	6.7	4.4	4.4	4.9	4.4	6.8	6.0	3.9	.90			
22	6.5	4.4	5.6	4.7	4.4	6.5	5.6	3.6	.60			
23	6.3	4.4	5.4	4.6	4.2	6.0	5.1	3.3	.52			
24	6.2	4.7	5.3	4.3	3.9	5.6	4.7	5.3	.48			
25	6.2	4.9	5.0	4.8	3.8	5.4	4.7	3.8	.48			
26	6.2	4.9	4.7	4.3	3.9	5.4	4.6	3.6	.48			
27	6.0	4.7	4.7	4.4	4.1	5.4	4.4	3.3	.45			
28	6.0	4.4	4.6	4.6	4.1	5.1	4.9	3.0	.42			
29	5.9	4.9	4.6	4.6	------	5.0	5.4	2.9	.39			
30	5.9	4.6	4.2	4.7	------	4.7	6.0	2.9	.36			
31	5.7	------	4.2	4.9	------	4.7	------	2.7	------			------
TOTAL	371.3	150.7	158.4	131.1	133.1	213.4	143.3	178.7	55.08			
MEAN	12.0	5.02	5.11	4.23	4.75	6.88	4.78	5.76	1.84			
MAX	155	5.7	6.2	5.6	5.6	19	6.0	33	3.7			
MIN	3.3	4.4	4.2	2.7	3.8	3.5	3.9	2.7	.36			
AC-FT	736	299	314	260	264	423	284	354	109			

CAL YR 1973 TOTAL 2,412.18 MEAN 6.61 MAX 155 MIN .33 AC-FT 4,780

07324000 SANDSTONE CREEK SUBWATERSHED NO. 1 (WILDCAT CREEK) NEAR CHEYENNE, OKLA.

LOCATION.--Lat 35°34'00", long 99°30'10", on east line of NE 1/4 NE 1/4 sec.35, T.13 N., R.22 W., Roger Mills County, near center of upstream side of dam on Wildcat Creek, 3 mi (4.8 km) southeast of Herring and 9.5 mi (15.3 km) southeast of Cheyenne.

DRAINAGE AREA.--5.33 mi^2 (13.80 km^2).

PERIOD OF RECORD.--October 1951 to June 1974 (discontinued). Prior to October 1960 monthly discharge and contents only, published in WSP 1731.

GAGE.--Water-stage recorder and recording rain gage. Datum of gage is 1,777.20 ft (541.691 m) above mean sea level (U.S. Soil Conservation Service bench mark).

AVERAGE DISCHARGE.--22 years (1951-1973), .063 ft^3/s (.002 m^3/s) 46 acre-ft/yr (56,700 m^3/yr).

EXTREMES.--Period October to June: No outflow; maximum gage height, 68.65 ft (20.924 m) Oct. 11; maximum inflow, 119 ft^3/s (3.37 m^3/s) average for 5-minute interval, Oct. 10, computed from outflow and change in reservoir contents, adjusted for rainfall on reservoir surface during time of peak inflow.

Period of record: Maximum outflow, 12 ft^3/s (0.34 m^3/s) May 26, 1959, gage height, 81.00 ft (24.689 m); no outflow most of time. Maximum inflow known, 4,280 ft^3/s (121 m^3/s), average for 5-minute interval Apr. 18, 1957, computed from outflow and change in reservoir contents, adjusted for rainfall on reservoir surface during time of peak inflow.

REMARKS.--Records good. Records of discharge are outflow from reservoir, determined from stage-discharge relation for outlet structure. Reservoir is formed by earth dam; storage began in May 1951. Outlet structure is an encasement of trash racks and retaining wall connected to an 18-inch (0.46 m) concrete pipe with invert at gage height 78.38 ft (23.890 m). There is a 6-inch (0.15 m) diameter iron drain pipe with control gate valve in face of dam. Crest of emergency earthen spillway is at gage height 87.0 ft (26.52 m). Original capacity at crest of emergency spillway, 1,557 acre-ft (1.92 hm^3) and at outlet pipe, 730 acre-ft (900,000 m^3). Storage data given herein are based on capacity curve interpolated successively for each period of storm runoff based on periodic surveys.

COOPERATION.--Elevations and contents furnished by Soil Conservation Service.

POOL WATER BUDGET, IN ACRE FEET, PERIOD OCTOBER 1973 TO JUNE 1974

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
Outflow	0	0	0	0	0	0	0	0	0
(†)	48.1	34.7	24.5	19.0	13.0	10.3	5.5	6.7	5.3
(++)	2.20	.30	.22	.38	.42	1.66	1.50	2.92	1.36

CAL YR 1973:	Outflow	0	++	31.16
PERIOD 1974:	Outflow	0	++	10.96

† Contents, in acre-feet, at end of month.
++ Precipitation, in inches, during month at main gage 1 R. 2.7 miles south of dam.

07324200 WASHITA RIVER NEAR HAMMON, OKLA.

LOCATION.--Lat 35°39'23", long 99°18'21", on west line of sec.26, T.14 N., R.20 W., Custer County, on right bank near county road bridge, 2.2 mi (3.5 km) downstream from Quartermaster Creek, 4.7 mi (7.6 km) northeast of Hammon, and at mile 494.5 (795.7 km).

DRAINAGE AREA.--1,387 mi^2 (3,592 km^2).

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

GAGE.--Water-stage recorder. Datum of gage is 1,643.22 ft (500.853 m) above mean sea level.

AVERAGE DISCHARGE.--5 years, 13.8 ft^3/s (0.391 m^3/s), 10,000 acre-ft/yr (12.3 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 674 ft^3/s (19.1 m^3/s) Oct. 11, gage height, 11.36 ft (3.463 m); no flow at times.
Period of record: Maximum discharge, 2,540 ft^3/s (71.9 m^3/s) April 18, 1970, gage height, 19.23 ft (5.861 m), from rating curve extended above 500 ft^3/s (14.2 m^3/s) on basis of slope-area measurement of peak flow; no flow at times.

REMARKS.--Records poor. Some regulation by numerous flood-retarding structures. Records of chemical analyses and of water temperatures for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.0	8.1	9.3	8.1	13	12	25	244	6.3	.09	.46	.02
2	1.1	7.6	9.6	6.7	13	12	24	369	6.8	.04	.52	.78
3	1.2	6.7	13	5.7	13	12	22	220	9.5	0	.35	.84
4	1.0	5.9	14	4.6	12	13	22	153	26	0	.09	.39
5	.68	6.7	22	9.0	11	12	23	107	23	0	.03	.18
6	.21	8.1	19	11	12	11	23	69	15	0	.05	.18
7	.17	9.1	15	11	12	10	22	74	13	0	.07	.65
8	.11	12	12	9.0	11	10	20	67	35	0	.04	.58
9	.11	11	10	5.7	11	11	18	65	49	0	.05	.65
10	.12	8.7	10	4.0	11	32	17	57	15	0	.06	.96
11	311	7.6	8.1	5.1	10	122	80	44	9.4	0	.04	1.3
12	385	11	7.6	7.3	11	136	65	40	7.2	0	.03	1.8
13	180	14	8.1	9.0	11	114	55	39	5.6	0	0	4.4
14	75	10	11	13	11	85	30	35	6.2	0	0	4.0
15	51	5.5	9.6	13	12	73	21	29	4.7	0	0	3.7
16	39	4.4	7.6	14	14	64	18	23	4.2	0	0	5.7
17	29	4.1	7.6	16	14	59	16	21	3.2	0	0	6.4
18	25	2.4	11	20	15	54	15	19	1.8	0	0	6.9
19	22	1.9	8.1	24	15	48	11	17	1.4	0	0	11
20	19	1.9	4.0	24	15	43	265	14	.91	0	0	16
21	17	3.2	6.7	20	16	41	217	12	.91	0	0	11
22	14	6.2	9.3	17	15	40	102	12	1.2	0	0	2.5
23	13	3.8	9.6	15	14	38	72	11	.76	0	0	.88
24	12	6.2	9.6	14	14	35	45	9.5	.85	0	0	1.1
25	12	4.0	9.0	14	13	33	33	13	.85	0	0	1.4
26	10	4.6	8.7	14	12	32	26	16	.78	0	6.3	.24
27	9.6	11	9.3	14	12	32	22	16	.52	0	5.6	.03
28	9.0	8.4	7.0	14	12	31	19	14	.19	0	5.1	0
29	8.4	7.6	7.6	14	------	29	24	12	.16	.01	5.1	0
30	8.4	7.5	7.8	14	------	27	125	9.5	.13	25	.71	.02
31	8.4	------	8.4	13	------	26	------	7.2	------	1.1	.16	------
TOTAL	1,263.50	209.2	309.6	383.2	355	1,297	1,477	1,838.2	249.56	26.24	24.76	83.60
MEAN	40.8	6.97	9.99	12.4	12.7	41.8	49.2	59.3	8.32	.85	.80	2.79
MAX	385	14	22	24	16	136	265	369	49	25	6.3	16
MIN	.11	1.9	4.0	4.0	10	10	11	7.2	.13	0	0	0
AC-FT	2,510	415	614	760	704	2,570	2,930	3,650	495	52	49	166

CAL YR 1973 TOTAL 9,244.83 MEAN 25.3 MAX 484 MIN 0 AC-FT 18,340
WTR YR 1974 TOTAL 7,516.86 MEAN 20.6 MAX 385 MIN 0 AC-FT 14,910

PEAK DISCHARGE (BASE, 1,500 FT^3/S).--No peak above base.

07324300 FOSS RESERVOIR NEAR FOSS, OKLA.

LOCATION.--Lat 35°32'18", long 99°10'40", in S 1/2 sec.2, T.12 N., R.19 W., Custer County, near right end of dam on Washita River, 0.5 mi (0.8 km) upstream from Oak Creek, 3.5 mi (5.6 km) west of Stafford, 6.0 mi (9.7 km) north of Foss, and at mile 474.4 (763.3 km).

DRAINAGE AREA.--1,496 mi^2 (3,875 km^2).

PERIOD OF RECORD.--February 1961 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Bureau of Reclamation). Prior to October 1961, nonrecording gage at same site and datum.

EXTREMES.--Current year. Maximum contents, 117,200 acre-ft (145 hm^3) May 3, elevation, 1,631.70 ft (497.342 m); minimum, 102,100 acre-ft (126 hm^3) Jan. 14, elevation, 1,628.60 ft (496.397 m).
Period of record: Maximum contents, 121,800 acre-ft (150 hm^3) May 30, 1970, elevation, 1,632.60 ft (497.616 m).

REMARKS.--Reservoir is formed by an earth dam. Storage began Feb. 13, 1961. Capacity, 436,500 acre-ft (538 hm^3) at elevation 1,668.6 ft (508.59 m) crest of drop inlet and 256,100 acre-ft (316 hm^3) at elevation 1,652.0 ft (503.530 m) conservation pool. Dead storage, 12,420 acre-ft (15.3 hm^3) below elevation 1,597.2 ft (486.83 m) sill of gated outlet. Figures given herein represent total contents. Reservoir is designed for flood control, municipal water supply (inactive), and irrigation release. Revised capacity table used after Sept. 30, 1964. Records of chemical analyses for the current year are published in Part 2 of this report.

COOPERATION.--Elevations and data on diversions furnished by Foss Reservoir Master Conservancy District.

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

Date	Elevation (feet) †	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	1,628.80	103,100	
Oct. 31	1,629.10	104,500	+1,400
Nov. 30	1,628.90	103,500	-1,000
Dec. 31	1,628.80	103,100	-400
CAL YR 1973	--	--	+1,400
Jan. 31	1,628.90	103,500	+400
Feb. 28	1,628.90	103,500	0
Mar. 31	1,629.70	107,300	+3,800
Apr. 30	1,630.50	111,200	+3,900
May 31	1,631.50	116,200	+5,000
June 30	1,631.10	114,200	-2,000
July 31	1,630.10	109,200	-5,000
Aug. 31	1,630.20	109,700	+500
Sept. 30	1,630.40	110,700	+1,000
WTR YR 1974	--	--	+7,600

† Elevation at 0800 on following day.

07324400 WASHITA RIVER NEAR FOSS, OKLA.

LOCATION.--Lat 35°32'20", long 99°10'10", in SW 1/4 SW 1/4 sec.1, T.12 N., R.19 W., Custer County, on left bank on downstream side of pile bent of county road bridge, 0.4 mi (0.6 km) downstream from Oak Creek, 0.9 mi (1.4 km) downstream from Foss Dam, 2.5 mi (4.0 km) west of Stafford, 6.0 mi (9.7 km) north of Foss, and at mile 473.5 (761.9 km).

DRAINAGE AREA.--1,511 mi^2 (4,017 km^2).

PERIOD OF RECORD.--March 1956 to April 1957, February to December 1958, July 1961 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,560 ft (475.5 m) from preliminary survey by Topographic Division.

AVERAGE DISCHARGE.--13 years (1961-74), 17.6 ft^3/s (0.498 m^3/s), 6,760 acre-ft/yr (8.34 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 1,330 ft^3/s (37.7 m^3/s) May 1, gage height, 17.39 ft (5.300 m); minimum daily, 0.24 ft^3/s (0.007 m^3/s) Aug. 19.
Period of record: Maximum discharge, 14,000 ft^3/s (397 m^3/s) Apr. 19, 1957, gage height, 20.40 ft (6.218 m), from rating curve extended above 3,600 ft^3/s (102 m^3/s) on basis of velocity-area study; no flow at times in 1956.
Flood in May 1959 reached a stage of 23.4 ft (7.13 m), from floodmark.

REMARKS.--Records poor. Except for 55 mi^2 (1,425 km^2) intervening area, flow completely regulated since 1961 by Foss Reservoir (see sta. 07324300).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.6	4.0	3.8	2.5	6.5	3.0	6.0	416	11	2.7	32	10
2	5.2	3.7	3.8	2.3	6.3	2.7	6.0	203	10	2.3	31	46
3	5.4	4.0	4.0	2.2	6.5	2.9	6.3	98	10	2.1	29	12
4	5.4	4.0	3.8	2.1	6.5	2.7	6.1	70	11	2.0	24	6.9
5	4.5	4.0	3.8	1.9	6.3	2.7	5.8	50	11	1.7	24	5.2
6	4.5	2.9	3.7	2.1	6.1	2.5	5.8	50	9.9	1.5	24	4.7
7	4.5	3.8	3.7	2.6	6.1	2.2	5.8	38	9.5	1.4	24	4.0
8	4.2	4.2	3.7	3.4	6.1	12	5.8	29	183	1.4	23	3.8
9	4.2	4.2	3.7	2.9	6.0	396	5.4	25	46	1.1	15	3.8
10	3.8	4.0	3.7	2.5	6.1	176	5.1	20	20	1.2	2.3	3.7
11	118	4.0	3.7	2.3	6.0	82	170	19	16	1.0	1.0	3.7
12	44	4.2	3.7	3.3	5.1	42	83	18	14	.83	.83	3.5
13	23	4.0	3.7	6.5	5.8	32	57	18	13	2.1	.51	3.3
14	16	4.2	3.7	5.1	3.7	27	42	16	12	10	.51	3.3
15	12	3.8	3.7	7.7	4.7	22	26	14	11	11	.83	3.3
16	9.3	3.8	3.5	8.7	4.7	18	15	14	10	11	.56	3.5
17	8.3	3.8	3.5	7.7	4.5	16	12	14	10	11	.41	3.8
18	7.3	4.0	3.5	7.1	3.8	14	11	13	9.4	124	.30	7.9
19	6.7	4.0	2.9	7.1	3.8	13	9.3	12	8.7	62	.24	16
20	6.1	4.0	2.8	6.9	3.2	12	9.1	9.7	8.1	50	.56	28
21	6.1	4.7	2.6	6.9	3.2	11	9.4	9.1	7.5	50	3.3	13
22	5.4	4.0	2.9	6.9	3.0	9.9	5.8	45	7.1	50	3.8	10
23	5.1	4.0	3.4	6.9	3.0	9.3	7.9	41	6.1	50	3.8	11
24	5.1	4.0	3.8	6.7	3.2	8.8	6.5	41	4.9	50	3.7	16
25	4.7	4.0	4.0	6.7	3.0	8.3	4.5	60	4.4	46	3.3	15
26	4.5	4.0	3.8	6.9	2.9	8.3	5.1	14	4.2	39	3.2	13
27	4.4	4.0	3.8	6.7	3.0	8.1	5.1	14	3.8	40	493	13
28	4.2	3.7	4.0	6.5	2.9	7.9	5.1	12	3.3	41	83	13
29	4.2	4.0	3.6	6.5	------	7.3	142	12	3.0	40	12	13
30	4.2	3.8	3.1	6.5	------	5.8	75	11	3.0	38	9.5	10
31	4.2	------	2.8	6.7	------	3.3	------	11	------	35	8.9	------
TOTAL	350.1	118.8	110.2	160.8	132.0	968.7	758.9	1,416.8	480.9	779.33	861.55	303.4
MEAN	11.3	3.96	3.55	5.19	4.71	31.2	25.3	45.7	16.0	25.1	27.8	10.1
MAX	118	4.7	4.0	8.7	6.5	396	170	416	183	124	493	46
MIN	3.8	2.9	2.6	1.9	2.9	2.2	4.5	9.1	3.0	.83	.24	3.3
AC-FT	694	236	219	319	262	1,920	1,510	2,810	954	1,550	1,710	602

CAL YR 1973 TOTAL 4,866.52 MEAN 13.3 MAX 630 MIN .33 AC-FT 9,650
WTR YR 1974 TOTAL 6,441.48 MEAN 17.6 MAX 493 MIN .24 AC-FT 12,780

07325000 WASHITA RIVER NEAR CLINTON, OKLA.

LOCATION.--Lat 35°31'52", long 98°57'57", in SW 1/4 NE 1/4 sec.11, T.12 N., R.17 W., Custer County, within channel on downstream side of pier of bridge on U.S. Highway 183, 0.5 mi (0.8 km) north of Clinton, 0.8 mi (1.3 km) upstream from Beaver Creek, 4.8 mi (7.7 km) downstream from Barnitz Creek, and at mile 447.4 (719.9 km).

DRAINAGE AREA.--1,977 mi^2 (5,120 km^2).

PERIOD OF RECORD.--October 1935 to current year. Monthly discharge only for some periods, published in WSP 1311.

GAGE.--Water-stage recorder. Datum of gage is 1,467.60 ft (447.324 m) above mean sea level. See WSP 1920 for history of changes prior to Mar. 19, 1941.

AVERAGE DISCHARGE.--25 years (1935-60), 146 ft^3/s (4.13 m^3/s) 105,700 acre-ft (130 hm^3/yr); 14 years (1960-74), 44.6 ft^3/s (1.263 m^3/s), 32,310 acre-ft/yr (39.8 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 2,630 ft^3/s (74.5 $m^3.s$) Aug. 27, gage height, 18.21 ft (5.550 m); maximum gage height, 18.46 ft (5.627 m) backwater, Aug. 28; minimum daily discharge 3.8 ft^3/s (0.11 m^3/s) Aug. 21.
Period of record: Maximum discharge, 66,800 ft^3/s (1,890 m^3/s) May 16, 1951, gage height, 31.09 ft (9.476 m), from rating curve extended above 7,900 ft^3/s (224 m^3/s) by contracted-opening measurement of peak flow; no flow at times in 1952-56, 1964, 1966.
Flood of Apr. 3-4, 1934, reached a stage of 33.9 ft (10.33 m), from floodmarks.

REMARKS.--Records fair. Flow regulated since February 1961 by Foss Reservoir (see sta. 07324300) and by numerous flood-retarding structures.

REVISIONS.--WSP 1211: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	18	16	9.6	19	14	34	436	38	12	34	96
2	23	17	16	11	18	14	25	1,340	28	10	31	1,110
3	24	17	16	13	19	14	27	465	32	8.8	28	778
4	30	20	16	17	18	15	33	290	45	8.3	24	202
5	29	21	15	16	18	14	24	213	31	8.4	22	125
6	27	20	16	15	18	14	23	135	26	7.4	36	94
7	25	18	15	16	17	14	23	111	26	6.6	31	78
8	24	18	15	17	15	16	24	96	493	6.2	26	65
9	22	17	15	18	18	50	22	73	441	6.2	25	57
10	21	17	15	17	17	1,010	21	66	126	5.5	17	50
11	96	16	15	18	17	739	366	62	68	5.4	16	47
12	193	16	16	18	17	395	418	60	51	5.3	10	38
13	74	16	16	18	18	205	150	59	42	5.4	8.8	36
14	42	19	16	18	16	113	88	60	40	7.3	7.7	34
15	33	16	15	18	18	83	57	51	37	6.2	6.6	32
16	30	16	15	19	18	69	45	42	33	6.6	6.2	34
17	28	16	15	19	17	61	41	37	30	5.8	6.2	33
18	27	16	15	20	18	56	41	32	29	5.6	5.8	31
19	26	17	15	20	18	50	40	29	26	82	4.9	587
20	25	16	15	21	16	46	38	27	23	40	4.5	1,330
21	24	17	15	22	15	46	42	35	21	38	3.8	398
22	23	17	15	21	15	44	38	52	22	36	4.2	228
23	22	16	15	21	15	45	31	51	19	34	4.9	135
24	21	17	15	20	14	38	27	51	17	33	7.8	111
25	21	17	15	20	14	36	23	66	15	36	17	151
26	20	17	15	19	14	35	21	94	14	32	12	139
27	20	17	15	20	20	35	19	46	13	29	1,570	109
28	19	16	15	19	14	34	17	44	11	30	1,830	94
29	19	16	15	19	------	34	94	43	12	37	263	75
30	19	16	15	19	------	32	223	33	11	89	183	63
31	18	------	11	20	------	34	------	29	------	40	124	------
TOTAL	1,051	513	469	558.6	471	3,405	2,075	4,228	1,820	683.0	4,370.4	6,360
MEAN	33.9	17.1	15.1	18.0	16.8	110	69.2	136	60.7	22.0	141	212
MAX	193	21	16	22	20	1,010	418	1,340	493	89	1,830	1,330
MIN	18	16	11	9.6	14	14	17	27	11	5.3	3.8	31
AC-FT	2,080	1,020	930	1,110	934	6,750	4,120	8,390	3,610	1,350	8,670	12,620

CAL YR 1973 TOTAL 19,335.6 MEAN 53.0 MAX 1,990 MIN 4.6 AC-FT 38,350
WTR YR 1974 TOTAL 26,004.0 MEAN 71.2 MAX 1,830 MIN 3.8 AC-FT 51,580

07325500 WASHITA RIVER AT CARNEGIE, OKLA.

LOCATION.--Lat 35°07'02", long 98°33'49", in NW 1/4 NW 1/4 sec.3, T.7 N., R.13 W., Caddo County, on downstream side of right pier of bridge on State Highway 9, 1,300 ft (396.2 m) upstream from Running Creek, 2.7 mi (4.3 km) east of Carnegie, and at mile 353.9 (569.4 km). Records include flow of Running Creek.

DRAINAGE AREA.--3,129 mi^2 (8.104 km^2), includes that of Running Creek.

PERIOD OF RECORD.--October 1937 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,249.23 ft (380.765 m) above mean sea level. Prior to October 1942, water-stage recorder at site 8.0 mi (12.9 km) upstream at datum 24.57 ft (7.489 m) higher.

AVERAGE DISCHARGE.--37 years, 276 ft^3/s (7.816 m^3/s), 200,000 acre-ft/yr (247 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 6,110 ft^3/s (173 m^3/s) Aug. 27, gage height, 20.11 ft (6.130 m); minimum daily, 8.5 ft^3/s (0.24 m^3/s) July 23.
Period of record: Maximum discharge, 50,000 ft^3/s (1,420 m^3/s) May 18, 1949, gage height, 26.21 ft (7.989 m), from rating curve extended above 35,500 ft^3/s (1,010 m^3/s) on basis of contracted-opening measurement of peak flow; no flow at times in 1956 and 1964.
Flood of May 23, 1903, reached a stage of about 29 ft (8.8 m) at former site and datum, from information by local resident; flood of May 18, 1949, reached a stage of 20.9 ft (6.37 m), from floodmark, at that site and datum.

REMARKS.--Records fair. Some diversion above station for irrigation. October 1942 to May 1949, occasional fluctuation caused by power plant at Carnegie, 7.5 mi (12.1 km) above station. Some regulation by Foss Reservoir since February 1961 (see sta. 07324300), and by numerous flood-retarding structures. Records of chemical analyses and of water temperatures for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1087: 1938. WSP 1211: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	349	115	96	95	91	82	99	1,140	140	35	28	413
2	248	116	98	89	92	82	99	2,750	119	32	54	340
3	192	112	138	86	91	83	93	3,740	121	30	40	293
4	254	113	175	86	92	87	95	2,240	108	27	37	898
5	1,120	112	140	100	92	86	90	1,120	108	25	37	579
6	1,120	113	118	97	90	84	91	787	115	24	38	309
7	383	113	106	98	88	80	91	602	104	24	36	248
8	248	114	101	99	86	77	87	455	98	29	34	209
9	185	114	101	96	86	77	84	382	233	29	36	185
10	146	112	106	89	87	95	83	344	846	27	1,350	166
11	447	108	107	53	86	735	92	289	421	24	1,940	152
12	1,780	106	107	65	86	1,340	92	251	226	21	339	142
13	1,090	106	105	64	85	731	294	223	155	13	114	131
14	714	112	105	61	85	480	309	202	130	12	78	121
15	516	117	103	62	85	365	215	182	112	9.6	59	114
16	389	116	102	64	85	266	182	173	100	11	47	118
17	288	111	99	68	89	216	132	162	94	10	40	121
18	235	110	97	69	98	190	126	144	86	8.8	45	119
19	203	111	97	70	98	175	121	135	77	10	38	153
20	183	119	95	68	230	166	110	129	72	11	30	618
21	169	118	111	66	151	158	110	130	67	10	27	1,350
22	156	111	111	65	108	155	144	165	59	9.5	24	1,120
23	145	110	119	63	98	147	121	427	55	8.5	65	553
24	137	122	122	63	89	138	110	168	52	9.6	58	396
25	132	134	117	61	79	131	104	765	48	20	59	422
26	129	133	114	60	79	126	99	1,550	46	20	41	783
27	125	118	111	60	81	121	94	556	45	17	3,080	457
28	123	106	109	60	81	119	94	371	43	21	2,690	317
29	124	101	108	95	------	112	121	284	40	23	2,600	260
30	118	98	107	94	------	107	540	211	38	27	1,620	226
31	117	------	100	92	------	103	------	172	------	26	582	------
TOTAL	11,565	3,401	3,425	2,358	2,688	6,914	4,122	20,249	3,958	604.0	15,266	11,313
MEAN	373	113	110	76.1	96.0	223	137	653	132	19.5	492	377
MAX	1,780	134	175	100	230	1,340	540	3,740	846	35	3,080	1,350
MIN	117	98	95	53	79	77	83	129	38	8.5	24	114
AC-FT	22,940	6,750	6,790	4,680	5,330	13,710	8,180	40,160	7,850	1,200	30,280	22,440

CAL YR 1973 TOTAL 142,954.0 MEAN 392 MAX 5,120 MIN 19 AC-FT 283,500
WTR YR 1974 TOTAL 85,863.0 MEAN 235 MAX 3,740 MIN 8.5 AC-FT 170,300

PEAK DISCHARGE (BASE, 3,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE
5-3	0545	14.84	3,100
8-27	1130	20.11	6,110

07325800 COBB CREEK NEAR EAKLY, OKLA.

LOCATION.--Lat 35°17'26", long 98°35'38", in NW 1/4 NE 1/4 sec.5, T.9 N., R.13 W., Caddo County, near right abutment of bridge on downstream side of State Highway 152, 0.5 mi (0.8 km) downstream from Fivemile Creek, 2.4 mi (3.9 km) southwest of Eakly, 2.5 mi (4.0 km) upstream from Fort Cobb Reservoir, and at mile 22.9 (36.8 km).

DRAINAGE AREA.--132 mi^2 (342 km^2).

PERIOD OF RECORD.--October 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,369.70 ft (417.485 m) above mean sea level.

AVERAGE DISCHARGE.--6 years, 20.1 ft^3/s (0.569 m^3/s), 14,560 acre-ft/yr (18.0 hm^3/yr).

EXTREMES.--Current year: Maximum gage height, 20.33 ft (6.197 m) Aug. 27 (discharge undetermined); minimum daily discharge, 0.40 ft^3/s (0.011 m^3/s) July 23, 24.
Period of record: Maximum gage height, 20.33 ft (6.197 m) Aug. 27, 1974 (discharge undetermined); no flow at times in most years.

REMARKS.--Records poor. Minor regulation by three small reservoirs having combined surface-area 262 acres (1.06 km^2) and capacity of 3,100 acre-ft (3.82 hm^3).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	10	10	10	13	12	11	476	11	2.3	1.2	60
2	15	9.5	10	9.5	13	12	11	244	11	2.4	1.4	40
3	13	10	18	9.0	13	12	11	81	13	1.7	1.1	30
4	70	10	25	10	12	11	11	40	11	1.6	1.6	20
5	25	10	15	11	13	11	11	20	10	1.6	1.6	15
6	20	11	13	13	12	11	10	15	10	1.5	2.5	13
7	15	11	13	12	13	10	10	13	50	1.5	2.3	13
8	13	12	12	12	12	10	10	12	100	1.4	1.9	12
9	10	12	12	12	13	10	10	11	30	.90	10	12
10	10	12	12	13	13	40	10	11	25	.90	241	11
11	212	12	11	12	13	89	25	10	20	1.1	15	11
12	55	13	11	12	13	35	20	10	18	1.1	4.6	11
13	30	13	11	13	12	22	15	10	14	.90	3.6	10
14	18	13	11	13	12	18	12	10	12	.90	3.2	10
15	13	13	11	15	24	16	11	10	11	.72	3.2	10
16	11	13	11	16	29	15	11	9.5	10	.90	3.0	10
17	10	13	11	16	22	14	11	9.5	9.0	.90	11	10
18	9.5	13	11	16	19	13	10	9.0	8.0	.80	4.0	10
19	9.0	13	12	15	20	13	10	9.0	7.0	.80	3.2	240
20	8.5	23	12	15	18	16	15	9.0	6.5	.72	3.0	300
21	8.3	18	11	15	30	18	25	11	6.0	.48	2.8	100
22	8.0	15	11	15	22	15	20	10	5.5	.56	2.2	50
23	8.0	14	12	14	17	14	15	10	5.0	.40	7.1	18
24	7.9	19	12	13	15	13	12	10	4.5	.40	5.4	50
25	7.7	29	12	13	14	13	11	222	4.0	.48	5.7	240
26	7.7	17	12	13	13	13	10	45	3.5	.56	4.8	50
27	11	14	12	13	13	12	10	30	3.2	.64	1,470	17
28	11	13	11	14	13	12	32	20	3.0	.49	371	14
29	11	11	11	14	------	12	104	15	2.7	.55	230	13
30	11	11	12	14	------	12	210	13	2.5	1.1	150	11
31	11	------	11	13	------	12	------	12	------	.90	100	------
TOTAL	686.6	407.5	379	405.5	446	536	694	1,417.0	426.4	31.20	2,667.4	1,411
MEAN	22.1	13.6	12.2	13.1	15.9	17.3	23.1	45.7	14.2	1.01	86.0	47.0
MAX	212	29	25	16	30	89	210	476	100	2.4	1,470	300
MIN	7.7	9.5	10	9.0	12	10	10	9.0	2.5	.40	1.1	10
AC-FT	1,360	808	752	804	885	1,060	1,380	2,810	846	62	5,290	2,800

CAL YR 1973 TOTAL 12,586.80 MEAN 34.5 MAX 1,130 MIN 1.5 AC-FT 24,970
WTR YR 1974 TOTAL 9,507.60 MEAN 26.0 MAX 1,470 MIN .40 AC-FT 18,860

PEAK DISCHARGE (BASE, 500 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
4-30	0015	11.65	1,030	8-10	0215	10.54	900
5-1	1830	13.50	1,460	8-27	1200	20.33	undetermined
5-25	0830	8.61	524				

07325850 LAKE CREEK NEAR EAKLY, OKLA.

LOCATION.--Lat 35°17'27", long 98°31'44", in NE 1/4 NW 1/4 sec.1, T.9 N., R.13 W., Caddo County, on downstream side of bridge on State Highway 152, 1.2 mi (1.9 km) upstream from Fort Cobb Reservoir, 2.0 mi (3.2 km) southeast of Eakly, and at mile 4.2 (6.8 km).

DRAINAGE AREA.--52.0 mi^2 (134.7 km^2).

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

GAGE.--Water-stage recorder. Datum of gage is 1,365.47 ft (416.195 m) above mean sea level.

AVERAGE DISCHARGE.--5 years, 4.56 ft^3/s (0.129 m^3/s), 3,300 acre-ft/yr (4.07 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 336 ft^3/s (9.52 m^3/s) May 1, gage height, 9.45 ft (2.880 m); no flow at times.
Period of record: Maximum discharge, 902 ft^3/s (25.5 m^3/s) Mar. 30, 1973, gage height 11.64 ft (3.548 m); from rating curve extended above 200 ft^3/s (5.66 m^3/s); no flow at times each year.

REMARKS.--Records fair.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.13	1.8	4.0	1.4	3.3	3.4	2.7	123	.67		0	1.3
2	.16	1.5	4.2	1.3	3.0	3.3	2.4	91	.40		0	.68
3	.10	1.3	51	1.2	2.7	3.2	2.2	24	2.0		0	.53
4	53	1.8	31	1.3	2.7	3.2	1.8	9.7	2.4		0	.46
5	7.6	1.9	8.8	1.9	2.7	2.7	1.8	6.8	.56		0	.42
6	2.2	2.1	5.1	2.0	2.4	2.6	2.0	5.4	.17		0	.40
7	.88	2.6	4.4	2.0	1.7	2.1	1.9	4.3	1.4		0	.40
8	.36	2.9	4.5	2.2	2.1	2.5	1.4	3.6	131		0	.36
9	.17	2.7	4.2	2.2	3.0	3.0	1.7	3.3	66		7.7	.35
10	.10	2.6	3.6	2.4	2.7	92	1.9	2.7	10		16	.35
11	86	2.8	4.0	2.5	2.6	48	9.5	2.3	3.9		0	.35
12	15	2.8	4.2	1.6	2.8	13	4.5	2.0	1.6		0	.32
13	5.8	3.0	3.6	2.0	3.2	8.6	3.2	1.8	1.0		0	.28
14	3.8	3.0	3.5	3.5	3.0	7.8	2.0	1.4	.57		0	.25
15	3.6	2.7	3.3	4.0	4.6	6.9	2.1	1.0	.08		0	.25
16	4.2	2.3	3.0	4.5	5.4	5.4	2.2	1.0	0		0	.35
17	3.3	2.5	3.3	4.7	4.3	5.2	2.2	.61	0		0	.40
18	3.1	2.8	3.8	5.2	4.0	5.2	2.2	.38	0		0	.36
19	2.8	4.2	2.5	5.7	5.7	4.3	2.4	.26	0		0	15
20	2.6	9.6	2.0	5.4	4.5	6.6	5.9	.17	0		0	20
21	2.3	4.9	2.5	4.9	60	9.5	11	3.4	0		0	4.6
22	2.0	4.0	3.0	4.5	11	8.4	4.5	7.5	0		0	1.0
23	1.8	3.8	4.8	3.6	6.7	5.8	2.7	2.1	0		0	.64
24	1.7	17	4.4	3.5	4.1	4.6	2.3	1.2	0		0	1.8
25	1.7	17	3.6	3.6	3.6	5.0	1.9	60	0		0	16
26	1.8	7.7	3.7	3.9	3.9	5.4	1.7	11	0		0	2.9
27	1.7	5.9	3.0	3.6	3.4	5.4	1.6	3.7	0		50	.49
28	1.5	4.6	3.6	4.0	3.3	4.5	2.3	2.1	0		13	.09
29	1.6	4.3	3.3	3.8	------	3.6	27	1.0	0		4.9	0
30	1.9	4.1	3.4	3.5	------	2.8	27	.55	0		3.8	0
31	2.1	------	1.6	3.4	------	3.3	------	.50	------		3.0	------
TOTAL	215.00	130.2	190.9	99.3	162.4	287.3	138.0	377.77	221.75	0	98.4	70.33
MEAN	6.94	4.34	6.16	3.20	5.80	9.27	4.60	12.2	7.39	0	3.17	2.34
MAX	86	17	51	5.7	60	92	27	123	131	0	50	20
MIN	.10	1.3	1.6	1.2	1.7	2.1	1.4	.17	0	0	0	0
AC-FT	426	258	379	197	322	570	274	749	440	0	195	139

CAL YR 1973 TOTAL 3,119.44 MEAN 8.55 MAX 330 MIN 0 AC-FT 6,190
WTR YR 1974 TOTAL 1,991.35 MEAN 5.46 MAX 131 MIN 0 AC-FT 3,950

PEAK DISCHARGE (BASE, 250 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE
5-1	2000	9.45	336
6-8	1600	9.38	329

07325860 WILLOW CREEK NEAR ALBERT, OKLA.

LOCATION.--Lat 35°14'00", long 98°27'57", in NE 1/4 NW 1/4 sec.28, T.9 N., R.12 W., Caddo County, at County road bridge 3.1 mi (5.0 km) west of Albert, 5.2 mi (8.4 km) above Fort Cobb Dam, and at mile 2.4 (3.9 km).

DRAINAGE AREA.--28.9 mi^2 (72.5 km^2).

PERIOD OF RECORD.--October 1971 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,340.00 ft (408.432 m) above mean sea level.

EXTREMES.--Current year: Maximum discharge, 398 ft^3/s (11.3 m^3/s) Aug. 10, gage height, 6.43 ft (1.960 m); no flow July 21-29.
Period of record: Maximum discharge, 732 ft^3/s (20.7 m^3/s) Mar. 30, 1973, gage height, 7.44 ft (2.268 m) from rating curve extended above 10 ft^3/s (0.28 m^3/s) on basis of computed flow at times each year.

REMARKS.--Records fair.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.7	1.5	2.3	1.8	1.5	2.0	1.7	68	1.1	.32	.05	1.9
2	1.7	1.5	2.4	1.8	1.5	2.0	1.7	8.6	1.0	.40	.06	1.7
3	1.7	1.5	9.6	1.8	1.5	2.0	1.7	3.7	1.1	.36	.05	1.6
4	15	1.5	4.0	1.8	1.5	2.0	1.6	3.7	1.0	.28	.05	1.6
5	5.0	1.5	2.5	1.8	1.5	1.9	1.6	3.4	.98	.40	.15	1.5
6	3.5	1.6	2.2	1.8	1.4	1.9	1.7	3.4	.80	.36	.44	1.4
7	2.5	1.7	2.2	1.8	1.4	1.8	1.6	3.5	.63	.28	.22	1.3
8	2.2	1.7	2.2	1.8	1.4	1.8	1.6	3.2	6.2	.12	.13	1.2
9	2.1	1.8	2.1	1.8	1.5	2.0	1.6	3.4	1.3	.08	5.4	1.1
10	2.0	1.7	2.0	1.8	1.5	15	1.6	3.4	1.0	.07	76	1.0
11	15	1.7	2.2	1.8	1.5	6.0	4.0	3.1	1.0	.05	2.4	.98
12	5.2	1.7	2.4	1.8	1.5	2.9	2.2	3.1	.98	.02	1.2	.92
13	3.5	1.8	2.4	1.8	1.5	2.5	1.9	3.4	.92	.02	.75	.86
14	3.0	1.8	2.2	1.9	1.5	2.5	1.6	2.7	1.0	.05	.66	.69
15	2.5	1.8	2.0	1.9	1.8	2.3	1.6	2.6	.98	.03	.61	.61
16	2.0	1.8	2.0	1.9	1.8	2.2	1.6	2.7	.86	.05	.51	1.1
17	1.8	1.9	2.0	2.3	1.8	2.3	1.6	2.7	1.0	.03	.50	.81
18	1.7	2.0	2.0	2.1	1.8	2.3	1.6	2.4	.98	.03	.44	.78
19	1.7	2.4	1.8	2.0	2.0	2.1	1.6	2.2	.98	.02	.34	9.6
20	1.7	4.0	1.7	1.9	3.1	2.7	1.6	1.9	.92	.02	.25	2.3
21	1.6	2.8	2.0	1.8	16	3.1	1.5	2.0	.86	0	.22	1.6
22	1.6	2.5	2.1	1.7	3.4	2.8	1.3	1.7	.62	0	.22	1.1
23	1.6	2.1	2.3	1.7	2.5	2.2	1.2	1.7	.47	0	.69	.89
24	1.6	11	2.2	1.7	2.3	2.1	1.2	1.4	.51	0	.65	1.9
25	1.6	4.7	2.1	1.7	2.2	2.3	1.1	29	.51	0	.48	4.0
26	1.6	3.0	2.1	1.7	2.1	2.3	1.0	1.6	.51	0	.39	1.9
27	1.6	2.6	2.0	1.7	2.0	2.3	1.0	1.6	.51	0	6.4	1.5
28	1.6	2.4	2.1	1.6	2.0	2.2	1.3	1.6	.43	0	5.5	1.1
29	1.6	2.3	2.1	1.6	------	1.9	3.5	1.1	.43	0	5.0	1.0
30	1.6	2.3	2.2	1.6	------	1.8	24	1.1	.32	1.1	3.5	1.0
31	1.6	------	1.8	1.5	------	1.7	------	1.1	------	.04	1.9	------
TOTAL	93.1	72.6	75.2	55.7	65.5	84.9	72.8	175.0	29.90	4.13	115.16	48.94
MEAN	3.00	2.42	2.43	1.80	2.34	2.74	2.43	5.65	1.00	.13	3.71	1.63
MAX	15	11	9.6	2.3	16	15	24	68	6.2	1.1	76	9.6
MIN	1.6	1.5	1.7	1.5	1.4	1.7	1.0	1.1	.32	0	.05	.61
AC-FT	185	144	149	110	130	168	144	347	59	8.2	228	97

CAL YR 1973 TOTAL 1,565.96 MEAN 4.29 MAX 240 MIN .03 AC-FT 3,110
WTR YR 1974 TOTAL 892.93 MEAN 2.45 MAX 76 MIN 0 AC-FT 1,770

PEAK DISCHARGE (BASE, 200 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE
5-1	1745	6.39	395
8-10	0200	6.43	398

07325900 FORT COBB RESERVOIR NEAR FORT COBB, OKLA.

LOCATION.--Lat 35°09'30", long 98°27'40", in SE 1/4 sec.21, T.8 N., R.12 W., Caddo County, in control house at right center of dam on Cobb Creek, 4.0 mi (6.4 km) northwest of Fort Cobb, and at mile 7.5 (12.1 km).

DRAINAGE AREA.--304 mi^2 (787 km^2).

PEIOD OF RECORD.--March 1959 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Bureau of Reclamation). Prior to October 1961, nonrecording gage at same datum.

EXTREMES.--Current year: Maximum contents, 85,110 acre-ft (105 hm^3) Sept. 1, elevation, 1,343.22 ft (409.413 m); minimum, 77,210 acre-ft (95.2 hm^3) Aug. 9, elevation, 1,341.31 ft (408.831 m).
Period of record: Maximum contents, 102,600 acre-ft (127 hm^3) Sept. 26, 1965, elevation, 1,347.10 ft (410.596 m); minimum since conservation pool was first filled, 54,650 acre-ft (67.4 hm^3) Oct. 19, 1972, elevation 1,335.06 ft (406.926 m).

REMARKS.--Reservoir is formed by an earth dam. Storage began Mar. 30, 1959. Conservation pool was first filled in June 1962. Capacity, 143,700 acre-ft (177 hm^3) at elevation 1,354.8 ft (412.94 m) crest of drop inlet, 80,010 acre-ft (98.7 hm^3) at elevation 1,342.0 ft (409.04 m) conservation pool, and 1,664 acre-ft (2.05 hm^3) at elevation 1,300.0 ft (396.24 m) crest of gated outlet. Figures given herein represent total contents. Reservoir is used for flood control, for municipal and industrial water supply, and for irrigation releases. Revised capacity table used since May 1, 1964.

COOPERATION.--Elevations and data on diversions furnished by Fort Cobb Reservoir Master Conservancy District.

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

Date	Elevation (feet) †	Contents (acre-feet)	Change in contents (acre-feet)	Diversions (acre-feet)
Sept. 30	1,341.44	77,740	--	--
Oct. 31	1,341.65	78,580	+840	644
Nov. 30	1,341.73	78,910	+330	542
Dec. 31	1,341.79	79,150	+240	544
CAL YR 1973	--	--	+23,660	8,299
Jan. 31	1,341.91	79,640	+490	639
Feb. 28	1,341.97	79,880	+240	989
Mar. 31	1,342.05	80,210	+330	619
Apr. 30	1,342.08	80,340	+130	690
May 31	1,343.12	84,680	+4,340	691
June 30	1,342.55	82,280	-2,400	677
July 31	1,341.51	78,020	-4,260	1,180
Aug. 31	1,343.22	85,110	+7,090	954
Sept. 30	1,341.99	79,970	-5,140	707
WTR YR 1974	--	--	+2,230	8,876

† Elevation at 0800 following day.

07326000 COBB CREEK NEAR FORT COBB, OKLA.

LOCATION.--Lat 35°08'37", long 98°26'33", in NE 1/4 NE 1/4 sec.27, T.8 N., R.12 W., Caddo County, on left bank 10 ft (3.0 m) upstream from county road bridge, 0.3 mi (0.5 km) upstream from Punjo Creek, 1.2 mi (1.9 km) downstream from Fort Cobb Dam, 3.0 mi (4.8 km) north of Fort Cobb, and at mile 5.8 (9.3 km).

DRAINAGE AREA.--313 mi^2 (811 km^2). Area at site used prior to Oct. 1, 1969, 319 mi^2 (826 km^2).

PERIOD OF RECORD.--October 1939 to current year. Monthly discharge only for some periods, published in WSP 1311. Prior to October 1960, published as Pond Creek near Fort Cobb.

GAGE.--Water-stage recorder. Datum of gage is 1,259.49 ft (383.893 m) above mean sea level (Bureau of Reclamation bench mark). Oct. 1, 1939, to Aug. 29, 1940, nonrecording gage and Aug. 30, 1940, to Sept. 30, 1969, water-stage recorder at site 0.8 mi (1.3 km) downstream at datum 6.92 ft (2.109 m) lower.

AVERAGE DISCHARGE.--19 years (1939-58), 50.2 ft^3/s (1.42 m^3/s) 36,340 acre-ft/yr (44.8 hm^3/yr); 16 years (1958-74), 14.3 ft^3/s (0.405 m^3/s), 10,360 acre-ft/yr (12.8 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 170 ft^3/s (4.81 m^3/s) Sept. 5, gage height, 5.80 ft (1.768 m); minimum daily, 1.4 ft^3/s (0.040 m^3/s) June 30.
Period of record: Maximum discharge, 35,000 ft^3/s (991 m^3/s) May 17, 1949, gage height, 18.72 ft (5.706 m), from floodmark in gage well at former site and datum, from rating curve extended above 4,300 ft^3/s (122 m^3/s) on basis of contracted-opening measurements at gage heights 16.62 (5.066 m), 17.58 (5.358 m), and 18.72 ft (5.706 m), at former site and datum; minimum daily, 0.2 ft^3/s (0.006 m^3/s) Sept. 20, 24-28, 1956.
Flood of June 15, 1973, reached a stage of 19.3 ft (5.88 m), site and datum used in 1939, from information by local resident.

REMARKS.--Records fair. Flow regulated since March 1959 by Fort Cobb Reservoir (see sta. 07325900).

REVISIONS (WATER YEARS).--WSP 1087: 1938. WSP 1211: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.2	2.2	2.6	2.5	2.6	2.9	2.4	6.3	3.8	1.5	2.5	1.8
2	2.2	2.2	2.5	2.5	2.8	2.8	2.3	11	3.7	2.4	2.5	1.9
3	2.2	2.3	3.0	2.5	2.8	2.5	2.2	3.0	3.6	1.7	2.8	1.9
4	2.6	2.4	2.8	2.6	2.8	2.5	2.2	3.0	3.6	1.6	2.8	1.7
5	2.2	2.4	2.6	2.6	2.8	2.5	2.2	3.0	3.6	1.7	2.8	78
6	2.2	2.4	2.6	2.7	3.1	2.5	2.2	3.0	3.6	1.6	3.2	154
7	2.2	2.4	2.6	2.6	3.1	2.5	2.2	3.0	3.6	1.7	2.8	149
8	2.2	2.6	2.6	2.7	3.1	2.5	2.1	3.0	3.6	1.6	2.8	149
9	2.3	2.6	2.6	2.6	3.1	2.5	2.1	3.0	3.6	1.9	3.1	148
10	2.2	2.4	2.5	2.5	3.1	2.5	2.2	3.0	3.4	1.8	4.8	147
11	3.3	2.5	2.6	2.4	2.9	2.5	3.3	3.0	3.3	2.4	3.3	146
12	1.9	2.5	2.6	2.3	2.9	2.5	2.4	3.0	3.3	1.9	3.3	144
13	1.9	2.5	2.6	2.3	2.9	2.5	2.4	3.0	5.2	2.5	3.3	142
14	1.9	2.5	2.6	2.4	2.9	2.5	2.2	3.0	3.3	2.5	3.2	141
15	1.9	2.5	2.5	2.5	2.9	2.5	2.4	3.0	3.1	2.6	3.2	140
16	1.9	2.7	2.5	2.5	2.9	2.5	2.4	3.0	3.0	2.6	3.1	139
17	1.8	2.8	2.5	2.5	2.9	2.5	2.5	3.0	3.1	2.7	3.1	137
18	1.9	2.8	2.6	2.5	3.0	2.5	2.6	3.0	3.1	2.8	3.1	136
19	1.9	2.8	2.6	2.5	3.0	2.5	2.7	3.0	3.1	2.3	3.0	137
20	1.8	3.1	2.6	2.6	4.2	3.0	2.8	3.0	3.1	2.5	3.1	135
21	1.8	2.9	2.6	2.7	3.3	2.5	2.8	3.0	3.1	2.4	3.0	133
22	1.9	2.9	2.6	2.7	2.5	2.5	2.7	3.0	3.0	2.2	3.0	132
23	1.9	2.9	2.6	2.7	2.4	2.5	2.7	3.0	3.0	2.9	3.3	131
24	1.9	3.6	2.6	2.8	2.4	2.5	2.6	3.0	3.0	2.3	3.1	131
25	1.9	3.0	2.6	2.8	2.5	2.5	2.1	3.0	3.0	2.2	3.3	129
26	1.9	2.9	2.6	2.7	2.7	2.5	5.9	3.0	3.0	2.5	3.4	137
27	1.9	2.8	2.5	2.7	2.9	2.5	4.6	3.0	5.1	2.3	5.9	147
28	2.1	2.8	2.5	2.7	3.0	2.5	4.6	4.1	4.0	2.6	2.9	147
29	2.2	2.6	2.6	2.8	------	2.5	5.4	4.1	1.5	3.2	1.8	146
30	2.2	2.5	2.7	2.7	------	2.5	5.9	4.1	1.4	4.7	1.8	74
31	2.2	------	2.6	2.7	------	2.5	------	7.6	------	4.4	1.8	------
TOTAL	64.6	79.5	80.6	80.3	81.5	78.7	87.1	112.2	99.8	74.0	95.1	3,536.3
MEAN	2.08	2.65	2.60	2.59	2.91	2.54	2.90	3.62	3.33	2.39	3.07	118
MAX	3.3	3.6	3.0	2.8	4.2	3.0	5.9	11	5.2	4.7	5.9	154
MIN	1.8	2.2	2.5	2.3	2.4	2.5	2.1	3.0	1.4	1.5	1.8	1.7
AC-FT	128	158	160	159	162	156	173	223	198	147	189	7,010

CAL YR 1973 TOTAL 959.5 MEAN 2.63 MAX 19 MIN 1.4 AC-FT 1,900
WTR YR 1974 TOTAL 4,469.7 MEAN 12.2 MAX 154 MIN 1.4 AC-FT 8,870

07326500 WASHITA RIVER AT ANADARKO, OKLA.

LOCATION.--Lat 35°05'06", long 98°14'35", in NW 1/4 sec.15, T.7 N., R.10 W., Caddo County, at left bank 35 ft (10.7 m) upstream from bridge on U.S. Highway 281 at north edge of Anadarko, 8.1 mi (13.0 km) upstream from Sugar Creek, and about 305.2 (491.1 km).

DRAINAGE AREA.--3,656 mi^2 (9,460 km^2).

PERIOD OF RECORD.--October 1902 to September 1908; June 1924 to June 1925, published as "near Anadarko", October 1935 to February 1938; October 1963 to current year. Monthly discharge only for some periods, published in WSP 1311.

GAGE.--Water-stage recorder. Datum of gage is 1,150.00 ft (350.520 m) above mean sea level. Oct. 26, 1902, to June 30, 1908, nonrecording gage at former bridge 125 ft (38.1 m) downstream at datum estimated to be 2.8 ft (8.53 m) higher. May 25, 1924, to June 30, 1925, nonrecording gage at county road bridge 14 mi (22.5 km) downstream at different datum. Jan. 10, 1936, to Mar. 7, 1938, nonrecording gage on upstream side of bridge on U.S. Highway 281 at datum 1.88 ft (0.573 m) higher.

AVERAGE DISCHARGE.--19 years (1902-8, 1935-37, 1963-74), 384 ft^3/s (10.87 m^3/s), 278,200 acre-ft/yr (343 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 3,050 ft^3/s (86.4 m^3/s) May 3, gage height, 14.40 ft (4.389 m); minimum daily, 10 ft^3/s (0.28 m^3/s) July 26, 27.
Period of record: Maximum discharge, about 29,000 ft^3/s (821 m^3/s) May 25, 1903, gage height, 26.8 ft (8.169 m), site and datum then in use, affected by backwater; no flow Aug. 1, 1964.
Flood in May 1949, reached an elevation of 1,176.7 ft (358.66 m), from floodmark, at right bank on downstream side of bridge on U.S. Highway 281.

REMARKS.--Some regulation by low-water dams upstream and since March 1959, by Fort Cobb Reservoir (see sta. 07325900), since February 1061, by Foss Reservoir (see sta. 07324300), and by numerous flood-retarding structures.

COOPERATION.--Records furnished by Agricultural Research Service.

REVISIONS (WATER YEARS).--WSP 1311: 1903, 1907-8, drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	601	161	136	131	120	106	140	715	236	58	24	508
2	466	154	136	123	120	112	140	1,610	182	54	26	375
3	374	154	145	117	117	109	137	2,550	178	48	32	319
4	337	151	170	114	120	112	131	2,710	175	45	37	306
5	510	151	224	114	120	114	125	1,500	165	41	41	838
6	1,170	151	194	114	117	114	125	856	162	40	43	534
7	951	154	170	112	114	112	123	633	178	35	43	389
8	491	154	151	125	114	123	125	510	165	33	45	319
9	337	154	145	117	112	140	123	404	149	32	50	289
10	284	154	142	112	112	205	123	337	285	26	120	289
11	388	151	142	112	112	398	143	328	691	25	1,260	272
12	778	151	145	112	114	805	146	302	391	26	1,160	260
13	1,500	148	142	112	114	1,070	149	276	240	26	342	248
14	916	148	145	146	114	673	337	248	189	24	156	236
15	670	151	142	140	120	459	354	229	178	21	106	236
16	515	157	139	128	123	334	240	214	159	20	84	232
17	409	157	136	128	125	252	199	203	152	19	62	232
18	327	151	133	131	134	217	182	196	140	19	48	232
19	279	151	130	134	140	221	165	178	128	19	47	240
20	251	148	127	134	137	210	159	165	117	17	62	272
21	235	154	124	134	303	203	199	168	112	17	54	735
22	220	154	121	131	253	192	172	165	106	15	48	1,350
23	209	151	121	128	152	189	206	182	104	14	48	928
24	194	157	145	125	131	178	172	359	99	12	48	619
25	187	170	148	120	120	172	146	225	81	12	48	499
26	180	184	154	120	112	168	134	865	75	10	86	547
27	180	180	145	120	109	165	128	1,040	70	10	205	781
28	174	167	139	120	106	162	123	489	68	14	2,200	543
29	167	148	139	120	------	159	137	351	64	18	2,310	440
30	167	139	136	120	------	152	149	280	64	18	2,310	380
31	164	------	136	120	------	146	------	264	------	21	1,240	------
TOTAL	13,631	4,655	4,502	3,814	3,685	7,772	4,932	18,552	5,103	789	12,385	13,448
MEAN	440	155	145	123	132	251	164	598	170	25.5	400	448
MAX	1,500	184	224	146	303	1,070	354	2,710	691	58	2,310	1,350
MIN	164	139	121	112	106	106	123	165	64	10	24	232
AC-FT	27,040	9,230	8,930	7,570	7,310	15,420	9,780	36,800	10,120	1,560	24,570	26,670

CAL YR 1973 TOTAL 157,474 MEAN 431 MAX 4,640 MIN 39 AC-FT 312,300
WTR YR 1974 TOTAL 93,268 MEAN 256 MAX 2,710 MIN 10 AC-FT 185,000

PEAK DISCHARGE (BASE, 3,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE
5-3	2215	14.40	3,050

07327000 SUGAR CREEK NEAR GRACEMONT, OKLA.

LOCATION.--Lat 35°10'30", long 98°15'20", in NW 1/4 NE 1/4 sec.16, T.8 N., R.10 W., Caddo County, on downstream side of county road bridge, 1.0 mi (1.6 km) south of Gracemont, 2.1 mi (3.4 km) downstream from Yellow Creek, 1.1 mi (1.8 km) upstream from bridge on U.S. Highway 281, and at mile 9.9 (15.9 km).

DRAINAGE AREA.--208 mi^2 (539 km^2).

PERIOD OF RECORD.--October 1955 to September 1974 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 1,190.00 ft (362.712 m) above mean sea level. Prior to Oct. 1, 1959, at site 1.1 mi (1.8 km) downstream at datum 3.72 ft (1.134 m) higher. Oct. 1, 1959, to Dec. 31, 1966, at datum 20.00 ft (6.096 m) higher and Jan. 1, 1967, to Mar. 31, 1968, at datum 10.00 ft (3.048 m) higher, at site 1.1 mi (1.8 km) upstream.

AVERAGE DISCHARGE.--19 years, 14.7 ft^3/s (0.416 m^3/s), 10,650 acre-ft/yr (13.1 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 831 ft^3/s (23.5 m^3/s) Feb. 21, gage height, 6.50 ft (1.981 m); minimum daily, 0.10 ft^3/s (0.003 m^3/s) at times.
Period of record: Maximum discharge, 8,500 ft^3/s (241 m^3/s) Sept. 21, 1965, gage height, 10.77 ft (3.283 m), datum then in use; no flow at times in most years.
Flood of May 17, 1949, reached a stage of 10.8 ft (3.29 m) at former site and datum, from floodmarks, discharge, 32,000 ft^3/s (906 m^3/s), on basis of slope-area measurement of peak flow.

REMARKS.--Some regulation by flood-retarding structures and some small diversions for irrigation above station.

COOPERATION.--Records furnished by Agricultural Research Service.

REVISIONS (WATER YEARS).--WSP 1731: 1960(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	8.6	12	8.5	11	18	10	228	14	.40	.50	6.2
2	9.5	9.1	11	5.1	10	17	9.4	210	12	.30	.20	6.9
3	7.4	8.2	31	5.1	10	17	9.0	113	20	.20	.80	5.8
4	32	6.1	34	5.8	9.4	16	7.7	74	17	.30	.70	3.7
5	33	5.1	28	5.8	9.4	16	6.9	48	14	.20	2.0	3.2
6	27	6.1	22	5.8	9.0	16	8.1	34	11	.20	.90	3.0
7	23	7.3	19	5.8	9.0	13	9.0	27	12	.20	.80	3.0
8	19	8.2	16	6.5	8.1	17	7.3	22	165	.20	.70	2.6
9	12	7.7	16	5.8	9.4	25	7.3	19	85	.10	1.1	2.0
10	10	7.3	13	5.1	8.5	104	6.9	15	54	.10	206	2.0
11	93	8.2	13	5.1	8.5	110	43	13	43	.10	74	2.4
12	62	9.1	13	5.8	9.4	59	27	10	29	.10	42	1.4
13	47	9.5	12	6.9	10	41	21	9.4	19	.10	31	.70
14	33	11	12	13	10	34	15	7.7	18	.10	25	.70
15	27	10	11	16	11	29	12	5.8	14	.10	13	.70
16	22	7.7	10	15	13	24	11	5.1	12	.20	5.1	3.0
17	16	8.2	10	15	13	21	10	4.8	17	.10	3.2	4.0
18	13	8.6	9.5	16	13	19	9.4	4.0	14	.10	2.0	3.0
19	11	8.6	9.1	14	16	18	9.0	3.2	10	.10	1.7	23
20	9.1	19	9.1	14	47	17	13	2.8	7.7	.10	1.4	26
21	8.6	16	9.1	15	322	23	20	37	6.2	.10	.90	9.0
22	8.2	12	13	14	85	21	14	34	4.3	.10	.70	6.2
23	7.7	11	11	14	60	20	12	32	3.5	.10	.80	6.9
24	6.9	27	11	13	38	18	10	21	1.7	.10	1.3	26
25	6.5	32	10	12	28	16	8.5	163	.90	.10	1.5	12
26	6.5	27	10	13	24	16	6.9	63	.80	.10	2.2	6.9
27	7.7	23	9.5	12	22	16	6.5	42	.70	.20	46	5.8
28	6.5	18	10	13	18	16	8.5	26	.70	.20	22	4.5
29	5.8	15	10	12	------	14	37	18	.50	7.7	8.5	3.5
30	6.5	13	10	12	------	13	54	14	.70	2.0	6.5	3.2
31	6.9	------	9.1	12	------	12	------	22	------	.70	5.5	------
TOTAL	598.8	367.6	423.4	322.1	841.7	816	429.4	1,327.8	607.70	14.70	508.00	187.30
MEAN	19.3	12.3	13.7	10.4	30.1	26.3	14.3	42.8	20.3	.47	16.4	6.24
MAX	93	32	34	16	322	110	54	228	165	7.7	206	26
MIN	5.8	5.1	9.1	5.1	8.1	12	6.5	2.8	.50	.10	.20	.70
AC-FT	1,190	729	840	639	1,670	1,620	852	2,630	1,210	29	1,010	372

CAL YR 1973 TOTAL 8,280.90 MEAN 22.7 MAX 480 MIN 0 AC-FT 16,430
WTR YR 1974 TOTAL 6,444.50 MEAN 17.7 MAX 322 MIN .10 AC-FT 12,780

PEAK DISCHARGE (BASE, 900 FT^3/S).--No peak above base.

07327490 LITTLE WASHITA RIVER NEAR NINNEKAH, OKLA.

LOCATION.--Lat 34°56'41", long 97°57'08", in SE 1/4 SE 1/4 sec.32, T.6 N., R.7 W., Grady County, at left bank on downstream side of bridge on U.S. Highway 81, 1.0 mi (1.6 km) upstream from Rock Creek, 1.5 mi (2.4 km) west of Ninnekah, 5.5 mi (8.8 km) south of Chickasha, and at mile 8.4 (13.5 km).

DRAINAGE AREA.--208 mi^2 (539 km^2).

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

GAGE.--Water-stage recorder. Datum of gage is 1,065.94 ft (324.899 m) above mean sea level.

AVERAGE DISCHARGE.--11 years, 23.8 ft^3/s (0.674 m^3/s), 17,240 acre-ft/yr (21.3 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 1,600 ft^3/s (45.3 m^3/s) Apr. 30, gage height, 14.32 ft (4.365 m); minimum daily, 4.0 ft^3/s (0.11 m^3/s) July 27-29.
Period of record: Maximum discharge, 7,560 ft^3/s (214 m^3/s) May 10, 1964, gage height, 20.65 ft (6.294 m); no flow at times in most years.

REMARKS.--Small diversions above station for irrigation.

COOPERATION.--Records furnished by Agricultural Research Service.

REVISIONS (WATER YEARS).--WRD Okla. 1971, 1964, 65 (M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37	32	42	31	26	31	34	178	47	11	4.9	10
2	34	31	43	30	26	32	34	251	35	10	33	11
3	35	30	53	29	25	34	36	77	40	9.8	8.1	12
4	101	30	53	29	25	35	39	53	34	11	6.2	11
5	63	31	47	29	26	38	37	44	30	12	5.9	10
6	44	32	43	29	27	38	36	43	78	11	10	10
7	33	33	41	29	27	34	34	38	126	9.4	9.4	10
8	30	35	46	31	26	45	35	38	54	8.1	6.9	9.8
9	33	38	45	30	28	182	37	36	30	8.1	15	9.4
10	35	34	45	28	28	338	38	34	26	8.1	343	9.8
11	220	33	44	28	28	341	207	34	26	7.3	55	11
12	146	35	41	28	31	95	70	32	26	6.9	19	11
13	152	34	40	31	34	74	40	32	26	6.9	17	11
14	64	33	41	39	32	66	33	33	27	7.3	15	10
15	52	35	40	34	34	64	34	34	24	6.6	13	11
16	54	38	39	34	33	59	34	33	22	6.6	10	33
17	51	37	39	31	31	53	34	32	396	6.9	9.4	31
18	50	34	40	32	31	47	33	30	82	6.9	8.9	25
19	45	41	41	31	31	43	34	30	30	7.3	7.7	23
20	41	117	38	31	29	46	37	30	24	5.9	6.9	25
21	38	56	41	28	208	53	37	31	22	4.3	6.6	27
22	34	54	38	28	76	45	35	36	19	4.3	6.6	22
23	35	53	37	28	41	45	33	32	18	4.3	7.7	20
24	34	187	39	28	36	43	32	33	17	4.3	10	32
25	33	132	38	28	34	39	31	440	16	4.6	8.5	72
26	33	57	39	30	32	40	31	257	16	4.6	8.1	27
27	46	50	39	30	32	40	31	81	15	4.0	24	22
28	39	45	40	29	31	37	31	48	14	4.0	17	20
29	37	41	37	27	------	38	91	37	13	4.0	15	17
30	35	41	37	26	------	37	616	34	12	4.3	12	14
31	33	------	37	26	------	36	------	67	------	4.6	11	------
TOTAL	1,717	1,479	1,283	922	1,068	2,148	1,884	2,208	1,345	214.4	730.8	567.0
MEAN	55.4	49.3	41.4	29.7	38.1	69.3	62.8	71.2	44.8	6.92	23.6	18.9
MAX	220	187	53	39	208	341	616	440	396	12	343	72
MIN	30	30	37	26	25	31	31	30	12	4.0	4.9	9.4
AC-FT	3,410	2,930	2,540	1,830	2,120	4,260	3,740	4,380	2,670	425	1,450	1,120

CAL YR 1973 TOTAL 25,180.6 MEAN 69.0 MAX 2,930 MIN 8.8 AC-FT 49,950
WTR YR 1974 TOTAL 15,566.2 MEAN 42.6 MAX 616 MIN 4.0 AC-FT 30,880

PEAK DISCHARGE (BASE, 1,500 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE
3-10	2145	14.25	1,550
4-30	0500	14.32	1,600

07328070 WINTER CREEK NEAR ALEX, OKLA.

LOCATION.--Lat 34°59'35", long 97°45'40", in NE 1/4 sec.18, T.6 N., R.5 W., Grady County, at left bank 1,000 ft (304.8 m) downstream from county road bridge, 0.7 mi (1.1 km) downstream from East Winter Creek, 3.2 mi (5.2 km) upstream from mouth, and 5.5 mi (8.9 km) north of Alex.

DRAINAGE AREA.--33 mi^2 (86 km^2).

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

GAGE.--Water-stage recorder and broad crest V-notch weir. Datum of gage is 1,048.20 ft (319.491 m) above mean sea level.

AVERAGE DISCHARGE.--10 years, 7.92 ft^3/s (0.224 m^3/s), 5,740 acre-ft/yr (7.08 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 906 ft^3/s (25.7 m^3/s) Apr. 29, gage height, 5.35 ft (1.631 m); minimum daily, 0.60 ft^3/s (0.017 m^3/s) July 26-28.
Period of record: Maximum discharge, 4,280 ft^3/s (121 m^3/s) May 24, 1973 gage height, 7.88 ft (2.402 m); no flow in most years.
Flood of May 10, 1964, reached a stage of 8.62 ft (2.627 m).

REMARKS.--Flow regulated by 16 flood-retarding structures, combined capacity, 1,050 acre-ft (1.29 hm^3). Minor diversions for irrigation above station.

COOPERATION.--Records furnished by Agricultural Research Service.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	8.7	16	7.6	8.4	8.4	6.5	94	10	2.2	3.1	2.1
2	10	7.9	14	7.1	8.2	8.4	6.3	84	8.7	2.1	2.4	5.8
3	9.4	7.6	13	7.1	8.2	8.2	5.6	53	8.4	2.1	1.7	3.1
4	13	7.6	12	7.1	8.2	8.2	5.4	40	9.0	3.6	1.9	2.5
5	10	7.3	11	7.9	8.2	7.9	5.4	31	8.2	2.6	1.7	2.1
6	12	7.1	11	7.1	8.2	7.3	5.4	21	8.2	2.4	1.9	1.9
7	10	7.1	11	7.9	7.6	7.3	5.1	15	10	2.1	1.4	1.6
8	9.0	7.3	11	10	7.6	7.3	5.1	13	10	1.9	.90	1.7
9	8.4	7.3	10	7.1	7.6	7.6	5.1	12	8.2	1.7	9.8	1.5
10	7.1	7.3	10	7.1	7.6	23	5.4	11	6.8	1.6	55	1.2
11	19	7.3	10	7.1	7.6	18	21	9.7	6.3	1.4	18	1.1
12	24	7.1	10	7.1	7.6	13	12	8.2	5.8	1.5	12	.90
13	17	7.1	10	8.4	7.6	11	10	8.4	5.6	1.4	9.7	1.2
14	14	7.6	10	9.7	7.6	10	8.4	8.2	5.1	1.3	7.1	1.9
15	12	7.3	10	9.7	7.6	9.4	7.9	7.9	4.7	1.2	5.1	2.2
16	10	6.8	10	9.4	7.6	8.7	7.3	7.1	4.3	1.2	4.1	7.1
17	9.0	7.6	10	9.4	7.6	8.4	6.8	6.3	4.9	1.2	3.4	4.3
18	8.7	7.6	10	9.4	9.0	8.4	6.5	5.8	4.5	1.1	2.8	3.8
19	8.7	83	7.1	9.7	8.7	7.9	6.5	5.6	3.9	1.0	2.1	3.9
20	8.4	107	8.7	9.7	8.2	9.0	7.1	5.1	3.8	.90	1.4	4.7
21	7.9	55	9.7	9.4	31	9.7	7.1	5.4	3.4	1.1	1.2	4.7
22	7.3	41	10	9.4	15	8.7	6.8	5.4	3.6	.70	1.2	3.4
23	7.3	32	9.7	9.0	12	8.4	6.3	5.4	3.4	.70	1.2	3.2
24	7.1	150	10	9.0	11	7.6	5.8	5.6	3.1	.70	1.3	8.3
25	6.8	76	9.7	8.7	9.7	7.6	5.6	72	2.8	.70	1.3	10
26	6.8	53	9.7	8.4	8.7	7.9	5.6	37	2.9	.60	1.4	6.5
27	27	39	9.4	8.2	8.2	7.9	5.8	19	3.4	.60	5.8	5.4
28	13	29	9.4	7.9	8.4	8.2	5.8	13	2.5	.60	3.2	4.3
29	12	22	9.4	7.9	------	8.2	55	10	2.2	2.8	2.8	3.8
30	11	19	9.4	7.9	------	7.1	192	8.4	2.4	2.5	2.5	3.2
31	9.7	------	8.2	7.9	------	6.8	------	13	------	1.4	2.4	------
TOTAL	347.6	839.6	319.4	259.3	262.9	285.5	444.6	640.5	166.1	46.90	169.80	107.40
MEAN	11.2	28.0	10.3	8.36	9.39	9.21	14.8	20.7	5.54	1.51	5.48	3.58
MAX	27	150	16	10	31	23	192	94	10	3.6	55	10
MIN	6.8	6.8	7.1	7.1	7.6	6.8	5.1	5.1	2.2	.60	.90	.90
AC-FT	689	1,670	634	514	521	566	882	1,270	329	93	337	213

CAL YR 1973 TOTAL 7,450.10 MEAN 20.4 MAX 465 MIN 2.5 AC-FT 14,780
WTR YR 1974 TOTAL 3,889.60 MEAN 10.7 MAX 192 MIN .60 AC-FT 7,720

PEAK DISCHARGE (BASE, 500 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE
11-19	2115	5.08	729
4-29	2330	5.35	906

07328100 WASHITA RIVER AT ALEX, OKLA.

LOCATION.--Lat 34°55'35", long 97°46'30", in NW 1/4 sec.7, T.5 N., R.5 W., Grady County, near left bank on downstream side of county road bridge, 1.0 mile (1.6 km) north of Alex, 3.8 miles (6.1 km) downstream from Winter Creek, and at mile 226.5 (362.4 km).

DRAINAGE AREA.--4,787 mi^2 (12,398 km^2).

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

GAGE.--Water-stage recorder. Datum of gage is 1,000.00 ft (304.800 m) above mean sea level.

AVERAGE DISCHARGE.--10 years, 326 ft^3/s (9.232 m^3/s), 236,200 acre-ft/yr (291 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 4,790 ft^3/s (136 m^3/s) Mar. 11, gage height, 12.52 ft (3.816 m); minimum daily, 12 ft^3/s (0.34 m^3/s) July 28, 29.
Period of record: Maximum discharge, 9,350 ft^3/s (265 m^3/s) May 7, 1969; maximum gage height, 18.34 ft (5.590 m); June 2, 1973; no flow Aug. 13-18, 1970, Aug. 30 to Sept. 1, 1971.

REMARKS.--Some regulation by Fort Cobb Reservoir (sta. 07325900), by Foss Reservoir (sta. 07324300), and by numerous flood-retarding structures.

COOPERATION.--Records furnished by Agricultural Research Service.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,060	283	312	213	213	252	254	1,020	1,330	100	91	1,440
2	793	266	293	203	209	248	242	3,050	582	93	82	700
3	669	260	285	201	209	244	228	2,270	415	87	60	529
4	685	256	300	201	203	242	220	2,490	380	84	47	437
5	698	256	323	201	203	234	214	2,750	327	91	42	385
6	629	268	317	201	197	232	207	1,950	291	82	42	576
7	993	258	337	211	196	228	199	1,280	535	76	44	683
8	1,050	254	315	250	194	226	190	989	416	64	51	495
9	733	254	291	240	196	1,800	190	822	385	57	54	417
10	577	248	270	230	196	1,190	190	665	428	52	1,300	368
11	836	246	260	220	196	3,620	510	558	311	54	1,360	334
12	1,080	244	256	213	194	1,220	457	481	555	57	925	322
13	1,390	240	254	213	194	949	337	440	638	53	1,260	309
14	1,510	238	252	232	192	1,220	263	408	424	49	630	302
15	1,100	233	250	252	190	881	244	373	293	46	362	289
16	823	227	244	259	192	678	430	341	236	43	259	329
17	689	231	242	278	192	561	420	306	416	40	192	313
18	606	238	244	250	203	483	344	282	371	36	143	295
19	548	331	238	244	203	411	302	267	238	33	115	289
20	465	1,300	219	246	201	380	278	252	214	30	95	297
21	393	476	221	242	656	388	288	236	178	26	81	318
22	381	374	242	242	982	368	332	230	172	23	76	453
23	355	332	240	236	570	353	304	236	164	20	81	1,020
24	339	786	235	230	408	334	269	230	156	21	72	973
25	328	1,200	231	226	317	322	284	901	151	18	66	823
26	317	663	238	224	291	320	254	986	146	18	62	647
27	398	521	244	220	273	309	226	813	104	14	113	570
28	363	442	244	220	259	304	220	1,190	111	12	145	745
29	293	390	238	216	------	293	240	734	107	12	1,380	664
30	285	348	235	216	------	275	2,300	527	104	102	2,050	520
31	281	------	225	214	------	269	------	746	------	219	2,150	------
TOTAL	20,667	11,663	8,095	7,044	7,729	18,834	10,436	27,823	10,178	1,712	13,430	15,842
MEAN	667	389	261	227	276	608	348	898	339	55.2	433	528
MAX	1,510	1,300	337	278	982	3,620	2,300	3,050	1,330	219	2,150	1,440
MIN	281	227	219	201	190	226	190	230	104	12	42	289
AC-FT	40,990	23,130	16,060	13,970	15,330	37,360	20,700	55,190	20,190	3,400	26,640	31,420

CAL YR 1973 TOTAL 245,521 MEAN 673 MAX 6,390 MIN 62 AC-FT 487,000
WTR YR 1974 TOTAL 153,453 MEAN 420 MAX 3,620 MIN 12 AC-FT 304,400

PEAK DISCHARGE (BASE, 3,800 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE
3-11	0600	12.52	4,790

07328500 WASHITA RIVER NEAR PAULS VALLEY, OKLA.

LOCATION.--Lat 34°45'17", long 97°15'04", in SE 1/4 sec.1, T.3 N., R.1 W., Garvin County, on downstream side of right pier of bridge on U.S. Highway 77, 2 mi (3.2 km) northwest of Pauls Valley, 6 mi (9.7 km) downstream from Owl Creek, 7 mi (11.3 km) upstream from Washington Creek, and at mile 146.5 (235.7 km).

DRAINAGE AREA.--5,330 mi^2 (13,805 km^2).

PERIOD OF RECORD.--May to December 1899 (gage heights only), October 1937 to current year. Monthly discharge only for some periods, published in WSP 1311. Published as "at Pauls Valley, Indian Territory" in 1899.

GAGE.--Water-stage recorder. Datum of gage is 854.61 ft (260.485 m) above mean sea level. During 1899, nonrecording gage at site 9 mi (14.5 km) downstream at different datum. Mar. 29, 1938, to Jan. 25, 1939, nonrecording gage and Jan. 26, 1939, to Oct. 6, 1948, water-stage recorder at site 0.7 mi (1.1 km) upstream at datum 1.53 ft (0.466 m) higher.

AVERAGE DISCHARGE.--37 years, 692 ft^3/s (19.6 m^3/s), 501,400 acre-ft/yr (618 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 8,580 ft^3/s (243 m^3/s) Nov. 25, gage height, 16.50 ft (5.029 m); minimum daily, 16 ft^3/s (0.45 m^3/s) July 27.
Period of record: Maximum discharge, 35,800 ft^3/s (1,010 m^3/s) May 18, 1957, gage height, 27.34 ft (8.333 m); maximum gage height, 29.88 ft (9.107 m) May 11, 1950; no flow at times in 1956, 1964, 1966-67, 1970-72.
Stream is reported to have receded to no flow in 1882 and in 1897 (from information by local resident).

REMARKS.--Records fair. Some diversion for irrigation above station. Some regulation since March 1959, by Fort Cobb Reservoir (see sta. 07325900), since February 1961, by Foss Reservoir (see sta. 07324300), and by numerous flood-retarding structures.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,720	363	611	330	306	343	330	3,180	1,040	145	74	1,810
2	1,190	343	536	330	300	325	330	2,200	1,240	145	223	1,380
3	906	331	505	330	300	314	320	3,260	770	145	156	901
4	810	318	594	330	302	306	310	2,720	816	156	120	598
5	766	314	498	335	300	299	300	2,880	673	249	108	503
6	899	314	473	340	295	295	290	2,950	548	167	87	434
7	718	326	459	350	296	292	280	2,380	2,210	144	72	450
8	908	335	461	337	297	290	270	1,420	1,050	133	60	681
9	963	335	449	336	294	290	264	1,110	816	122	174	496
10	722	341	419	342	295	1,350	274	936	618	110	738	430
11	1,240	340	392	337	294	2,080	293	821	598	102	1,460	395
12	2,440	344	380	340	295	3,280	395	699	525	82	1,240	364
13	2,980	355	374	339	295	1,480	548	606	503	82	1,120	349
14	1,830	363	364	342	295	1,180	447	555	651	87	1,020	335
15	1,630	362	359	367	295	1,290	370	521	485	89	651	321
16	1,220	360	355	342	295	978	323	485	417	72	474	364
17	938	360	349	350	296	840	346	450	401	72	349	411
18	782	350	348	364	296	620	443	434	517	70	269	364
19	665	350	354	364	294	500	414	398	517	69	244	335
20	590	1,440	343	341	295	420	395	373	379	64	213	326
21	503	1,300	335	337	356	480	364	370	326	55	192	346
22	424	722	328	340	723	430	364	355	279	52	149	343
23	386	568	340	335	939	400	364	326	249	47	140	443
24	354	3,540	350	325	646	370	379	326	237	35	129	1,290
25	328	5,520	345	321	522	360	355	995	225	31	129	1,690
26	310	2,140	342	317	449	350	346	4,910	213	25	129	986
27	853	1,480	341	317	394	350	352	1,840	203	16	151	716
28	683	1,050	349	319	364	340	323	1,340	201	25	163	598
29	529	820	354	323	------	340	308	1,440	176	21	296	681
30	418	710	354	320	------	340	2,390	1,000	158	38	1,300	619
31	391	------	340	310	------	335	------	816	------	42	1,580	------
TOTAL	29,096	25,794	12,401	10,410	10,328	20,867	12,487	42,096	17,041	2,692	13,210	18,959
MEAN	939	860	400	336	369	673	416	1,358	568	86.8	426	632
MAX	2,980	5,520	611	367	939	3,280	2,390	4,910	2,210	249	1,580	1,810
MIN	310	314	328	310	294	290	264	326	158	16	60	321
AC-FT	57,710	51,160	24,600	20,650	20,490	41,390	24,770	83,500	33,800	5,340	26,200	37,610

CAL YR 1973 TOTAL 345,869 MEAN 948 MAX 7,570 MIN 120 AC-FT 686,000
WTR YR 1974 TOTAL 215,381 MEAN 590 MAX 5,520 MIN 16 AC-FT 427,200

PEAK DISCHARGE (BASE, 5,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE
10-12	2300	14.09	6,070
11-25	0015	16.50	8,580
5-26	0145	13.09	7,250

07329500 RUSH CREEK NEAR MAYSVILLE, OKLA.

LOCATION.--Lat 34°44'36", long 97°24'18", in SW 1/4 SW 1/4 sec.10, T.3 N., R.2 W., Garvin County, near right bank on downstream side of pier of bridge on State Highway 74, 2.8 miles (4.5 km) downstream from Panther Creek, 5.3 miles (8.5 km) south of Maysville, and at mile 14.2 (22.8 km).

DRAINAGE AREA.--206 mi^2 (534 km^2).

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

GAGE.--Water-stage recorder. Datum of gage is 903.04 ft (275.247 m) above mean sea level (State Highway Department bench mark).

AVERAGE DISCHARGE.--20 years (1954-74), 50.5 ft^3/s (1.430 m^3/s), 36,590 acre-ft/yr (45.1 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 9,160 ft^3/s (259 m^3/s) NOv. 24, gage height, 16.08 ft (4.901 m); minimum, 2.4 ft^3/s (0.068 m^3/s) July 28, 29.
Period of record: Maximum discharge, 38,500 ft^3/s (1,090 m^3/s) May 18, 1957, gage height, 23.62 ft (7.199 m), from rating curve extended above 5,300 ft^3/s (150 m^3/s) on basis of contracted-opening measurement of peak flow; no flow at times in most years.

REMARKS.--Records good.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	70	29	55	31	26	31	24	179	35	9.5	3.1	9.6
2	55	27	49	33	26	30	24	133	32	9.0	4.9	22
3	45	27	56	35	26	29	23	107	115	8.9	3.4	21
4	40	26	63	34	25	28	22	86	74	54	3.2	14
5	35	26	38	35	26	27	21	61	48	45	3.0	9.2
6	60	27	30	36	26	27	21	53	37	35	3.2	7.5
7	40	28	31	37	26	26	20	37	102	26	3.3	6.6
8	30	28	33	39	25	26	19	30	74	16	3.1	6.1
9	25	27	32	37	24	26	19	25	82	14	2.9	5.9
10	23	28	31	39	24	35	19	23	42	13	140	5.7
11	219	28	45	38	24	200	42	21	31	12	46	5.7
12	1,520	28	35	33	24	90	31	20	136	16	28	5.7
13	422	29	33	38	24	58	27	20	81	21	22	6.6
14	137	30	33	38	24	47	24	19	51	11	18	6.2
15	77	30	33	37	24	42	23	19	39	7.8	14	6.0
16	74	29	33	37	24	33	22	18	35	6.4	10	8.9
17	67	28	34	37	25	29	21	17	62	5.4	8.9	29
18	44	29	37	36	26	29	21	16	134	4.7	7.3	14
19	36	63	35	34	37	29	20	14	86	4.4	6.4	10
20	33	344	37	34	30	30	21	13	66	4.1	5.9	8.0
21	30	100	39	32	92	39	31	13	41	3.8	5.6	15
22	27	62	35	31	91	37	28	13	30	3.5	5.4	9.0
23	26	55	37	30	62	35	23	12	25	3.1	5.2	7.6
24	26	3,430	37	29	50	33	21	17	21	3.0	5.2	79
25	25	1,030	36	28	45	32	20	300	18	3.0	5.2	443
26	26	438	37	30	38	30	19	220	17	2.8	5.4	92
27	59	238	36	28	35	27	18	97	15	2.6	42	73
28	42	190	37	28	33	30	18	63	13	2.5	21	67
29	34	139	36	27	------	30	33	47	11	2.5	13	58
30	32	120	37	27	------	28	379	37	10	4.1	8.7	51
31	30	------	35	27	------	26	------	35	------	2.8	7.2	------
TOTAL	3,409	6,713	1,175	1,035	962	1,219	1,054	1,765	1,563	356.9	460.5	1,102.3
MEAN	110	224	37.9	33.4	34.4	39.3	35.1	56.9	52.1	11.5	14.9	36.7
MAX	1,520	3,430	63	39	92	200	379	300	136	54	140	443
MIN	23	26	30	27	24	26	18	12	10	2.5	2.9	5.7
AC-FT	6,760	13,320	2,330	2,050	1,910	2,420	2,090	3,500	3,100	708	913	2,190

CAL YR 1973 TOTAL 43,121.9 MEAN 118 MAX 3,430 MIN 5.6 AC-FT 85,530
WTR YR 1974 TOTAL 20,814.7 MEAN 57.0 MAX 3,430 MIN 2.5 AC-FT 41,290

PEAK DISCHARGE (BASE, 3,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE
10-12	1530	13.98	5,880
11-24	1630	16.08	9,160

07329700 WILDHORSE CREEK NEAR HOOVER, OKLA.

LOCATION.--Lat 34°32'29", long 97°14'49", on west line of SW 1/4 sec.19, T.1 N., R.1 E., Garvin County, on downstream left bank at bridge on State Highway 19A, 1.5 mi (2.4 km) north of Hoover, 1.8 mi (2.9 km) downstream from Sandy Creek, and at mile 7.9 (12.7 km).

DRAINAGE AREA.--604 mi^2 (1,564 km^2).

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1944, 1951-69. October 1969 to current year.

GAGE.--Water-stage recorder. Datum of gage is 803.3 ft (244.85 m) above mean sea level.

AVERAGE DISCHARGE.--5 years, 156 ft^3/s (4.418 m^3/s), 113,000 acre-ft/yr (139 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 13,100 ft^3/s (371 m^3/s) Nov. 24, gage height, 23.95 ft (7.300 m); minimum daily, 3.9 ft^3/s (0.11 m^3/s) July 27.
Period of record: Maximum discharge, 13,100 ft^3/s (371 m^3/s) Nov. 24, 1973; maximum gage height, 24.10 ft (7.346 m) Apr. 22, 1973; no flow at times.

REMARKS.--Records good except for period of no gage height record which is poor. Flow regulated by Duncan, Clear Creek, Humphries and Fuqua Lakes, combined surface-area, 3,340 acres (13.5 km^2), and capacity, 44,800 acre-ft (55.2 hm^3), and numerous flood-retarding structures.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	383	125	796	163	70	94	77	2,960	73	33	20	30
2	301	117	704	150	70	91	74	1,460	70	30	32	60
3	240	112	655	147	69	87	68	928	231	27	35	45
4	244	108	615	145	68	86	65	707	313	53	33	30
5	186	108	480	149	68	81	63	590	184	54	34	25
6	965	103	402	152	67	78	61	500	130	40	47	20
7	411	101	362	148	66	76	60	396	148	29	51	16
8	267	100	338	146	70	75	59	340	137	23	52	15
9	199	98	312	144	66	74	58	264	325	20	62	15
10	168	95	285	140	65	157	61	230	198	18	574	15
11	935	92	283	124	65	868	87	202	131	17	428	15
12	1,930	90	268	116	64	496	100	175	286	16	160	16
13	4,560	89	254	124	63	315	70	151	198	15	70	17
14	1,730	87	244	123	62	259	62	121	160	14	50	16
15	991	80	235	119	62	219	58	100	144	13	37	15
16	707	70	226	117	61	184	57	101	133	12	25	30
17	531	68	219	112	61	155	54	95	227	11	20	80
18	416	68	216	109	64	133	52	87	327	10	18	40
19	345	113	210	103	68	114	53	80	170	9.0	16	25
20	286	969	219	103	68	108	57	75	130	8.0	15	20
21	245	468	211	98	423	118	878	72	95	7.0	14	35
22	217	294	199	95	475	120	298	67	75	6.0	14	25
23	196	221	197	90	279	106	120	65	60	5.5	13	20
24	180	6,510	194	90	202	100	84	66	55	5.0	13	2,060
25	169	8,050	188	84	162	95	69	563	50	4.5	13	5,620
26	160	4,010	180	81	130	90	63	894	46	4.2	13	1,820
27	226	1,880	175	79	102	88	59	302	48	3.9	120	997
28	184	1,340	172	80	97	88	57	160	42	4.8	50	680
29	159	1,100	169	76	------	84	205	125	38	6.7	30	482
30	149	935	169	73	------	82	8,620	92	35	9.9	23	327
31	142	------	167	70	------	82	------	82	------	11	18	------
TOTAL	17,822	27,601	9,344	3,550	3,187	4,803	11,749	12,050	4,259	520.5	2,100	12,611
MEAN	575	920	301	115	114	155	392	389	142	16.8	67.7	420
MAX	4,560	8,050	796	163	475	868	8,620	2,960	327	54	574	5,620
MIN	142	68	167	70	61	74	52	65	35	3.9	13	15
AC-FT	35,350	54,750	18,530	7,040	6,320	9,530	23,300	23,900	8,450	1,030	4,170	25,010

CAL YR 1973 TOTAL 155,275.6 MEAN 425 MAX 8,720 MIN 3.0 AC-FT 308,000
WTR YR 1974 TOTAL 109,596.5 MEAN 300 MAX 8,620 MIN 3.9 AC-FT 217,400

PEAK DISCHARGE (BASE, 2,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-12	2400	20.47	8,910	4-30	0630	23.75	12,800
11-24	2315	23.95	13,100	9-25	0045	20.59	9,040

Note.--No gage height record Aug. 16 to Sept. 23.

07331000 WASHITA RIVER NEAR DURWOOD, OKLA.

LOCATION.--Lat 34°14'03", long 96°58'32", in NW 1/4 SW 1/4 sec.3, T.4 S., R.3 E., Carter County, near left bank on downstream side of pier of bridge on U.S. Highway 177, 1.3 miles (2.1 km) downstream from Caddo Creek, 4 miles (6.4 km) north of Durwood, and at mile 63.4 (102.0 km).

DRAINAGE AREA.--7,202 mi^2 (18,653 km^2).

PERIOD OF RECORD.--August 1928 to current year. Monthly discharge only for some periods, published in WSP 1311.

GAGE.--Water-stage recorder. Datum of gage is 650.57 ft (198.294 m) above mean sea level (levels by Corps of Engineers). Prior to Feb. 16, 1939, nonrecording gage at same site and datum. Dec. 15, 1950, to Feb. 19, 1952, nonrecording gage at site 500 ft (152.4 m) upstream at same datum.

AVERAGE DISCHARGE.--46 years, 1,379 ft^3/s (39.05 m^3/s), 999,100 acre-ft/yr (1,230 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 42,300 ft^3/s (1,200 m^3/s) Nov. 26, gage height, 31.85 ft (9.708 m); minimum daily, 68 ft^3/s (1.93 m^3/s) July 30.
Period of record: Maximum discharge, 98,000 ft^3/s (2,780 m^3/s) May 19, 1957; gage height, 42.30 ft (12.893 m), from floodmark; maximum gage height, 44.37 ft (13.524 m) Oct. 31, 1941; no flow Aug. 28, Sept. 14 to Oct. 1, Oct. 7-12, 1956.

REMARKS.--Records fair. Some diversions above station for irrigation. Some regulation since March 1959 by Fort Cobb Reservoir (see sta. 07325900), since February 1961 by Foss Reservoir (see sta. 07324300), and by numerous flood-retarding structures. Records of chemical analyses and of water temperatures for the current year are published in Part 2 of this report.

COOPERATION.--Results of 12 discharge measurements furnished by Corps of Engineers.

REVISIONS (WATER YEARS).--WSP 1211: Drainage area. WSP 1281: 1935 (m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3,680	1,000	6,330	804	613	1,030	704	26,800	1,540	266	87	2,070
2	2,880	907	5,410	775	700	972	841	14,100	1,610	270	173	2,300
3	2,190	814	4,880	652	766	928	832	10,000	1,960	270	162	2,420
4	1,670	762	4,220	547	780	826	806	8,730	2,820	1,070	249	1,450
5	1,620	712	3,880	539	732	739	766	7,380	2,140	515	193	1,070
6	2,590	675	2,560	638	567	692	583	6,720	1,360	430	159	857
7	3,570	664	1,980	761	500	658	543	5,580	3,510	397	146	721
8	2,060	660	1,900	761	496	630	516	3,440	4,440	292	137	660
9	1,940	655	1,690	723	486	611	504	2,650	2,910	253	119	972
10	2,030	624	1,590	709	486	688	489	2,180	2,160	228	485	817
11	4,060	604	1,500	655	486	2,930	603	1,850	1,560	205	2,700	678
12	6,540	591	1,420	571	486	4,190	625	1,570	2,310	194	2,660	602
13	16,800	674	1,300	527	486	3,580	699	1,320	1,780	178	1,980	544
14	11,100	683	1,190	563	496	2,250	864	1,220	1,330	167	1,220	501
15	6,790	683	1,140	559	500	2,010	720	1,130	1,300	169	1,560	489
16	5,410	664	1,060	709	489	2,030	626	1,060	1,260	173	1,050	708
17	4,250	591	1,030	724	486	1,730	547	933	1,100	154	750	697
18	3,390	569	1,030	896	486	1,520	523	664	1,380	150	579	731
19	2,690	598	1,040	917	486	1,310	609	780	1,380	131	468	657
20	2,060	5,690	1,060	917	496	1,180	652	790	819	122	397	1,520
21	1,510	5,530	1,010	886	1,400	1,170	1,340	630	756	120	378	2,560
22	1,460	3,540	928	804	3,640	1,130	1,690	571	718	110	320	1,670
23	1,330	2,570	901	761	2,780	1,070	1,220	520	634	107	240	1,210
24	1,220	14,000	875	742	2,420	1,070	900	500	523	101	216	1,760
25	1,130	37,200	865	731	1,880	922	971	600	471	90	194	17,600
26	929	33,400	840	700	1,410	885	868	5,910	417	83	182	13,400
27	1,040	13,400	984	636	1,220	844	785	4,860	404	79	802	7,130
28	2,470	11,200	966	830	1,120	822	761	2,800	384	76	1,480	4,700
29	1,670	9,760	960	1,050	------	805	1,020	2,440	356	72	980	3,610
30	1,260	8,280	880	761	------	770	21,400	2,040	320	68	763	3,050
31	1,080	------	835	678	------	737	------	1,610	------	73	1,140	------
TOTAL	102,419	157,700	56,254	22,526	26,893	40,729	44,007	121,378	43,652	6,613	21,969	77,154
MEAN	3,304	5,257	1,815	727	960	1,314	1,467	3,915	1,455	213	709	2,572
MAX	16,800	37,200	6,330	1,050	3,640	4,190	21,400	26,800	4,440	1,070	2,700	17,600
MIN	929	569	835	527	486	611	489	500	320	68	87	489
AC-FT	203,100	312,800	111,600	44,680	53,340	80,790	87,290	240,800	86,580	13,120	43,580	153,000

CAL YR 1973 TOTAL 1,055,158 MEAN 2,891 MAX 37,200 MIN 142 AC-FT 2,093,000
WTR YR 1974 TOTAL 721,294 MEAN 1,976 MAX 37,200 MIN 68 AC-FT 1,431,000

PEAK DISCHARGE (BASE, 10,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-13	1615	23.16	20,300	5-1	0015	26.24	33,600
11-26	0200	31.85	42,300	9-25	1445	20.62	20,300

07331500 LAKE TEXOMA NEAR DENISON, TEX.

LOCATION.--Lat 33°49'05", long 96°34'20", in NE 1/4 sec.33, T.8 S., R.7 E., Bryan County, Okla., in control tower of Denison Dam on Red River, 1.2 miles (1.9 km) upstream from Shawnee Creek, 1.8 miles (2.9 km) upstream from Sand Creek, 4.0 miles (6.4 km) northwest of Denison, and at mile 725.9 (1,168.0 km).
DRAINAGE AREA.--39,719 mi^2 (102,872 km^2), of which 5,936 mi^2 (15,374 km^2) is probably noncontributing.
PERIOD OF RECORD.--July 1942 to current year. Month-end contents only for some periods, published in WSP 1311.
GAGE.--Water-stage recorder. Datum of gage is at mean sea level. Prior to Mar. 30, 1944, nonrecording gage at same site and datum. Prior to Oct. 1, 1948, auxiliary nonrecording gage in Cumberland pool at same datum.
EXTREMES.--Current year: Maximum contents, 3,220,000 acre-ft (3.97 km^3) Nov. 29, elevation, 622.11 ft (189.619 m); minimum, 2,458,000 acre-ft (3.03 km^3) Aug. 25, elevation, 613.75 ft (187.071 m).
Period of record: Maximum contents, 5,991,300 acre-ft (7.39 km^3) June 5, 1957, elevation, 643.18 ft (196.041 m). Minimum contents since power pool was first filled, 1,565,100 acre-ft (1.93 km^3) Sept. 16, 1964; minimum elevation, 599.96 ft (182.868 m) Mar. 1, 2, 1957.
REMARKS.--Reservoir is formed by a rolled-fill earth dam. Flow was diverted through conduits July 27, 1942; regulated storage began Oct. 31, 1943; power-pool was first filled Mar. 15, 1945. Capacity, based on 1962 survey, 5,392,900 acre-ft (6.65 km^3) at elevation 640.0 ft (195.07 m), crest of spillway, 2,733,300 acre-ft (3.37 km^3) at elevation 617.0 ft (188.06 m), maximum power pool, 1,049,200 acre-ft (1.29 km^3) at elevation 590.0 ft (179.83 m), minimum power pool, in Denison pool. Dead storage, 11,000 acre-ft (13.6 hm^3) at elevation 610.0 ft (185.93 m) in Cumberland pool. When contents are below 2,167,900 acre-ft (2.67 km^3), the reservoir is divided into two pools by protective levees around the Cumberland oilfield on the Washita River arm with bottom of outlet channel for the upper pool (known as Cumberland pool) at elevation 610 ft (185.9 m). At higher elevations the two pools are considered as being at a common level, contents being computed from gage in the Denison pool. Figures given herein represent total contents of both pools. Reservoir is used principally for flood control and power development. Revised capacity table, based on survey in 1962, used since Oct. 1, 1963.
COOPERATION.--Records furnished by Corps of Engineers.
REVISIONS.--WSP 1211: Drainage area.

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

613	2,398	619	2,914
615	2,562	621	3,109
617	2,733	623	3,311

CONTENTS, IN THOUSANDS OF ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,893	2,836	3,145	2,782	2,724	2,767	2,762	2,835	2,807	2,700	2,545	2,474
2	2,892	2,833	3,099	2,777	2,726	2,770	2,762	2,895	2,794	2,696	2,543	2,489
3	2,885	2,825	3,084	2,764	2,726	2,770	2,766	2,912	2,783	2,696	2,541	2,492
4	2,876	2,820	3,074	2,756	2,724	2,780	2,758	2,912	2,772	2,702	2,541	2,498
5	2,860	2,813	3,064	2,755	2,726	2,781	2,751	2,915	2,761	2,702	2,536	2,503
6	2,858	2,808	3,057	2,760	2,732	2,780	2,746	2,903	2,751	2,702	2,531	2,506
7	2,849	2,804	3,041	2,749	2,726	2,778	2,760	2,881	2,765	2,702	2,524	2,507
8	2,840	2,803	3,027	2,748	2,718	2,778	2,751	2,868	2,780	2,699	2,518	2,510
9	2,828	2,797	3,016	2,740	2,718	2,784	2,746	2,866	2,794	2,692	2,510	2,506
10	2,818	2,788	2,994	2,732	2,719	2,792	2,743	2,860	2,786	2,687	2,524	2,504
11	2,838	2,786	2,978	2,722	2,718	2,790	2,757	2,854	2,776	2,678	2,536	2,498
12	2,850	2,781	2,967	2,714	2,719	2,788	2,761	2,838	2,791	2,670	2,536	2,504
13	2,882	2,778	2,948	2,717	2,722	2,798	2,769	2,820	2,779	2,665	2,534	2,502
14	2,907	2,774	2,933	2,716	2,721	2,813	2,765	2,820	2,766	2,663	2,529	2,502
15	2,942	2,772	2,918	2,718	2,719	2,822	2,761	2,802	2,767	2,660	2,524	2,503
16	2,962	2,765	2,893	2,721	2,719	2,824	2,760	2,786	2,764	2,651	2,518	2,556
17	2,972	2,768	2,876	2,724	2,719	2,824	2,755	2,774	2,760	2,643	2,512	2,572
18	2,974	2,772	2,868	2,731	2,729	2,825	2,757	2,760	2,757	2,637	2,507	2,575
19	2,971	2,782	2,874	2,733	2,722	2,820	2,753	2,746	2,749	2,629	2,497	2,576
20	2,961	2,798	2,848	2,738	2,720	2,821	2,751	2,746	2,742	2,624	2,488	2,578
21	2,948	2,818	2,832	2,732	2,740	2,805	2,793	2,746	2,737	2,618	2,480	2,587
22	2,937	2,835	2,826	2,732	2,735	2,797	2,794	2,749	2,738	2,608	2,477	2,593
23	2,921	2,839	2,822	2,725	2,746	2,796	2,793	2,746	2,738	2,597	2,466	2,602
24	2,905	2,903	2,818	2,723	2,740	2,786	2,790	2,740	2,733	2,589	2,459	2,640
25	2,891	2,956	2,808	2,719	2,743	2,780	2,793	2,751	2,729	2,588	2,460	2,710
26	2,874	3,052	2,808	2,724	2,748	2,774	2,791	2,749	2,724	2,577	2,469	2,760
27	2,860	3,169	2,788	2,732	2,755	2,768	2,788	2,758	2,720	2,576	2,474	2,812
28	2,845	3,213	2,788	2,726	2,762	2,766	2,790	2,773	2,713	2,570	2,471	2,854
29	2,840	3,212	2,791	2,728	------	2,762	2,786	2,791	2,710	2,562	2,473	2,877
30	2,858	3,185	2,796	2,723	------	2,763	2,799	2,801	2,709	2,553	2,474	2,863
31	2,846	------	2,790	2,724	------	2,765	------	2,818	------	2,546	2,472	------
MAX	2,974	3,213	3,145	2,782	2,762	2,825	2,799	2,915	2,807	2,702	2,545	2,877
MIN	2,818	2,765	2,788	2,714	2,718	2,762	2,743	2,740	2,709	2,546	2,459	2,474
(†)	618.27	621.76	617.64	616.89	617.33	617.36	617.74	617.95	616.72	614.81	613.92	618.45
(‡)	-48	+339	-395	-66	+38	+3	+34	+19	-109	-163	-74	+391

CAL YR 1973..... ‡ +163
WTR YR 1974..... ‡ -31

† Elevation in feet, at end of month.
‡ Change in contents, in thousands of acre-ft.

07331600 RED RIVER AT DENISON DAM, NEAR DENISON, TEX.

LOCATION.--Lat 33°49'08", long 96°33'47", Grayson County, on right bank 1,800 ft (548.6 m) downstream from Denison Dam powerhouse, 0.4 mile (0.6 km) upstream from Shawnee Creek (spillway flow return), 4.5 miles (7.2 km) north of Denison, and at mile 725.5 (1,167.3 km).

DRAINAGE AREA.--39,720 mi^2 (102,875 km^2), of which 5,936 mi^2 (15,374 km^2) is probably noncontributing. At site used prior to October 1961, drainage area 39,777 mi^2 (103,022 km^2), of which 5,936 mi^2 (15,374 km^2) was probably noncontributing.

PERIOD OF RECORD.--October 1923 to current year. Monthly discharge only for some periods, published in WSP 1311. Prior to October 1934, published as "near Denison, Tex.", and October 1934 to September 1961, published as "near Colbert, Okla.". Gage-height records collected at various sites in this vicinity 1892-93, 1906-28, 1931-49 are contained in reports of U.S. Weather Bureau.

GAGE.--Water-stage recorder. Datum of gage is 500.00 ft (152.400 m) above mean sea level. Oct. 9, 1923, to Sept. 24, 1934, nonrecording gage, and July 29, 1942, to Sept. 30, 1961, water-stage recorder at county road bridge 2.5 miles (4.0 km) downstream at datum 6.85 ft (2.088 m) higher prior to Oct. 1, 1931, at datum 7.07 ft (2.155 m) higher Oct. 1, 1931, to Sept. 24, 1934, and at datum 2.64 ft (0.805 m) lower July 29, 1942, to Sept. 30, 1961. Sept. 25, 1934, to July 28, 1942, water-stage recorder at railway bridge 1.9 miles (3.1 km) downstream at datum 7.36 ft (2.243 m) higher.

AVERAGE DISCHARGE.--51 years, 4,757 ft^3/s (134.7 m^3/s), 3,446,000 acre-ft/yr (4.25 km^3/yr).

EXTREMES.--Current year: Maximum discharge, 35,400 ft^3/s (1,000 m^3/s) May 3, gage height, 16.51 ft (5.032 m); minimum daily, 70 ft^3/s (1.98 m^3/s) Mar. 3.
Period of record: Maximum discharge, 201,000 ft^3/s (5,690 m^3/s) May 21, 1935, gage height, 31.8 ft (9.69 m) at site and datum then in use; maximum gage height, 32.0 ft (9.75 m) Apr. 25, 1942 (at site and datum used in 1943); minimum daily discharge, 12 ft^3/s (0.340 m^3/s) Jan. 10, 1944.
Flood of May 26, 1908, reached a stage of 45.5 ft (13.87 m) at site and datum used July 29, 1942, to Sept. 30, 1961, from records of U.S. Weather Bureau.

REMARKS.--Records good. Flow regulated since October 1943 by Lake Texoma (see sta. 07331500).

COOPERATION.--Gage-height record and 24 discharge measurements furnished by Corps of Engineers; records computed by Geological Survey.

REVISIONS (WATER YEARS).--WSP 807: 1935 (M). WSP 1211: Drainage area. WSP 1241: 1924-29, 1932-33, 1934 (M), 1935.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10,800	5,320	32,700	4,110	2,660	74	3,750	4,970	9,170	3,760	2,150	1,760
2	10,900	5,290	32,900	5,820	138	72	2,850	13,900	9,210	1,500	1,730	150
3	10,900	5,380	28,800	6,240	532	70	2,600	30,800	9,240	108	153	82
4	10,800	5,290	13,800	3,830	1,470	287	2,610	30,400	9,230	78	85	79
5	10,800	3,670	11,000	1,390	1,020	1,030	2,820	26,200	9,220	78	1,900	78
6	10,900	3,760	10,800	122	94	1,880	149	26,200	9,240	79	1,930	77
7	10,900	3,640	10,800	6,190	3,420	2,250	73	26,300	9,360	80	2,120	873
8	10,900	3,320	10,700	5,620	3,260	1,430	1,500	19,300	9,220	1,900	2,280	127
9	10,900	2,940	10,800	3,990	900	141	583	10,500	8,260	3,070	3,690	1,790
10	10,900	4,650	10,800	5,230	97	73	97	10,600	9,910	1,840	250	2,360
11	11,400	3,320	10,900	5,410	1,020	2,750	97	10,600	10,500	3,480	92	3,550
12	11,100	3,430	10,900	4,640	1,020	2,580	91	10,600	10,500	3,950	3,120	1,470
13	10,900	3,080	10,900	220	94	3,420	88	10,600	10,400	2,190	3,970	582
14	10,800	3,090	10,900	2,730	1,370	3,220	88	8,350	10,200	668	4,080	76
15	10,700	3,520	10,800	165	2,980	5,090	2,540	10,800	3,270	1,710	3,820	72
16	10,600	3,300	10,800	106	170	4,520	583	10,600	2,380	3,790	4,390	1,820
17	10,600	274	11,000	102	107	5,040	2,620	9,470	5,050	3,190	4,480	2,870
18	10,600	77	5,490	1,060	114	4,640	734	9,510	4,120	2,860	3,350	3,330
19	10,600	2,850	7,690	913	1,120	4,660	1,030	9,090	5,740	3,470	4,960	4,590
20	10,600	2,970	8,830	106	1,810	8,090	414	1,300	5,890	2,140	4,670	4,660
21	10,600	1,110	8,680	4,050	5,430	7,180	91	1,150	4,200	2,130	3,900	1,600
22	10,700	3,050	5,270	3,130	3,700	5,320	4,010	100	1,630	4,540	3,250	120
23	10,600	3,280	5,260	3,340	3,540	4,540	2,740	2,880	128	4,760	4,260	1,750
24	10,700	2,960	5,210	3,130	2,870	4,710	2,800	3,210	2,580	2,480	3,230	1,980
25	10,700	8,000	5,230	2,580	1,150	4,590	236	962	2,100	1,950	276	5,110
26	10,700	11,100	5,260	153	324	4,590	2,960	942	2,270	3,460	2,430	10,900
27	10,700	10,900	5,310	101	96	4,610	2,400	949	2,490	342	4,100	13,900
28	10,700	16,400	5,170	1,200	79	4,600	206	962	2,290	1,610	4,290	22,300
29	3,970	26,700	213	1,400	------	4,340	5,680	3,790	1,220	4,410	2,660	22,200
30	5,380	32,700	100	3,670	------	147	5,590	5,220	1,070	2,660	2,570	22,200
31	5,380	------	5,260	1,060	------	74	------	6,570	------	3,730	2,270	------
TOTAL	316,730	185,371	322,273	81,808	40,585	96,018	52,030	316,825	180,088	72,013	86,456	132,456
MEAN	10,220	6,179	10,400	2,639	1,449	3,097	1,734	10,220	6,003	2,323	2,789	4,415
MAX	11,400	32,700	32,900	6,240	5,430	8,090	5,680	30,800	10,500	4,760	4,960	22,300
MIN	3,970	77	100	101	79	70	73	100	128	78	85	72
AC-FT	628,200	367,700	639,200	162,300	80,500	190,500	103,200	628,400	357,200	142,800	171,500	262,700

CAL YR 1973 TOTAL 3,111,196 MEAN 8,524 MAX 45,600 MIN 77 AC-FT 6,171,000
WTR YR 1974 TOTAL 1,882,653 MEAN 5,158 MAX 32,900 MIN 70 AC-FT 3,734,000

07332400 BLUE CREEK AT MILBURN, OKLA.
(Headwater of Blue River)

LOCATION.--Lat 34°15'04", long 96°33'05", in SW 1/4 SW 1/4 sec.35, T.3 S., R.7 E., Johnston County, on downstream side of left bank pier of bridge on State Highway 48A, 0.5 mi (0.8 km) north of Milburn, and at mile 84.9 (136.6 km).

DRAINAGE AREA.--203 mi^2 (526 km^2).

PERIOD OF RECORD.--Occasional low flow measurements made in water years 1956-61. October 1965 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 650 ft (198.1 m), from topographic map.

AVERAGE DISCHARGE.--9 years, 154 ft^3/s (4.361 m^3/s), 10.30 in/yr (262 mm/yr), 111,600 acre-ft/yr (138 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 22,900 ft^3/s (649 m^3/s) Nov. 24, gage height, 26.45 ft (8.062 m); minimum daily, 40 ft^3/s (1.13 m^3/s) July 22-25, 27-31, Aug. 5-8.
Period of record: Maximum discharge, 35,100 ft^3/s (994 m^3/s) Oct. 8, 1970, gage height, 27.87 ft (8.495 m); minimum, 20 ft^3/s (0.57 m^3/s) Mar. 15-19, Apr. 5-7, 1967.

REMARKS.--Records good except those for period of no gage height record, which is poor.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	118	202	348	129	128	117	91	631	119	73	42	49
2	110	136	325	126	126	116	90	724	98	70	45	56
3	104	126	368	123	123	115	89	265	96	69	45	77
4	99	121	680	121	120	113	86	173	195	85	43	57
5	96	117	349	122	120	112	85	148	134	88	40	50
6	153	114	286	124	121	112	85	135	108	70	40	47
7	128	115	261	121	117	111	84	126	921	67	40	47
8	109	115	252	120	116	109	82	121	275	65	40	46
9	99	112	242	121	116	109	81	115	174	64	42	46
10	96	108	226	120	115	111	80	112	132	60	45	49
11	1,010	106	224	117	114	173	108	109	117	55	60	48
12	622	105	224	115	114	122	97	105	114	50	55	49
13	1,440	105	215	117	114	108	82	102	114	50	52	72
14	385	106	204	122	113	106	79	101	107	50	50	52
15	247	103	197	125	112	106	78	102	103	50	49	48
16	217	99	185	126	111	104	76	99	101	47	48	86
17	186	98	180	127	111	103	77	97	110	45	47	88
18	167	98	181	127	115	103	78	94	127	45	47	60
19	157	98	198	129	118	102	79	91	108	45	47	54
20	150	1,640	185	126	113	104	79	90	97	45	46	157
21	142	438	168	124	261	123	81	89	91	43	46	118
22	136	196	169	124	344	121	91	88	89	40	46	75
23	132	175	169	121	163	103	84	86	86	40	46	60
24	128	8,490	170	121	138	99	82	84	84	40	46	292
25	125	11,500	156	122	124	98	83	111	82	40	45	2,750
26	123	2,110	150	131	121	98	84	502	81	45	58	351
27	125	889	145	133	119	97	84	158	78	40	80	193
28	138	549	141	131	119	95	85	108	77	40	53	150
29	123	439	140	156	------	95	99	97	75	40	48	129
30	120	387	137	133	------	93	2,310	91	74	40	48	121
31	230	------	135	131	------	92	------	106	------	40	53	------
TOTAL	7,215	28,997	7,010	3,885	3,726	3,370	4,769	5,060	4,167	1,641	1,492	5,477
MEAN	233	967	226	125	133	109	159	163	139	52.9	48.1	183
MAX	1,440	11,500	680	156	344	173	2,310	724	921	88	80	2,750
MIN	96	98	135	115	111	92	76	84	74	40	40	46
CFSM	1.15	4.76	1.11	.62	.66	.54	.78	.80	.68	.26	.24	.90
IN.	1.32	5.31	1.28	.71	.68	.62	.87	.93	.76	.30	.27	1.00
AC-FT	14,310	57,520	13,900	7,710	7,390	6,680	9,460	10,040	8,270	3,250	2,960	10,860

CAL YR 1973 TOTAL 133,856 MEAN 367 MAX 11,500 MIN 43 CFSM 1.81 IN 24.53 AC-FT 265,500
WTR YR 1974 TOTAL 76,809 MEAN 210 MAX 11,500 MIN 40 CFSM 1.03 IN 14.08 AC-FT 152,400

PEAK DISCHARGE (BASE, 2,200 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
11-20	1130	16.77	2,780	4-30	0815	19.88	4,340
11-24	1915	26.45	22,900	6-7	0915	15.26	2,240
11-26	1615	16.01	2,490	9-25	0300	22.97	7,260

Note.--No gage height record July 10 to Aug. 13.

07332500 BLUE RIVER NEAR BLUE, OKLA.

LOCATION.--Lat 33°59'49", long 96°14'27", on line between secs. 27 and 34, T.6 S., R.10 E., Bryan County, near left bank on downstream side of pier of bridge on U.S. Highway 70, 1.0 mi (1.6 km) west of Blue, 7.0 mi (11.3 km) east of Durant, 7.7 mi (12.4 km) upstream from Caddo Creek, and at mile 38.8 (62.4 km).

DRAINAGE AREA.--476 mi^2 (1,233 km^2).

PERIOD OF RECORD.--June 1936 to current year. Monthly discharge only for some periods, published in WSP 1311, 1731.

GAGE.--Water-stage recorder. Datum of gage is 503.36 ft (153.424 m) above mean sea level. Prior to Mar. 13, 1945, nonrecording gage and Mar. 13, 1945, to Feb. 2, 1960, water-stage recorder at site 1.2 mi (1.9 km) downstream at datum 5.00 ft (1.524 m) lower.

AVERAGE DISCHARGE.--38 years, 301 ft^3/s (8.524 m^3/s), 8.59 in/yr (218 mm/yr), 218,100 acre-ft/ye (269 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 15,300 ft^3/s (433 m^3/s) Nov. 26, gage height, 29.33 ft (8.940 m); minimum, 34 ft^3/s (0.96 m^3/s) Aug. 22.
Period of record: Maximum discharge, 34,400 ft^3/s (974 m^3/s) Feb. 17, 1938, gage height, 31.81 ft (9.696 m), site and datum then in use; no flow (estimated) Aug. 3, 4, 1936, result of regulation at fish hatchery, and no flow Sept. 19, to Oct. 16, 1956.

REMARKS.--Records good. Some regulation at low flow by State Fish Hatchery, 16.0 miles (25.7 km) above station. Small diversion above station for municipal water supply of city of Durant.

COOPERATION.--Gage-height record and 29 discharge measurements furnished by Corps of Engineers; records computed by Geological Survey.

REVISIONS (WATER YEARS).--WSP 957: 1938. WSP 1241: 1936, drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	296	585	665	274	194	184	123	2,680	210	75	49	550
2	236	396	610	259	192	191	123	2,300	152	73	51	173
3	204	244	828	250	183	186	1,510	1,120	120	71	50	113
4	182	216	2,420	245	174	178	353	514	99	71	46	95
5	166	195	1,260	243	170	163	168	335	217	78	43	77
6	459	197	711	247	168	157	141	259	180	104	42	62
7	1,110	191	579	253	164	152	127	212	741	86	41	53
8	361	192	530	253	158	147	119	188	2,310	71	41	51
9	235	191	509	252	155	148	112	174	1,280	66	48	50
10	189	183	484	249	154	151	116	159	631	61	54	53
11	1,250	175	459	238	152	576	138	152	251	57	559	57
12	3,840	170	451	223	153	654	271	146	270	53	250	55
13	3,020	166	445	215	146	283	204	135	249	55	87	52
14	2,240	167	426	219	141	197	136	137	168	52	74	66
15	885	167	404	231	140	173	115	250	137	51	67	75
16	618	163	387	233	142	168	108	147	120	51	60	1,220
17	460	155	368	231	138	155	101	125	113	51	50	3,770
18	372	660	360	230	138	147	102	109	142	50	49	475
19	324	1,160	422	411	150	142	103	102	160	48	49	182
20	291	350	484	414	160	142	101	98	137	46	49	134
21	270	225	395	280	800	237	114	98	112	45	39	811
22	247	201	356	244	1,610	275	560	96	102	44	39	374
23	231	194	359	223	766	208	242	94	98	44	43	175
24	215	169	381	209	400	165	150	93	93	45	46	153
25	203	6,230	370	197	265	144	122	89	91	46	46	4,410
26	189	13,500	337	223	220	137	109	330	89	55	51	4,790
27	194	7,060	315	281	198	134	99	667	83	46	201	1,380
28	198	2,200	305	317	195	134	97	255	83	45	171	402
29	208	905	297	237	------	134	95	134	81	42	103	271
30	205	742	289	241	------	130	672	108	78	40	63	205
31	1,450	------	284	210	------	123	------	128	------	44	57	------
TOTAL	20,348	37,349	16,490	7,832	7,626	6,115	6,531	11,434	8,597	1,766	2,618	20,334
MEAN	656	1,245	532	253	272	197	218	369	287	57.0	84.5	678
MAX	3,840	13,500	2,420	414	1,610	654	1,510	2,680	2,310	104	559	4,790
MIN	166	155	284	197	138	123	95	89	78	40	39	50
CFSM	1.38	2.62	1.12	.53	.57	.41	.46	.78	.60	.12	.18	1.42
IN.	1.59	2.92	1.29	.61	.60	.48	.51	.89	.67	.14	.20	1.59
AC-FT	40,360	74,080	32,710	15,530	15,130	12,130	12,950	22,680	17,050	3,500	5,190	40,330

CAL YR 1973 TOTAL 284,373 MEAN 779 MAX 13,500 MIN 57 CFSM 1.64 IN 22.22 AC-FT 564,100
WTR YR 1974 TOTAL 147,040 MEAN 403 MAX 13,500 MIN 39 CFSM .85 IN 11.49 AC-FT 291,700

PEAK DISCHARGE (BASE, 4,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE
11-26	0315	29.33	15,300
9-17	0815	21.44	5,220
9-25	2230	22.29	5,720

07334000 MUDDY BOGGY CREEK NEAR FARRIS, OKLA.

LOCATION.--Lat 34°16'17", long 95°54'43", in NE 1/4 NW 1/4 sec.26, T.3 S., R.13 E., Atoka County, on downstream side of left bank pier of main span of bridge on State Highway 3, 1.3 miles (2.1 km) downstream from McGee Creek, 2.8 miles (4.5 km) northwest of Farris, and at mile 57.7 (92.8 km).

DRAINAGE AREA.--1,087 mi^2 (2,815 km^2).

PERIOD OF RECORD.--October 1937 to current year. Monthly discharge only for some periods, published in WSP 1311.

GAGE.--Water-stage recorder. Datum of gage is 444.58 ft (135.508 m) above mean sea level. Prior to Mar. 13, 1945, nonrecording gage, and Mar. 13, 1945, to Sept. 30, 1961, water-stage recorder at same site at datum 2.00 ft (0.610 m) higher.

AVERAGE DISCHARGE.--37 years, 913 ft^3/s (25.86 m^3/s), 661,500 acre-ft/yr (816 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 33,900 ft^3/s (960 m^3/s) June 8, gage height, 42.72 ft (13.021 m); minimum daily, 7.0 ft^3/s (0.20 m^3/s) July 29.
Period of record: Maximum discharge, 61,900 ft^3/s (1,750 m^3/s) June 17, 1945, gage height, 44.94 ft (13.698 m), datum then in use, from rating curve extended above 37,000 ft^3/s (1,050 m^3/s); no flow at times in many years.

REMARKS.--Records fair. Some regulation since June 1959 by Atoka Reservoir, capacity, 125,000 acre-ft (154 hm^2), on North Boggy Creek, drainage area, 176 mi^2 (456 km^2); pipeline diversions to Oklahoma City since November 1963, normal capacity, 60 mgd (227,100 m^3/d).

COOPERATION.--Gage-height records and 30 discharge measurements by Corps of Engineers; records computed by Geological Survey.

REVISIONS.--WSP 1211: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,900	6,930	1,590	379	403	298	215	15,500	300	25	30	1,000
2	1,000	5,260	1,190	295	339	263	195	13,300	250	24	25	800
3	450	1,900	1,470	233	309	247	3,700	10,900	200	22	22	700
4	300	858	3,890	239	260	226	1,930	8,020	150	23	30	1,000
5	213	613	4,390	163	205	208	846	2,880	800	27	45	600
6	261	421	2,650	136	190	193	531	1,030	6,400	29	30	450
7	1,340	308	1,250	155	210	166	361	695	17,200	26	25	350
8	1,800	263	864	159	190	148	283	511	28,500	35	20	300
9	676	239	671	159	145	134	249	395	27,100	48	15	250
10	346	219	561	200	125	1,210	178	304	17,100	40	100	2,200
11	982	157	438	177	105	7,120	364	246	6,210	34	1,000	4,470
12	6,270	133	371	164	90	6,390	1,930	210	1,760	28	700	1,400
13	9,200	113	341	135	87	4,250	1,670	166	1,060	23	400	822
14	8,020	100	320	103	84	1,610	898	195	720	20	200	839
15	5,980	92	275	110	83	1,410	544	697	539	18	100	494
16	2,430	90	259	113	83	1,610	367	362	719	17	70	2,140
17	1,100	86	226	125	90	953	303	211	1,390	16	50	3,030
18	668	77	176	137	84	681	189	154	1,730	17	40	1,800
19	462	70	661	252	95	538	133	127	724	18	35	926
20	330	1,580	1,160	424	110	484	110	96	418	15	30	3,910
21	242	4,260	839	363	617	1,090	169	75	290	13	25	4,970
22	179	4,300	589	300	3,590	1,870	2,970	66	207	12	22	3,940
23	136	3,210	623	253	3,340	1,500	1,400	60	151	11	20	2,080
24	106	7,860	2,490	209	2,110	1,070	677	50	135	10	20	1,250
25	85	30,300	1,660	163	898	733	462	100	91	9.0	20	16,900
26	72	24,800	1,070	224	542	574	295	4,000	67	8.5	23	10,000
27	63	28,500	751	579	396	476	206	3,500	52	8.0	28	4,170
28	76	25,500	571	1,640	327	413	155	1,500	40	7.5	25	1,740
29	199	17,400	469	999	------	375	122	800	32	7.0	23	977
30	246	6,040	410	667	------	359	9,770	550	28	10	20	647
31	5,230	------	365	503	------	275	------	400	------	20	20	------
TOTAL	50,362	171,679	32,590	9,758	15,107	36,874	31,222	67,100	114,363	621.0	3,213	74,155
MEAN	1,625	5,723	1,051	315	540	1,189	1,041	2,165	3,812	20.0	104	2,472
MAX	9,200	30,300	4,390	1,640	3,590	7,120	9,770	15,500	28,500	48	1,000	16,900
MIN	63	70	176	103	83	134	110	50	28	7.0	15	250
AC-FT	99,890	340,500	64,640	19,350	29,960	73,140	61,930	133,100	226,800	1,230	6,370	147,100

CAL YR 1973 TOTAL 862,508.1 MEAN 2,363 MAX 30,300 MIN 6.4 AC-FT 1,711,000
WTR YR 1974 TOTAL 607,044.0 MEAN 1,663 MAX 30,300 MIN 7.0 AC-FT 1,204,000

PEAK DISCHARGE (BASE, 10,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
11-25	1415	42.58	33,200	6-8	0930	42.72	33,900
4-30	2400	38.32	18,600	9-25	1130	38.45	18,900

07334200 BYRD'S MILL SPRING NEAR FITTSTOWN, OKLA.

LOCATION.--Lat 34°35'45", long 96°39'55", in SW 1/4 SW 1/4 sec.34, T.2 N., R.6 E., Pontotoc County, upstream from weir outlet of spring, 0.5 mile (0.8 km) upstream from Big Spring Creek, 2.0 miles (3.2 km) west of Fittstown, and 12.0 miles (19.3 km) south of Ada.

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

GAGE.--Water-stage recorder and V-notch sharp-crested weir. Altitude of gage is 1,022 ft (311.5 m) from ground-water survey map.

AVERAGE DISCHARGE.--15 years, 8.04 ft^3/s (0.228 m^3/s), 5,820 acre-ft/yr (7.18 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 23 ft^3/s (0.65 m^3/s) Dec. 3, 4, gage height, 3.15 ft (0.960 m); minimum daily, 4.5 ft^3/s (0.13 m^3/s) at times.
Period of record: Maximum discharge, 30 ft^3/s (0.850 m^3/s) May 30, 1960, gage height, 3.22 ft (0.981 m); no flow at times in 1959, 1964-67.

REMARKS.--Records good. Records do not include diversion of about 6 to 10 ft^3/s (0.170 to 0.283 m^3/s) by city of Ada for municipal water supply, a part of which is discharged as effluent to Sandy Creek, tributary to Canadian River.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	15	22	18	13	11	8.9	9.0	9.9	9.1	6.6	4.9
2	13	15	22	18	13	11	8.9	9.8	9.9	9.1	6.6	4.9
3	13	15	22	17	13	11	8.9	9.9	9.9	9.1	6.6	4.8
4	13	15	22	17	13	11	8.9	9.9	9.9	9.2	6.6	4.8
5	13	15	22	17	13	10	8.9	9.9	9.9	9.2	6.6	4.7
6	13	15	22	17	13	10	8.8	10	9.9	9.2	6.5	4.6
7	13	15	22	17	13	10	8.7	10	9.9	9.3	6.4	4.5
8	13	15	22	16	12	10	8.4	10	10	9.3	6.4	4.5
9	13	15	22	16	12	10	8.5	10	10	9.3	6.4	4.5
10	13	14	22	16	12	10	8.8	10	9.9	9.3	6.4	4.5
11	14	14	22	16	12	10	8.6	10	9.9	9.1	6.2	4.5
12	14	14	22	15	12	10	8.4	10	9.9	8.3	6.1	4.6
13	15	14	21	15	12	10	8.4	10	9.9	7.4	6.0	4.6
14	15	14	21	15	12	10	8.4	10	9.8	7.4	6.0	4.5
15	15	14	21	15	12	9.9	8.4	10	9.6	7.5	5.9	4.5
16	15	14	21	15	12	9.9	8.4	10	9.6	7.2	5.7	4.6
17	15	14	21	15	12	9.9	8.4	10	9.8	7.1	5.6	4.6
18	15	14	20	15	12	9.9	8.4	10	8.9	7.1	5.5	4.8
19	15	14	20	15	12	9.9	8.4	10	9.0	7.0	5.5	4.6
20	16	15	20	15	12	9.9	8.2	10	9.0	7.0	5.3	4.5
21	16	14	20	14	12	9.7	8.0	10	9.0	7.0	5.2	4.7
22	15	14	19	14	12	9.8	7.9	10	9.0	7.0	5.2	4.9
23	16	15	19	14	11	9.6	7.8	10	9.0	7.0	5.2	4.8
24	16	18	19	14	11	9.4	7.9	10	9.0	7.0	5.2	4.9
25	15	19	19	14	11	9.4	7.9	10	9.0	7.0	5.2	5.8
26	15	20	19	14	11	9.4	7.9	10	9.0	6.8	5.1	6.1
27	15	21	18	13	11	9.4	7.9	9.9	9.0	6.8	5.2	6.3
28	15	21	18	13	11	9.0	7.9	9.9	9.0	6.8	5.0	6.3
29	15	21	18	13	------	8.9	7.8	9.9	9.0	6.8	4.9	6.3
30	15	22	18	13	------	8.9	8.9	9.9	9.0	6.8	4.9	6.3
31	15	------	18	13	------	9.0	------	9.9	------	6.8	4.9	------
TOTAL	447	475	634	469	337	305.9	251.6	308.0	284.6	243.0	178.9	148.9
MEAN	14.4	15.8	20.5	15.1	12.0	9.87	8.39	9.94	9.49	7.84	5.77	4.96
MAX	16	22	22	18	13	11	8.9	10	10	9.3	6.6	6.3
MIN	13	14	18	13	11	8.9	7.8	9.0	8.9	6.8	4.9	4.5
AC-FT	887	942	1,260	930	668	607	499	611	565	482	355	295

CAL YR 1973 TOTAL 5,891.9 MEAN 16.1 MAX 25 MIN 8.0 AC-FT 11,690
WTR YR 1974 TOTAL 4,082.9 MEAN 11.2 MAX 22 MIN 4.5 AC-FT 8,100

07335000 CLEAR BOGGY CREEK NEAR CANEY, OKLA.

LOCATION.--Lat 34°15'09", long 96°12'19", in NW 1/4 SE 1/4 sec.36, T.3 S., R.10 E., Atoka County, on downstream side of left pier of bridge on old U.S. Highways 69 and 75, 0.5 mi (0.8 km) downstream from Caney Creek. 1.5 mi (2.4 km) north of Caney, and at mile 24.1 (38.8 km).

DRAINAGE AREA.--720 mi^2 (1,865 km^2).

PERIOD OF RECORD.--October 1942 to current year. Monthly discharge only for some periods, published in WSP 1311.

GAGE.--Water-stage recorder. Datum of gage is 485.05 ft (147.843 m) above mean sea level. Prior to Mar. 13, 1945, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--32 years, 494 ft^3/s (13.99 m^3/s), 9.32 in/yr (237 mm/yr), 357,900 acre-ft/yr (441 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 19,600 ft^3/s (555 m^3/s) Nov. 26, gage height, 24.20 ft (7.376 m); minimum, 15 ft^3/s (0.42 m^3/s) Aug. 25, 26.
Period of record: Maximum discharge, 52,800 ft^3/s (1,500 m^3/s) Dec. 11, 1946, Dec. 11, 1946, gage height, 26.77 ft (8.159 m); no flow at times in 1954, 1956, 1964.

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

COOPERATION.--Gage-height record and 39 discharge measurements furnished by Corps of Engineers; records computed by Geological Survey.

REVISIONS.--WSP 1211: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,250	2,050	2,470	220	162	298	155	5,840	206	54	21	248
2	913	984	2,250	204	155	269	146	6,230	234	51	20	114
3	669	579	2,390	196	148	246	1,030	5,310	178	47	23	196
4	520	440	4,190	187	139	223	330	2,870	154	47	25	198
5	398	368	3,290	192	132	203	212	1,470	357	62	29	127
6	915	322	2,010	198	131	187	158	1,120	800	96	25	82
7	1,250	287	1,610	200	126	173	138	915	3,200	84	23	64
8	655	263	1,460	194	121	166	124	702	4,890	66	22	51
9	422	244	1,340	195	118	160	114	569	6,430	52	22	44
10	325	223	1,230	193	113	158	111	468	2,390	46	34	44
11	2,230	204	1,110	182	113	1,760	209	403	1,050	42	257	42
12	5,700	190	1,010	167	115	1,460	564	355	697	39	188	43
13	6,930	179	878	166	114	592	447	314	515	36	98	42
14	5,920	169	759	166	113	401	272	267	416	36	63	72
15	3,880	157	688	172	113	348	196	239	334	37	46	127
16	1,790	147	624	175	113	333	162	211	291	38	37	656
17	1,290	139	572	174	110	275	142	179	243	35	32	530
18	960	134	538	174	112	232	129	151	251	41	28	313
19	740	130	632	231	124	207	120	134	281	35	24	268
20	609	1,800	687	243	132	193	114	122	204	31	20	438
21	522	3,210	567	205	526	372	131	110	157	30	19	791
22	458	3,080	473	187	2,150	703	279	97	128	29	18	531
23	400	1,310	439	175	1,830	441	204	91	108	28	17	298
24	350	3,230	458	161	841	339	188	85	92	26	16	294
25	315	12,100	415	151	572	281	140	185	83	25	15	4,870
26	290	15,500	375	178	443	243	120	1,890	76	24	45	5,530
27	271	11,500	330	202	378	221	108	1,720	71	24	90	3,220
28	419	8,170	300	205	330	221	101	578	64	23	62	1,060
29	563	5,520	284	190	------	214	96	375	60	22	84	801
30	365	3,250	262	190	------	192	2,880	280	57	25	55	632
31	1,190	------	242	175	------	173	------	239	------	26	41	------
TOTAL	42,509	75,879	33,883	5,848	9,574	11,284	9,120	33,519	24,017	1,257	1,499	21,726
MEAN	1,371	2,529	1,093	189	342	364	304	1,081	801	40.5	48.4	724
MAX	6,930	15,500	4,190	243	2,150	1,760	2,880	6,230	6,430	96	257	5,530
MIN	271	130	242	151	110	158	96	85	57	22	15	42
CFSM	1.90	3.51	1.52	.26	.48	.51	.42	1.50	1.11	.06	.07	1.01
IN.	2.20	3.92	1.75	.30	.49	.58	.47	1.73	1.24	.06	.08	1.12
AC-FT	84,320	150,500	67,210	11,600	18,990	22,380	18,090	66,480	47,640	2,490	2,970	43,090

CAL YR 1973 TOTAL 532,176 MEAN 1,458 MAX 15,500 MIN 35 CFSM 2.03 IN 27.50 AC-FT 1,056,000
WTR YR 1974 TOTAL 270,115 MEAN 740 MAX 15,500 MIN 15 CFSM 1.03 IN 13.96 AC-FT 535,800

PEAK DISCHARGE (BASE, 4,500 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
10-13	0530	22.0	7,340	6-9	0715	22.20	7,340
11-26	1200	24.20	19,600	9-25	1230	21.88	6,310
5-11	2245	22.06	6,870				

07335500 RED RIVER AT ARTHUR CITY, TEX.

LOCATION.--Lat 33°52'32", long 95°30'08", in NW 1/4 sec.11, T.8 S., R.17 E., Choctaw County, Okla., near right bank on downstream side of pier of bridge on U.S. Highway 271 at Arthur City, 10.6 miles (17.1 km) downstream from Muddy Boggy River, 26.0 miles (41.8 km) upstream from Kiamichi River, and at mile 633.1 (1,018.7 km).

DRAINAGE AREA.--44,531 mi^2 (115,335 km^2), of which 5,936 mi^2 (15,374 km^2) is probably noncontributing.

PERIOD OF RECORD.--January to September 1905 (gage heights and discharge measurements only), October 1905 to December 1911, July 1936 to current year. Monthly discharge only for some periods, published in WSP 1311. Gage-height records collected at same site since 1891 are contained in reports of the U.S. Weather Bureau.

GAGE.--Water-stage recorder. Datum of gage is 380.07 ft (115.845 m) above mean sea level. 1905-11, nonrecording gage at St. Louis-San Francisco Railway Co. bridge 200 ft (61.0 m) upstream at same datum. July 1, 1936, to Mar. 24, 1940, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--44 years, 8,162 ft^3/s (231.1 m^3/s), 5,913,000 acre-ft/yr (7.29 km^3/yr).

EXTREMES.--Current year: Maximum discharge, 61,000 ft^3/s (1,730 m^3/s) Dec.1, gage height, 20.18 ft (6.151 m); minimum, 603 ft^3/s (17.1 m^3/s) Aug. 7, gage height, 4.22 ft (1.286 m).
Period of record: Maximum discharge, about 400,000 ft^3/s (11,300 m^3/s) May 28, 1908, gage height, 43.2 ft (13.17 m), from rating curve extended above 41,000 ft^3/s (1,160 m^3/s) on basis of records for later years; minimum, 130 ft^3/s (3.68 m^3/s) Dec. 11, 12, 1956, gage height, 4.49 ft (1.369 m).

REMARKS.--Records good. Flow regulated since October 1943 by Lake Texoma, 92.8 miles (149.3 km) above station (see sta. 07331500).

COOPERATION.--Gage-height record and 41 discharge measurements furnished by Corps of Engineers; records computed by Geological Survey.

REVISIONS (WATER YEARS).--WSP 1241: Drainage area. WSP 1311: 1906-11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22,100	26,100	59,600	2,990	4,340	2,410	2,920	10,600	8,280	2,300	3,670	5,190
2	21,000	24,100	54,700	5,800	3,680	2,040	1,900	20,300	11,200	1,930	3,670	7,740
3	19,800	17,100	49,700	5,880	3,490	1,850	3,100	32,900	10,900	2,770	3,520	6,830
4	15,600	15,300	51,000	6,610	2,870	1,700	7,390	49,400	10,400	2,910	2,680	4,750
5	12,700	13,800	37,700	7,030	1,890	1,610	9,310	49,900	14,300	1,900	2,110	2,760
6	12,900	14,100	29,100	5,560	2,430	1,480	5,970	42,400	15,100	1,100	980	1,950
7	16,400	11,200	24,100	3,780	2,440	1,610	4,550	40,100	22,200	872	774	1,550
8	16,000	7,400	21,600	2,780	1,870	2,540	2,910	37,600	23,400	828	2,140	1,170
9	14,600	6,320	18,900	5,790	2,300	3,260	1,690	30,300	26,200	768	2,480	977
10	13,000	5,760	15,600	6,460	3,800	2,880	1,720	16,400	29,400	757	2,830	3,440
11	13,200	5,310	14,500	5,650	3,030	3,570	2,130	13,100	32,800	2,580	3,650	5,320
12	23,800	5,990	14,100	6,200	1,760	7,470	1,840	12,400	36,000	3,020	4,060	6,630
13	41,600	5,370	13,700	6,540	1,570	10,700	2,680	12,100	33,800	3,140	4,350	7,200
14	42,800	5,200	13,500	5,550	1,900	11,300	3,430	11,900	30,400	4,020	5,560	5,070
15	37,000	4,780	13,200	2,900	1,630	10,100	2,660	12,500	23,500	3,470	5,590	3,150
16	32,700	4,710	13,000	3,510	1,480	6,850	1,830	11,900	17,400	2,410	4,900	2,810
17	29,600	4,860	12,800	2,770	2,640	7,490	1,930	12,500	8,820	1,680	4,660	7,680
18	26,200	4,670	12,600	2,040	2,490	6,750	2,420	11,400	7,200	3,050	4,630	13,800
19	22,300	3,130	12,500	2,470	1,360	6,480	2,410	10,500	9,020	3,760	4,860	11,200
20	17,000	2,690	10,900	4,890	1,150	6,350	2,370	10,400	7,260	3,330	4,230	7,710
21	13,300	5,500	12,100	5,020	1,760	6,310	2,150	8,480	7,360	3,600	4,650	14,900
22	12,600	12,000	12,100	3,600	5,340	8,850	8,040	4,190	6,980	3,220	5,000	13,700
23	12,300	16,000	10,800	4,420	13,500	9,790	12,700	3,230	5,770	2,760	4,490	10,500
24	12,000	20,000	12,800	4,830	11,900	8,480	13,400	2,710	3,690	3,760	4,000	7,330
25	11,900	25,000	13,900	4,750	9,940	7,030	8,780	3,170	2,390	4,720	4,250	12,900
26	11,700	30,000	11,600	4,740	6,890	6,560	5,310	5,300	2,570	3,790	3,980	26,000
27	11,800	39,800	9,530	5,060	4,610	6,110	3,710	6,880	2,970	2,850	3,020	29,700
28	13,900	45,300	8,590	4,410	3,020	5,940	3,230	7,960	2,970	3,390	2,160	29,000
29	17,300	47,400	8,160	6,540	------	5,860	3,820	7,140	3,150	2,550	4,180	30,500
30	13,900	54,600	6,810	5,300	------	5,800	4,320	4,260	2,970	1,280	5,060	33,000
31	13,400	------	3,990	4,090	------	5,300	------	5,270	------	3,480	4,350	------
TOTAL	594,400	483,490	603,180	147,960	105,080	174,470	130,620	507,190	418,400	81,995	116,484	314,457
MEAN	19,170	16,120	19,460	4,773	3,753	5,628	4,354	16,360	13,950	2,645	3,758	10,480
MAX	42,800	54,600	59,600	7,030	13,500	11,300	13,400	49,900	36,000	4,720	5,590	33,000
MIN	11,700	2,690	3,990	2,040	1,150	1,480	1,690	2,710	2,390	757	774	977
AC-FT	1,179M	959,000	1,196M	293,500	208,400	346,100	259,100	1,006M	829,900	162,600	231,000	623,700

CAL YR 1973 TOTAL 6,070,620 MEAN 16,630 MAX 70,800 MIN 1,300 AC-FT 12,040,000
WTR YR 1974 TOTAL 3,677,726 MEAN 10,080 MAX 59,600 MIN 757 AC-FT 7,295,000

07335700 KIAMICHI RIVER NEAR BIG CEDAR, OKLA.
(Hydrologic bench mark station)

LOCATION.--Lat 34°38'18", long 94°36'45", in SW 1/4 SE 1/4 sec.18, T.2 N., R.26 E., LeFlore County, in Ouachita National Forest, on downstream side of right bank pier of bridge on State Highway 63, 0.2 mile (0.3 km) upstream from Rattlesnake Creek, 1.1 miles (1.8 km) upstream from Big Branch, 2.1 miles (3.4 km) east of Big Cedar, and at mile 157.6 (253.6 km).

DRAINAGE AREA.--40.1 mi^2 (103.9 km^2).

PERIOD OF RECORD.--October 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 886.97 ft (270.348 m) above mean sea level (State Highway Department bench mark).

AVERAGE DISCHARGE.--9 years, 81.1 ft^3/s (2.297 m^3/s), 27.5 in/yr (698 mm/yr), 58,760 acre-ft/yr (72.5 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 8,710 ft^3/s (247 m^3/s) June 7, gage height, 13.90 ft (4.237 m); no flow Aug. 28.
Period of record: Maximum discharge, 21,500 ft^3/s (609 m^3/s) Dec. 10, 1971, gage height, 17.08 ft (5.206 m), from rating curve extended above 9,000 ft^3/s (255 m^3/s); no flow at times in most years.

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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	95	67	88	53	61	41	25	436	13	2.0	.44	1.0
2	64	54	72	47	56	37	23	684	8.9	1.8	.44	146
3	44	45	445	43	49	33	74	259	7.1	1.6	.34	59
4	32	73	714	39	43	34	49	176	11	1.5	.24	29
5	24	64	254	36	38	98	45	126	66	1.4	.18	18
6	21	58	171	35	36	404	41	94	53	1.3	.14	12
7	19	54	128	32	32	245	40	70	1,430	1.3	.12	7.9
8	16	50	104	31	29	176	36	56	507	1.4	.10	5.9
9	13	44	85	30	26	144	31	48	688	1.1	.10	7.4
10	12	40	67	36	24	197	28	40	254	1.0	.20	216
11	27	36	56	41	21	2,400	119	35	140	.88	.28	648
12	35	33	49	35	20	341	176	30	98	.80	.48	182
13	593	31	42	33	19	207	130	25	71	.69	1.1	149
14	237	31	35	34	18	156	100	23	54	.66	1.1	109
15	159	30	30	35	18	124	77	25	41	.66	.85	78
16	119	26	25	35	18	99	63	20	32	.67	.80	96
17	85	24	22	35	16	79	51	16	24	.76	.63	163
18	63	31	20	35	18	68	43	14	19	.75	.49	141
19	49	32	170	66	25	59	37	11	15	.67	.39	109
20	38	246	159	82	20	54	31	9.2	12	.49	.31	346
21	30	228	122	88	82	67	114	8.0	9.0	.38	.26	647
22	24	150	101	90	114	50	581	7.2	7.0	.28	.23	257
23	20	160	128	83	102	50	228	6.2	5.8	.19	.18	146
24	17	554	429	75	87	45	148	5.5	4.7	.16	.13	108
25	15	583	212	68	70	42	108	14	4.1	.13	.09	237
26	14	532	158	86	60	40	82	47	3.4	.09	.07	201
27	16	286	120	85	53	38	64	22	3.0	.02	.09	141
28	15	190	101	83	48	36	51	15	2.7	0	.08	106
29	13	141	86	76	------	34	45	12	2.5	.03	.07	77
30	10	110	72	72	------	30	742	9.1	2.2	.19	.09	59
31	74	------	62	66	------	28	------	10	------	.19	.24	------
TOTAL	1,993	4,003	4,327	1,685	1,203	5,456	3,382	2,353.2	3,588.4	23.09	10.26	4,502.2
MEAN	64.3	133	140	54.4	43.0	176	113	75.9	120	.74	.33	150
MAX	593	583	714	90	114	2,400	742	684	1,430	2.0	1.1	648
MIN	10	24	20	30	16	28	23	5.5	2.2	0	.07	1.0
CFSM	1.60	3.32	3.49	1.36	1.07	4.39	2.82	1.89	2.99	.02	.008	3.74
IN.	1.85	3.71	4.01	1.56	1.12	5.06	3.14	2.18	3.33	.02	.009	4.18
AC-FT	3,950	7,940	8,580	3,340	2,390	10,820	6,710	4,670	7,120	46	20	8,930

CAL YR 1973 TOTAL 51,460.34 MEAN 141 MAX 2,700 MIN .69 CFSM 3.52 IN 47.74 AC-FT 102,100
WTR YR 1974 TOTAL 32,526.15 MEAN 89.1 MAX 2,400 MIN 0 CFSM 2.22 IN 30.17 AC-FT 64,520

PEAK DISCHARGE (BASE, 2,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE
12-3	2200	10.22	2,870
3-11	0245	13.69	8,250
6-7	0915	13.90	8,710

07336200 KIAMICHI RIVER NEAR ANTLERS, OKLA.

LOCATION.--Lat 34°14'55", long 95°36'18", in SW 1/4 sec.35, T.3 S., R.16 E., Pushmataha County, on right bank, 50 ft (15.240 m) downstream from bridge on U.S. Highway 271 and State Highway 2, 2.0 mi (3.2 km) northeast of Antlers, 7.7 mi (12.4 km) downstream from Tenmile Creek, 5.4 mi (8.7 km) upstream from Cedar Creek and at mile 59.6 (95.9 km).

DRAINAGE AREA.--1,138 mi^2 (2,947 km^2).

PERIOD OF RECORD.--October 1972 to current year.

GAGE.--Water-stage recorder. Datum of gage is 419.82 ft (127.961 m) above mean sea level.

EXTREMES.--Current year: Maximum discharge, 38,500 ft^3/s (1,090 m^3/s) Nov. 26, gage height, 32.62 ft (9.943 m); minimum, 12 ft^3/s (0.34 m^3/s) Aug. 8, 9.
Period of record: Maximum discharge, 38,500 ft^3/s (1,090 m^3/s) Nov. 26, 1973, gage height, 32.62 ft (9.943 m), no flow Oct. 1-21, 1972.

REMARKS.--Records good. Small diversion above station for municipal water supply of city of Antlers.

COOPERATION.--Gage height record, 35 discharge measurements furnished by Corps of Engineers; records computed by Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	985	7,000	1,790	955	1,160	650	567	23,400	8,000	94	18	583
2	650	2,390	1,480	804	982	611	496	23,900	3,060	82	18	1,380
3	473	1,420	1,980	702	847	569	3,870	11,600	1,080	73	17	5,330
4	363	1,110	11,100	629	730	520	5,540	4,750	1,530	67	16	3,020
5	287	1,000	12,300	574	648	483	2,390	2,810	14,000	62	14	1,090
6	793	832	4,540	545	588	444	1,550	2,020	9,330	59	14	619
7	1,220	722	2,810	529	527	442	1,180	1,550	14,400	56	13	415
8	833	624	2,110	508	483	859	957	1,230	29,600	51	12	306
9	569	544	1,700	481	447	750	797	986	35,600	51	15	239
10	373	470	1,420	464	412	622	675	820	30,800	49	29	7,810
11	628	412	1,200	455	386	10,600	676	693	16,700	51	40	23,500
12	2,010	362	1,060	477	360	22,700	2,210	601	2,940	49	4,850	22,100
13	10,300	318	944	415	342	16,300	2,830	530	1,800	44	5,880	9,170
14	11,000	288	837	385	328	3,860	1,900	916	1,320	39	1,140	3,770
15	3,870	263	726	377	311	2,680	1,440	3,090	989	36	417	2,030
16	2,720	238	646	374	299	2,340	1,090	1,160	844	38	272	2,650
17	2,150	216	579	367	290	1,820	890	643	700	42	212	7,400
18	1,410	203	528	359	280	1,460	758	425	712	39	181	7,220
19	1,030	193	1,390	507	280	1,250	657	328	549	32	137	4,090
20	789	751	3,520	745	304	1,100	571	267	439	29	109	6,750
21	634	3,750	2,330	983	518	1,300	528	221	351	26	91	15,300
22	510	2,680	1,520	782	2,470	2,200	2,330	187	281	23	72	8,050
23	436	2,500	1,490	654	2,730	1,610	4,650	157	238	21	57	3,530
24	354	9,470	7,680	579	1,620	1,650	2,550	138	202	19	45	2,300
25	305	27,800	9,580	523	1,170	1,450	1,530	145	178	17	38	16,400
26	264	37,100	4,040	622	933	1,180	1,100	4,170	161	16	37	12,400
27	237	26,000	2,580	945	805	1,030	862	3,490	157	15	33	4,480
28	223	5,610	1,890	3,590	719	924	705	1,170	122	14	353	2,570
29	202	3,150	1,500	3,540	------	833	594	666	111	14	355	1,700
30	224	2,270	1,280	2,020	------	750	7,380	450	102	15	400	1,210
31	6,030	------	1,100	1,460	------	648	------	2,980	------	17	316	------
TOTAL	51,872	139,686	87,650	26,350	20,969	83,635	53,273	95,493	176,296	1,240	15,201	177,412
MEAN	1,673	4,656	2,827	850	749	2,698	1,776	3,080	5,877	40.0	490	5,914
MAX	11,000	37,100	12,300	3,590	2,730	22,700	7,380	23,900	35,600	94	5,880	23,500
MIN	202	193	528	359	280	442	496	138	102	14	12	239
CFSM	1.47	4.09	2.48	.75	.66	2.37	1.56	2.71	5.16	.04	.43	5.20
IN.	1.70	4.57	2.87	.86	.69	2.73	1.74	3.12	5.76	.04	.50	5.80
AC-FT	102,900	277,100	173,900	52,270	41,590	165,900	105,700	189,400	349,700	2,460	30,150	351,900

CAL YR 1973 TOTAL 1,064,389 MEAN 2,916 MAX 37,100 MIN 17 CFSM 2.56 IN 34.79 AC-FT 2,111,000
WTR YR 1974 TOTAL 929,077 MEAN 2,545 MAX 37,100 MIN 12 CFSM 2.24 IN 30.37 AC-FT 1,843,000

PEAK DISCHARGE (BASE, 18.000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
11-26	1330	32.62	38,500.	6-9	1745	32.02	37,100
3-12	1415	23.94	23,500	9-11	1845	25.85	25,000
5-2	0500	25.04	25,500	9-25	1115	21.66	18,100

07336600 HUGO LAKE NEAR HUGO, OKLAHOMA

LOCATION.--Lat 34°00'42", long 95°22'49", in NW 1/4 NW 1/4 sec.25, T.6 S., R.18 E., Choctaw County, on upstream face of Hugo Dam, 700 ft (213 m) to left of spillway, 7.0 mi (11.3 km) east of Hugo, and at mile 17.6 (28.3 km).

DRAINAGE AREA.--1,709 mi^2 (4,426 km^2).

PERIOD OF RECORD.--January to September 1974.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level.

EXTREMES.--Maximum contents, 416,100 acre-ft (513 hm^3) June 12, elevation 418.70 ft (127.620 m); minimum since conservation pool was first filled, 143,900 acre-ft (177 hm^3) Aug. 9, elevation 403.44 ft (122.969 m).

REMARKS.--Reservoir is formed by rolled earth dam. Regulated storage began Jan. 18, 1974; conservation pool was first filled Mar. 12, 1974. Total capacity, 1,561,500 acre-ft (1.93 km^3) at elevation 452.5 ft (137.92 m), top of dam, 966,700 acre-ft (1.19 km^3) at elevation 437.5 ft (133.35 m), top of flood control pool. Dead storage 21,080 acre-ft (26.0 hm^3) at elevation 387.5 ft (118.11 m), crest of gated spillway. Figures given herein represent total contents. Reservoir is used for flood control, water supply, recreation and conservation.

COOPERATION.--Records furnished by Corps of Engineers.

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

388	22,570	404	150,800
393	46,510	412	275,000
398	84,240	419	423,200

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1					57,250	107,099	152,399	183,500	179,099	153,799	145,000	165,399
2					60,170	108,599	153,500	202,000	182,699	153,399	144,899	171,799
3					61,700	109,699	161,799	206,299	177,899	153,099	144,699	178,799
4					63,149	111,399	169,199	191,899	171,799	152,599	144,399	178,899
5					64,539	112,799	171,899	171,299	187,099	152,399	144,399	170,199
6					66,069	113,799	172,599	159,599	197,199	151,500	144,299	164,199
7					66,869	114,899	172,299	156,500	221,299	151,199	144,299	161,500
8					67,159	116,399	170,000	155,899	283,399	150,599	144,299	158,500
9					68,269	118,000	167,599	156,199	352,699	150,299	143,899	156,899
10					69,379	122,000	165,699	156,799	398,500	150,199	146,000	178,599
11					70,149	142,799	165,699	157,000	415,899	149,899	144,899	221,199
12					71,089	169,399	167,099	156,599	396,699	149,799	174,099	258,899
13					72,029	188,399	171,099	156,199	374,899	149,599	187,099	264,799
14					72,799	178,299	172,299	160,699	349,399	149,199	183,799	244,299
15					73,989	170,899	171,399	169,899	325,099	149,099	176,299	222,099
16					74,329	171,299	169,000	166,399	311,799	148,899	171,899	202,799
17					75,019	170,599	166,000	162,500	288,000	148,799	169,000	198,199
18				24,769	76,719	169,000	163,000	161,199	262,699	148,799	166,399	189,000
19				27,879	76,809	165,599	160,000	159,199	233,799	148,699	163,000	177,099
20				30,789	77,319	163,299	157,299	157,199	204,599	148,299	161,099	180,899
21				33,939	82,359	160,000	163,500	157,000	184,599	148,000	160,299	205,500
22				36,030	86,399	159,599	176,299	157,000	174,000	147,699	159,500	212,399
23				36,280	94,269	161,000	176,000	156,599	163,099	147,500	159,099	199,899
24				36,530	97,709	160,799	169,199	156,399	157,699	147,099	158,699	190,500
25				37,030	100,000	160,799	166,000	158,799	156,399	146,599	158,699	222,500
26				39,530	101,899	161,000	162,000	167,699	155,799	146,399	158,000	233,099
27				43,099	103,699	160,599	159,099	175,699	155,699	146,199	157,599	217,899
28				47,539	105,599	160,000	155,500	175,500	155,099	146,099	158,299	196,299
29				51,859	------	158,899	151,699	171,500	154,899	146,000	159,299	173,199
30				53,609	------	156,500	160,799	166,799	154,599	145,599	159,599	162,599
31		------		55,069	------	153,099	------	166,500	------	145,399	162,599	------
MAX					105,599	188,399	176,299	206,299	415,899	153,799	187,099	264,799
MIN					57,250	107,099	151,699	155,899	154,599	145,399	143,899	156,899
(†)					400.15	404.2	404.74	405.16	404.28	403.56	404.87	404.78
(‡)					+50,530	+47,500	+7,700	+5,700	-11,900	-9,200	+17,200	0

† Elevation, in feet, at end of month.
‡ Change in contents, acre-ft.

07336820 RED RIVER NEAR DE KALB, TEX.

LOCATION.--Lat 33°41'15", long 94°41'39", Bowie, Tex.-McCurtain, Okla. County line, near left bank at downstream side of bridge on U.S. Highway 259, 4.8 miles (7.7 km) upstream from North Mill Creek, 13 miles (21 km) north of De Kalb, and at mile 556.9 (896.1 km).

DRAINAGE AREA.--47,348 mi^2 (122,631 km^2), of which 5,936 mi^2 (15,374 km^2) is probably noncontributing.

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

GAGE.--Water-stage recorder. Datum of gage is 302.92 ft (92.330 m) above mean sea level.

AVERAGE DISCHARGE.--6 years, 12,650 ft^3/s (358.2 m^3/s), 9,165,000 acre-ft/yr (11.3 km^3/yr).

EXTREMES.--Current year: Maximum discharge, 81,600 ft^3/s (2,310 m^3/s) Nov. 29, gage height, 24.75 ft (7.544 m); minimum, 1,010 ft^3/s (28.6 m^3/s) Aug. 9, gage height, 9.58 ft (2.896 m).
Period of record: Maximum discharge, 189,000 ft^3/s (5,350 m^3/s) Dec. 11, 1971, gage height, 31.55 ft (9.616 m), from graph based on gage readings; minimum, 431 ft^3/s (12.2 m^3/s) Sept. 4, 5, 1972.
Maximum stage since 1957, 32.2 ft (9.81 m) in June 1957. Greatest flood since 1936 occurred in February 1938, stage unknown.

REMARKS.--Records good. Flow partly regulated by Lake Texoma (station 07331500) approximately 169 miles (272 km) upstream. Water-quality records for the current year are published in Part 2 of the Texas State report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33,600	32,300	72,200	8,860	7,830	4,610	7,550	7,150	8,860	4,670	1,780	6,730
2	27,400	43,100	74,100	6,860	6,470	3,620	5,870	18,900	11,300	4,470	3,300	6,500
3	25,400	40,400	68,000	6,920	5,820	3,070	3,620	39,900	14,200	3,750	3,750	8,220
4	23,900	36,400	69,100	8,300	4,890	2,750	2,970	51,700	16,700	3,390	3,690	10,300
5	20,500	31,500	69,800	8,300	4,810	2,580	5,800	65,000	18,100	4,290	3,560	10,900
6	16,600	27,500	57,800	8,580	3,940	2,360	10,000	64,000	23,900	4,140	2,830	10,300
7	14,400	24,300	47,700	8,300	3,420	2,220	9,630	51,900	29,100	3,140	2,170	7,830
8	18,800	19,300	37,900	6,700	3,870	2,100	7,190	46,000	36,600	2,360	1,280	4,620
9	21,200	13,000	31,800	5,650	3,620	2,250	5,980	41,900	36,000	2,070	1,130	3,960
10	19,400	9,940	26,900	6,810	3,060	2,920	4,640	33,200	41,400	1,760	1,960	4,610
11	16,600	8,660	22,400	15,400	4,020	3,600	4,090	21,100	48,400	1,480	2,550	14,200
12	15,400	8,410	20,100	13,400	4,580	4,310	4,550	15,800	49,800	1,440	2,870	25,300
13	27,600	7,260	18,800	12,300	3,680	10,400	4,580	14,200	50,500	2,940	4,030	30,900
14	47,600	6,790	17,900	11,200	2,790	19,400	4,340	13,500	47,700	3,510	7,100	31,300
15	54,000	6,620	16,500	9,700	2,660	21,900	5,070	13,200	44,900	3,830	8,610	26,500
16	52,200	5,990	15,300	7,260	2,790	18,100	5,300	15,600	42,100	4,520	9,710	22,700
17	45,900	5,730	15,200	5,860	2,510	11,100	4,960	16,600	37,900	3,960	8,700	24,700
18	39,500	5,600	14,700	5,870	2,540	9,290	4,470	16,800	28,600	2,950	6,830	29,200
19	33,900	5,540	15,800	6,090	3,500	9,500	4,830	14,500	24,400	2,540	6,440	36,000
20	28,600	5,240	17,300	7,930	3,110	9,200	4,650	13,200	26,400	3,430	6,410	33,000
21	23,000	5,100	16,900	8,430	2,440	9,160	4,650	12,300	26,900	4,080	6,180	23,600
22	17,400	8,000	17,400	9,690	2,800	8,940	5,730	10,900	21,600	3,820	5,010	26,600
23	15,000	16,100	18,600	8,040	3,970	9,490	11,300	7,300	15,200	3,950	5,250	30,200
24	13,800	18,100	24,600	6,530	9,950	10,500	20,100	5,320	13,400	3,730	5,200	26,200
25	13,100	26,300	29,100	6,990	12,800	10,500	23,300	4,860	9,650	3,510	4,630	26,400
26	12,800	39,600	32,400	6,920	10,900	9,190	16,200	4,760	6,060	4,270	4,230	41,700
27	12,900	57,800	29,600	6,970	8,570	8,220	11,000	5,920	4,540	4,990	4,450	49,700
28	13,000	75,700	21,900	7,280	6,440	7,740	7,970	8,350	4,750	4,140	4,220	50,700
29	13,700	80,700	17,900	7,770	------	7,440	6,120	11,100	4,740	3,340	3,060	48,800
30	19,500	73,600	14,200	9,040	------	7,290	6,300	12,200	4,640	3,620	2,860	48,700
31	25,200	------	11,600	9,890	------	7,580	------	10,600	------	2,800	4,640	------
TOTAL	761,900	744,580	963,500	257,840	137,780	241,330	222,760	667,760	748,340	106,890	138,430	720,370
MEAN	24,580	24,820	31,080	8,317	4,921	7,785	7,425	21,540	24,940	3,448	4,465	24,010
MAX	54,000	80,700	74,100	15,400	12,800	21,900	23,300	65,000	50,500	4,990	9,710	50,700
MIN	12,800	5,100	11,600	5,650	2,440	2,100	2,970	4,760	4,540	1,440	1,130	3,960
AC-FT	1,511M	1,477M	1,911M	511,400	273,300	478,700	441,800	1,325M	1,484M	212,000	274,600	1,429M

CAL YR 1973 TOTAL 9,152,140 MEAN 25,070 MAX 128,000 MIN 2,900 AC-FT 18,150,000
WTR YR 1974 TOTAL 5,711,480 MEAN 15,650 MAX 80,700 MIN 1,130 AC-FT 11,330,000

07337000 RED RIVER AT INDEX, ARK.

LOCATION.--Lat 33°33'07", long 94°02'28", in NW 1/4SW1/4 sec.7, T.14 S., R.28 W., Miller County, near right bank on downstream side of bridge on U.S. Highway 71 at Index, 2.2 mi (3.5 km) south of Ogden, 20.6 mi (33.1 km) upstream from Little River, and at mile 485.3 (780.8 km).

DRAINAGE AREA.--48,030 mi^2 (124,400 km^2), of which 5,936 mi^2 (15,370 km^2) is probably noncontributing.

PERIOD OF RECORD.--July 1936 to current year. Gage-height records collected at same site since 1917 are contained in reports of National Weather Service.

GAGE.--Water-stage recorder. Datum of gage is 246.87 ft (75.246 m) above mean sea level. Prior to Dec. 12, 1939, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--38 years, 11,940 ft^3/s (338 m^3/s), 8,651,000 acre-ft/yr (10,700 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 68,200 ft^3/s (1,930 m^3/s) Nov. 29, gage height, 18.65 ft (5.685 m); minimum, 1,980 ft^3/s (56.1 m^3/s) Aug. 10-11, gage height, 4.47 ft (1.362 m).
Period of record: Maximum discharge, 297,000 ft^3/s (8,410 m^3/s) Feb. 23, 1938, gage height, 34.25 ft (10.439 m); minimum, 378 ft^3/s (10.7 m^3/s) Nov. 28, 1956.

REMARKS.--Records good. Some regulation by Lake Texoma (Texas), 241 mi (388 km) upstream since Oct. 31, 1943, capacity, 5,392,900 acre-ft (6,650 hm^3), by Pat Mayse Lake (Texas) since Sept. 28, 1967, capacity, 352,700 acre-ft (435 hm^3), and by Hugo Lake (Oklahoma) since Jan. 18, 1974, capacity, 966,700 acre-ft (1,190 hm^3).

REVISIONS.--WSP 1211: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35,000	27,600	62,500	11,900	10,300	7,080	7,070	5,700	10,600	4,790	3,530	4,170
2	30,300	31,800	61,200	9,330	8,790	5,160	7,130	6,250	8,780	4,740	2,760	5,930
3	24,200	36,800	60,300	7,300	6,860	3,820	6,150	17,500	9,720	4,590	2,710	7,350
4	21,900	32,900	59,300	6,810	5,770	3,160	3,920	36,300	12,700	4,200	3,650	7,590
5	20,600	37,800	61,400	7,830	4,870	2,810	2,970	47,700	15,800	3,770	3,770	9,670
6	17,800	37,000	59,700	7,980	4,490	2,610	3,910	55,200	17,000	3,830	3,770	10,600
7	14,600	29,100	50,600	8,320	3,960	2,450	7,700	51,900	23,600	4,400	3,440	10,100
8	13,200	24,300	41,900	7,990	3,370	2,310	9,320	44,100	36,000	3,820	2,960	8,480
9	15,900	19,900	34,800	6,700	3,420	2,210	7,650	40,300	41,300	3,300	2,460	6,020
10	18,500	15,300	30,500	6,070	3,470	2,140	6,000	37,100	41,600	2,920	2,040	4,880
11	17,400	12,100	26,600	12,300	3,100	2,420	4,730	30,200	44,500	2,640	2,100	5,320
12	15,400	10,100	22,900	20,400	3,190	3,040	4,040	22,200	46,100	2,420	2,570	13,000
13	16,300	8,830	20,700	17,800	3,940	3,550	4,040	17,600	46,800	2,250	2,890	25,600
14	29,400	8,180	19,400	14,100	3,750	6,610	4,230	15,900	47,400	2,700	3,210	30,100
15	40,200	7,750	18,400	12,200	3,100	17,700	3,970	14,900	46,400	3,400	5,300	28,800
16	45,300	7,190	17,500	10,500	2,870	22,100	4,240	14,400	44,100	4,000	7,580	24,000
17	44,100	6,570	16,800	8,340	3,000	18,400	4,710	15,900	41,800	4,400	8,700	23,000
18	38,900	6,120	16,100	6,370	2,860	12,200	4,580	17,200	36,900	4,390	8,440	26,600
19	34,000	5,930	15,800	6,740	2,640	9,510	4,130	17,100	29,300	3,670	6,870	29,700
20	30,100	5,990	17,500	8,810	2,980	9,310	4,060	15,100	25,900	2,970	6,180	32,000
21	26,200	6,070	19,400	11,600	3,490	9,230	4,290	13,600	27,200	2,850	6,040	27,700
22	22,200	5,710	18,600	11,200	3,490	9,010	4,760	12,600	27,600	3,670	6,130	21,400
23	18,500	9,100	18,200	10,800	3,400	8,880	5,880	11,300	22,000	3,940	5,390	23,800
24	16,200	21,900	20,800	9,380	3,760	9,100	9,870	8,510	16,500	3,840	4,890	26,000
25	14,900	24,200	27,400	7,280	7,220	10,000	19,000	6,070	14,500	3,930	5,110	23,800
26	14,100	29,200	30,000	7,060	11,500	10,500	21,500	5,700	11,400	3,670	4,840	27,700
27	13,500	40,900	30,700	7,870	11,200	9,550	15,700	5,280	7,510	3,620	4,450	39,400
28	13,200	53,700	26,200	9,260	9,290	8,350	11,300	5,520	5,540	4,450	4,320	41,400
29	13,000	64,500	20,300	10,500	------	7,690	8,340	7,680	4,910	4,570	4,530	41,500
30	13,500	66,500	16,300	10,400	------	7,200	6,340	9,490	4,950	3,830	4,180	40,800
31	20,200	------	13,900	9,770	------	6,940	------	11,100	------	3,440	3,460	------
TOTAL	708,600	693,040	955,700	302,910	140,080	235,040	211,530	619,400	768,410	115,010	138,270	626,410
MEAN	22,860	23,100	30,830	9,771	5,003	7,582	7,051	19,980	25,610	3,710	4,460	20,880
MAX	45,300	66,500	62,500	20,400	11,500	22,100	21,500	55,200	47,400	4,790	8,700	41,500
MIN	13,000	5,710	13,900	6,070	2,640	2,140	2,970	5,280	4,910	2,250	2,040	4,170
AC-FT	1,406M	1,375M	1,896M	600,800	277,800	466,200	419,600	1,229M	1,524M	228,100	274,300	1,242M

CAL YR 1973 TOTAL 8,575,630 MEAN 23,490 MAX 66,500 MIN 970 AC-FT 17,010,000
WTR YR 1974 TOTAL 5,514,400 MEAN 15,110 MAX 66,500 MIN 2,040 AC-FT 10,940,000

07337300 PINE CREEK LAKE NEAR WRIGHT CITY, OKLA.

LOCATION.--Lat 34°06'43", long 95°04'46", in NE 1/4 NW 1/4 sec.23, T.5 S., R.21 E., McCurtain County, at left of outlet works of dam on Little River, 4.7 mi (7.6 km) upstream from bridge on State Highway 98, 5.0 mi (8.0 km) northwest of Wright City, and at mile 145.3 (233.8 km).

DRAINAGE AREA.--635 mi^2 (1,645 km^2).

PERIOD OF RECORD.--June 1969 to current year. Prior to October 1970 published as Pine Creek Reservoir near Wright City.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level.

EXTREMES.--Current year: Maximum contents, 197,000 acre-ft (243 hm^3) Sept. 14, elevation, 459.98 ft (140.202 m); minimum, 51,100 acre-ft (63.0 hm^3) Oct. 4, elevation, 437.28 ft (133.283 m).
Period of record: Maximum contents, 348,410 acre-ft (430 hm^3) Dec. 16, 1971, elevation, 472.57 ft (144.039 m); minimum since conservation pool was first filled, 28,220 acre-ft (34.8 hm^3) Oct. 21, 1972, elevation, 429.34 ft (130.863 m).

REMARKS.--Reservoir is formed by rolled earth dam; regulated storage began June 1, 1969; conservation pool was first filled Jan. 7, 1970. Total capacity, 1,136,000 acre-ft (1.40 km^3) at elevation 509.0 ft (153.14 m), top of dam, 465,800 acre-ft (574 hm^3) at elevation 480.0 ft (146.30 m), crest of spillway, 53,800 acre-ft (66.3 hm^3) at elevation 438.0 ft (133.50 m) top of conservation pool, 7,140 acre-ft (8.80 hm^3) dead storage at elevation 414.0 ft (126.19 m). Figures given herein represent total contents. Reservoir is designed for flood control, municipal and industrial water supply, and recreation.

COOPERATION.--Records furnished by Corps of Engineers.

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

437	50,100	450	115,400
441	65,970	455	152,500
445	85,440	460	197,200

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	67,659	68,109	94,729	57,209	54,349	54,349	54,049	73,689	55,810	54,539	52,079	57,929
2	60,849	65,969	84,589	53,750	54,700	54,200	53,979	72,829	55,459	54,469	51,969	60,599
3	52,709	62,859	79,049	53,189	54,619	53,899	55,119	69,019	54,729	54,280	51,829	63,030
4	51,170	60,149	96,059	53,379	54,579	53,859	56,429	65,229	54,929	54,239	51,679	61,390
5	51,359	56,939	101,199	53,750	54,390	53,899	56,119	60,269	57,060	54,170	51,539	58,929
6	51,789	54,959	96,239	53,979	54,090	54,280	55,420	56,659	57,369	53,979	51,459	57,209
7	53,269	54,429	87,329	54,239	53,899	54,659	54,579	56,159	65,750	53,899	51,319	56,349
8	54,239	53,899	77,799	54,509	54,009	54,509	53,899	55,459	91,589	53,679	51,250	55,310
9	54,810	53,269	68,289	54,659	54,200	54,239	53,679	54,539	120,500	53,640	51,209	55,349
10	55,189	53,489	60,229	55,500	54,319	56,119	53,859	53,750	126,399	53,530	51,609	107,000
11	56,200	53,679	57,209	55,929	54,280	123,000	55,310	53,599	126,699	53,409	51,939	169,399
12	57,409	53,899	55,649	56,159	54,469	132,899	57,689	53,299	124,399	53,299	62,729	185,899
13	67,259	54,009	53,899	56,349	54,509	134,399	56,979	53,269	117,500	53,189	65,399	194,099
14	70,769	54,170	53,079	56,549	54,509	128,199	55,119	54,009	107,500	53,149	64,969	197,000
15	70,809	54,129	53,379	55,849	54,509	118,500	54,170	54,659	96,239	53,149	62,099	193,799
16	68,699	54,009	53,450	55,189	54,509	108,199	53,899	54,009	87,759	53,149	60,149	189,000
17	63,670	53,859	53,750	54,539	54,390	97,589	53,709	54,009	81,089	53,079	58,689	186,000
18	62,519	53,899	54,200	53,979	54,579	87,329	53,939	53,979	72,269	52,890	57,140	178,899
19	60,069	53,750	55,959	54,929	54,700	76,699	54,200	53,640	61,769	52,780	55,500	169,399
20	59,090	55,379	56,659	56,119	54,769	66,500	54,390	53,489	55,929	52,629	54,700	166,199
21	57,890	58,090	57,369	56,819	54,959	58,329	62,399	53,450	55,769	52,489	54,769	166,599
22	56,700	59,209	57,769	56,780	55,079	56,039	102,399	53,450	55,579	52,379	54,729	160,399
23	55,269	65,099	63,369	56,700	55,929	55,149	111,799	53,489	55,119	52,189	54,700	151,099
24	54,429	85,709	82,379	56,700	56,000	54,280	115,000	53,530	54,849	52,709	54,619	141,899
25	54,349	107,000	89,969	56,780	55,929	53,709	115,199	53,939	54,769	52,780	54,579	177,099
26	54,319	118,399	91,589	56,899	55,619	53,679	108,500	55,269	54,769	52,780	54,579	188,099
27	54,280	125,000	86,789	57,019	55,149	53,640	97,949	56,310	54,769	52,670	54,619	191,699
28	54,239	124,399	81,599	57,060	54,769	53,530	87,379	56,200	54,700	52,560	54,579	188,099
29	54,200	115,000	75,819	56,239	------	53,859	76,699	54,810	54,659	52,450	54,890	179,299
30	55,349	105,099	69,750	55,189	------	53,899	74,939	54,170	54,579	52,299	56,349	167,899
31	65,009	------	63,289	54,390	------	54,049	------	54,890	------	52,229	57,140	------
MAX	70,809	125,000	101,199	57,209	56,000	134,399	115,199	73,689	126,699	54,539	65,399	197,000
MIN	51,170	53,269	53,079	53,189	53,899	53,530	53,679	53,269	54,579	52,189	51,209	55,310
(†)	440.78	448.40	440.38	438.17	438.27	438.08	442.94	438.30	438.22	437.59	438.88	456.83
(‡)	-4,190	+40,090	-41,810	-8,900	+380	-720	+20,890	-20,050	-310	-2,350	+4,910	+110,760

CAL YR 1973 .....‡ +7,360
WTR YR 1974 .....‡ +98,700

† Elevation, in feet, at end of month.
‡ Change in contents, in acre-ft.

07337500 LITTLE RIVER NEAR WRIGHT CITY, OKLA.

LOCATION.--Lat 34°04'10", long 95°02'47", in NE 1/4 NW 1/4 sec.6, T.6 S., R.22 E., McCurtain County, on left bank on downstream side of bridge on State Highway 98, 1.8 mi (2.9 km) upstream from White Oak Creek, 2.0 mi (3.2 km) west of Wright City, 4.7 mi (7.6 km) downstream from Pine Creek Lake, and at mile 140.6 (226.2 km).

DRAINAGE AREA.--645 mi^2 (1,671 km^2).

PERIOD OF RECORD.--October 1929 to September 1931, October 1944 to current year. Monthly discharge only for some periods, published in WSP 1311.

GAGE.--Water-stage recorder. Datum of gage is 346.76 ft (105.692 m) above mean sea level. Oct. 12, 1929, to Sept. 30, 1931, nonrecording gage at railroad bridge 1.0 mi (1.6 km) downstream at datum 4.15 ft (1.265 m) higher. Dec. 6, 1944, to July 30, 1951, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--32 years,939 ft^3/s (26.59 m^3/s), 680,300 acre-ft/yr (839 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 8,570 ft^3/s (243 m^3/s) Sept. 25, gage height, 25.53 ft (7.782 m); minimum daily, 3.1 ft^3/s (0.088 m^3/s) May 24.

Period of record: Maximum discharge, 78,200 ft^3/s (2,210 m^3/s) May 6, 1961, gage height, 45.60 ft (13.899 m); maximum gage height, 45.77 ft (13.951 m) Sept. 16, 1950; no flow at times in 1930, 1954, 1956, 1964.

REMARKS.--Records good. Except for 10 mi^2 (25.9 km^2) intervening area, flow completely regulated since June 1969 by Pine Creek Lake. (See sta. 07337300).

COOPERATION.--Gage height record and 23 discharge measurements furnished by Corps of Engineers; records computed by Geological Survey.

REVISIONS.--WSP 1211: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,270	1,230	6,300	3,960	643	588	243	6,090	575	6.5	11	436
2	3,350	2,890	6,200	2,980	475	447	253	6,350	582	6.2	9.6	478
3	5,240	2,850	5,900	898	448	443	250	6,030	582	5.2	7.2	709
4	1,550	3,100	1,320	275	445	364	405	4,340	455	5.8	9.3	1,970
5	49	2,950	391	253	449	192	907	3,980	246	6.6	10	2,030
6	21	2,210	3,750	253	448	194	922	3,340	912	6.9	9.8	1,530
7	21	999	6,030	253	418	298	925	975	2,520	6.9	12	610
8	21	980	6,050	253	209	642	774	927	1,690	7.9	19	603
9	23	825	5,960	260	177	649	402	918	565	7.6	23	528
10	58	228	5,490	366	174	654	259	813	667	8.5	43	50
11	70	222	2,930	425	174	700	278	276	1,730	9.6	35	50
12	293	219	1,610	338	175	60	896	267	2,300	9.6	89	50
13	1,340	220	1,550	323	176	700	2,190	189	4,010	11	357	50
14	1,330	218	1,010	400	171	4,700	2,190	35	5,390	11	1,400	751
15	1,680	216	242	676	171	6,130	1,600	267	6,170	15	2,140	3,090
16	2,680	215	213	696	171	6,190	795	659	6,940	20	1,550	4,680
17	2,610	218	201	705	171	6,110	534	174	4,780	13	1,030	5,640
18	2,560	219	95	660	185	6,010	360	170	5,030	13	1,020	6,840
19	2,140	222	97	397	192	5,910	228	171	5,950	12	1,020	6,820
20	973	395	185	347	178	5,790	222	138	4,350	15	617	6,720
21	961	1,040	440	402	375	5,370	220	33	251	16	3.9	6,770
22	954	1,020	449	657	943	2,450	240	20	243	16	3.7	6,910
23	950	1,020	450	664	669	944	60	3.3	238	17	4.5	6,760
24	594	1,100	460	663	647	920	300	3.1	206	47	4.6	6,620
25	68	1,310	30	662	643	834	1,260	4.9	6.2	23	4.7	6,810
26	66	1,300	1,020	710	647	502	3,710	90	4.9	11	5.4	3,670
27	73	700	4,170	728	646	462	6,000	11	6.8	8.8	6.2	1,460
28	70	1,810	4,220	995	646	417	6,040	149	10	12	6.3	3,440
29	69	6,230	4,160	1,570	------	277	5,950	832	8.7	13	32	5,450
30	81	6,390	4,090	1,570	------	247	5,980	452	5.5	12	61	6,540
31	343	------	4,030	1,400	------	246	------	143	------	9.8	312	------
TOTAL	31,508	42,546	79,043	24,739	10,866	59,440	44,393	37,850.3	56,424.1	382.9	9,856.2	98,065
MEAN	1,016	1,418	2,550	798	388	1,917	1,480	1,221	1,881	12.4	318	3,269
MAX	5,240	6,390	6,300	3,960	943	6,190	6,040	6,350	6,940	47	2,140	6,910
MIN	21	215	30	253	171	60	60	3.1	4.9	5.2	3.7	50
AC-FT	62,500	84,390	156,800	49,070	21,550	117,900	88,050	75,080	111,900	759	19,550	194,500

CAL YR 1973 TOTAL 689,490.9 MEAN 1,889 MAX 7,110 MIN 2.0 AC-FT 1,368,000
WTR YR 1974 TOTAL 495,113.5 MEAN 1,356 MAX 6,940 MIN 3.1 AC-FT 982,100

07337900 GLOVER CREEK NEAR GLOVER, OKLA.

LOCATION.--Lat 34°05'51", long 94°54'07", in NW 1/4 NE 1/4 sec.28, T.5 S., R.23 E., McCurtain County, near right bank on downstream side of pier of bridge on State Highways 3 and 7, 2.0 mi (3.2 km) north of Glover, 11.0 mi (17.7 km) northwest of Broken Bow, and at mile 9.2 (14.8 km).

DRAINAGE AREA.--315 mi^2 (816 km^2).

PERIOD OF RECORD.--October 1961 to current year.

GAGE.--Water-stage recorder. Datum of gage is 378.70 ft (115.428 m) above mean sea level.

AVERAGE DISCHARGE.--13 years, 467 ft^3/s (13.23 m^3/s), 20.13 in/yr (511 mm/yr), 338,300 acre-ft/yr (417 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 55,500 ft^3/s (1,570 m^3/s) Mar. 11, gage height, 23.88 ft (7.279 m); minimum, 5.3 ft^3/s (0.15 m^3/s) July 21-24, July 28-Aug. 10.
Period of record: Maximum discharge, 98,600 ft^3/s (2,790 m^3/s) Dec. 10, 1971, gage height, 29.72 ft (9.059 m); no flow at times in 1966, 1968, 1970, 1972, 1973.
Flood in May 1961 reached a stage of 28.84 ft (8.790 m), from floodmark. Flood in 1908 was higher than in May 1961, from information by local residents.

REMARKS.--Records good.

COOPERATION.--Gage height record and 27 discharge measurements furnished by Corps of Engineers; records computed by Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	222	1,880	508	324	413	196	109	1,720	50	26	5.3	453
2	161	800	400	273	364	178	101	3,440	47	23	5.3	2,860
3	113	493	647	235	308	155	103	2,100	47	20	5.3	2,240
4	86	389	4,000	216	268	152	244	1,430	200	19	5.3	960
5	65	391	1,900	189	227	136	215	941	800	16	5.5	495
6	54	330	1,200	178	204	131	175	582	1,130	15	5.3	303
7	50	272	790	168	189	394	155	419	1,670	13	5.3	204
8	48	243	564	161	172	324	135	313	7,280	12	5.5	147
9	58	220	439	152	155	240	117	240	3,340	12	6.1	169
10	57	186	376	1,090	136	696	109	192	1,690	12	19	11,200
11	53	170	313	1,440	131	21,800	168	161	898	12	53	19,000
12	119	149	268	656	122	3,790	1,460	139	563	23	645	3,310
13	2,300	134	204	432	117	1,840	1,110	117	404	20	1,310	2,800
14	1,200	122	211	364	111	1,300	716	98	294	18	426	1,740
15	585	109	185	324	109	992	487	109	228	17	249	1,150
16	430	95	158	287	103	696	364	128	1,120	16	143	953
17	340	85	145	263	94	494	298	98	456	13	93	1,590
18	260	79	128	244	98	394	231	80	686	11	72	1,200
19	204	75	388	917	117	341	207	69	449	9.1	63	886
20	164	243	941	1,300	152	293	182	60	259	7.4	53	732
21	133	1,130	547	954	249	293	287	53	178	5.7	44	3,350
22	106	651	413	676	618	287	17,700	48	132	5.3	36	2,020
23	89	469	602	523	523	235	3,260	46	101	5.3	30	1,200
24	69	2,810	8,390	419	413	212	1,670	54	77	7.2	24	797
25	56	4,750	2,520	358	324	185	1,150	100	65	7.6	20	12,000
26	47	4,270	1,510	370	263	168	758	400	55	7.3	20	4,120
27	49	2,370	1,100	716	227	158	515	200	46	6.4	24	1,950
28	50	1,470	738	779	215	149	388	100	39	5.7	21	1,300
29	56	1,020	574	716	------	139	313	70	35	5.5	27	936
30	69	686	446	591	------	131	618	60	30	5.3	324	627
31	3,000	------	382	487	------	117	------	53	------	5.3	541	------
TOTAL	10,293	26,091	30,987	15,802	6,422	36,616	33,345	13,620	22,369	381.1	4,285.9	80,692
MEAN	332	870	1,000	510	229	1,181	1,112	439	746	12.3	138	2,690
MAX	3,000	4,750	8,390	1,440	618	21,800	17,700	3,440	7,280	26	1,310	19,000
MIN	47	75	128	152	94	117	101	46	30	5.3	5.3	147
CFSM	1.05	2.76	3.17	1.62	.73	3.75	3.53	1.39	2.37	.04	.44	8.54
IN.	1.22	3.08	3.66	1.87	.76	4.32	3.94	1.61	2.64	.05	.51	9.53
AC-FT	20,420	51,750	61,460	31,340	12,740	72,630	66,140	27,020	44,370	756	8,500	160,100

CAL YR 1973 TOTAL 325,788.7 MEAN 893 MAX 11,900 MIN 3.3 CFSM 2.83 IN 38.47 AC-FT 646,200
WTR YR 1974 TOTAL 280,904.0 MEAN 770 MAX 21,800 MIN 5.3 CFSM 2.44 IN 33.17 AC-FT 557,200

PEAK DISCHARGE (BASE, 8,000 FT^3/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
11-25	0700	10.72	8,080	6-8	1645	15.77	19,300
12-24	0700	14.50	15,900	9-11	0100	20.27	34,800
3-11	1045	23.88	55,500	9-25	1000	16.82	22,500
4-22	0530	21.08	39,900				

07338500 LITTLE RIVER BELOW LUKFATA CREEK, NEAR IDABEL, OKLA.

LOCATION.--Lat 33°56'28", long 94°45'30", in SE 1/4 SE 1/4 sec.14, T.7 S., R.24 E., McCurtain County, on left bank at downstream side of bridge on U.S. Highway 70 just downstream from Lukfata Creek, 5.0 mi (8.0 km) northeast of Idabel, and at mile 103.4 (166.4 km).

DRAINAGE AREA.--1,226 mi^2 (3,175 hm^2).

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

GAGE.--Water-stage recorder. Datum of gage is 312.08 ft (95.122 m) above mean sea level. Oct. 1, 1946, to Oct. 26, 1950, and for stages below 9.0 ft (2.7 m) Oct. 26, 1950, to Oct. 10, 1951, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--28 years, 1,701 ft^3/s (48.17 m^3/s), 1,232,000 acre-ft/yr (1.52 km^3/yr).

EXTREMES.--Current year: Maximum discharge, 15,000 ft^3/s (425 m^3/s) Sept. 13, gage height, 28.65 ft (8.733 m); minimum daily, 30 ft^3/s (0.85 m^3/s) Aug. 8.
Period of record: Maximum discharge, 103,000 ft^3/s (2,920 m^3/s) Dec. 10, 1971, gage height, 39.39 ft (12.006 m); minimum, 0.4 ft^3/s (0.011 m^3/s) Sept. 15, 16, Sept. 21 to Oct. 1, 1956.
Flood in February 1938 reached a stage of 39.7 ft (12.10 m), from information by local residents, discharge, 86,000 ft^3/s (2,440 m^3/s).

REMARKS.--Records good. Flow regulated since June 1969 by Pine Creek Lake 41.9 miles (67.4 km) upstream. (See sta. 07337300). Records of chemical analyses for the current year are published in Part 2 of this report.

COOPERATION.--Gage-height record and 32 discharge measurements furnished by Corps of Engineers; records computed by Geological Survey.

REVISIONS.--WSP 1211: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,380	5,160	6,940	4,240	1,820	1,060	464	7,040	445	112	39	1,080
2	1,730	4,170	6,980	4,060	1,290	918	436	8,990	843	101	43	1,800
3	3,660	3,580	7,010	2,760	1,080	780	422	9,880	876	93	61	3,140
4	4,400	3,830	9,770	1,170	981	741	425	9,590	831	86	73	2,820
5	1,490	4,720	8,370	671	911	600	857	7,780	671	79	47	2,540
6	333	3,530	4,460	633	864	447	1,180	5,640	1,110	74	35	2,220
7	198	2,270	5,030	625	825	474	1,160	3,790	3,440	70	32	1,540
8	160	1,380	6,390	602	709	906	1,130	1,670	7,180	67	30	968
9	144	1,270	6,690	589	503	1,050	900	1,380	9,000	66	38	977
10	132	1,000	6,630	2,280	460	1,010	585	1,300	7,460	67	61	3,460
11	172	560	5,870	6,980	438	3,180	496	1,040	3,640	64	88	11,900
12	269	495	3,340	4,050	423	10,500	1,200	646	2,520	63	146	14,400
13	2,010	462	1,790	1,700	412	11,400	2,670	583	2,950	59	1,020	14,600
14	3,630	440	1,610	1,250	402	8,220	2,940	477	4,300	59	1,600	11,900
15	2,580	419	1,020	1,360	402	6,580	2,660	372	5,410	64	1,930	7,180
16	2,890	393	545	1,450	399	6,880	1,790	695	7,500	89	2,050	5,160
17	3,210	376	495	1,380	385	7,000	1,220	833	8,500	88	1,370	7,030
18	2,850	361	461	1,320	373	6,880	957	447	7,500	77	1,070	7,580
19	2,640	358	652	2,250	468	6,720	711	399	6,620	65	1,040	8,000
20	1,930	552	1,440	3,170	485	6,530	559	374	6,540	56	1,010	8,040
21	1,130	1,590	1,350	2,210	605	6,420	574	335	4,580	51	684	7,970
22	1,060	2,210	1,180	1,810	1,540	5,740	5,380	227	930	45	219	8,670
23	1,020	1,800	1,100	1,700	1,740	2,790	11,300	182	518	42	113	9,020
24	998	2,150	4,800	1,520	1,430	1,380	10,900	152	453	44	83	8,650
25	633	5,040	8,570	1,390	1,270	1,350	5,950	128	397	69	73	10,600
26	212	7,830	5,660	1,450	1,170	1,160	2,880	623	257	114	68	13,300
27	176	8,430	3,540	1,860	1,120	845	4,540	639	177	85	65	13,000
28	197	5,430	4,730	2,190	1,080	787	6,180	393	149	58	64	9,490
29	188	4,270	4,830	2,380	------	700	6,570	549	133	41	77	6,410
30	180	6,310	4,650	2,390	------	535	6,600	1,020	120	40	98	6,310
31	2,670	------	4,420	2,210	------	484	------	610	------	40	438	------
TOTAL	44,272	80,386	130,323	63,650	23,585	104,067	83,636	67,784	95,050	2,128	13,765	209,755
MEAN	1,428	2,680	4,204	2,053	842	3,357	2,788	2,187	3,168	68.6	444	6,992
MAX	4,400	8,430	9,770	6,980	1,820	11,400	11,300	9,880	9,000	114	2,050	14,600
MIN	132	358	461	589	373	447	422	128	120	40	30	968
AC-FT	87,810	159,400	258,500	126,200	46,780	206,400	165,900	134,400	188,500	4,220	27,300	416,000

CAL YR 1973 TOTAL 1,221,727 MEAN 3,347 MAX 13,800 MIN 30 AC-FT 2,423,000
WTR YR 1974 TOTAL 918,401 MEAN 2,516 MAX 14,600 MIN 30 AC-FT 1,822,000

07338900 BROKEN BOW LAKE NEAR BROKEN BOW, OKLA.

LOCATION.--Lat 34°08'35", long 94°41'00", in SW 1/4 sec.3, T.5 S., R.25 E., McCurtain County, at intake structure on upstream side of dam on Mountain Fork, 9.0 mi (14.5 km) northeast of Broken Bow, and at mile 20.3 (32.7 km).

DRAINAGE AREA.--754 mi^2 (1,953 km^2).

PERIOD OF RECORD.--October 1968 to current year. Prior to October 1970 published as Broken Bow Reservoir near Broken Bow.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level.

EXTREMES.--Current year: Maximum contents, 1,013,000 acre-ft (1.25 km^3) Mar. 13, elevation, 606.01 ft (184.712 m); minimum, 780,300 acre-ft (962 hm^3) Aug. 29, elevation, 589.30 ft (179.619 m).
Period of record: Maximum contents, 1,178,000 acre-ft (1.45 km^3), Dec. 17, 1971, elevation, 616.41 ft (187.882 m); minimum since conservation pool was first filled, 672,000 acre-ft (829 hm^3) Oct. 21, 1972, elevation 580.48 ft (176.930 m).

REMARKS.--Reservoir is formed by a rolled earth and gravel structure. Regulated storage began Oct. 3, 1968; conservation pool was first filled Jan. 30, 1969. Total capacity, 1,368,000 acre-ft (1.69 km^3) at elevation 627.5 ft (191.26 m), top of flood pool and spillway gates, 918,100 acre ft (1.13 km^3) at elevation 599.5 ft (182.73 m), top of power pool, and 448,200 acre-ft (553 hm^3) at elevation 599.0 ft (170.38 m), conservation pool. Figures given herein represent total contents. Reservoir is used for flood control, power development and water supply.

COOPERATION.--Records furnished by Corps of Engineers.

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

589	776.5	599	911.0
592	815.4	603	968.6
595	855.6	607	1,029

CONTENTS, IN THOUSANDS OF ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	842.8	892.6	964.2	919.8	924.3	904.9	915.1	940.2	914.5	896.2	805.6	800.2
2	841.4	894.6	962.9	915.8	926.8	905.9	913.1	949.6	915.0	894.7	805.6	812.3
3	840.5	896.5	956.2	909.9	927.9	906.8	913.0	950.6	913.8	892.9	805.7	820.9
4	841.4	898.9	977.7	906.1	925.2	907.8	912.4	954.3	914.7	892.3	805.2	822.7
5	840.3	897.4	986.3	907.2	925.2	908.5	909.7	961.3	916.6	891.6	805.1	824.2
6	840.9	896.7	983.4	908.5	922.8	910.2	910.2	960.0	917.4	891.2	804.4	824.3
7	841.4	898.8	974.5	904.5	915.2	913.0	911.3	944.7	938.9	890.8	803.9	824.8
8	839.0	899.2	967.9	905.2	906.9	914.2	910.6	948.5	985.6	886.8	802.7	825.8
9	837.6	899.0	960.1	898.8	907.8	915.1	910.3	944.4	1,001	885.0	801.5	826.8
10	837.0	899.5	950.8	904.5	908.9	919.9	910.6	940.1	1,001	880.8	800.4	851.8
11	837.9	899.9	942.1	907.0	907.8	997.5	914.1	940.4	992.3	875.2	799.2	906.6
12	839.9	899.8	935.2	902.3	907.2	1,009	918.8	941.5	983.1	870.6	797.9	918.2
13	857.9	899.5	929.0	905.8	907.9	1,013	922.5	935.8	973.5	870.6	796.8	932.0
14	866.2	898.9	921.5	907.2	907.3	1,011	925.2	936.6	962.3	870.2	796.5	939.6
15	871.2	895.6	920.1	909.6	901.8	1,008	925.2	934.6	956.5	866.8	794.5	944.1
16	874.3	894.8	920.5	911.8	902.1	1,004	923.2	930.2	954.0	862.3	793.5	946.1
17	875.3	895.1	917.1	913.4	902.6	998.9	922.6	926.5	953.0	856.8	792.2	952.8
18	876.8	895.8	914.5	913.8	903.0	991.6	918.4	926.9	942.4	851.5	791.0	954.8
19	877.2	895.4	913.0	917.2	902.1	982.8	918.1	927.2	937.2	845.2	789.8	953.1
20	878.2	898.9	915.1	921.3	900.7	974.2	918.9	921.2	927.3	843.3	788.7	950.6
21	878.9	904.7	918.1	922.9	900.6	964.2	929.8	919.5	920.6	841.3	788.0	956.6
22	876.7	908.7	921.3	924.6	901.7	954.4	977.9	917.9	920.9	835.1	787.3	960.1
23	875.7	911.6	927.8	923.0	904.9	948.5	985.3	917.8	920.9	829.4	786.1	958.1
24	873.5	922.5	946.6	919.9	906.3	943.2	986.0	916.6	916.4	825.2	785.1	956.6
25	873.8	943.8	955.7	917.1	903.5	936.3	981.6	915.9	914.8	821.4	783.8	983.7
26	873.9	970.4	955.9	920.2	902.6	932.3	971.1	919.5	907.9	817.6	781.4	995.0
27	875.3	983.4	950.5	923.9	903.7	927.3	960.5	917.8	903.2	816.8	780.8	1,001
28	875.2	984.8	945.7	926.3	905.2	920.9	949.6	917.2	899.2	816.5	780.4	998.7
29	874.1	979.1	938.1	927.5	------	916.4	939.8	914.5	899.0	812.8	787.0	995.4
30	876.1	972.4	933.5	925.9	------	916.9	940.2	913.3	899.0	810.2	793.4	986.0
31	887.5	------	925.2	925.2	------	917.6	------	914.4	------	806.2	796.1	------
MAX	887.5	984.8	986.3	927.5	927.9	1,013	986.0	961.3	1,001	896.2	805.7	1,001
MIN	837.0	892.6	913.0	898.8	900.6	904.9	909.7	913.3	899.0	806.2	780.4	800.2
(†)	597.32	603.26	600.00	600.00	598.59	599.47	601.05	599.24	598.15	591.30	590.52	604.18
(‡)	+44.5	+84.9	-47.2	0	-20.0	+12.4	+22.6	-25.8	-15.4	-92.8	-10.1	+189.9

CAL YR 1973 .....‡ +20.5
WTR YR 1974.....‡ +143.0

† Elevation, in feet, at end of month.
‡ Change in contents, in thousands of acre-ft.

07339000 MOUNTAIN FORK NEAR EAGLETOWN, OKLA.

LOCATION.--Lat 34°02'30", long 94°37'15", in SE 1/4 SE 1/4 sec.7, T.6 S., R.26 E., McCurtain County, near center of span on downstream side of pier of bridge on U.S. Highway 70, 2.0 miles (3.2 km) west of Eagletown, 10.7 miles (17.2 km) downstream from Broken Bow Dam, and at mile 8.9 (14.3 km).

DRAINAGE AREA.--787 mi^2 (2,040 km^2).

PERIOD OF RECORD.--March 1924 to December 1925, October 1929 to current year. Published as Mountain Fork River near Broken Bow 1924-25 and as Mountain Fork River near Eagletown 1929-60. Monthly discharge only for some periods, published in WSP 1311.

GAGE.--Water-stage recorder. Datum of gage is 333.87 ft (101.763 m) above mean sea level. See WSP 1920 for history of changes prior to July 23, 1950.

AVERAGE DISCHARGE.--46 years, 1,290 ft^3/s (36.53 m^3/s), 934,600 acre-ft/yr (1.15 km^3/yr).

EXTREMES.--Current year: Maximum discharge, 14,900 ft^3/s (422 m^3/s) May 4, gage height, 10.63 ft (3.240 m); minimum daily, 93 ft^3/s (2.63 m^3/s) Jan. 6.
Period of record: Maximum discharge, 101,000 ft^3/s (2,850 m^3/s) May 20, 1960, gage height, 26.73 ft (8.147 m), from rating curve extended above 65,000 ft^3/s (1,840 m^3/s); no flow at times.
Flood of Aug. 18-19, 1915, reached a stage of 26.4 ft (8.05 m), from information by local residents, discharge, 92,500 ft^3/s (2,620 m^3/s).

REMARKS.--Records fair. Except for 33 mi^2 (85 km^2) intervening area, flow completely regulated since October 1968 by Broken Bow Lake. (See sta. 07338900).

COOPERATION.--Gage-height record and 17 discharge measurements furnished by Corps of Engineers; records computed by Geological Survey.

REVISIONS (WATER YEARS).--WSP 1211: Drainage area. WSP 1241: 1924-26, 1930 (M), 1936-37 (M), 1938, 1939 (M), 1942 (M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	296	385	5,680	3,490	1,600	297	750	3,710	188	606	1,860	197
2	1,180	500	5,690	2,840	515	558	1,460	5,320	168	1,180	1,130	190
3	865	822	5,220	3,020	138	156	1,550	4,570	164	841	490	169
4	842	400	5,610	2,390	1,240	137	696	7,330	165	533	197	147
5	327	786	1,260	814	1,130	158	1,440	748	511	273	180	182
6	401	984	3,830	93	1,240	249	755	1,490	1,300	285	213	209
7	203	355	6,800	1,250	3,550	188	165	6,140	2,190	169	182	348
8	489	252	5,190	1,130	4,740	226	133	3,140	2,090	801	300	181
9	1,030	311	5,210	2,300	1,770	748	248	3,240	522	1,460	600	313
10	799	310	5,840	3,510	229	242	293	3,030	1,970	1,570	902	1,550
11	478	191	5,270	4,340	568	461	171	1,980	6,750	2,690	207	3,840
12	275	181	4,520	5,500	800	2,070	167	258	6,510	2,430	372	1,500
13	778	218	4,100	1,400	297	2,100	398	1,400	6,610	1,460	1,320	1,100
14	278	358	4,210	497	420	3,180	162	1,970	7,140	213	1,460	300
15	220	1,460	1,930	558	1,010	3,680	798	629	4,740	776	771	204
16	319	1,110	972	154	1,090	3,900	1,500	2,470	3,650	1,900	850	1,030
17	305	384	1,200	135	203	3,780	1,320	2,540	3,620	2,660	652	2,750
18	617	148	1,800	148	230	4,670	2,120	1,450	4,200	2,850	579	2,970
19	253	151	3,150	747	760	5,450	1,820	226	4,600	3,260	356	3,720
20	400	423	2,760	304	1,180	5,670	326	1,430	4,480	1,740	1,000	4,310
21	201	238	1,370	446	1,390	6,120	367	2,560	4,330	964	1,600	3,600
22	524	212	832	1,450	1,430	6,140	3,230	673	1,670	2,620	1,000	2,290
23	993	193	196	1,760	458	4,140	2,940	926	228	3,020	800	3,200
24	1,010	539	386	2,510	155	3,640	3,330	356	1,210	2,190	600	3,220
25	1,060	407	210	2,750	1,700	4,470	4,150	491	2,040	2,370	300	4,920
26	306	2,270	1,340	1,100	1,660	2,830	6,850	203	2,290	2,350	200	2,150
27	211	1,260	4,480	227	589	3,110	6,870	539	2,690	1,230	725	1,230
28	196	2,250	4,120	551	223	3,810	6,900	819	2,260	205	195	2,520
29	175	5,590	5,200	1,120	------	3,200	6,840	863	1,280	658	183	3,050
30	241	5,590	3,890	1,850	------	1,540	2,780	1,470	209	1,510	232	6,490
31	1,350	------	4,730	2,260	------	217	------	653	------	1,500	477	------
TOTAL	16,622	28,278	106,996	50,644	30,315	77,137	60,529	62,624	79,775	46,314	19,933	57,880
MEAN	536	943	3,451	1,634	1,083	2,488	2,018	2,020	2,659	1,494	643	1,929
MAX	1,350	5,590	6,800	5,500	4,740	6,140	6,900	7,330	7,140	3,260	1,860	6,490
MIN	175	148	196	93	138	137	133	203	164	169	180	147
AC-FT	32,970	56,090	212,200	100,500	60,130	153,000	120,100	124,200	158,200	91,860	39,540	114,800

CAL YR 1973 TOTAL 901,978 MEAN 2,471 MAX 8,200 MIN 148 AC-FT 1,789,000
WTR YR 1974 TOTAL 637,047 MEAN 1,745 MAX 7,330 MIN 93 AC-FT 1,264,000

As the number of streams on which stream flow 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 station are usable in low-flow or floodflow analyses, depending on the type of data collected. In addition, discharge measurements are made at other sites not included in the partial-record program. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

Records collected at partial-record stations are presented in two tables. The first is a table of discharge measurements at low-flow partial-record stations, and the second is a table of annual maximum stage and discharge at crest-stage stations. Discharge measurements made at miscellaneous sites for both low flow and high flow are given in a third table.

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 a 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 1974

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
		Arkansas River basin				
07148360	Greenwood Creek near Winchester	Lat 36°55'23", long 98°47'27", in SW 1/4 NW 1/4 sec.11, T.28 N., R.14 N., Woods County, at county road bridge 2.4 mi (3.9 km) south of Winchester and at mile 1.9 (3.1 km).	41.2	1972-74	12- 6-73 3-12-74 5-16-74 9- 6-74	4.6 5.3 1.3 2.3

Discharge measurement at miscellaneous sites during water year 1974

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
Cottonwood Creek	Cimarron River	Lat 35°53'08", long 97°25'32", in SE 1/4 SE 1/4 sec.5, T.16 N., R.2 W., Logan County, at bridge on College Ave. at north edge of Guthrie, 2.5 mi (4.0 km) upstream from Cimarron River.			05-22-74 05-22-74	456 707
Canadian River	Arkansas River	Lat 35°21'47", long 97°55'46", in SE 1/4 SW 1/4 sec.3, T.10 N., R.7 W., Canadian County, at bridge on U.S. Highway 81, 2 mi (3.2 km) south of Union City.			06-08-74	1,220
Deep Fork	North Canadian River	Lat 35°30'17", long 97°34'28", in NW 1/4 sec.24, T.12 N., R.4 W., Oklahoma County at control structure at 34th St. and Grand Blvd in Oklahoma City.	4.02	1973	03-08-74	700
Deep Fork	North Canadian River	Lat 35°32'05", long 97°28'35" on west line NW 1/4 sec.12, T.12 N., R.3 W., Oklahoma County, at bridge on Eastern Ave., 0.2 mi (.3 km) south of N.E. 63rd St. in Oklahoma City.		1973	02-21-74 04-29-74 05-21-74	144 460 3,190

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)	Discharge (cfs)
		Arkansas River Basin					
07150580	Sand Creek tributary near Kremlin, Okla. (discontinued)	Lat 36°33'00", long 97°48'38", in SE 1/4 SW 1/4 sec.14, T.24 N., R.6 W., Garfield County, at county road bridge, 1.2 mi (1.9 km) east of Kremlin.	7.21	1964-74	10-10-73	11.2	12,000
07150870	Salt Fork Arkansas River tributary near Eddy, Okla.	Lat 36°41'42", long 97°25'30", in SW 1/4 SW 1/4 sec.28, T.26 N., R.2 W., Kay County, at culvert on U.S. Highway 60, 3.0 mi (4.8 km) southeast of Eddy.	2.35	1964-74	08-14-74	16.91	1,080
07152360	Elm Creek near Foraker, Okla.	Lat 36°52'08", long 96°36'50", in SE 1/4 SW 1/4 sec.25, T.28 N., R.6 E., Osage County, at county road bridge, 2.8 mi (4.5 km) west of Foraker	18.2	1964-74	05-26-74	12.0	6,500
07152520	Black Bear Creek tributary near Garber, Okla.	Lat 36°23'25", long 97°37'20", in SE 1/4 SE 1/4 sec.9, T.22 N., R.4 W., Garfield County, at culvert on old U.S. Highway 64, 4.0 mi (6.4 km) southwest of Garber.	.97	1964-74	08-14-74	9.6	1,310
07154650	Tesesquite Creek near Kenton, Okla.	Lat 36°53'52", long 102°54'04", in NE 1/4 SE 1/4 sec.13, T.5 N., R.1 E., Cimarron County, at county road bridge, 3.9 mi (6.3 km) east of Kenton	25.4	1964-74	08-09-74	15.68	1,780
07155100	Cold Springs Creek near Wheeless, Okla.	Lat 36°46'20", long 102°48'16", in SE 1/4 NE 1/4 sec.35, T.4 N., R.2 E., Cimarron County, at county road multi-barrel culvert, 6.0 mi (9.7 km) northeast of Wheeless.	11.0	1964-74	08-09-74	10.50	17
07157550	West Fork Creek near Knowles, Okla.	Lat 36°52'30", long 100°07'20", in SE 1/4 SE 1/4 sec.22, T.5 N., R.27 E., Beaver County, at county road culvert, 4.2 mi (6.8 km) east of Knowles.	4.22	1964-74	06-01-74	14.25	179
07158020	Cimarron River tributary near Lone Wolf, Okla.	Lat 36°24'25", long 98°44'10", in SW 1/4 SE 1/4 sec.6, T.22 N., R.14 W., Major County, at multi-barrel culvert on State Highway 15, 5.4 mi (8.7 km) west of Lone Wolf.	4.07	1964-74	08-27-74	5.05	785
07158080	Sand Creek tributary near Waynoka, Okla.	Lat 36°35'40", long 98°44'00", in NW 1/4 NE 1/4 sec.6, T.24 N., R.14 W., Woods County, at multi-barrel culvert on U.S. Highway 281, 8.0 mi (12.9 km) east of Waynoka.	1.61	1964-74	08-27-74	4.82	327
07158180	Salt Creek tributary near Okeene, Okla. (discontinued)	Lat 36°03'00", long 98°19'00", in SW 1/4 NW 1/4 sec.7, T.18 N., R.10 W., Blaine County, at multi-barrel culvert on State Highway 8, 4.4 mi (7.1 km) south of Okeene.	8.23	1964-74	09-20-74	8.24	4,500
07158500	Preacher Creek near Dover, Okla.	Lat 36°02'37", long 98°00'48", in NW 1/4 NW 1/4 sec.13, T.18 N., R.8 W., Kingfisher County, at county road bridge, 7.1 mi (11.4 km) northwest of Dover.	14.5	1952-57, 1964-74	08-14-74	6.07	454
07158550	Turkey Creek tributary near Goltry, Okla.	Lat 36°28'40", long 98°08'05", in SE 1/4 SW 1/4 sec.11, T.23 N., R.9 W., Alfalfa County, at multi-barrel culvert on State Highway 45, 4.1 mi (6.6 km) south of Goltry.	5.08	1964-74	08-14-74	10.8	1,200
†07159000	Turkey Creek near Drummond, Okla. (discontinued)	Lat 36°19'05", long 98°00'03", in NE 1/4 NE 1/4 sec.12, T.21 N., R.8 W., Garfield County, at county road bridge, 2.2 mi (3.5 km) northeast of Drummond.	248	1948-70, 1971-74	10-11-73	25.9	36,300
†07159200	Kingfisher Creek near Kingfisher, Okla.	Lat 35°50'03", long 98°03'57", in NW 1/4 SW 1/4 sec.28, T.16 N., R.8 W., Kingfisher County, at county road bridge, 7.6 mi (12.2 km) west of Kingfisher.	157	1967-70, 1971-74	09-20-74	20.43	3,000

See footnotes at end of table, p. 186.

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)	Discharge (cfs)
		Arkansas River Basin--Continued					
07159450	Bluff Creek at Oklahoma City, Okla.	Lat 35°32'26", long 97°35'56", in SW 1/4 sec.2, T.12 N., R.4 W., Oklahoma County at 68 St. and Northwest Highway in Oklahoma City.	1.64	1973-74	06-08-74	11.10	1,080
07160550	West Beaver Creek near Orlando, Okla.	Lat 36°08'45", long 97°28'05", in NW 1/4 NE 1/4 sec.12, T.19 N., R.3 W., Logan County, at county road bridge, 5.0 mi (8.0 km) west of Orlando.	13.9	1964-74	03-10-74	6.90	975
07163020	Corral Creek near Yale, Okla.	Lat 36°07'50", long 96°49'50", in NE 1/4 NW 1/4 sec.13, T.19 N., R.4 E., Payne County, at multi-barrel culvert on Old State Highway 51, 7.7 mi (12.4 km) west of Yale.	2.89	1964-74	09-01-74	9.48	500
†07165550	Snake Creek near Bixby, Okla.	Lat 35°49'08", long 95°53'18", in NW 1/4 SW 1/4 sec.36, T.16 N., R.13 E., Okmulgee County, on right bank 5.5 mi (8.8 km) upstream from Duck Creek, 8.8 mi (14.2 km) south of Bixby, and at mile 11.0 (17.7 km).	50	1962-70‡† 1971-74	06-09-74	21.55	9,280
07171120	Clear Creek tributary near Hollow, Okla.	Lat 36°52'50", long 95°16'00", in SW 1/4 NW 1/4 sec.27, T.28 N., R.19 E., Craig County, on downstream side of multi-barrel box culvert on State Highway 10, 1.2 mi (1.9 km) southeast of Hollow.	2.19	1966-74	03-08-74	7.22	1,040
07174720	Hogshooter Creek tributary near Bartlesville, Okla.	Lat 36°43'40", long 95°50'52", in SE 1/4 SE 1/4 sec.18, T.26 N., R.14 E., Washington County, at multi-barrel culvert on U.S. Highway 60, 4.9 mi (7.9 km) east of junction with U.S. Highway 75 southeast of Bartlesville.	.94	1965-74	03-08-74	9.12	481
07178640	Bull Creek near Inola, Okla.	Lat 36°08'55", long 95°27'05", in NE 1/4 NW 1/4 sec.12, T.19 N., R.17 E., Rogers County, at county road bridge, 3.2 mi (5.1 km) east of Inola.	10.7	1965-74	01-28-68 03-23-69 04-30-70 10-05-70 12-14-71 11-25-73	9.70* 9.80* 10.50 10.00 11.25 10.70	910* 950* 1,100* 1,000* 1,400* 1,180
07188140	Flint Branch near Peoria, Okla.	Lat 36°52'25", long 94°41'35", in SW 1/4 SW 1/4 sec.26, T.28 N., R.24 E., Ottawa County, at upstream side of dam, 3.2 mi (5.1 km) southwest of Peoria.	4.90	1964-74	06-08-74	15.52	1,910
†07188500	Lost Creek at Seneca, Mo.	Lat 36°50'28", long 94°36'30", in SE 1/4 SE 1/4 sec.35, T.25 N., R.34 W., Newton County, at Seneca Street bridge in Seneca, half a mile upstream from Little Lost Creek and 9.5 mi (15 km) upstream from mouth.	42	1949-59† 1960-74	06-08-74	7.71	4,520
†07189700	Horse Creek at Afton, Okla.	Lat 36°41'50", long 94°57'20", in NE 1/4 NW 1/4 sec.33, T.26 N., R.22 E., Ottawa County, on downstream side of bridge on U.S. Highway 60 at east edge of Afton.	21.9	1966-74	06-08-74	12.71	2,270
07190600	Big Cabin Creek near Pyramid Corners, Okla.	Lat 36°48'10", long 94°44'50", in SE 1/4 SE 1/4 sec.21, T.27 N., R.20 E., Craig County, on left bank 60 ft (18 m) upstream from county highway bridge, on graveled road 1.2 mi (1.9 km) west of Pyramid Corners, about 7 mi (11 km) upstream from West Fork, and 34.4 mi (55.4 km) above mouth.	71.1	1964-72‡ 1973-74	03-08-74	21.58	18,800
07194515	Mill Creek near Park Hill, Okla.	Lat 35°48'37", long 95°04'07", in NE 1/4 NW 1/4 sec.3, T.15 N., R.21 E., Cherokee County, at multi-barrel culvert on U.S. Highway 62, 6.3 mi (10.1 km) southwest of junction with State Highway 82 near Park Hill.	2.57	1965-74	09-02-74	6.28	330
07196380	Illinois River tributary near Tahlequah, Okla.	Lat 35°58'45", long 94°55'25", in SE 1/4 SE 1/4 sec.2, T.17 N., R.22 E., Cherokee County, at multi-barrel culvert on State Highway 10, 4.9 mi (7.9 km) northeast of Tahlequah.	3.59	1965-74	06-08-74	12.4	5,000
07228290	Rough Creek near Thomas, Okla.	Lat 35°48'08", long 98°47'15", in NW 1/4 SW 1/4 sec.3, T.15 N., R.15 W., Custer County, at county road bridge, 4.7 mi (7.6 km) northwest of Thomas	10.4	1964-74	08-14-74	13.40	2,700
07228450	Deer Creek tributary near Hydro, Okla.	Lat 35°32'10", long 98°28'50", in NW 1/4 NW 1/4 sec.9, T.12 N., R.12 W., Caddo County, at county road culvert, 5.5 mi (8.8 km) east of Hydro.	2.31	1964-74	08-14-74	7.38	201

See footnotes at end of table, p. 186.

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)	Discharge (cfs)
		Arkansas River Basin--Continued					
07228960	Canadian River tributary near Newcastle, Okla.	Lat 35°17'27", long 97°37'20", in NW 1/4 NE 1/4 sec.4, T.9 N., R.4 W., McClain County, at multi-barrel culvert on State Highway 37, 1.3 mi (2.1 km) west of junction with U.S. Highway 62 north of Newcastle.	3.32	1965-74	08-09-74	18.28	354
07229420	Julian Creek tributary near Asher, Okla.	Lat 34°59'09", long 96°58'48", in SW 1/4 SW 1/4 sec.15, T.6 N., R.3 E., Pottawatomie County, at multi-barrel culvert on State Highway 39, 3.4 mi (5.5 km) west of Asher.	2.28	1964-74	05-25-74	13.88	536
07231280	Arbeca Creek near Allen, Okla. (discontinued)	Lat 34°54'10", long 96°23'20", in NE 1/4 SE 1/4 sec.18, T.5 N., R.9 E., Hughes County, at multi-barrel culvert on State Highway 12, 1.7 mi (2.7 km) northeast of Allen.	2.26	1964-74	11-24-73	7.50	977
07231320	Leader Creek tributary near Atwood, Okla.	Lat 34°57'10", long 96°20'40", in NW 1/4 NW 1/4 sec.34, T.6 N., R.9 E., Hughes County, at multi-barrel culvert on State Highway 12, 0.7 mi (1.1 km) southwest of Atwood.	.72	1964-74	04-30-74	13.17	682
07231560	Middle Creek near Carson, Okla. (discontinued)	Lat 35°11'10", long 96°04'20", in NE 1/4 NE 1/4 sec.7, T.8 N., R.12 E., Hughes County, at multi-barrel culvert on State Highway 84, 1.2 mi (1.9 km) northeast of Carson.	7.40	1964-74	05-28-74	16.78	4,350
07231950	Pine Creek near Higgins, Okla.	Lat 34°47'40", long 95°20'50", in NE 1/4 NE 1/4 sec.30, T.4 N., R.19 E., Latimer County, at bridge on State Highway 63, 5.4 mi (8.7 km) east of Higgins.	9.99	1964-74	11-24-73	14.54	8,100
07232550	South Fork tributary near Guymon, Okla.	Lat 36°40'06", long 101°29'54", in SW 1/4 NE 1/4 sec.1, T.2 N., R.14 E., Texas County, at multiple culvert on Chicago, Rock Island, and Pacific Railroad, 1.8 mi (2.9 km) southwest of junction of U.S. Highways 54 and 64 at Guymon.	.26	1964-74	08-09-74	6.73	23
07232650	Aqua Frio Creek near Felt, Okla.	Lat 36°33'23", long 102°47'10", in SW 1/4 NW 1/4 sec.18, T.1 N., R.3 E., Cimarron County, at county road culvert, 1.1 mi (1.8 km) south of junction with U.S. Highway 64 at Felt.	31.0	1964-74	08-09-74	12.50	770
07233850	Sharp Creek tributary near Turpin, Okla.	Lat 36°51'50", long 100°54'45", in SE 1/4 SE 1/4 sec.29, T.5 N., R.20 E., Beaver County, at culvert on U.S. Highway 64, 2.1 mi (3.4 km) west of Turpin.	1	1964-74	03-10-74	11.30	11
07234050	North Fork Clear Creek tributary near Balko, Okla.	Lat 36°37'01", long 100°39'50", in SW 1/4 SW 1/4 sec.23, T.2 N., R.22 E., Beaver County, at multi-barrel culvert on State Highway 3, 1.5 mi (2.4 km) southeast of Balko.	4.22*	1964-74		< 10.00	< 2
07234290	Clear Creek tributary near Catesby, Okla.	Lat 36°29'30", long 99°57'20", in SE 1/4 SW 1/4 sec.2, T.23 N., R.26 W., Ellis County, on downstream side of county road bridge, 0.1 mi (0.2 km) east of Catesby.	8.51*	1966-74	08-05-74	7.65	1,160
07235700	Little Wolf Creek tributary near Gage, Okla. (discontinued)	Lat 36°14'26", long 99°45'30", in NW 1/4 NW 1/4 sec.4, T.20 N., R.24 W., Ellis County, at multi-barrel culvert on State Highway 46, 5.5 mi (8.8 km) south of Gage.	17.6	1964-74	10-10-73	4.65	490
07237750	Cottonwood Creek near Vici, Okla.	Lat 36°08'45", long 99°12'00", in SE 1/4 SW 1/4 sec.2, T.19 N., R.19 W., Dewey County, at bridge on U.S. Highway 60, 5.4 mi (8.7 km) east of Vici.	11.8*	1964-74	04-20-74	8.89	1,290
†07237800	Bent Creek near Seiling, Okla.	Lat 36°11'26", long 99°00'36", in NW 1/4 SE 1/4 sec.21, T.20 N., R.17 W., Woodward County, at bridge on U.S. Highway 183 and 270, 6 mi (10 km) northwest of Seiling.	139	1967-70, 1971-74	08-27-74	20.04	9,120
07239050	North Canadian River tributary near Eagle City, Okla.	Lat 35°55'30", long 98°35'00", in SE 1/4 NE 1/4 sec.28, T.17 N., R.13 W., Blaine County, at culvert on State Highway 58, 0.5 mi (0.8 km) south of Eagle City.	.52	1964-74	08-14-74	2.88	126

See footnotes at end of table, p. 186.

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)	Discharge (cfs)
		Arkansas River Basin--Continued					
07241880	Sand Creek near Cromwell, Okla.	Lat 35°20'56", long 96°29'40", in SE 1/4 SE 1/4 sec.7, T.10 N., R.8 E., Seminole County, at bridge on State Highway 99A, 2.2 mi (3.5 km) west of Cromwell.	9.48	1964-74	10-12-73	13.02	1,590
07242160	Alabama Creek near Weleetka, Okla. (discontinued)	Lat 35°21'40", long 96°08'55", in NW 1/4 NE 1/4 sec.9, T.10 N., R.11 E., Okfuskee County, at county road multi-barrel culvert, 2.0 mi (3.2 km) north of Weleetka.	16.5	1965-74	11-24-73	12.94	2,960
07242180	Stidham Creek near Dustin, Okla.	Lat 35°17'16", long 96°03'05", in NW 1/4 NW 1/4 sec.3, T.9 N., R.12 E., Hughes County, at multi-barrel culvert on State Highway 84, 1.1 mi (1.8 km) north of Dustin.	2.56	1964-74	06-08-74	9.9	496
07242200	Deep Fork Portland Ave. at Oklahoma City, Okla.	Lat 35°30'06", long 97°34'58", in NW 1/4 sec.24, T.12 N., R.4 W., Oklahoma County at N.W. 31 St. and Portland in Oklahoma City	2.98	1973-74	09-03-73 06-08-74	12.4 11.56	2,900* 2,150
07243550	Adams Creek near Beggs, Okla.	Lat 35°44'55", long 96°02'15", in NE 1/4 SE 1/4 sec.28, T.15 N., R.12 E., Okmulgee County, at county road bridge, 2.0 mi (3.2 km) northeast of Beggs.	5.90	1965-74	06-08-74	13.69	3,390
07244790	Brooken Creek near Enterprise, Okla. (discontinued)	Lat 35°14'50", long 95°22'50", in SE 1/4 SE 1/4 sec.15, T.9 N., R.18 E., Haskell County, at county road multi-barrel culvert, 1.5 mi (2.4 km) north of Enterprise.	5.66	1964-74	11-24-73	10.58	2,410
07246610	Pecan Creek near Spiro, Okla.	Lat 35°14'40", long 94°44'35", in NE 1/4 NE 1/4 sec.22, T.9 N., R.24 E., LeFlore County, at multi-barrel culvert on U.S. Highway 59, 4.2 mi (6.8 km) west of Junction with U.S. Highway 271 west of Spiro.	.90	1965-74	11-25-73	10.74	461
07246630	Big Black Fox Creek near Long, Okla.	Lat 35°31'15", long 94°37'10", in NE 1/4 NE 1/4 sec.14, T.12 N., R.25 E., Sequoyah County, at county road bridge, 2.3 mi (3.7 km) northwest of Long.	5.32	1964-74	11-25-73	10.22	1,700
		Red River Basin					
07300150	Salt Fork Red River tributary near Vinson, Okla.	Lat 34°54'10", long 99°58'50", in NW 1/4 NE 1/4 sec.19, T.5 N., R.26 W., Harmon County, at bridge on State Highway 9, 6.9 mi (11.1 km) west of Vinson.	7.24	1964-74	05-21-74	13.2	2,800
07301480	Short Creek near Sayre, Okla.	Lat 35°18'20", long 99°39'15", in SW 1/4 SE 1/4 sec.29, T.10 N., R.23 W., Beckham County, at county road multi-barrel culvert, 0.9 mi (1.4 km) northwest of Sayre.	9.12	1964-74	09-19-74	14.98	864
07301495	Indian Creek near Carter, Okla.	Lat 35°17'30", long 99°30'35", in NW 1/4 NE 1/4 sec.3, T.9 N., R.22 W., Beckham County, at bridge on State Highway 152, 5.0 mi (8.0 km) north of Carter.	24.9	1965-74	04-29-74	6.92	448
07303450	Deer Creek near Plainview, Okla.	Lat 35°02'50", long 99°46'10", in NW 1/4 SE 1/4 sec.31, T.7 N., R.24 W., Greer County, at county road bridge, 3.8 mi (6.1 km) southwest of Plainview.	27.8	1964-74	04-29-74	8.40	890
07309480	Canyon Creek near Medicine Park, Okla.	Lat 34°49'55", long 98°32'10", in NW 1/4 SE 1/4 sec.11, T.4 N., R.13 W., Comanche County, at multi-barrel culvert on State Highway 58, 7.3 mi (11.7 km) northwest of Medicine Park.	3.35	1965-74	03-09-74	8.19	1.280
07311410	Red Creek near Snyder, Okla. (discontinued)	Lat 34°40'58", long 98°51'40", in SE 1/4 SE 1/4 sec.34, T.3 N., R.16 W., Kiowa County, at multi-barrel culvert on State Highway 54, 5.4 mi (8.7 km) northeast of Snyder.	6.12	1965-74		< 3.00	< 18
07312850	Nine Mile Beaver Creek near Elgin, Okla.	Lat 34°46'40", long 98°15'25", in SE 1/4 NW 1/4 sec.33, T.4 N., R.10 W., Comanche County, at multi-barrel culvert on State Highway 17, 2.0 mi (3.2 km) east of Elgin.	6.29	1964-74	08-10-74	7.37	1,010

See footnotes at end of table, p. 186.

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)	Discharge (cfs)
		Red River Basin--Continued					
07312950	Little Beaver Creek near Marlow, Okla.	Lat 34°40'55", long 98°00'30", in SW 1/4 SE 1/4 sec.35, T.3 N., R.8 W., Grady County, at county road bridge, 3.6 mi (5.8 km) northwest of Marlow.	35.4	1964-74	03-09-74	3.31	520
†07313600	Cow Creek at Waurika, Okla.	Lat 34°10'55", long 98°00'05", in SE 1/4 NE 1/4 sec.26, T.4 S., R.8 W., Jefferson County, at Chicago, Rock Island and Pacific Railway Co. bridge, near north edge of Waurika.	193	1967-70‡ 1971-74	11-26-73	21.85	4,040
07315680	Cottonwood Creek tributary near Loco, Okla.	Lat 34°18'40", long 97°34'00", in SE 1/4 NE 1/4 sec.12, T.3 S., R.4 W., Stephens County, at multi-barrel culvert on State Highway 53, 6.6 mi (10.6 km) southeast of Loco.	1.74	1964-74	04-29-74	9.02	705
07316130	Wilson Creek tributary near McMillan, Okla.	Lat 34°06'00", long 96°58'35", in NW 1/4 NE 1/4 sec.27, T.5 S., R.3 E., Carter County, at county road culvert, 2.5 mi (4.0 km) northwest of McMillan.	2.97	1965-74	05-25-74	7.18	1,150
07316140	Brier Creek near Powell, Okla.	Lat 33°59'54", long 96°49'35", in NW 1/4 NW 1/4 sec.31, T.6 S., R.5 E., Marshall County, at bridge on State Highway 32, 3.6 mi (5.8 km) northeast of Powell.	12.0	1965-74	11-18-64 12-29-69 06-06-74	10.18 8.48 14.66	2,010* 1,150* 5,290
07328030	Big Dry Creek near Alex, Okla.	Lat 34°56'44", long 97°50'18", in NE 1/4 SW 1/4 sec.33, T.6 N., R.6 W., Grady County, upstream from box culvert on State Highway 19, 4.5 mi (7.2 km) northwest of Alex.	7.57	1962-74	05-25-74	4.48	365
07328040	Little Dry Creek near Alex, Okla.	Lat 34°57'06", long 97°50'48", in SW 1/4 NW 1/4 sec.33, T.6 N., R.6 W., Grady County, upstream from box culvert on State Highway 19, 5.0 mi (8.0 km) northwest of Alex.	.88	1962-74	05-25-74	2.70	173
07329870	Honey Creek near Davis, Okla.	Lat 34°26'50", long 97°07'40", in NW 1/4 NE 1/4 sec.30, T.1 S., R.2 E., Murray County, at bridge on State Highway 77D, 4.0 mi (6.4 km) south of Davis.	18.7	1964-74	11-24-73	12.76	3,960
07331410	Buzzard Creek near Reagan, Okla.	Lat 34°19'50", long 96°39'28", in NE 1/4 NE 1/4 sec.3, T.3 S., R.6 E., Johnson County, at bridge on State Highway 99, 4.0 mi (6.4 km) southeast of Reagan.	4.30	1965-74	11-24-73	8.69	626
07332070	Rock Creek near Achille, Okla. (discontinued)	Lat 33°48'35", long 96°22'38", in SW 1/4 SW 1/4 sec.33, T.8 S., R.9 E., Bryan County, at county road culvert, 2.0 mi (3.2 km) south of Achille.	.72	1965-74	11-24-73	4.60	314
07333500	Chickasaw Creek near Stringtown, Okla.	Lat 34°27'41", long 96°01'36", in NE 1/4 NE 1/4 sec.22, T.1 S., R.12 E., Atoka County, on right upstream pier of county road bridge, 1.5 mi (2.4 km) east of Stringtown.	32.7	1956-68‡ 1969-74	08-10-74	19.50	10,500
07333800	McGee Creek near Stringtown, Okla.	Lat 34°26'33", long 95°52'10", in NE 1/4 sec.30, T.1 S., R.14 E., Atoka County, on right bank 10.6 mi (17.0 km) east of Stringtown.	86.6	1956-68‡ 1969-74	11-24-73	17.68	11,100
07335310	Rock Creek near Boswell, Okla.	Lat 33°57'57", long 95°52'02", in NE 1/4 NE 1/4 sec.7, T.7 S., R.14 E., Choctaw County, at culvert on State Highway 109, 4.2 mi (6.7 km) south of Boswell.	.94	1965-74	08-10-74	5.34	308
07335320	Bokchito Creek near Soper, Okla.	Lat 34°02'20", long 95°40'10", in NE 1/4 NW 1/4 sec.18, T.6 S., R.16 E., Choctaw County, at bridge on U.S. Highway 70, 1.9 mi (3.1 km) east of Soper.	16.6	1965-74	06-07-74	7.96	4,160
†07336000	Tenmile Creek near Miller, Okla.	Lat 34°17'55", long 95°44'40", in NW 1/4 sec.16, T.3 S., R.15 E., Pushmataha County, at county raod bridge, 1.2 mi (1.9 km) south of Miller.	68	1956-70‡ 1971-74	11-24-73	21.12	6,550

See footnotes at end of table, p.186.

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)	Discharge (cfs)
		Red River Basin--Continued					
07336520	Frazier Creek near Oleta, Okla.	Lat 34°11'50", long 95°21'00", in NW 1/4 NE 1/4 sec.19, T.4 S., R.19 E., Pushmataha County, at bridge on State Highway 3, 0.5 mi (0.8 km) west of Oleta.	19.4	1964-74	06-08-74	16.78	5,480
07336710	Rock Creek near Sawyer, Okla. (discontinued)	Lat 34°01'05", long 95°21'30", in NW 1/4 SW 1/4 sec.19, T.6 S., R.19 E., Choctaw County, at county road bridge, 0.5 mi (0.8 km) east of Sawyer.	3.39	1964-74	06-08-74	6.33	1,190
07336785	Bokchito Creek near Garvin, Okla.	Lat 33°53'44", long 94°54'23", in NE 1/4 NW 1/4 sec.4, T.8 S., R.23 E., McCurtain County, at multi-barrel culvert on State Highway 37, 4.5 mi (7.2 km) southeast of Garvin.	2.96	1965-74	09-10-74	6.70	930
07337220	Big Branch near Ringold, Okla. (discontinued)	Lat 34°10'27", long 95°04'33", in NW 1/4 SW 1/4 sec.26, T.4 S., R.21 E., McCurtain County, at multiple culvert on State Highway 3, 3.8 mi (6.1 km) southeast of Ringold.	1.99	1964-74	12-23-73	9.8	440
07338520	Yanubbee Creek near Broken Bow, Okla.	Lat 34°03'35", long 94°44'22", in NW 1/4 SW 1/4 sec.6, T.6 S., R.25 E., McCurtain County, at bridge on U.S. Highway 259, 2.3 mi (3.7 km) north of Broken Bow.	9.10	1964-74	09-10-74	9.42	927
07338780	Mountain Fork tributary near Smithville, Okla.	Lat 34°29'48", long 94°40'06", in NW 1/4 SE 1/4 sec.3, T.1 S., R.25 E., McCurtain County, at multi-barrel culvert on U.S. Highway 259, 2.5 mi (4.0 km) northwest of Smithville.	.68*	1965-74	04-22-74	4.10	165

† Also a low-flow partial-record station.
†† Operated as a continuous-record station.
* Revised.

1974 water year maximum discharge at discontinued crest-stage partial-record stations.

07191260	Brush Creek near Jay, Okla. (discontinued)	Lat 36°25'15", long 94°46'10", in NW 1/4 NW 1/4 sec.5, T.22 N., R.24 E., Delaware County, at bridge on State Highway 20, 1.2 mi (1.9 km) east of Jay.	16.0	1965-72 1974	11-24-73	11.36	4,640
07196010	Flint Creek tributary near Flint, Okla. (discontinued)	Lat 36°12'00", long 94°44'00", in SE 1/4 NW 1/4 sec.22, T.20 N., R.24 E., Delaware County, upstream of multi-barrel box culvert on State Highway 33, 1.8 mi (2.9 km) northwest of Flint.	.94	1966-71 1974	06-08-74	7.30	410

Indirect discharge measurements made at miscellaneous sites for storm of October 10, 1973

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
Wildhorse Creek	Salt Fork Arkansas River	Lat 36°33'05", long 97°54'40", sec. 23, T.24 N., R.7 W., Garfield County, at county road 4 mi (6.4 km) east and 2 mi (3.2 km) south of Hillsdale.	5.08		10-10-73	6,280
Wildhorse Creek	Salt Fork Arkansas River	Lat 36°37'23", long 97°47'36". SW 1/4 SW 1/4 S 1/4 sec.24, T.25 N., R.6 W., Grant County, 0.8 mi (1.3 km) below mouth of Sand Creek, 3.2 mi (5.1 km) south of Pond Creek.	116		10-10-73	102,000
Pond and Osage Creek	Salt Fork Arkansas River	Lat 36°43'25"N, long 97"74'45", south edge of sec.13, T.26 N., R.6 E., Grant County, at Jefferson.	173		10-10-73	24,300
Deer Creek	Arkansas River	Lat 36°48'08", long 97°30'10", T.27 N., R.3 W., SW 1/4 SW 1/4 SW1/4 sec.15, Grant County, at State Highway 11 about 1 mi (1.6 km) northeast of Deer Creek.	53.1		10-10-73	36,400
Red Rock Creek	Arkansas River	Lat 36°31'30", long 97°39'55", sec. 31, T.24 N., R.4 W., Garfield County at county road, 3 mi (4.8 km) south of Hunter and 4 mi (6.4 km) west of Highway 15.	59.4		10-10-73	55,700
Black Bear Creek	Arkansas River	Lat 36°23'30"N, Long 97°40'30", NW 1/4 NW 1/4 sec.18, T.22 N., R.4 W., Garfield County at bridge located on U.S. Highway 64, 3 mi (4.8 km) south and 4.95 mi (7.96 km) west of Garber, or 11.4 mi (18.3 km) east of Enid.	22.2		10-10-73	10,300
Sand Creek	Skeleton Creek	Lat 32°25'30"N, long 97°59'25", in the SW 14/ SE 1/4 sec.7, T.22 N., R.7 W., Garfield County, 4.4 mi (7.1 km) west of Cleveland Avenue in Enid at U.S. Highway 60 bridge.	15.5		10-10-73	12,400
Turkey Creek	Cimarron River	Lat 36°03'38", long 97°55'50", south edge of sec.3, T.18 N., R.7 W., Kingfisher County, 4 mi (6.4 km) south of State Highway 51 and 2 mi (3.2 km) west of U.S. Highway 81.	385		10-10-73	52,700
Skeleton Creek	Cimarron River	Lat 36°24'35"N, long 97°51'52", through the NE 1/4 sec.3, T.22 N., R.6 W., Garfield County between Willow Avenue at the ATSF railroad trestle in east Enid.	17.3		10-10-73	24,100
Boggy Creek	Skeleton Creek	Lat 36°23'25"N, long 97°54'40", NW 1/4 NE 1/4 NE 1/4, sec.14, T.22 N., R.7 W., Garfield County at Lahoma Road at Enid.	6.91		10-10-73	10,000
Old Channel Boggy Creek	Skeleton Creek	Lat 36°23'27", long 97°53'40", NE 1/4 NW 1/4 sec. line 12 and 13, T.22 N., R.7 W., Garfield County, on Lahoma Road just east of intersection with Fillmore Street in west Enid.	.384		10-10-73	1,660
Boggy Creek Diversion Canal	Skeleton Creek	Lat 36°22'25", long 97°54'00", SE 1/4 NW 1/4 sec.24, T.22 N., R.7 W., Garfield County, approximately 1,000 ft (305 m) downstream from Rupe Avenue in Enid.	12.4		10-10-73	13,200
North Boggy Creek	Skeleton Creek	Lat 36°24'00", long 97°52'27", NE 1/4 SE 1/4 NE 1/4 sec.7, T.22 N., R.6 W., Garfield County, at Rock Island railroad bridge at Elm and 4th Streets in Enid.	7.17		10-10-73	10,200
Skeleton Creek	Cimarron River	Lat 36°21'35"N, long 97°48'15", SE 1/4 NW 1/4 NE 1/4, sec.26, T.22 N., R.6 W., in Garfield County at Southgate Road below confluence with Boggy Creek near Enid.	71.1		10-10-73	60,600

A series of discharge measurements made at selected sites on the Canadian, North Canadian, and Deep Fork rivers within the Oklahoma City urban area made December 12-14 to assist in a preliminary survey of both water quality and quantity.

Station No.	Station Name	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
07228500	Canadian River at Bridgeport	Lat 35°34'00", long 98°22'45", in SE 1/4 SW 1/4 sec.28, T.13 N., R.11 W., Blaine County, on downstream side of left abutment of Chicago, Rock Island and Pacific Railroad Co. bridge, 1.0 mi (1.6 km) north of Bridgeport, 2.8 mi (4.5 km) upstream from Lumpmouth Creek, and at mile 267.1 (429.8 km).	25,229	*1944-64 *1969-73	12-12-73	64.6
07228700	Canadian River near Union City	Lat 35°21'47", long 97°55'46", in SE 1/4 SW 1/4 sec.3, T.10 N., R.7 W., Canadian County, at bridge on U.S. Highway 81, 2 mi (3.2 km) south of Union City.			12-12-73	63.4
07229050	Canadian River at Norman	Lat 35°11'40", long 97°29'05", in NW 1/4 SE 1/4 sec.2, T.8 N., R.3 W., Cleveland County, at bridge on I Highway 35, in southwest part of Norman, Oklahoma.			12-12-73	129
07229100	Canadian River near Noble	Lat 35°04'55", long 97°22'52", in N 1/2 sec. 14, T.7 N., R.2 W., McClain County, on right bank 80 ft (24.4 m) upstream from the Atchison, Topeka, and Santa Fe Railroad Co. bridge, 3.6 mi (5.8 km) upstream from Chouteau Creek, 3.8 mi (6.1 km) south of Noble, and at mile 190.8 (307.0 km).	25,911	*1959-61 *1963-73	12-12-73	170
07229300	Walnut Creek near Purcell	Lat 34°59'56", long 97°22'00", in NW 1/4 SW 1/4 sec.13, T.6 N., R.2 W., McClain County, on downstream side of right bank pier of bridge on U.S. Highway 77, at south edge of Purcell, and at mile 1.0 (1.6 km).	202	1951-55 1958-65 *1965-73	12-12-73	89.1
07239500	North Canadian River near El Reno	Lat 35°33'44", long 97°57'32", on east line of sec.32, T.13 N., R.7 W., Canadian County, near left bank on downstream side of pier of bridge of U.S. Highway 81, 2.0 mi (3.2 km) north of courthouse in El Reno, 2.2 mi (3.5 km) downstream from Target Creek, and at mile 307.4 (494.6 km).	13,042	1902-08 *1937-73	12-13-73	26.2
07239650	North Canadian River at Cemetary Road near Yukon	Lat 35°31'48", long 97°45'35", on west line SW 1/4 sec.8, T.12 N., R.5 W., Canadian County, at bridge on Cemetary Road 1.5 mi (2.4 km) north of Yukon, Oklahoma.			12-13-73	36.3
07239750	North Canadian River at Morgan Road near Yukon	Lat 35°32'50", long 97°41'20", on west line NW 1/4 sec.1, T.12 N., R.5 W., Canadian County, at bridge on Morgan Road 2.7 mi (4.3 km) north and 3 mi (4.8 km) east of Yukon.			12-13-73	41.0
07241000	North Canadian River below Lake Overholser near Oklahoma City	Lat 35°28'46", long 97°39'47", in southwest corner of SW 1/4 sec.30, T.12 N., R.4 W., Oklahoma County, on left bank 200 ft (61 m) upstream from bridge on State Highway 4, 0.5 (.8 km) downstream from Lake Overholser, 2.4 mi (3.9 km) upstream from Mustang Creek, 9.1 mi (14.6 km) southwest of State Capitol in Oklahoma City, and at mile 281.0 (452 km).	13,222	*1952-68 *1969-72 *1973	12-13-73	33.4
07241100	North Canadian River at Portland Ave. in Oklahoma City	Lat 35°26'57", long 97°35'00", in NE 1/4 sec.11, T.11 N., R.4 N., Oklahoma County, at bridge on Portland Avenue in Oklahoma City.			12-13-73	44.0
07241200	North Canadian River at Western Ave in Oklahoma City	Lat 35°27'11", long 97°31'47", on west line of SW 1/4 sec.4, T.11 N., R.3 W., Oklahoma County, at bridge on Western Ave. in Oklahoma City.			12-13-73	61.0
07241250	Lightening Creek at SE 33rd in Oklahoma City	Lat 35°25'53", long 97°30'49", in SW 1/4 NW 1/4 sec.15, T.11 N., R.3 W., Oklahoma County, at bridge on SE 33rd Street between S. Robinson and Kelley Ave. in Oklahoma City.			12-13-73	1.08
07241300	North Canadian River at I-40 in Oklahoma City	Lat 35°27'51", long 97°28'02", on north line NE 1/4, sec.1, T.11 N., R.3 W., Oklahoma County, at old bridge crossing of El Reno, 900 ft (274 m) upstream from upstream lane of I-40, 3,000 ft (914 m) downstream from Eastern Ave. in Oklahoma City.			12-13-73	67.8

Station No.	Station Name	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
07241350	Crooked Oak Creek at SE 15th St. in Oklahoma City	Lat 35°27'01", long 97"27'47", in SE 1/4 SE 1/4 sec.1, T.11 N., R.3 W., Oklahoma City, at bridge on Grand Blvd. 300 ft (91 m) downstream from SE 15th Street in Oklahoma City.			12-13-73	0.66
07241510	Crutcho Creek at Midwest City	Lat 35°28'43", long 97°24'42", on south line SE 1/4, sec.28, T.12 N., R.2 W., Oklahoma County, at bridge on NE 10th between Sooner Road and Air Depot Blvd., Midwest City.			12-13-73	4.6
07241515	Soldier Creek at Reno Ave. in Midwest City	Lat 35°27'50", long 97°22'48", on south line SW 1/4 sec.35, T.12 N., R.3 W., Oklahoma County, at bridge on East Reno between Midwest Blvd. and Douglas Blvd. in Midwest City.			12-12-73	3.10
07241530	North Canadian River near Jones, Okla.	Lat 35°35'52", long 97°18'00", on west line SW 1/4 sec.15, T.13 N., R.1 W., Oklahoma County, at bridge on county road (Jones Road) 2 mi (3 km) north of Jones.			12-12-73	136
07241550	North Canadian River near Harrah	Lat 35°30'01", long 97°11'37", in SW 1/4 NW 1/4 sec.22, T.12 N., R.18 ., Oklahoma County near left bank on downstream side of pier of county road bridge, 2.2 mi (3.5 km) northwest of Harrah, 3.8 mi (6.1 km) downstream from Choctaw Creek, and at mile 230.0 (370.1 km).	13,501	*1968-73	12-13-73	171
07241650	North Canadian River near McCloud	Lat 35°26'45", long 97°05'25", in NE 1/4 NE 1/4 sec.9, T.11 N., R.2 E., Pottawatomie County, at bridge on county road, 0.5 m (.8 km) north of McCloud			12-12-73	165
07241700	North Canadian River near Shawnee	Lat 35°19'58", long 96°57'35", in NE 1/4 NW 1/4 sec.23, T.10 N., R.3 E., Pottawatomie County, at bridge on county road, 0.1 mi upstream from Atchison, Topeka, and Santa Fe Railroad, 1.0 mi (1.6 km) west of Shawnee.			12-12-73	193
07242210	Deep Fork at Youngs Blvd. in Oklahoma City	Lat 35°31'01", long 97°33'07", on west line NE 1/4 sec.18, T.12 N., R.3 W., Oklahoma County, at bridge on Youngs Ave. in Oklahoma City.			12-14-73	1.10
07242215	Deep Fork trib at Belleview Dr. in Oklahoma City	Lat 35°31'39", long 97°33'12", in NW 1/4 SE 1/4 sec.7, T.12 N., R.3 W., Oklahoma County, at bridge on Belleview Drive about 500 ft (152 m) south of NW 56th Street in Oklahoma City.			12-14-73	.051
07242220	Deep Fork at Eastern Ave. in Oklahoma City	Lat 35°32'05", long 97°28'35", on west line NW 1/4 sec.12, T.12 W., R.3 W., Oklahoma County, at bridge on Eastern Ave., 0.2 mi (.3 km) south of N.E. 63rd Street in Oklahoma City.			12-14-73	1.70
07242240	Deep Fork trib below Northeast Lake in Oklahoma City	Lat 35°31'28", long 97°28'35", in SW 1/4 SE 1/4 sec.12, T.12 N., R.3 W., Oklahoma County, 800 ft (243 m) downstream from Northeast Lake in Oklahoma City.			12-14-73	.79
07242245	Deep Fork trib near Witcher	Lat 35°34'30", long 97°26'32", on east line NE 1/4 sec.30, T.13 N., R.2 W., Oklahoma County, at bridge on Sunnylane Road, 0.5 mi (.8 km) north of Deep Fork Crossing at Sunnylane Road, 1.0 mi (1.6 km) west and 1.4 mi (2.3 km) south of Witcher.			12-14-73	.87
07242250	Deep Fork near Witcher	Lat 35°35'41", long 97°25'06", on north line NW 1/4 sec.21, T.13 N., R.2 W., Oklahoma County, at bridge on NE 122nd Street between Sooner Road and Air Depot Blvd., 0.4 mi (.6 km) east of Witcher.			12-14-73	17.6
07242280	Spring Creek near Edmond	Lat. 35°38'40", long 97°23'21", on west line SW 1/4 sec.35, T.14 N., R.2 W., Oklahoma County, at bridge on Midwest Blvd. between NE 164th Street and U.S. Highway 66, 4.0 mi (6.4 km) east and 0.5 mi (.8 km) south of Edmond.			12-14-73	2.26
07242350	Deep Fork near Arcadia	Lat 35°39'10", long 97°20'58", on south line of SW 1/4 sec.30, T.14 N., R.1 W., Oklahoma County, on left bank at downstream side of county road bridge, 1.6 mi (2.6 km) upstream from Coffee Creek, 1.6 mi (2.6 km) southwest of Arcadia, and at mile 212.8 (342.4 km).	108	*1964-73	12-14-73	36.3

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