1973

Water Resources Data for Nebraska

Part 1. Surface Water Records

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Prepared in cooperation with the Nebraska Department of Water Resources and with other State and Federal agencies

CALENDAR FOR WATER YEAR 1973

1972

OCTOBER

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
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NOVEMBER

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DECEMBER

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1973

JANUARY

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FEBRUARY

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MARCH

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APRIL

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MAY

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JUNE

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JULY

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AUGUST

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SEPTEMBER

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Nebraska Department of Water Resources
Nebraska Department of Roads
Nebraska Game and Parks Commission
Lower Platte South Natural Resources District
Corps of Engineers, U.S. Army
Bureau of Reclamation, U.S. Department of the Interior

Water resources records, 1973, for Nebraska are in the following reports of the U.S. Geological Survey:

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

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

Copies of this report may be obtained from
District Chief, Water Resources Division
U.S. Geological Survey
Room 127 Nebraska Hall
901 North 17th Street
Lincoln, Nebraska 68508

1974

CONTENTS

ILLUSTRATIONS

TABLES

GAGING STATIONS, IN DOWNSTREAM ORDER, FOR WHICH RECORDS ARE PUBLISHED

VI GAGING STATIONS, IN DOWNSTREAM ORDER--Continued

VIII GAGING STATIONS, IN DOWNSTREAM ORDER--Continued

PART 1. SURFACE-WATER RECORDS

By G. G. Jamison

INTRODUCTION

The surface-water records for the 1973 water year for gaging stations, partial-record stations, and miscellaneous sites within the State of Nebraska are given in this report. For convenience there are also included records for a few pertinent gaging stations in bordering States. The records in Nebraska were collected and computed by the Water Resources Division of the U.S. Geological Survey, under the direction of K. A. Mac Kichan, district chief. 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 Nebraska.

Through September 30, 1960, the records of discharge and stage of streams 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." Since 1951 there have been 20 volumes in the series; each volume covered an area whose boundaries coincided with those of certain natural drainage areas. The records in Nebraska were contained in Part 6 of that series.

Beginning with the 1961 water year, streamflow records and related data have been released by the Geological Survey in annual reports on a State-boundary basis. Distribution of these basic-data reports is limited, primarily for local needs. The discharge and reservoir storage records for 1961-65 were published in a Geological Survey water-supply paper series entitled "Surface Water Supply of the United States 1961-65." The discharge and reservoir storage records for 1966-70 were published in a Geological Survey water-supply paper series entitled "Surface Water Supply of the United States 1966-1970."

COOPERATION

Cooperative agreements between the U.S. Geological Survey and organizations of the State of Nebraska for the systematic collection of streamflow records began in 1931. Organizations that supplied data are acknowledged in station

descriptions. Organizations that assisted in collecting data through cooperative agreements with the Survey are:

Nebraska Department of Water Resources, D. S. Jones, Jr., director.

Nebraska Department of Roads, T. D. Doyle, director-state engineer.

Nebraska Game and Parks Commision, W. R. Barbee, director.

Lower Platte South Natural Resources District, H. L. Schroeder, general manager.

Assistance in the form of funds and services was given by the Corps of Engineers, U.S. Army, in collecting records for 38 gaging stations and through the Missouri River Basin Program for 20 gaging stations.

The following organizations aided in collecting records:

Central Nebraska Public Power and Irrigation District, Nebraska Public Power District, Loup River Public Power district.

DEFINITION OF TERMS

The terms of 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 15.

Acre-foot (AC-FT, acre-ft) is the quanity of water required to cover 1 acre to the depth of 1 foot and is equivalent to 43,560 cubic feet , 325,851 gallons, or 1,233 cubic metres.

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, 646,317 gallons, or 2,445 cubic metres, and represents a runoff of 0.0372 inch from 1 square mile or 0.3468 millimetre from 1 square kilometre.

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 constriction of the channel, an artificial structure, or a uniform cross section over a long reach of the channel.

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

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

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.

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

International Hydrological Decade (IHD) River Stations provide a general index of runoff and materials in the water balance (discharge of water, and dissolved and transported solids) of the world. In the United States, IHD Stations provide indices of runoff and of the general distribution of water in the principal river basins of the conterminous United States and Alaska.

DOWNSTREAM ORDER AND STATION NUMBERS

Stations are listed in the same downstream order used in the water-supply papers. Records are listed in a downstream direction along the main stem with all stations on a tributary entering above a main-stem station listed before that station. If a tributary enters between two main-stem stations, it is listed between them. A similar order is followed listing stations on first rank, second rank, and other ranks of tributaries. To indicate the rank of any tributary on which a gaging station is situated and the stream to which it is immediately tributary, each indention in the listing of gaging stations in the table of contents of this report represents one rank. This downstream order and system of indention show which gaging stations are on tributaries between any two stations on a

main stem and the rank of the tributary on which each gaging station is situated.

As an added means of identification, each gaging station and partial-record station has been assigned a station number. The numbers have been assigned in the same downstream order used in the annual series of water-supply papers. In assigning station numbers, no distinction is made between partial-record stations and continuous-record gaging stations, so that 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 06794500, includes the part number "06" plus a 6-digit station number. 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-, 30-,or 60-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 discharges 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 individual 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 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 recorder 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 the water year, which begins on October 1 and ends on September 30. A calendar for the 1973 water year is shown on the reverse side of the front cover to facilitate finding the day of the week for any date.

The description of the gaging 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 indictated 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. In addition, the median of yearly mean discharges is given for stream-gaging stations having 10 or more complete years of record if the median differs from the average by more than 10 percent. The maximum discharge (or contents), the maximum gage height, and the minimum daily discharge (or the minimum contents) are given under "EXTREMES." 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 nonrecording gage read at the time of the crest. If the maximum gage height did not occur at the same time as the maximum discharge or contents, it is given separately. Information pertaining to the accuracy of the discharge records, to conditions that affect the natural flow at the gaging station, and the availability of Water Quality records, is given under "REMARKS"; for reservoir stations information on the dam forming the reservoir, the capacity, outlet works and spillway, and purpose and use of the reservoir, is also given under "REMARKS."

Previously published records of some stations have been found to be in error on the basis of data or information later obtained. Revisions of such records are usually published along with the current records in one of the annual or compilation reports. In order to make it easier to find such revised records, a paragraph headed "REVISIONS (WATER YEARS)" has been added to the description of all stations for which revised records have been published. Listed therein are all the reports in which revisions have been published, each followed by the water years for which figures are revised in that report. In listing the water

years only one number is given; for instance, 1933 stands for the water October 1, 1932, to September 30, 1933. If no daily, monthly, or annual figures of discharge were revised, that fact is brought out by the 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 most recently 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 revision 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 the 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.

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 division, if the drainage area includes large noncontributing 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. If elevation or gage height is given in the daily table, the monthly summary gives the contents at the end of the month, rather than the elevation or gage height.

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.

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 indictated 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

Each volume of the 1960 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 were 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. A new series of water-supply papers containing surface-water records for the 5-year periods October 1, 1960, to September 30, 1965, and October 1, 1965, to September 30, 1970, also includes lists of annual and special reports published as water-supply papers.

Records through September 1950 for the area covered by this report have been compiled and published in Water-Supply Papers 1309(6A) and 1310(6B); records for October 1950 to September 1960 have been compiled and published in Water-Supply Papers 1729(6A) and 1730(6B). 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.

Nebraska streamflow records for October 1960 to September 1965 have been published in Water-Supply Papers 1917, 1918, and 1919. Records for October 1965 to September 1970 have been published in Water-Supply Papers 2117, 2118, and 2119. These reports contain values of daily discharge, summaries of monthly and annual discharge, and monthend storage for all records previously published in the annual series of State reports. All records were reexamined and revised where warranted.

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 Nebraska through 1973 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 consecutive 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.

Records of discharge collected by agencies other than the Geological Survey

Records of daily diversions of water from streams by canals are collected by and published in Hydrographic Reports of the Nebraska Department of Water Resources. Also published therein are discharge records for Nebraska streams and storage records for Nebraska reservoirs which are not published in reports of the U.S. Geological Survey. Copies

of the Hydrographic Reports may be obtained by addressing the Nebraska Department of Water Resources, Capitol Building, P.O. Box No. 94607, Lincoln, Nebraska 68509.

Records of discharge not published by the Geological Survey were collected in Nebraska at nine sites by Corps of Engineers, U.S. Army. The Office of Water Data Coordination, Water Resources Division, U.S. Geological Survey, Reston, Va., 22092, maintains an index of these sites. Information on records at specific sites can be obtained from that office upon request.

SELECTED REFERENCES

Carter, R. W., and Davidian, Jacob, 1968, General procedure for gaging streams: U.S. Geol. Survey Techniques Water-Resources Inv., book 3, chap. A6, 13 p.

Corbett, D. M., and others, 1943, Stream-gaging procedure, a manual describing methods and practices of the Geological Survey: U.S. Geol. Survey Water-Supply Paper 888, 245 p.

Langbein, W. B., and Iseri, K. 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 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	millimetres (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 hectometres (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)

WHITE RIVER BASIN

06444000 White River at Crawford, Nebr.

LOCATION.--Lat 42°41'33", long 103°25'03", in W1/2 sec.3, T.31 N., R.52 W., Dawes County, on right bank 15 ft (5 m) downstream from bridge in city park at Crawford.

DRAINAGE AREA.--313 mi² (811 km²).

PERIOD OF RECORD.--February 1931 to September 1943, October 1947 to current year.

GAGE.--Water-stage recorder. Datum of gage is 3,659.85 ft (1,115.522 m) above mean sea level. Feb. 25, 1931, to Oct. 2, 1933, nonrecording gage at old highway bridge 0.5 mi (0.8 km) upstream at different datum and Oct. 3, 1933, to Sept. 30, 1943, 1 mi (2 km) upstream at different datum.

AVERAGE DISCHARGE.--38 years, 20.2 ft³/s (0.572 m³/s), 14,630 acre-ft/yr (18.0 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 240 ft³/s (6.80 m³/s) July 9, gage height, 3.48 ft (1.061 m), from graph; minimum daily, 9.1 ft³/s (0.26 m³/s) Aug. 31, Sept. 31.
Period of record: Maximum discharge, 1,580 ft³/s (44.7 m³/s) Mar. 15, 1948, gage height, 6.88 ft (2.097 m); maximum gage height, 7.7 ft (2.35 m) July 10, 1958, from floodmarks; minimum daily discharge, 2.7 ft³/s (0.076 m³/s) Aug. 13, 31, Sept. 1, 1960.

REMARKS.--Records good except those for winter period, which are poor. Some regulation at low flows by pumps for irrigation and diversion for water supply for town of Crawford.

REVISIONS (WATER YEARS).--WSP 1309: 1931(M), 1942(M). WSP 1729: 1958-59(M). WSP 1917: 1958-59.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	18	23	18	23	25	28	36	24	16	15	9.1
2	12	18	22	18	22	25	30	29	25	14	15	11
3	12	18	20	20	20	27	28	27	25	14	14	14
4	13	18	18	18	21	24	28	26	24	13	13	13
5	14	18	15	18	21	23	27	26	23	13	14	12
6	16	18	12	17	21	23	26	38	22	12	14	11
7	16	18	11	16	20	23	28	33	20	11	13	11
8	16	18	10	16	20	23	27	30	20	12	12	11
9	16	18	11	15	19	23	29	25	20	51	13	11
10	16	18	12	16	22	23	27	27	19	14	12	11
11	15	18	13	18	24	23	27	27	19	12	12	12
12	15	19	13	22	21	23	27	26	20	10	12	17
13	16	18	13	25	20	23	26	25	18	10	33	16
14	16	19	14	30	20	22	25	25	19	13	15	15
15	16	19	15	30	20	21	26	27	22	12	13	15
16	17	19	16	25	22	22	25	25	19	12	12	16
17	16	19	18	26	24	23	25	27	18	11	12	17
18	16	19	20	24	22	24	25	27	18	10	11	17
19	16	19	22	22	22	26	33	25	18	11	10	16
20	17	19	25	22	21	25	38	24	18	22	10	15
21	17	19	28	22	22	25	31	23	18	25	9.8	15
22	18	19	30	21	22	38	29	23	18	19	9.8	15
23	17	18	23	20	24	29	27	23	17	16	11	15
24	17	19	22	21	31	28	26	23	16	15	12	16
25	17	19	23	22	28	31	27	25	16	16	12	16
26	17	19	22	22	25	28	31	25	15	15	12	19
27	17	19	22	20	26	28	27	37	14	14	11	18
28	17	19	23	20	25	27	25	37	14	14	9.8	18
29	17	20	22	20	------	27	23	29	14	14	9.8	20
30	18	25	22	22	------	26	33	26	16	14	9.4	18
31	18	------	20	23	------	27	------	25	------	14	9.1	------
TOTAL	493	564	580	649	628	785	834	851	569	469	390.7	440.1
MEAN	15.9	18.8	18.7	20.9	22.4	25.3	27.8	27.5	19.0	15.1	12.6	14.7
MAX	18	25	30	30	31	38	38	38	25	51	33	20
MIN	12	18	10	15	19	21	23	23	14	10	9.1	9.1
AC-FT	978	1,120	1,150	1,290	1,250	1,560	1,650	1,690	1,130	930	775	873

CAL YR 1972 TOTAL 7,043.1 MEAN 19.2 MAX 130 MIN 8.4 AC-FT 13,970
WTR YR 1973 TOTAL 7,252.8 MEAN 19.9 MAX 51 MIN 9.1 AC-FT 14,390

PEAK DISCHARGE (BASE, 100 CFS).--July 9 (0215) 240 cfs (3.48 ft).

06445590 Big Bordeaux Creek near Chadron, Nebr.

LOCATION.--Lat 42°43'30", long 102°55'44", in NW1/4NW1/4 sec.26, T.32 N., R.48 W., Dawes County, Nebraska National Forest-Pine Ridge Division, on right bank 4.2 mi (6.8 km) northeast of Chadron State Park headquarters and 8 mi (13 km) southeast of Chadron.

DRAINAGE AREA.--9.42 mi² (24.40 km²).

PERIOD OF RECORD.--June 1968 to current year.

GAGE.--Water-stage recorder.

AVERAGE DISCHARGE.--5 years, 0.48 ft³/s (0.014 m³/s), 348 acre-ft/yr (0.429 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2.8 ft³/s (0.079 m³/s) Apr. 10, gage height, 1.62 ft (0.494 m); maximum gage height recorded, 2.18 ft (0.664 m) Dec. 8, backwater from ice; no flow Dec. 10-16, Jan. 6-12. Period of record: Maximum discharge, 400 ft³/s (11.3 m³/s) July 20, 1969, gage height, 4.89 ft (1.490 m), from rating curve extended above 13 ft³/s (0.37 m³/s) on basis of slope-area measurement of peak flow; minimum daily, no flow Dec. 10-16, 1972, Jan. 6-12, 1973.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.20	.50	.32	.10	.40	.50	.78	.92	.92	.27	.27	.12
2	.17	.50	.37	.20	.40	.55	.73	.85	1.1	.22	.27	.20
3	.17	.50	.30	.10	.40	.55	.73	.78	1.0	.22	.22	.17
4	.17	.50	.30	.10	.40	.60	.73	.78	.92	.22	.22	.14
5	.17	.50	.20	.05	.40	.60	.73	.80	.92	.22	.22	.14
6	.17	.50	.10	0	.40	.60	.78	1.1	.78	.20	.22	.12
7	.17	.50	.10	0	.40	.70	.78	1.1	.78	.20	.22	.10
8	.17	.50	.10	0	.40	.70	.73	1.1	.73	.17	.20	.10
9	.14	.50	.10	0	.45	.70	.85	1.0	.69	.20	.20	.12
10	.17	.50	0	0	.45	.80	1.1	1.0	.69	.24	.17	.12
11	.17	.50	0	0	.40	.90	.73	.92	.64	.24	.20	.24
12	.20	.40	0	0	.35	1.0	.73	.92	.60	.22	.20	.27
13	.22	.40	0	.05	.30	1.1	.73	.92	.60	.37	.20	.24
14	.22	.40	0	.10	.25	1.0	.73	.85	.64	.32	.17	.24
15	.24	.40	0	.20	.30	1.0	.78	.85	.50	.30	.17	.32
16	.27	.46	0	.30	.30	.73	.73	.78	.50	.30	.12	.32
17	.27	.46	.20	.50	.35	.73	.78	.78	.46	.27	.12	.32
18	.27	.46	.40	.60	.40	.78	.85	.78	.46	.27	.12	.32
19	.30	.40	.40	.50	.40	.85	1.1	.78	.46	.37	.10	.32
20	.30	.41	.40	.40	.40	.78	1.1	.73	.46	.64	.07	.32
21	.30	.41	.30	.40	.40	.78	1.0	.73	.46	.37	.07	.32
22	.30	.40	.20	.40	.40	1.0	1.0	.73	.46	.37	.16	.37
23	.32	.40	.05	.40	.40	.85	.92	.73	.46	.37	.14	.41
24	.32	.41	.03	.50	.40	.85	.92	.73	.41	.37	.12	.41
25	.32	.32	.03	.60	.40	.85	.92	.73	.37	.32	.12	.46
26	.32	.32	.02	.50	.40	.85	.92	.85	.37	.32	.10	.41
27	.32	.32	.02	.40	.40	.92	.92	1.2	.37	.32	.07	.37
28	.32	.30	.02	.30	.40	.92	.85	1.0	.32	.32	.07	.46
29	.32	.30	.02	.40	------	.85	.73	.92	.37	.32	.07	.50
30	.46	.32	.10	.40	------	.85	1.0	.92	.30	.32	.07	.41
31	.50	------	.10	.40	------	.78	------	.92	------	.32	.07	------
TOTAL	7.96	12.79	4.18	7.90	10.75	24.67	25.38	27.20	17.74	9.18	4.74	8.36
MEAN	.26	.43	.13	.25	.38	.80	.85	.88	.59	.30	.15	.28
MAX	.50	.50	.40	.60	.45	1.1	1.1	1.2	1.1	.64	.27	.50
MIN	.14	.30	0	0	.25	.50	.73	.73	.30	.17	.07	.10
AC-FT	16	25	8.3	16	21	49	50	54	35	18	9.4	17

CAL YR 1972 TOTAL 144.31 MEAN .39 MAX 1.6 MIN 0 AC-FT 286
WTR YR 1973 TOTAL 160.85 MEAN .44 MAX 1.2 MIN 0 AC-FT 319

PEAK DISCHARGE (BASE, 2.0 CFS).--Apr. 10 (0845) 2.8 cfs (1.62 ft); May 5 (2230) 2.3 cfs (1.58 ft).

NOTE.--No gage-height record Dec. 11-16, Jan. 5 to Mar. 13.

06453400 Ponca Creek near Naper, Nebr.

LOCATION.--Lat 43°01'45", long 99°05'59", in SE1/4SE1/4 sec.22, T.95 N., R.70 W., Gregory County, S. Dak., on right bank 70 ft (21 m) upstream from highway bridge, 2.2 mi (3.5 km) north of and 6.0 mi (9.7 km) upstream from South Dakota-Nebraska State line, 4.2 mi (6.8 km) south of St. Charles, S. Dak., and 5 mi (8 km) north of Naper, Nebr.

DRAINAGE AREA.--373 mi² (966 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 1,801.64 ft (549.140 m) above mean sea level.

AVERAGE DISCHARGE.--13 years, 30.3 ft³/s (0.858 m³/s), 21,950 acre-ft/yr (27.1 hm³/yr); median of yearly mean discharges, 21 ft³/s (0.595 m³/s), 15,200 acre-ft/yr (18.7 hm³/yr).

EXTREMES.--Current year: Maximum discharge, about 800 ft³/s (22.7 m³/s) Feb. 25, gage height, unknown; minimum daily, 0.42 ft³/s (0.012 m³/s) Aug. 28.
Period of record: Maximum discharge, 2,840 ft³/s (80.4 m³/s) July 2, 1962, gage height, 12.24 ft (3.731 m); no flow for many days in 1961-62, 1964-72.

REMARKS.--Records poor.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.5	10	8.0	3.7	15	380	90	60	77	12	1.6	5.0
2	2.5	9.0	5.4	3.6	18	330	78	49	66	73	1.2	3.0
3	2.5	17	4.0	3.6	23	250	64	39	69	83	.76	9.1
4	2.5	35	3.4	3.4	21	190	56	36	55	39	.85	15
5	2.5	32	2.6	3.1	19	160	53	31	45	31	.61	5.6
6	2.5	29	2.2	3.2	17	176	50	28	39	23	.48	1.8
7	2.5	26	2.0	3.3	16	149	48	29	36	16	.85	1.5
8	2.0	24	2.1	3.2	14	139	47	27	32	12	1.0	1.5
9	2.0	22	2.2	3.0	15	124	42	25	27	12	1.5	1.6
10	2.0	20	2.2	3.1	20	110	37	23	23	12	1.3	1.6
11	2.0	20	2.3	3.3	22	110	37	21	21	11	1.3	1.6
12	2.0	17	2.3	3.5	19	100	34	18	19	7.7	1.6	2.5
13	2.0	14	2.6	3.7	17	130	32	17	18	5.1	2.0	6.3
14	2.1	12	2.8	4.5	15	300	28	16	17	5.6	2.5	7.7
15	2.1	13	3.0	6.0	12	350	62	15	18	4.1	2.0	10
16	2.2	11	3.0	60	15	230	49	14	19	4.1	1.6	13
17	2.3	9.6	3.2	160	24	140	44	14	17	3.3	1.5	14
18	2.3	9.2	4.0	250	36	110	38	14	16	6.5	1.3	11
19	2.3	8.8	3.8	150	45	94	52	13	103	6.5	1.0	8.0
20	2.3	8.6	4.2	60	90	82	80	12	70	5.4	1.0	6.0
21	2.3	8.2	4.4	35	140	76	56	12	56	6.2	1.6	5.0
22	2.4	8.0	4.7	20	165	70	46	11	40	5.9	2.0	3.8
23	2.5	7.0	4.3	12	300	76	39	10	33	5.6	1.6	3.2
24	2.6	7.8	4.0	7.0	680	90	38	10	26	14	1.5	3.0
25	2.5	8.4	4.2	17	780	120	35	10	22	15	1.3	2.6
26	2.4	7.8	4.0	15	400	150	32	12	17	9.3	.76	8.0
27	2.4	7.2	4.3	13	210	102	30	137	14	6.2	.48	22
28	2.4	7.0	3.9	11	270	94	28	428	12	4.6	.42	50
29	3.0	7.0	3.6	15	------	100	27	338	11	3.6	6.0	60
30	5.0	7.6	3.2	17	------	90	32	144	11	2.8	26	50
31	7.0	------	2.9	16	------	80	------	92	------	2.2	10	------
TOTAL	79.6	423.2	108.8	912.2	3,418	4,702	1,384	1,705	1,029	447.7	77.61	333.4
MEAN	2.57	14.1	3.51	29.4	122	152	46.1	55.0	34.3	14.4	2.50	11.1
MAX	7.0	35	8.0	250	780	380	90	428	103	83	26	60
MIN	2.0	7.0	2.0	3.0	12	70	27	10	11	2.2	.42	1.5
AC-FT	158	839	216	1,810	6,780	9,330	2,750	3,380	2,040	888	154	661

CAL YR 1972 TOTAL 10,225.01 MEAN 27.9 MAX 566 MIN 0 AC-FT 20,280
WTR YR 1973 TOTAL 14,620.51 MEAN 40.1 MAX 780 MIN .42 AC-FT 29,000

PEAK DISCHARGE (BASE, 300 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
2-25	UNKNOWN	-	a800	3-15	UNKNOWN	-	a400
3- 2	UNKNOWN	-	a500	5-28	0400	4.65	503

a About

06453500 Ponca Creek at Anoka, Nebr.

LOCATION.--Lat 42°56'25", long 98°50'30", in NE1/4 sec.9, T.34 N., R.13 W., Boyd County, on downstream side of left pier of bridge on State Highway 11, 0.5 mi (0.8 km) southwest of Anoka and 0.5 mi (0.8 km) upstream from Dry Creek.

DRAINAGE AREA.--505 mi² (1,308 km²).

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

GAGE.--Water-stage recorder for stages above 0.4 ft (0.12 m) and nonrecording gage read twice daily. Altitude of gage is 1,630 ft (497 m), from topographic map. Prior to Sept. 13, 1950, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--24 years, 52.2 ft³/s (1.478 m³/s), 37,820 acre-ft/yr (46.6 hm³/yr); median of yearly mean discharges, 37 ft³/s (1.048 m³/s), 26,800 acre-ft/yr (33.0 hm³/yr).

EXTREMES.--Current year: Maximum discharge observed, 1,040 ft³/s (29.5 m³/s) Feb. 24, gage height, 6.03 ft (1.838 m); maximum gage height, 7.96 ft (2.426 m) Feb. 23 , from floodmark, backwater from ice; minimum daily discharge, 2.4 ft³/s (0.068 m³/s) Aug. 28.
Period of record: Maximum discharge, 9,810 ft³/s (278 m³/s) Mar. 27, 1960, gage height, 16.86 ft (5.139 m); no flow at times in 1949-50, 1955-62, 1965-71.

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

REVISIONS.--WSP 2117: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.3	12	22	4.8	20	552	143	83	150	14	8.4	22
2	3.3	20	15	5.1	24	538	127	96	125	29	9.0	11
3	3.6	15	10	4.8	30	359	113	79	148	128	4.9	14
4	3.3	24	7.0	4.5	28	249	92	63	113	93	4.9	14
5	4.4	32	6.0	4.1	26	203	78	55	79	52	4.1	18
6	5.2	32	5.0	4.2	22	223	71	50	64	35	4.6	10
7	5.2	42	3.0	4.3	20	201	68	46	56	24	4.4	6.6
8	4.9	45	3.5	4.2	18	169	60	47	50	18	4.1	5.5
9	4.9	37	4.2	4.0	20	146	59	41	41	14	4.1	4.9
10	4.9	35	4.3	4.2	26	130	56	38	39	14	3.8	4.9
11	4.9	31	4.4	4.4	28	131	55	36	32	13	4.4	4.4
12	5.2	28	4.2	4.7	24	118	56	32	31	11	3.8	5.2
13	5.2	30	4.6	5.4	20	127	54	30	27	9.0	4.1	6.6
14	5.2	22	4.4	8.0	18	466	46	27	26	9.0	4.1	6.6
15	5.2	22	4.6	12	16	445	96	26	29	7.2	4.1	8.4
16	5.2	30	4.3	50	20	305	107	26	32	5.5	3.8	9.6
17	5.2	25	4.2	200	30	201	80	25	31	5.2	3.6	16
18	5.5	22	4.8	300	45	151	66	25	31	22	3.8	17
19	5.2	18	4.8	200	66	128	60	22	50	10	3.0	11
20	5.5	21	5.1	80	135	116	71	20	112	9.6	3.2	8.4
21	5.5	20	5.6	50	210	104	95	19	95	13	5.7	6.6
22	5.2	19	6.0	30	250	99	74	18	68	11	4.6	6.6
23	6.0	14	5.4	20	600	95	64	17	47	10	4.4	4.1
24	6.6	17	5.0	12	936	122	54	18	41	38	4.4	3.6
25	6.6	22	5.2	25	948	213	52	17	35	32	3.8	3.2
26	5.7	14	5.0	22	569	211	50	22	27	21	3.3	5.5
27	6.0	18	5.2	19	315	165	47	205	21	13	2.6	7.8
28	6.0	15	4.8	15	367	167	45	793	18	9.6	2.4	16
29	5.7	15	4.3	21	------	187	42	562	17	9.0	3.0	76
30	11	17	4.0	22	------	144	48	365	17	6.0	12	112
31	12	------	3.7	21	------	131	------	193	------	5.7	59	------
TOTAL	171.6	714	179.6	1,165.7	4,831	6,596	2,129	3,096	1,652	690.8	195.4	445.5
MEAN	5.54	23.8	5.79	37.6	173	213	71.0	99.9	55.1	22.3	6.30	14.9
MAX	12	45	22	300	948	552	143	793	150	128	59	112
MIN	3.3	12	3.0	4.0	16	95	42	17	17	5.2	2.4	3.2
AC-FT	340	1,420	356	2,310	9,580	13,080	4,220	6,140	3,280	1,370	388	884

CAL YR 1972 TOTAL 17,383.33 MEAN 47.5 MAX 1,260 MIN .02 AC-FT 34,480
WTR YR 1973 TOTAL 21,866.60 MEAN 59.9 MAX 948 MIN 2.4 AC-FT 43,370

PEAK DISCHARGE (BASE, 500 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
2-24	1130	6.03	1,040	3-14	0900	4.76	572
3- 1	1030	4.80	586	5-28	0300	5.93	1,020

06453600 Ponca Creek at Verdel, Nebr.

LOCATION.--Lat 42°48'40", long 98°10'35", in NE1/4NE1/4 sec.30, T.33 N., R.7 W., Knox County, near left bank at left downstream end of bridge on State Highway 12, 0.6 mi (1.0 km) east of Verdel and 3.1 mi (5.0 km) upstream from mouth.

DRAINAGE AREA.--812 mi² (2,103 km²).

PERIOD OF RECORD.--October 1957 to current year.

GAGE.--Water-stage recorder and nonrecording gage read once daily. Datum of gage is 1,232.9 ft (375.79 m) above mean sea level (Nebraska Department of Highways reference marks). See WSP 1917 for history of changes prior to Nov. 15, 1962.

AVERAGE DISCHARGE.--16 years, 82.3 ft³/s (2.331 m³/s), 59,630 acre-ft/yr (73.5 hm³/yr); median of yearly mean discharges, 60 ft³/s (1.699 m³/s), 43,500 acre-ft/yr (53.6 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,280 ft³/s (36.2 m³/s) May 28, gage height, 4.80 ft (1.463 m); maximum gage height observed, 12.65 ft (3.856 m) Feb. 24, icejam ; minimum daily discharge 4.3 ft³/s (0.12 m³/s) Aug. 29.
Period of record: Maximum discharge, 15,700 ft³/s (445 m³/s) Mar. 27, 1960, gage height, 15.10 ft (4.602 m), site and datum then in use; no flow for many days in 1957-60, 1965-72.

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

REVISIONS.--WSP 2117: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	42	37	9.0	30	640	310	235	432	42	22	34
2	16	74	17	9.0	35	660	305	241	334	48	20	32
3	16	89	16	8.8	45	600	271	210	294	54	21	26
4	16	75	15	8.0	42	560	232	173	352	108	19	23
5	18	66	9.0	7.2	38	526	195	149	242	130	19	14
6	20	67	8.0	7.4	33	372	181	139	171	87	17	15
7	21	69	7.0	7.6	31	343	158	142	134	66	16	16
8	20	70	8.0	7.4	29	275	139	124	107	53	15	14
9	19	77	9.0	7.0	33	231	134	108	87	50	14	14
10	19	72	9.2	7.6	41	195	127	97	70	51	14	13
11	20	63	9.6	7.9	43	234	129	88	50	68	15	12
12	19	62	10	8.4	38	231	125	79	48	83	12	13
13	20	56	11	9.2	32	231	117	75	47	49	10	17
14	20	57	11	9.7	29	863	117	69	42	33	9.1	17
15	20	55	11	13	25	772	139	66	43	29	12	18
16	21	53	12	40	31	569	179	66	45	27	11	22
17	21	55	12	220	54	416	200	64	39	37	9.5	25
18	20	49	12	350	90	315	157	65	271	51	7.2	24
19	20	47	13	400	106	237	148	60	264	33	7.1	25
20	23	43	14	250	120	215	154	53	74	41	5.8	23
21	23	41	14	100	250	195	134	46	105	39	8.2	19
22	25	39	16	50	350	191	150	39	108	35	11	16
23	27	39	14	30	700	178	124	37	83	35	7.7	14
24	27	38	13	20	900	203	111	38	66	87	8.2	14
25	25	37	14	35	1,000	246	109	39	54	110	8.0	14
26	26	39	13	30	1,000	300	106	44	48	85	6.6	17
27	27	39	14	27	700	304	107	167	40	75	6.3	19
28	25	34	13	23	600	332	100	926	34	39	5.0	40
29	25	31	12	30	------	352	94	921	35	33	4.3	132
30	33	35	11	32	------	333	104	880	43	30	8.8	193
31	44	------	10	31	------	300	------	594	------	24	13	------
TOTAL	693	1,613	394.8	1,795.2	6,425	11,419	4,656	6,034	3,762	1,732	362.8	875
MEAN	22.4	53.8	12.7	57.9	229	368	155	195	125	55.9	11.7	29.2
MAX	44	89	37	400	1,000	863	310	926	432	130	22	193
MIN	16	31	7.0	7.0	25	178	94	37	34	24	4.3	12
AC-FT	1,370	3,200	783	3,560	12,740	22,650	9,240	11,970	7,460	3,440	720	1,740

CAL YR 1972 TOTAL 33,613.46 MEAN 91.8 MAX 1,620 MIN .10 AC-FT 66,670
WTR YR 1973 TOTAL 39,761.80 MEAN 109 MAX 1,000 MIN 4.3 AC-FT 78,870

PEAK DISCHARGE (BASE, 800 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
2-24	-	-	a1,000	5-28	1430	4.80	1,280
3-14	1300	4.71	1,180				

a About.

06454000 Niobrara River at Wyoming-Nebraska State line

LOCATION.--Lat 42°39'33", long 104°03'54", in SE1/4SW1/4 sec.15, T.31 N., R.60 W., Niobrara County, Wyo., on left bank 0.2 mi (0.3 km) downstream from Van Tassel Creek, 0.3 mi (0.5 km) upstream from Wyoming-Nebraska State line, and 3 mi (5 km) east of Van Tassel, Wyo.

DRAINAGE AREA.--450 mi² (1,170 km²), approximately.

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

GAGE.--Water-stage recorder. Datum of gage is 4,687.70 ft (1,428.811 m) above mean sea level, datum of 1956.

AVERAGE DISCHARGE.--18 years, 4.35 ft³/s (0.123 m³/s), 3,150 acre-ft/yr (3.88 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 85 ft³/s (2.41 m³/s) Feb. 24, gage height, 2.81 ft (0.856 m); maximum gage height, 4.69 ft (1.430 m) Mar. 15, backwater from snow; minimum daily discharge, 1.8 ft³/s (0.051 m³/s) July 25-27.
Period of record: Maximum discharge, 800 ft³/s (22.7 m³/s) July 17, 1969, gage height, 6.92 ft (2.109 m) in gage well, 6.75 ft (2.057 m), from floodmarks, from rating curve extended above 63 ft³/s (1.78 m³/s) on basis of computation of peak flow through culvert and over road; minimum daily, 1.4 ft³/s (0.040 m³/s) Sept. 12-16, 20, 1959, July 26, 27, 1961, Aug. 20, 1964, Aug. 20, 22, 24, 1968.

REMARKS.--Records fair. Diversions for irrigation of about 4,700 acres (19.0 km²) above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.0	2.6	4.2	3.3	3.7	5.2	9.4	11	3.3	2.4	2.4	2.1
2	3.0	3.1	4.2	3.3	3.8	5.4	10	9.9	3.9	2.3	2.4	6.3
3	3.2	3.4	4.0	3.2	3.8	5.5	10	9.1	3.6	2.5	2.5	3.5
4	3.2	3.4	3.8	3.1	4.0	5.5	9.5	8.9	3.5	2.5	2.5	2.9
5	3.4	3.4	3.8	3.0	4.2	7.6	9.3	8.4	3.3	2.5	2.4	2.8
6	3.3	3.2	3.6	3.0	4.2	8.4	8.7	8.7	3.3	2.4	2.3	2.7
7	3.2	3.1	3.5	2.9	4.0	7.7	8.5	8.6	3.1	3.6	2.2	2.7
8	3.1	3.3	3.4	2.8	4.0	7.4	7.8	8.1	3.0	3.6	2.3	2.8
9	2.9	3.4	3.4	2.8	3.8	7.3	8.4	7.2	2.9	3.2	2.4	2.8
10	2.8	3.3	3.4	2.8	3.8	7.0	8.2	6.7	2.7	2.9	2.3	2.7
11	2.8	3.0	3.3	3.0	3.9	6.8	8.3	6.3	2.7	2.7	2.2	6.1
12	2.8	2.7	3.3	3.0	4.1	6.6	7.8	5.6	2.8	2.4	2.3	4.1
13	2.8	2.7	3.3	3.0	4.0	6.6	7.6	6.4	2.8	2.5	2.2	3.8
14	2.7	2.7	3.2	3.1	3.7	6.0	7.3	6.6	3.4	2.7	2.1	3.8
15	3.2	2.8	3.0	3.2	3.6	5.0	7.2	6.7	3.2	2.5	2.1	4.5
16	3.1	3.0	3.0	3.5	3.5	4.5	6.8	6.6	2.8	2.2	2.1	4.3
17	2.4	3.1	3.0	14	3.6	5.0	6.7	6.4	2.8	2.0	2.2	4.0
18	2.4	3.3	3.1	11	3.8	5.5	6.8	6.3	2.7	2.0	2.1	3.5
19	2.4	3.3	3.2	7.0	3.8	6.0	6.2	5.7	2.7	2.1	2.0	3.0
20	2.4	3.3	3.3	4.6	3.6	4.7	7.4	5.0	2.6	4.2	1.9	3.0
21	2.5	3.2	3.4	4.2	3.5	4.1	9.7	4.2	2.5	2.5	2.0	2.8
22	3.0	3.1	3.6	4.0	3.9	8.3	9.4	3.7	2.4	2.2	2.1	2.8
23	2.5	3.1	3.7	3.9	4.1	8.1	7.7	3.5	2.2	2.0	2.1	2.9
24	2.6	3.1	3.9	4.0	39	6.2	7.6	3.5	2.2	2.0	2.1	2.9
25	2.7	3.1	4.4	5.0	28	5.5	9.6	3.5	2.2	1.8	2.1	2.5
26	2.8	3.3	4.2	6.0	11	14	11	3.4	2.2	1.8	2.1	2.2
27	2.6	3.4	4.0	9.8	7.8	12	9.9	4.5	2.2	1.8	2.1	2.4
28	2.5	3.3	4.2	3.9	5.8	9.9	9.4	3.9	2.3	2.1	2.1	2.4
29	2.5	3.0	4.5	3.7	------	10	8.8	3.6	2.5	2.3	2.1	2.5
30	2.5	2.8	4.0	3.6	------	9.7	10	3.5	2.6	2.3	2.0	2.6
31	2.6	-----	4.2	3.5	------	9.5	------	3.3	------	2.3	1.9	------
TOTAL	86.9	93.5	113.1	137.2	180.0	221.0	255.0	188.8	84.4	76.3	67.6	97.4
MEAN	2.80	3.12	3.65	4.43	6.43	7.13	8.50	6.09	2.81	2.46	2.18	3.25
MAX	3.4	3.4	4.5	14	39	14	11	11	3.9	4.2	2.5	6.3
MIN	2.4	2.6	3.0	2.8	3.5	4.1	6.2	3.3	2.2	1.8	1.9	2.1
AC-FT	172	185	224	272	357	438	506	374	167	151	134	193

CAL YR 1972 TOTAL 1,630.5 MEAN 4.47 MAX 227 MIN 1.8 AC-FT 3,250
WTR YR 1973 TOTAL 1,601.2 MEAN 4.39 MAX 39 MIN 1.8 AC-FT 3,180

PEAK DISCHARGE (BASE, 20 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
1-17	1100	2.13	34	2-24	1045	2.81	85
1-27	0845	1.95	23	3-26	1215	2.11	26

06454100 Niobrara River at Agate, Nebr.

LOCATION.--Lat 42°25'22", long 103°47'28", in SW1/4 sec.6, T.28 N., R.55 W., Sioux County, on right bank 10 ft (3 m) upstream from timber farm-vehicle bridge, 300 ft (91 m) upstream from bridge on State Highway 29, 0.2 mi (0.3 km) northwest of Agate, and 14.5 mi (23.3 km) upstream from Whistle Creek.

DRAINAGE AREA.--840 mi² (2,180 km²), approximately.

PERIOD OF RECORD.--October 1957 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 4,440 ft (1,353 m), from topographic map. Prior to Nov. 3, 1960, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--16 years, 14.8 ft³/s (0.419 m³/s), 10,720 acre-ft/yr (13.2 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 46 ft³/s (1.30 m³/s) Mar. 24, gage height, 3.52 ft (1.073 m); minimum daily, 2.9 ft³/s (0.082 m³/s) July 18.
Period of record: Maximum discharge, 181 ft³/s (5.13 m³/s) June 23, 1959, gage height, 5.00 ft (1.524 m), from floodmark; minimum daily, 1.8 ft³/s (0.051 m³/s) Apr. 4, 1968, result of freezeup.

REMARKS.--Records good. Diversions for irrigation of about 6,700 acres (27.1 km²) above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	14	18	8.4	18	29	26	27	13	6.0	5.1	6.8
2	13	15	17	13	18	27	28	26	14	5.8	4.8	11
3	7.7	15	12	14	18	26	29	25	14	5.6	4.7	11
4	6.7	15	13	15	18	25	31	23	14	5.3	4.6	9.9
5	12	14	14	15	19	24	31	23	14	5.7	4.6	9.6
6	8.7	14	13	15	19	28	30	24	12	5.0	4.5	9.9
7	8.2	14	13	15	12	26	30	23	12	3.9	4.4	9.6
8	7.2	14	13	15	16	26	30	23	13	4.2	4.3	9.4
9	7.2	14	13	15	16	26	30	22	12	4.2	4.1	10
10	7.3	14	12	15	17	26	29	21	12	3.7	4.1	10
11	10	14	12	15	17	26	29	20	11	3.5	4.1	15
12	11	14	12	15	18	26	29	20	7.5	3.4	4.2	16
13	11	14	12	15	19	26	28	20	7.5	3.6	4.7	14
14	11	15	12	15	19	7.0	27	20	8.0	3.5	4.9	14
15	11	15	12	15	18	4.7	27	19	9.1	3.4	4.4	14
16	11	16	12	15	19	5.4	26	19	7.3	3.3	4.1	14
17	11	16	12	15	19	10	26	16	6.6	3.0	4.1	14
18	11	16	12	16	20	18	26	14	6.2	2.9	4.3	14
19	11	16	13	16	23	18	29	14	6.0	3.8	4.3	13
20	11	16	14	16	23	20	30	15	6.0	7.7	4.1	13
21	12	16	15	17	23	29	26	15	6.0	7.0	4.7	13
22	12	16	17	17	23	33	24	16	6.0	6.0	5.5	12
23	11	16	16	18	25	36	24	14	6.1	5.4	7.0	12
24	12	16	16	18	24	43	24	14	5.8	4.4	6.8	13
25	12	15	17	19	25	41	25	14	5.5	4.4	6.6	15
26	12	16	17	19	30	40	27	14	5.2	4.3	6.6	16
27	12	16	17	13	34	41	25	16	4.9	4.2	6.4	15
28	12	14	17	7.9	38	37	24	15	5.5	4.1	6.4	15
29	11	14	17	14	------	36	23	14	6.1	4.2	6.6	15
30	12	15	7.1	15	------	33	25	16	6.3	4.8	6.8	15
31	15	------	6.5	17	------	30	------	14	------	5.1	6.6	------
TOTAL	333.0	449	423.6	468.3	588	823.1	818	576	262.6	141.4	158.4	379.2
MEAN	10.7	15.0	13.7	15.1	21.0	26.6	27.3	18.6	8.75	4.56	5.11	12.6
MAX	15	16	18	19	38	43	31	27	14	7.7	7.0	16
MIN	6.7	14	6.5	7.9	12	4.7	23	14	4.9	2.9	4.1	6.8
AC-FT	661	891	840	929	1,170	1,630	1,620	1,140	521	280	314	752

CAL YR 1972 TOTAL 4,834.8 MEAN 13.2 MAX 82 MIN 5.4 AC-FT 9,590
WTR YR 1973 TOTAL 5,420.6 MEAN 14.9 MAX 43 MIN 2.9 AC-FT 10,750

PEAK DISCHARGE (BASE, 35 CFS).-- Feb. 28 (0630) 42 cfs (3.36 ft.); Mar. 24 (1715) 46 cfs (3.52 ft).

06454500 Niobrara River above Box Butte Reservoir, Nebr.

LOCATION.--Lat 42°27'35", long 103°10'15", in NE1/4 sec.27, T.29 N., R.50 W., Dawes County, on right bank 1 mi (2 km) upstream from high-water line of Box Butte Reservoir and 6 mi (10 km) east of Marsland.

DRAINAGE AREA.--1,400 mi² (3,630 km²), approximately.

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

GAGE.--Water-stage recorder. Concrete control since Oct. 12, 1953. Datum of gage is 4,012.47 ft (1,223.001 m) above mean sea level. Prior to Nov. 27, 1949, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--27 years, 31.1 ft³/s (0.881 m³/s), 22,530 acre-ft/yr (27.8 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 106 ft³/s (3.00 m³/s) Mar. 22, gage height, 4.41 ft (1.344 m); maximum gage height, 6.03 ft (1.838 m) Mar. 15, backwater from ice; minimum daily discharge, 4.7 ft³/s (0.13 m³/s) July 12.
Period of record: Maximum discharge, 4,950 ft³/s (140 m³/s) July 28, 1951, gage height, 10.30 ft (3.139 m), from rating curve extended above 230 ft³/s (6.51 m³/s) on basis of step-backwater analysis and slope-area measurement at gage height 9.22 ft (2.810 m); minimum daily, 1.6 ft³/s (0.045 m³/s) Sept. 26, 1953.

REMARKS.--Records good except those for winter period, which are poor. Diversions for irrigation of about 12,800 acres (51.8 km²) above station.

REVISIONS (WATER YEARS).--WSP 1917: 1951, 1952(P), 1957(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	26	34	16	26	66	68	70	21	6.5	22	13
2	15	28	30	16	25	70	66	64	16	5.3	22	22
3	15	30	30	14	26	74	65	61	16	5.3	21	20
4	13	29	30	15	36	74	63	59	18	5.3	21	16
5	12	30	28	15	39	75	60	56	21	5.3	21	11
6	13	30	25	14	35	64	58	81	19	5.0	20	14
7	14	29	24	14	30	56	56	70	17	5.9	20	11
8	14	30	22	14	25	51	58	75	11	5.9	19	12
9	20	30	20	15	26	50	57	65	18	5.9	12	17
10	20	30	23	16	25	50	58	54	13	6.5	16	22
11	19	30	23	17	31	50	58	47	14	5.0	21	28
12	19	30	24	20	32	46	56	44	16	4.7	16	31
13	19	27	24	22	32	45	55	43	15	5.3	22	30
14	19	29	24	24	28	40	53	42	18	6.5	20	30
15	18	29	24	25	33	35	49	41	16	6.5	24	30
16	18	32	25	26	36	32	47	40	14	5.9	22	33
17	18	33	26	28	30	35	45	31	14	5.9	16	34
18	18	35	26	32	34	50	45	32	8.3	5.9	17	34
19	20	35	26	32	35	75	53	29	17	10	18	34
20	23	35	27	32	32	62	65	35	13	33	17	34
21	25	34	27	33	36	82	64	28	8.3	22	16	33
22	25	32	29	35	38	97	62	26	9.5	20	15	32
23	25	31	31	30	41	101	60	23	9.5	19	16	32
24	25	32	29	34	45	98	56	23	8.9	22	16	34
25	25	32	30	34	50	93	53	22	8.9	22	16	34
26	25	32	30	35	54	91	55	22	7.7	20	17	36
27	25	31	31	35	59	86	54	38	6.5	20	16	35
28	25	30	32	30	66	83	51	37	6.5	19	16	36
29	25	28	31	28	------	87	48	29	6.5	21	16	41
30	25	30	25	26	------	81	62	31	6.5	22	14	38
31	25	------	18	26	------	74	------	28	------	22	14	------
TOTAL	617	919	828	753	1,005	2,073	1,700	1,346	394.1	374.6	559	827
MEAN	19.9	30.6	26.7	24.3	35.9	66.9	56.7	43.4	13.1	12.1	18.0	27.6
MAX	25	35	34	35	66	101	68	81	21	33	24	41
MIN	12	26	18	14	25	32	45	22	6.5	4.7	12	11
AC-FT	1,220	1,820	1,640	1,490	1,990	4,110	3,370	2,670	782	743	1,110	1,640

CAL YR 1972 TOTAL 9,231.7 MEAN 25.2 MAX 64 MIN 6.2 AC-FT 18,310
WTR YR 1973 TOTAL 11,395.7 MEAN 31.2 MAX 101 MIN 4.7 AC-FT 22,600

PEAK DISCHARGE (BASE, 100 CFS).--Mar. 22 (1500) 106 cfs (4.41 ft).

06455000 Box Butte Reservoir near Hemingford, Nebr.

LOCATION.--Lat 42°27'30", long 103°04'03", in sec.28, T.29 N., R.49 W., Dawes County, in control tower on dam near left bank on Niobrara River, 9 mi (14 km) north of Hemingford.

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

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

GAGE.--Electric tape gage read three or more times a month. Datum of gage is at mean sea level.

EXTREMES.--Current year: Maximum contents observed, 20,140 acre-ft (24.8 hm³) June 12, elevation, 3,999.32 ft (1,218.993 m); minimum observed, 1,370 acre-ft (1.69 hm³) Sept. 6, elevation, 3,972.95 ft (1,210.955 m). Period of record: Maximum contents, 32,210 acre-ft (39.7 hm³) Mar. 26, 1948, elevation, 4,007.70 ft (1,221.547 m); minimum observed since operation of reservoir began, 868 acre-ft (1.07 hm³) Sept. 4, 1971, elevation, 3,970.42 ft (1,210.184 m).

REMARKS.--Reservoir is formed by earthfill dam; outlet gate first closed Oct. 3, 1945. Usable capacity, 30,400 acre-ft (37.5 hm³) between elevations 3,969.00 ft (1,209.751 m), sill of outlet gate, and 4,007.00 ft (1,221.334 m), crest of spillway. Dead storage, 640 acre-ft (0.789 hm³). Figures given herein represent total contents. Water is used for irrigation of Mirage Flats project of Bureau of Reclamation.

COOPERATION.--Records of elevations and capacity table furnished by Bureau of Reclamation.

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

Date	Elevation (feet) a/	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	3,978.27	2,940	-
Oct. 31	3,981.25	4,350	+1,410
Nov. 30	3,984.85	6,400	+2,050
Dec. 31	3,987.44	8,180	+1,780
CAL YR 1972			+60
Jan. 31	3,989.41	9,760	+1,580
Feb. 28	3,991.66	11,780	+2,020
Mar. 31	3,994.15	14,270	+2,490
Apr. 30	3,995.88	16,070	+1,800
May 31	3,996.74	17,030	+960
June 30	3,997.50	17,920	+890
July 31	3,988.99	9,410	-8,510
Aug. 31	3,974.85	1,820	-7,590
Sept. 30	3,979.26	3,370	+1,550
WTR YR 1973	-	-	+430

a Elevations read on or near last day of month.

06455500 Niobrara River below Box Butte Reservoir, Nebr.

LOCATION.--Lat 42°27'25", long 103°04'05", in SE1/4 sec.28, T.29 N., R.49 W., Dawes County, on left bank 0.2 mi (0.3 km) downstream from Box Butte Reservoir and 9 mi (14 km) north of Hemingford.

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

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

GAGE.--Water-stage recorder. Concrete control since Apr. 11, 1953. Datum of gage is 3,950.08 ft (1,203.984 m) above mean sea level.

EXTREMES.--Current year: Maximum discharge, 223 ft³/s (6.32 m³/s) July 13, gage height, 4.50 ft (1.372 m); minimum daily, 0.62 ft³/s (0.018 m³/s) Dec. 1, Apr. 10,11.
Period of record: Maximum discharge, 616 ft³/s (17.4 m³/s) July 2, 1968, gage height, 5.04 ft (1.536 m); minimum daily, 0.10 ft³/s (0.003 m³/s) for many days in 1947, 1951.

REMARKS.--Records good except those below 2 ft³/s (0.057 m³/s), which are fair. Flow completely regulated by Box Butte Reservoir. (See preceding page.)

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.72	.72	.62	.79	.87	.87	.96	1.1	.92	134	192	85
2	.72	.76	.65	.76	.87	.87	.96	.96	1.0	136	201	72
3	.72	.72	.65	.72	.87	.92	.92	1.0	1.0	146	198	65
4	.72	.72	.65	.72	.83	.92	.87	.96	.96	153	192	64
5	.76	.76	.69	1.5	.83	.92	.83	1.1	.96	158	192	6.2
6	.79	.72	.72	.69	.83	.92	.79	1.2	1.0	175	186	27
7	.76	.76	.76	.72	.87	.96	.72	1.1	1.0	183	177	1.2
8	.76	.76	.76	.72	.79	.96	.69	1.1	1.1	189	161	1.1
9	.76	.76	.79	.72	.79	.96	.65	1.0	1.1	195	158	1.1
10	.76	.76	.76	.69	.79	.96	.62	1.1	1.0	198	148	1.1
11	.76	.76	.79	.69	.83	.96	.62	1.0	1.1	207	139	1.6
12	.76	.79	.79	.69	.83	.96	.65	1.0	1.3	210	141	1.4
13	.76	.83	.83	.69	.79	.96	.65	1.0	.92	213	151	1.2
14	.79	.83	.79	.76	.79	.96	.69	1.1	1.0	192	164	1.2
15	.79	.83	.79	.79	.79	.96	.72	1.1	1.1	189	180	1.4
16	.79	.87	.79	.79	.79	.96	.76	1.1	1.0	183	192	1.3
17	.79	.83	.83	.79	.79	.96	.76	1.1	.92	183	183	1.3
18	.79	.79	.87	.79	.79	.96	.76	1.1	.87	183	180	1.1
19	.79	.79	.92	.79	.79	.96	1.2	1.1	.87	180	169	1.1
20	.76	.76	.87	.79	.79	.96	1.1	1.1	.96	61	156	1.0
21	.76	.76	.87	.83	.79	.95	.87	1.1	.87	1.2	158	.96
22	.76	.76	.87	.79	.79	.95	.87	1.1	.87	1.1	151	.92
23	.76	.72	.83	.79	.83	.95	.87	1.1	.87	1.0	139	.92
24	.76	.72	.83	.79	.87	.95	.92	1.1	8.5	.94	116	.83
25	.72	.72	.83	.83	.87	.95	1.0	1.1	60	5.9	99	.87
26	.72	.76	.79	.83	.87	.95	1.0	1.1	67	75	87	.87
27	.72	.69	.79	.83	.87	.95	.96	1.4	82	95	87	.83
28	.72	.69	.83	.87	.87	.95	.92	1.2	90	129	94	.96
29	.72	.69	.79	.87	------	.96	.92	1.1	108	146	94	.96
30	.69	.65	.83	.87	------	.96	1.3	1.3	125	175	92	.83
31	.72	------	.79	.87	------	.96	------	.96	------	186	90	------
TOTAL	23.30	22.68	24.37	24.77	23.08	29.34	25.55	33.88	563.19	4,284.14	4,667	345.25
MEAN	.75	.76	.79	.80	.82	.95	.85	1.09	18.8	138	151	11.5
MAX	.79	.87	.92	1.5	.87	.96	1.3	1.4	125	213	201	85
MIN	.69	.65	.62	.69	.79	.87	.62	.96	.87	.94	87	.83
AC-FT	46	45	48	49	46	58	51	67	1,120	8,500	9,260	685

CAL YR 1972 TOTAL 8,422.93 MEAN 23.0 MAX 207 MIN .62 AC-FT 16,710
WTR YR 1973 TOTAL 10,066.55 MEAN 27.6 MAX 213 MIN .62 AC-FT 19,970

06457500 Niobrara River near Gordon, Nebr.

LOCATION.--Lat 42°38'00", long 102°12'40", in NE1/4 sec.26, T.31 N., R.42 W., Sheridan County, on left bank 250 ft (76 m) upstream from bridge on State Highway 27, 4 mi (6 km) downstream from Rush Creek, and 11 mi (18 km) south of Gordon.

DRAINAGE AREA.--4,290 mi² (11,100 km²), approximately.

PERIOD OF RECORD.--August 1928 to September 1932, October 1945 to current year. Monthly discharge only for some periods, published in WSP 1309.

GAGE.--Water-stage recorder. Datum of gage is 3,433.49 ft (1,046.528 m) above mean sea level. Aug. 24, 1928, to June 30, 1932, nonrecording gage at bridge 4 mi (6 km) downstream at different datum. Dec. 3, 1945, to Mar. 24, 1970, water-stage recorder at datum 1.0 ft (0.30 m) higher.

EXTREMES.--Current year: Maximum discharge, 366 ft³/s (10.4 m³/s) Apr. 30, gage height, 1.46 ft (0.445 m); maximum gage height, 2.54 ft (0.774 m) Dec. 30, backwater from ice; minimum daily discharge, 59 ft³/s (1.67 m³/s) Aug. 18.
Period of record: Maximum discharge, 9,130 ft³/s (259 m³/s) May 21, 1962, gage height, 5.25 ft (1.600 m); minimum daily, 16 ft³/s (0.45 m³/s) Dec. 20, 1966.

REMARKS.--Records fair except those for winter period, which are poor. Natural flow of stream affected by storage in Box Butte Reservoir (see sta 06455000), for irrigation of Mirage Flats project and return flow from irrigated land.

REVISIONS.--WRD Nebr. 1967: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	99	142	118	95	130	128	113	310	105	76	87	68
2	101	142	130	90	130	133	113	280	108	70	81	76
3	103	136	93	85	130	151	113	230	115	69	79	84
4	105	136	101	85	125	168	113	210	113	68	76	82
5	108	151	90	80	120	151	115	205	108	75	76	82
6	108	148	85	80	115	151	108	184	103	70	78	82
7	108	142	85	75	75	154	110	184	103	68	75	84
8	101	133	80	70	95	139	113	176	99	69	75	99
9	97	130	80	70	115	151	115	154	95	70	75	95
10	97	130	85	70	100	148	118	142	91	69	73	95
11	99	130	90	80	110	160	118	139	93	69	79	110
12	97	139	95	80	110	157	113	130	99	66	72	164
13	97	168	95	85	95	139	105	128	99	70	68	157
14	97	225	100	90	110	215	110	125	99	79	67	145
15	99	168	105	95	130	184	108	125	108	81	65	145
16	101	142	110	110	168	151	118	128	103	79	63	139
17	101	123	115	120	176	139	123	125	95	79	61	130
18	95	130	120	140	168	139	128	120	87	75	59	123
19	95	125	120	160	157	142	168	118	82	78	62	113
20	99	120	120	150	184	157	188	120	84	139	62	108
21	101	103	130	140	164	157	148	118	87	176	60	108
22	108	103	140	140	148	160	154	110	87	142	60	103
23	108	110	140	130	136	160	157	110	85	120	67	110
24	108	115	135	130	133	145	176	113	81	110	64	133
25	113	115	140	140	128	136	176	110	79	105	64	128
26	113	125	140	135	113	118	205	118	78	101	67	128
27	113	125	135	130	115	103	220	142	81	91	67	130
28	115	130	130	130	115	97	210	154	76	84	64	148
29	115	151	125	125	------	99	210	136	75	84	64	196
30	136	145	100	125	------	110	292	108	79	82	63	184
31	130	------	100	130	------	115	------	115	------	84	65	------
TOTAL	3,267	4,082	3,432	3,365	3,595	4,457	4,358	4,667	2,797	2,698	2,138	3,549
MEAN	105	136	111	109	128	144	145	151	93.2	87.0	69.0	118
MAX	136	225	140	160	184	215	292	310	115	176	87	196
MIN	95	103	80	70	75	97	105	108	75	66	59	68
AC-FT	6,480	8,100	6,810	6,670	7,130	8,840	8,640	9,260	5,550	5,350	4,240	7,040

CAL YR 1972 TOTAL 41,233 MEAN 113 MAX 225 MIN 70 AC-FT 81,790
WTR YR 1973 TOTAL 42,405 MEAN 116 MAX 310 MIN 59 AC-FT 84,110

06459200 Snake River above Merritt Reservoir, Nebr.

LOCATION.--Lat 42°35'40", long 101°02'20", in NE1/4 sec.11, T.30 N., R.32 W., Cherry County, on left bank 5 ft (2 m) upstream from steel piling control, 1,200 ft (366 m) upstream from Shelbourn Bridge, 0.7 mi (1.1 km) northwest of Swanson Camp, 8.5 mi (13.7 km) southeast of headquarters for Nebraska National Forest (Niobrara Division), 10 mi (16 km) upstream from Boardman Creek, and 14.5 mi (23.3 km) upstream from Merritt Dam.

DRAINAGE AREA.--440 mi² (1,140 km²), approximately, of which about 28 mi² (73 km²) contributes directly to surface runoff.

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

GAGE.--Water-stage recorder and steel piling control. Datum of gage is 2,952.75 ft (899.998 m) above mean sea level, (levels by Bureau of Reclamation).

AVERAGE DISCHARGE.--11 years, 204 ft³/s (5.777 m³/s), 147,800 acre-ft/yr (0.182 km³/yr).

EXTREMES.--Current year: Maximum discharge, 393 ft³/s (11.1 m³/s) May 27, gage height, 3.58 ft (1.091 m); maximum gage height, 5.03 ft (1.533 m) Dec. 4, backwater from ice; minimum daily discharge, 160 ft³/s (4.53 m³/s) Dec. 6.
Period of record: Maximum discharge, 637 ft³/s (18.0 m³/s) Aug. 12, 1966, gage height, 2.43 ft (0.741 m); maximum gage height, 5.56 ft (1.695 m) Nov. 23, 1970, backwater from ice; minimum daily discharge, 89 ft³/s (2.52 m³/s) Dec. 13, 1968.
Maximum flood since October 1960, 820 ft³/s (23.2 m³/s) June 30, 1962, gage height, 2,953.46 ft (900.215 m) above mean sea level, from high-water profiles at reference point on downstream side of Shelbourn Bridge 1,200 ft (370 m) downstream, result of slope-area measurement of peak flow.

REMARKS.--Records good except those for winter period, which are fair. Records of water temperatures for the water year 1972 are published in Part 2 of this report.

REVISIONS.--WRD Nebr. 1972: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	189	205	204	180	219	240	213	288	211	193	190	183
2	190	234	207	190	211	243	204	286	203	179	193	263
3	185	212	190	200	212	237	202	276	207	177	190	253
4	188	221	180	180	205	229	195	250	202	178	187	237
5	193	221	170	170	208	235	193	235	190	178	185	197
6	188	223	160	165	209	223	194	225	184	175	185	189
7	185	217	165	165	206	217	199	215	182	170	183	184
8	188	214	170	170	190	211	187	209	181	170	184	183
9	188	221	175	175	200	214	186	207	180	180	182	187
10	193	216	175	175	220	204	173	203	176	181	185	185
11	189	204	190	180	235	201	185	203	179	176	198	201
12	190	223	210	190	226	202	190	197	182	169	202	237
13	190	223	210	210	236	206	193	198	180	172	196	226
14	192	211	215	240	210	276	192	199	185	180	191	210
15	189	200	220	279	185	262	193	201	226	182	190	205
16	190	198	210	293	210	252	188	202	205	179	182	210
17	187	204	210	277	230	231	190	201	184	175	178	207
18	186	209	240	248	266	215	190	206	183	174	178	202
19	182	213	220	231	231	212	211	200	169	178	180	199
20	186	212	250	229	231	206	221	200	174	202	177	197
21	189	206	267	221	232	196	224	198	181	221	175	193
22	206	207	274	209	228	212	220	194	180	218	175	186
23	199	207	244	202	229	203	207	196	179	204	179	186
24	197	209	222	200	234	219	208	200	179	194	186	222
25	195	212	217	209	231	220	199	198	181	193	189	218
26	197	210	214	214	233	210	194	224	181	187	185	240
27	199	211	209	218	238	218	204	338	177	186	178	215
28	199	208	209	200	240	216	199	295	179	190	173	239
29	200	208	208	210	------	198	200	276	180	204	181	307
30	212	203	190	229	------	199	252	234	197	194	197	258
31	204	------	185	213	------	212	------	222	------	191	185	------
TOTAL	5,965	6,362	6,410	6,472	6,205	6,819	6,006	6,976	5,597	5,750	5,739	6,419
MEAN	192	212	207	209	222	220	200	225	187	185	185	214
MAX	212	234	274	293	266	276	252	338	226	221	202	307
MIN	182	198	160	165	185	196	173	194	169	169	173	183
AC-FT	11,830	12,620	12,710	12,840	12,310	13,530	11,910	13,840	11,100	11,410	11,380	12,730

CAL YR 1972 TOTAL 73,680 MEAN 201 MAX 295 MIN 160 AC-FT 146,100
WTR YR 1973 TOTAL 74,720 MEAN 205 MAX 338 MIN 160 AC-FT 148,200

PEAK DISCHARGE (BASE, 350 CFS).--May 27 (1515) 393 cfs (3.58 ft); Sept. 29 (0245) 352 cfs (3.57 ft)

06459300 Merritt Reservoir near Burge, Nebr.

LOCATION.--Lat 42°38'06", long 100°52'18", in SW1/4NW1/4 sec.29, T.31 N., R.30 W., Cherry County, in control house of outlet works of Merritt Dam, 8.1 mi (13.0 km) (revised) southwest of Burge and 23 mi (37 km) (revised) southwest of Valentine.

DRAINAGE AREA.--640 mi² (1,660 km²), approximately, of which about 44 mi² (110 km²) (revised) contributes directly to surface runoff.

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

GAGE.--Direct reading, single vertical column, mercury-well type manometer read once daily. Datum of gage is at mean sea level.

EXTREMES.--Current year: Maximum contents observed, 75,370 acre-ft (92.9 hm³) May 28 to June 2, elevation, 2,946.3 ft (898.03 m); minimum observed, 40,750 acre-ft (50.2 hm³) Aug. 31 to Sept. 1, elevation, 2,931.6 ft (893.55 m).
Period of record: Maximum contents observed, 76,840 acre-ft (94.7 hm³) May 4, 1971; minimum since appreciable storage was attained, 20,060 acre-ft (24.7 hm³) Oct. 1, 1968, elevation, 2,916.1 ft (888.83 m).

REMARKS.--Reservoir is formed by earthfill dam; storage began Feb. 19, 1964. Usable capacity, 71,379 acre-ft (88.0 hm³) between elevations 2,884.0 ft (879.04 m), minimum water surface, and 2,946.0 ft (897.94 m), crest of spillway. Dead and inactive storage, 3,107 acre-ft (3.83 hm³) below elevation 2,884.0 ft (879.04 m). Figures given herein represent total contents. Water is used for irrigation of Ainsworth Unit of Bureau of Reclamation.

COOPERATION.--Records of elevation and capacity table furnished by Bureau of Reclamation.

REVISIONS.--WRD Nebr. 1967: Drainage area.

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	2,940.6	59,910	-
Oct. 31	2,940.6	59,910	0
Nov. 30	2,940.9	60,660	+750
Dec. 31	2,941.0	60,910	+250
CAL YR 1972	-	-	-1,540
Jan. 31	2,941.0	60,910	0
Feb. 28	2,941.1	61,170	+260
Mar. 31	2,945.1	71,910	+10,740
Apr. 30	2,946.1	74,780	+2,870
May 31	2,946.3	75,370	+590
June 30	2,946.0	74,490	-880
July 31	2,938.9	55,770	-18,720
Aug. 31	2,931.6	40,750	-15,020
Sept. 30	2,934.2	45,620	+4,870
WTR YR 1973	-	-	-14,290

06459500 Snake River near Burge, Nebr.

LOCATION (REVISED).--Lat 42°39'15", long 100°51'28", in NE1/4 sec.20, T.31 N., R.30 W., Cherry County, on right bank 150 ft (46 m) downstream from Nebraska National Forest boundary, 2.1 downstream from Merritt Dam, 6.5 mi (10.5 km) southwest of Burge, and 22 mi (35 km) southwest of Valentine.

DRAINAGE AREA.--660 mi² (1,710 km²), approximately, of which about 44 mi² (110 km²) contributes directly to surface runoff.

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

GAGE.--Water-stage recorder. Datum of gage is 2,805.36 ft (855.074 m) above mean sea level, (levels by Bureau of Reclamation).

AVERAGE DISCHARGE.--10 years (1963-73), 162 ft³/s (4.588 m³/s), 117,400 acre-ft/yr (0.145 km³/yr), since storage and diversion began.

EXTREMES.--Current year: Maximum discharge, 346 ft³/s (9.80 m³/s) May 28, gage height, 2.32 ft (0.707 m); minimum daily, 15 ft³/s (0.42 m³/s) Mar. 13-21, Apr. 2, Aug. 21-28.
Period of record: Maximum discharge, 3,170 ft³/s (89.8 m³/s) Feb. 7, 1963, gage height, 6.96 ft (2.121 m), release of storage behind temporary construction dike, from rating curve extended above 520 ft³/s (14.7 m³/s) on basis of slope-area measurement at gage height 5.39 ft (1.643 m); minimum daily, 5.8 ft³/s (0.16 m³/s) May 24-27, 1964.

REMARKS.--Records good. Natural flow affected by storage in Merritt Reservoir 2.1 mi (3.4 km) upstream. (See sta 06459300.)

REVISIONS (WATER YEARS).--WSP 1279: 1950(M), 1951(P). WRD Nebr. 1967,1972: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	194	182	220	262	272	261	16	283	272	35	18	17
2	219	193	220	243	269	275	15	303	292	19	18	20
3	218	207	220	230	258	279	65	306	276	18	17	18
4	218	208	206	228	252	280	150	310	269	18	16	19
5	220	205	193	212	252	280	210	300	262	18	16	19
6	220	205	193	199	249	283	210	291	253	18	16	19
7	220	220	193	199	251	283	210	283	210	17	16	19
8	220	231	193	199	230	286	210	244	149	17	16	17
9	220	231	193	200	217	286	210	266	132	17	16	18
10	220	234	193	200	217	286	210	263	117	17	16	19
11	223	234	193	200	214	290	215	261	103	17	16	20
12	222	237	193	235	214	132	215	258	83	17	16	69
13	224	248	193	235	217	15	215	240	76	17	16	217
14	224	257	193	235	217	15	215	135	80	17	16	217
15	225	260	213	235	217	15	215	108	76	16	16	221
16	226	259	233	255	214	15	215	107	78	16	16	221
17	224	262	220	255	214	15	215	108	86	16	16	223
18	220	262	220	270	214	15	215	108	96	16	16	227
19	217	262	220	270	236	15	215	110	132	16	16	224
20	201	265	220	270	248	15	220	115	129	17	16	224
21	189	266	237	290	244	15	220	98	122	16	15	223
22	190	256	255	290	245	16	220	119	103	17	15	223
23	190	248	259	290	244	16	220	120	103	17	15	220
24	187	249	259	290	245	17	220	118	105	18	15	223
25	187	253	259	290	241	16	223	119	103	18	15	234
26	184	252	259	290	241	16	223	123	103	18	15	249
27	186	238	259	290	241	16	226	232	90	18	15	245
28	184	221	259	270	252	16	227	323	59	18	15	250
29	183	220	260	270	------	16	221	333	37	17	16	266
30	184	220	264	270	------	16	235	325	38	17	17	275
31	181	------	264	271	------	16	------	318	------	17	17	------
TOTAL	6,420	7,085	6,956	7,743	6,625	3,517	5,896	6,627	4,034	550	495	4,456
MEAN	207	236	224	250	237	113	197	214	134	17.7	16.0	149
MAX	226	266	264	290	272	290	235	333	292	35	18	275
MIN	181	182	193	199	214	15	15	98	37	16	15	17
AC-FT	12,730	14,050	13,800	15,360	13,140	6,980	11,690	13,140	8,000	1,090	982	8,840

CAL YR 1972 TOTAL 57,562 MEAN 157 MAX 353 MIN 14 AC-FT 114,200
WTR YR 1973 TOTAL 60,404 MEAN 165 MAX 333 MIN 15 AC-FT 119,800

06460900 Minnechaduza Creek near Kilgore, Nebr.

LOCATION.--Lat 42°59'10", long 100°53'55", in NE1/4NW1/4 sec.30, T.35 N., R.30 W., Cherry County, on right bank 800 ft (244 m) northeast of Paul Zysset ranch buildings, 2.5 mi (4.0 km) downstream from South Dakota-Nebraska State line, and 4.5 mi (7.2 km) northeast of Kilgore.

DRAINAGE AREA.--85 mi² (220 km²), approximately.

PERIOD OF RECORD.--March 1958 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 2,770 ft (844 m), from topographic map.

AVERAGE DISCHARGE.--15 years, 7.34 ft³/s (0.208 m³/s), 5,320 acre-ft/yr (6.56 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 25 ft³/s (0.71 m³/s) Feb 28, gage height, 3.70 ft (1.128 m), maximum gage height, 4.01 ft (1.222 m) May 28, backwater from beaver dams; no flow Aug. 21-29.
Period of record: Maximum discharge, 147 ft³/s (4.16 m³/s) June 8, 1968, gage height, 4.19 ft (1.277 m); maximum gage height, 4.37 ft (1.332 m) Apr. 20, 1971, backwater from beaver dams; no flow at times in 1959, 1961, 1964, 1966, 1969-73.

REMARKS.--Records fair.

REVISIONS (WATER YEARS).--WSP 1729: 1959(M). WSP 1917: 1958(M), 1960(P). WRD Nebr. 1967: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.02	5.0	6.4	2.6	6.2	21	16	7.6	11	.20	3.1	1.4
2	.03	5.4	5.0	2.6	6.8	21	17	7.6	10	.15	2.9	1.7
3	.08	6.0	3.0	2.7	7.4	19	17	7.6	9.0	.18	2.6	1.7
4	.22	6.5	1.5	2.6	8.0	17	16	7.3	8.0	.38	2.1	1.7
5	.38	6.8	1.4	2.6	8.4	16	15	6.8	7.1	.62	1.6	1.5
6	.50	7.1	1.3	2.5	8.6	16	15	6.0	6.6	.41	1.3	1.5
7	.48	7.4	1.4	2.4	8.0	15	14	5.3	5.8	.10	1.0	1.5
8	.60	7.6	1.5	2.5	7.2	15	13	4.9	5.5	.03	1.4	1.6
9	.87	7.6	1.4	2.5	7.4	15	12	4.5	4.8	.84	1.4	1.7
10	.94	7.7	1.4	2.6	8.0	14	12	4.1	4.1	1.1	1.4	1.7
11	.94	7.6	1.4	2.6	8.6	13	11	3.8	3.7	1.0	1.5	1.7
12	.97	7.5	1.4	2.7	9.2	12	11	3.6	3.5	.58	1.5	2.0
13	1.1	7.3	1.5	2.9	8.4	13	10	3.4	3.0	.47	1.5	2.0
14	1.1	7.0	1.6	3.7	8.4	18	10	3.2	2.8	.94	1.4	2.0
15	1.1	6.8	1.7	4.0	8.0	21	9.9	3.2	2.8	.93	1.2	2.2
16	1.2	6.8	1.8	5.2	9.0	21	9.4	3.2	2.8	.86	1.0	2.3
17	1.4	6.6	1.9	5.6	10	20	9.0	3.1	2.5	.62	.61	2.3
18	1.6	6.8	2.1	6.0	12	19	8.6	3.0	2.3	.57	.30	2.3
19	1.8	7.0	2.2	5.2	12	16	8.7	2.9	2.1	.61	.15	2.3
20	2.2	7.0	2.5	5.4	13	15	9.1	2.9	1.5	1.1	.06	2.1
21	2.3	7.0	2.7	4.6	15	14	9.0	2.8	1.7	1.6	0	2.0
22	2.5	7.1	3.0	4.9	16	15	9.0	2.5	1.4	1.8	0	1.8
23	2.7	6.9	3.1	5.2	18	15	8.6	2.4	1.2	1.9	0	1.7
24	3.0	6.9	2.9	5.4	19	16	8.0	2.5	.96	2.6	0	2.1
25	3.2	7.0	3.0	5.6	19	17	7.5	2.6	.69	2.6	0	2.1
26	3.4	6.8	3.1	5.8	21	18	7.2	2.9	.51	2.6	0	2.3
27	3.7	6.7	3.2	5.8	22	18	6.8	10	.45	2.7	0	2.3
28	4.0	6.7	3.3	5.6	23	17	6.6	20	.53	3.0	0	3.0
29	4.2	6.4	3.4	4.9	------	17	6.4	19	.41	3.5	0	4.7
30	4.4	6.4	3.3	5.2	------	16	6.6	15	.32	3.4	.61	4.2
31	4.6	------	2.9	5.8	------	16	------	13	------	3.2	1.4	------
TOTAL	55.53	205.4	76.3	127.7	327.6	516	319.4	186.7	107.07	40.59	30.03	63.4
MEAN	1.79	6.85	2.46	4.12	11.7	16.6	10.6	6.02	3.57	1.31	.97	2.11
MAX	4.6	7.7	6.4	6.0	23	21	17	20	11	3.5	3.1	4.7
MIN	.02	5.0	1.3	2.4	6.2	12	6.4	2.4	.32	.03	0	1.4
AC-FT	110	407	151	253	650	1,020	634	370	212	81	60	126

CAL YR 1972 TOTAL 1,953.48 MEAN 5.34 MAX 41 MIN 0 AC-FT 3,870
WTR YR 1973 TOTAL 2,055.72 MEAN 5.63 MAX 23 MIN 0 AC-FT 4,080

PEAK DISCHARGE (BASE, 45 CFS).--No peak above base.

06461000 Minnechaduza Creek at Valentine, Nebr.

LOCATION.--Lat 42°53'10", long 100°33'10", in SW1/4 sec.30, T.34 N., R.27 W., Cherry County, on right bank 500 ft (152 m) downstream from powerplant in city park at north edge of Valentine and 4 mi (6 km) upstream from mouth.

DRAINAGE AREA.--390 mi² (1,010 km²), approximately, of which about 200 mi² (520 km²) contributes directly to surface runoff.

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

GAGE.--Water-stage recorder. Altitude of gage is 2,470 ft (753 m), from topographic map.

AVERAGE DISCHARGE.--25 years (1948-73), 34.7 ft³/s (0.983 m³/s), 25,140 acre-ft/yr (31.0 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 164 ft³/s (4.64 m³/s) Aug. 31, gage height, 2.74 ft (0.835 m); minimum daily, 5.2 ft³/s (0.15 m³/s) Aug. 18.
Period of record: Maximum discharge, 1,100 ft³/s (31.2 m³/s) Mar. 22, 1960, gage height, 8.00 ft (2.438 m); minimum daily, 2.6 ft³/s (0.074 m³/s) Feb. 22, 1955.

REMARKS.--Records poor prior to December 1972 and good thereafter. Flow regulated by powerplant 500 ft (152 m) above station.

REVISIONS.--WRD Nebr. 1967: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	29	31	19	46	53	50	50	51	19	22	32
2	15	27	31	33	32	62	40	49	83	12	12	35
3	15	39	8.5	29	39	66	48	49	29	17	21	28
4	15	29	13	28	36	48	44	36	50	24	7.1	16
5	20	29	24	26	39	56	36	43	39	19	15	25
6	20	32	26	20	40	57	45	38	35	17	15	25
7	15	39	21	18	28	56	42	32	35	23	12	25
8	15	34	21	25	22	45	36	37	24	7.1	11	6.3
9	20	25	26	19	37	49	30	30	32	17	15	19
10	20	44	15	29	34	48	36	31	21	21	20	31
11	18	22	25	22	44	44	39	30	19	17	16	17
12	18	34	16	24	39	45	34	32	20	18	10	26
13	18	39	26	27	38	50	31	26	25	22	15	19
14	18	27	19	24	25	57	38	25	22	7.7	16	37
15	20	29	25	25	18	68	29	21	30	7.7	16	9.7
16	20	34	21	34	32	59	29	22	21	24	10	36
17	20	29	30	37	46	64	30	21	21	13	15	31
18	15	29	16	48	35	68	29	26	20	11	5.2	32
19	22	27	25	37	39	68	31	9.4	21	14	5.4	31
20	20	34	26	34	34	48	45	45	21	26	12	26
21	20	34	25	37	34	55	34	13	19	8.1	5.4	24
22	22	5.9	30	34	34	51	37	10	21	29	8.3	19
23	25	27	35	29	39	48	40	23	20	19	5.6	21
24	25	34	35	26	37	47	34	24	9.0	18	15	31
25	25	29	30	43	39	49	35	25	11	13	5.6	26
26	25	38	30	43	44	49	33	30	16	14	10	26
27	25	30	34	38	39	51	36	71	16	17	16	26
28	22	27	38	25	48	57	13	72	17	13	5.8	31
29	15	25	25	23	------	50	51	86	17	18	11	51
30	29	29	19	43	------	50	30	93	11	15	33	67
31	25	------	7.1	40	------	50	------	93	------	6.9	80	------
TOTAL	620	909.9	753.6	939	1,017	1,668	1,085	1,192.4	776.0	507.5	466.4	829.0
MEAN	20.0	30.3	24.3	30.3	36.3	53.8	36.2	38.5	25.9	16.4	15.0	27.6
MAX	29	44	38	48	48	68	51	93	83	29	80	67
MIN	15	5.9	7.1	18	18	44	13	9.4	9.0	6.9	5.2	6.3
AC-FT	1,230	1,800	1,490	1,860	2,020	3,310	2,150	2,370	1,540	1,010	925	1,640

CAL YR 1972 TOTAL 10,408.5 MEAN 28.4 MAX 90 MIN 5.9 AC-FT 20,650
WTR YR 1973 TOTAL 10,763.8 MEAN 29.5 MAX 93 MIN 5.2 AC-FT 21,350

06461500 Niobrara River near Sparks, Nebr.

LOCATION.--Lat 42°54'10", long 100°21'40", in SE1/4 sec.22, T.34 N., R.26 W., Cherry County, on left bank 18 ft (5 m) downstream from highway bridge, 2.2 mi (3.5 km) downstream from Big Beaver Creek, 5.5 mi (8.8 km) downstream from Minnechaduza Creek, and 6.5 mi (10.5 km) southwest of Sparks.

DRAINAGE AREA.--8,090 mi² (21,000 km²), approximately.

PERIOD OF RECORD.--October 1945 to current year. Monthly discharge only for some periods, published in WSP 1309.

GAGE.--Water-stage recorder. Datum of gage is 2,287.57 ft (697.251 m) above mean sea level.

AVERAGE DISCHARGE.--28 years, 803 ft³/s (22.74 m³/s), 581,800 acre-ft/yr (0.717 km³/yr), unadjusted.

EXTREMES.--Current year: Maximum discharge, 3,100 ft³/s (87.8 m³/s) Dec. 3, gage height, 4.53 ft (1.381 m), backwater from ice; maximum gage height, 10.06 ft (3.066 m) Feb. 7,ice jam; minimum daily discharge, 373 ft³/s (10.6 m³/s) Aug. 22.
Period of record: Maximum discharge, 10,200 ft³/s (289 m³/s) Mar. 5, 1949, gage height, 6.73 ft (2.051 m), from rating curve extended above 3,800 ft³/s (108 m³/s); maximum gage height recorded, 10.06 , ft (3.066 m) Feb. 7, 1973, ice jam; minimum daily discharge, 100 ft³/s (2.83 m³/s) Jan. 10, 1957.

REMARKS.--Records good except those for winter period, which are poor. Natural flow of stream affected by irrigation and power developments, storage in Box Butte Reservoir (see sta 06455000), and since May 1964 storage in Merritt Reservoir (see sta 06459300).

REVISIONS (WATER YEARS).--WSP 1209: 1947(M), 1948-50(P). WRD Nebr. 1967: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	630.	757	680	520	920	906	727	1,090	965	482	442	402
2	684	861	680	500	920	931	708	1,160	883	482	434	458
3	706	851	580	480	900	958	686	1,140	920	442	450	482
4	694	801	410	460	900	961	740	1,000	867	500	434	450
5	714	832	390	450	860	994	825	980	810	466	426	440
6	752	807	380	460	780	991	815	951	813	426	418	430
7	717	816	380	480	720	964	852	999	797	426	410	430
8	694	834	380	500	740	952	839	922	713	402	434	440
9	725	823	390	520	760	965	786	899	646	474	442	450
10	709	833	400	540	800	966	780	897	623	466	442	482
11	723	818	430	600	860	960	795	843	584	434	450	491
12	720	871	450	660	800	949	773	847	592	418	458	552
13	717	870	500	800	740	716	778	798	552	418	458	676
14	719	864	520	1,300	700	895	791	779	535	418	474	793
15	737	774	580	1,700	660	920	833	671	666	434	466	840
16	725	835	640	1,400	680	899	798	742	589	450	442	874
17	722	838	740	1,200	720	808	765	671	552	442	395	839
18	744	845	840	1,100	780	799	748	652	561	450	388	725
19	763	833	940	1,060	820	779	860	693	561	442	395	687
20	734	844	1,060	1,020	860	771	974	733	561	491	402	691
21	676	829	1,090	960	880	746	937	716	589	500	395	704
22	729	810	1,080	900	900	778	953	683	580	552	373	679
23	748	785	1,110	940	920	775	876	692	561	580	380	682
24	721	795	1,130	1,000	960	797	841	676	552	552	410	760
25	732	801	996	1,060	980	843	852	681	552	500	426	797
26	740	812	1,050	1,060	1,000	787	836	708	544	482	418	780
27	706	801	961	920	957	770	836	1,080	526	474	410	760
28	738	767	991	820	897	787	821	1,200	508	508	380	840
29	731	720	894	860	------	742	844	1,090	491	508	395	1,220
30	797	700	589	900	------	706	966	1,080	458	458	733	987
31	761	------	566	940	------	732	------	987	------	426	466	------
TOTAL	22,408	24,427	21,827	26,110	23,414	26,547	24,635	27,060	19,151	14,503	13,446	19,841
MEAN	723	814	704	842	836	856	821	873	638	468	434	661
MAX	797	871	1,130	1,700	1,000	994	974	1,200	965	580	733	1,220
MIN	630	700	380	450	660	706	686	652	458	402	373	402
AC-FT	44,450	48,450	43,290	51,790	46,440	52,660	48,860	53,670	37,990	28,770	26,670	39,350

CAL YR 1972 TOTAL 262,678 MEAN 718 MAX 1,260 MIN 380 AC-FT 521,000
WTR YR 1973 TOTAL 263,369 MEAN 722 MAX 1,700 MIN 373 AC-FT 522,400

06462000 Niobrara River near Norden, Nebr.

LOCATION.--Lat 42°47'13", long 100°02'06", in N1/2SW1/4 sec.33, T.33 N., R.23 W., Keya Paha County, on left bank 60 ft (18 m) downstream from county road bridge, 1.5 mi (2.4 km) downstream from Fairfield Creek, and 6 mi (10 km) south of Norden.

DRAINAGE AREA.--8,390 mi² (21,700 km²), approximately.

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

GAGE.--Water-stage recorder. Datum of gage is 2,109.93 ft (643.107 m) above mean sea level.

AVERAGE DISCHARGE.--21 years, 887 ft³/s (25.12 m³/s), 642,600 acre-ft/yr (0.792 km³/yr), unadjusted.

EXTREMES.--Current year: Maximum discharge, 2,430 ft³/s (68.8 m³/s) Jan. 14, gage height, 3.08 ft (0.939 m); maximum gage height, 4.15 ft (1.265 m) Dec. 24, ice jam; minimum daily discharge, 450 ft³/s (12.7 m³/s) Dec. 6, 7.
Period of record: Maximum discharge, 7,380 ft³/s (209 m³/s) July 1, 1962, gage height, 7.10 ft (2.164 m), backwater from bridge in channel; maximum gage height, 10.24 ft (3.121 m) Mar. 11, 1966, ice jam and backwater from bridge in channel; minimum daily discharge, 130 ft³/s (3.68 m³/s) Jan. 10, 1957.

REMARKS.--Records fair except those for winter period, which are poor. Flow affected by regulation at powerplants, diversions for irrigation, return flow from irrigated areas, storage in Box Butte Reservoir (see sta 06455000), and since May 1964 storage in Merritt Reservoir (see sta 06459300).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	661	821	785	600	1,020	1,050	844	1,190	1,090	568	482	575
2	697	928	791	580	980	1,050	847	1,230	999	612	482	582
3	743	964	659	560	1,000	1,120	773	1,270	1,090	538	482	724
4	727	926	498	540	1,020	1,150	811	1,160	984	524	517	524
5	750	950	460	540	1,000	1,180	909	1,070	932	538	482	510
6	781	893	450	560	1,000	1,230	908	1,050	908	496	496	503
7	759	924	450	580	900	1,230	924	1,120	884	510	475	489
8	728	929	460	600	820	1,230	934	1,040	852	475	496	489
9	741	900	470	660	860	1,220	873	959	796	517	489	482
10	722	902	490	740	880	1,210	846	991	764	582	489	496
11	721	889	520	840	891	1,200	845	940	740	489	496	496
12	738	967	540	1,040	1,040	1,200	828	948	692	482	510	568
13	753	918	580	1,300	996	965	817	942	692	496	496	612
14	746	980	640	1,950	780	1,150	853	855	700	503	517	796
15	763	868	680	2,100	740	1,170	871	788	788	496	482	876
16	762	901	740	1,800	820	1,100	905	764	756	475	503	900
17	771	917	820	1,600	940	990	801	764	692	496	482	940
18	796	896	920	1,400	1,010	953	760	756	732	531	489	828
19	802	904	1,040	1,300	1,010	944	878	748	708	524	468	812
20	773	890	1,100	1,200	1,000	903	1,060	764	732	468	461	788
21	702	893	1,200	1,100	1,060	880	1,000	708	684	524	461	788
22	734	876	1,240	1,000	1,130	905	1,010	708	676	496	468	788
23	791	849	1,250	1,060	1,150	943	899	708	582	538	461	772
24	763	866	1,300	1,100	1,190	974	837	756	628	605	461	796
25	778	868	1,200	1,140	1,150	1,010	873	772	652	531	482	860
26	764	849	1,250	1,140	1,150	998	829	812	582	517	482	868
27	784	816	1,180	1,020	1,210	931	832	1,270	644	496	475	852
28	802	786	1,100	960	1,180	978	861	1,550	605	489	489	916
29	814	803	980	940	------	919	825	1,310	582	668	468	1,190
30	880	808	720	1,000	------	812	993	1,310	568	510	812	1,040
31	862	------	640	1,000	------	838	------	1,160	------	489	612	------
TOTAL	23,608	26,681	25,153	31,950	27,927	32,433	26,246	30,413	22,734	16,183	15,465	21,860
MEAN	762	889	811	1,031	997	1,046	875	981	758	522	499	729
MAX	880	980	1,300	2,100	1,210	1,230	1,060	1,550	1,090	668	812	1,190
MIN	661	786	450	540	740	812	760	708	568	468	461	482
AC-FT	46,830	52,920	49,890	63,370	55,390	64,330	52,060	60,320	45,090	32,100	30,670	43,360

CAL YR 1972 TOTAL 290,794 MEAN 795 MAX 1,400 MIN 450 AC-FT 576,800
WTR YR 1973 TOTAL 300,653 MEAN 824 MAX 2,100 MIN 450 AC-FT 596,300

06462500 Plum Creek at Meadville, Nebr.

LOCATION.--Lat 42°45'05", long 99°52'05", in NE1/4NW1/4 sec.14, T.32 N., R.22 W., Brown County, on left bank 0.4 mi (0.6 km) upstream from county road bridge, 1 mi (2 km) upstream from mouth, 1 mi (2 km) southwest of Meadville, and 17 mi (27 km) north of Ainsworth.

DRAINAGE AREA.--600 mi² (1,550 km²), approximately, of which about 340 mi² (880 km²) contributes directly to surface runoff.

PERIOD OF RECORD.--December 1947 to current year. Prior to October 1962, published as "near Meadville."

GAGE.--Water-stage recorder. Altitude of gage is 2,035 ft (620.3 m), from topographic map. Prior to Nov. 25, 1962, at site 6.5 mi (10.5 km) upstream at different datum. Nov. 25, 1962, to Nov. 14, 1966, at present site at datum 1.0 ft (0.30 m) higher.

AVERAGE DISCHARGE.--25 years (1948-73), 107 ft³/s (3.030 m³/s), 77,520 acre-ft/yr (95.6 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 333 ft³/s (9.43 m³/s) May 31, gage height, 2.17 ft (0.661 m); maximum gage height, 4.55 ft (1.387 m) Jan. 11, backwater from ice; minimum daily discharge, 76 ft³/s (2.15 m³/s) Dec. 6.
Period of record: Maximum discharge, 2,070 ft³/s (58.6 m³/s) Sept. 18, 1967, gage height, 4.98 ft (1.518 m); maximum gage height observed, 7.54 ft (2.298 m) Dec. 6, 1964, backwater from ice, present datum; minimum daily discharge, 15 ft³/s (0.42 m³/s) Feb. 19, 1955.

REMARKS.--Records fair, except those for periods of no gage-height record, which are poor.

REVISIONS (WATER YEARS).--WSP 1729: 1953. WSP 1917: 1953.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	101	99	94	90	94	135	150	125	304	100	105	105
2	101	107	95	88	100	128	190	145	251	99	103	115
3	91	108	100	92	105	121	180	157	213	103	103	128
4	87	99	100	86	108	118	175	157	192	100	103	91
5	91	103	96	80	110	118	160	147	182	108	105	88
6	93	105	76	82	110	119	150	124	165	107	119	92
7	91	108	80	86	100	115	140	114	152	98	110	90
8	90	103	82	84	92	112	130	104	141	103	105	94
9	90	103	80	82	92	110	120	102	139	104	96	96
10	91	99	78	94	96	110	120	103	132	100	96	96
11	90	98	80	100	98	107	120	96	120	106	108	94
12	88	110	84	110	96	101	120	96	120	103	117	105
13	90	110	82	120	99	105	120	95	117	103	105	116
14	90	103	82	130	96	143	120	98	116	93	98	107
15	89	97	84	140	90	174	120	100	137	96	96	106
16	90	94	94	150	92	250	120	112	131	96	103	109
17	90	96	100	140	100	210	120	103	120	100	98	113
18	90	95	108	129	110	150	120	100	114	95	101	115
19	90	98	110	135	116	140	120	105	111	96	98	110
20	91	100	106	131	109	140	130	103	112	101	96	103
21	92	98	106	126	103	130	130	107	117	101	101	104
22	93	98	122	123	104	130	120	105	120	103	103	103
23	93	101	128	118	114	120	120	105	114	105	94	102
24	93	98	137	122	117	120	120	109	108	98	92	103
25	92	96	143	116	119	140	110	111	104	98	96	108
26	92	96	144	107	121	180	103	126	107	98	96	113
27	92	98	145	108	122	170	101	186	105	98	94	113
28	92	96	149	100	129	140	101	221	97	103	94	121
29	93	94	145	110	------	150	100	280	97	105	90	136
30	100	93	120	103	------	180	117	308	96	101	96	126
31	98	------	100	103	------	160	------	326	------	101	100	------
TOTAL	2,854	3,003	3,250	3,385	2,942	4,326	3,847	4,270	4,134	3,122	3,121	3,202
MEAN	92.1	100	105	109	105	140	128	138	138	101	101	107
MAX	101	110	149	150	129	250	190	326	304	108	119	136
MIN	87	93	76	80	90	101	100	95	96	93	90	88
AC-FT	5,660	5,960	6,450	6,710	5,840	8,580	7,630	8,470	8,200	6,190	6,190	6,350

CAL YR 1972 TOTAL 39,110 MEAN 107 MAX 263 MIN 66 AC-FT 77,570
WTR YR 1973 TOTAL 41,456 MEAN 114 MAX 326 MIN 76 AC-FT 82,230

PEAK DISCHARGE (BASE, 300 CFS).--May 31 (0930) 333 cfs (2.17 ft)

NOTE.--No gage-height record Jan. 8, 9, Mar. 16 to Apr. 24.

06463500 Long Pine Creek near Riverview, Nebr.

LOCATION.--Lat 42°41'20", long 99°41'20", in N1/2 sec.5, T.31 N., R.20 W., Brown County, on right bank 7 ft (2 m) downstream from county road bridge, 1 mi (2 km) downstream from Bone Creek, and 5.5 mi (8.8 km) southwest of Riverview.

DRAINAGE AREA.--390 mi² (1,010 km²), approximately.

PERIOD OF RECORD.--April 1948 to January 1954, September 1954 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,983.34 ft (604.522 m) above mean sea level, (levels by Bureau of Reclamation). Prior to Dec. 7, 1962, at site 100 ft (30 m) upstream at present datum.

AVERAGE DISCHARGE.--24 years (1948-53, 1954-73), 133 ft³/s (3.767 m³/s), 96,360 acre-ft/yr (0.119 km³/yr).

EXTREMES.--Current year: Maximum discharge, 968 ft³/s (27.4 m³/s) May 28, gage height, 5.52 ft (1.682 m); minimum daily, 82 ft³/s (2.32 m³/s) Jan. 6.
Period of record: Maximum discharge, 9,650 ft³/s (273 m³/s) July 1, 1962, gage height, 15.68 ft (4.779 m), backwater from fallen bridge, from rating curve extended above 3,600 ft³/s (102 m³/s) on basis of slope-area measurement of peak flow; minimum daily, 44 ft³/s (1.25 m³/s) Jan. 10, 1963.

REMARKS.--Records good.

REVISIONS (WATER YEARS).--WSP 1729: 1952(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	133	132	124	100	142	207	211	188	200	144	141	169
2	132	121	122	104	137	190	204	178	182	141	138	173
3	133	137	112	100	132	185	163	171	180	143	143	170
4	127	139	118	96	148	176	152	160	182	144	138	156
5	126	145	119	86	148	173	148	155	175	151	143	154
6	124	144	127	82	148	186	145	149	172	147	151	147
7	125	143	126	90	137	190	142	151	182	141	149	143
8	124	141	126	88	132	178	142	149	157	137	150	157
9	123	142	120	86	121	166	145	147	151	138	148	156
10	134	138	110	100	123	166	145	144	154	130	139	157
11	126	139	120	86	129	163	146	141	145	129	166	157
12	119	158	126	88	132	161	146	140	151	131	165	179
13	127	155	126	84	126	167	145	138	154	127	156	174
14	125	139	137	94	113	255	145	137	140	127	152	158
15	122	131	123	94	100	346	143	136	169	126	137	155
16	129	136	108	118	108	233	147	148	178	131	130	162
17	121	133	116	137	118	197	147	170	157	130	134	172
18	120	135	138	203	108	188	147	172	172	134	132	155
19	121	134	139	157	132	180	162	159	140	132	136	149
20	127	132	138	140	121	175	164	143	140	144	144	145
21	133	130	138	104	126	169	153	138	129	153	144	151
22	125	130	148	106	140	166	153	126	121	156	127	138
23	127	132	145	84	148	166	152	128	116	159	135	143
24	124	127	132	96	191	186	153	128	137	155	143	146
25	130	130	129	99	179	233	153	144	134	142	142	145
26	130	127	126	113	170	221	150	158	129	140	139	171
27	126	127	126	134	173	182	150	310	123	142	135	148
28	124	126	121	99	208	195	151	670	125	142	135	167
29	124	119	129	121	------	240	147	411	139	146	127	250
30	125	125	88	129	------	188	172	285	140	142	172	195
31	123	------	120	142	------	178	------	247	------	138	163	------
TOTAL	3,909	4,047	3,877	3,360	3,890	6,006	4,623	5,821	4,574	4,342	4,454	4,842
MEAN	126	135	125	108	139	194	154	188	152	140	144	161
MAX	134	158	148	203	208	346	211	670	200	159	172	250
MIN	119	119	88	82	100	161	142	126	116	126	127	138
AC-FT	7,750	8,030	7,690	6,660	7,720	11,910	9,170	11,550	9,070	8,610	8,830	9,600

CAL YR 1972 TOTAL 52,427 MEAN 143 MAX 543 MIN 88 AC-FT 104,000
WTR YR 1973 TOTAL 53,745 MEAN 147 MAX 670 MIN 82 AC-FT 106,600

PEAK DISCHARGE (BASE, 400 CFS).--Mar. 15 (1000) 402 cfs (4.72 ft); May 28 (1700) 968 cfs (5.52 ft).

06464500 Keya Paha River at Wewela, S. Dak.

LOCATION.--Lat 43°01'42", long 99°46'45", in SE1/4 sec.24, T.95 N., R.76 W., Tripp County, on left bank 13 ft (4 m) downstream from bridge on U.S. Highway 183, 1.0 mi (1.6 km) north of Wewela, 4.5 mi (7.2 km) upstream from Holt Creek, and 11.5 mi (18.5 km) downstream from Lost Creek.

DRAINAGE AREA.--1,070 mi² (2,770 km²), approximately.

PERIOD OF RECORD.--November 1937 to September 1940, October 1947 to current year. Monthly discharge only for October 1947, published in WSP 1309.

GAGE.--Water-stage recorder. Datum of gage is 2,049.78 ft (624.773 m) above mean sea level. Prior to June 21, 1957, nonrecording gage at site 13 ft (4.0 m) upstream at same datum.

AVERAGE DISCHARGE.--28 years (1938-40, 1947-73), 70.9 ft³/s (2.008 m³/s), 51,370 acre-ft/yr (63.3 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 556 ft³/s (15.7 m³/s) May 29, gage height, 3.60 ft (1.097 m); maximum gage height, 3.95 ft (1.204 m) Feb. 24, backwater from ice; minimum daily discharge, 13 ft³/s (0.37 m³/s) Jan 8, 9, Aug. 29 to Sept. 1.
Period of record: Maximum discharge, 5,430 ft³/s (154 m³/s) Mar. 31, 1952, gage height, 13.08 ft (3.987 m); maximum gage height, 13.5 ft (4.11 m) Mar. 25, 1950, from floodmark, backwater from ice; no flow Jan. 10 to Feb. 15, 1949.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	40	40	22	48	350	123	90	267	55	21	13
2	24	66	35	20	48	300	129	120	210	47	22	14
3	23	85	25	20	48	241	114	130	172	43	22	17
4	23	148	25	18	50	198	99	122	146	39	18	18
5	25	132	20	16	50	161	90	110	125	41	17	19
6	27	70	15	14	48	156	86	96	112	37	17	19
7	27	55	15	14	46	151	81	84	97	33	16	19
8	27	53	16	13	46	135	78	73	87	31	19	19
9	27	52	16	13	48	122	80	71	78	58	20	21
10	26	51	17	14	50	113	78	67	67	46	18	20
11	27	52	17	15	50	114	76	62	60	41	18	19
12	26	59	18	15	55	105	73	57	57	33	20	20
13	25	63	18	20	52	106	69	53	53	29	21	22
14	25	50	18	25	50	156	68	50	51	30	21	23
15	24	38	18	30	50	218	80	48	60	30	22	26
16	25	39	20	40	50	214	83	47	55	28	22	28
17	24	40	22	50	60	192	79	46	50	26	20	32
18	24	40	24	55	100	172	73	46	199	30	19	32
19	24	42	24	50	200	148	75	45	85	29	17	29
20	24	43	22	46	250	128	96	44	62	36	17	27
21	25	42	24	46	260	113	113	44	56	44	16	25
22	26	40	25	45	260	102	115	42	49	39	16	22
23	27	40	25	45	280	99	109	40	46	38	15	21
24	27	42	24	46	260	110	96	41	41	45	15	22
25	27	44	24	48	250	140	87	40	42	40	16	23
26	26	42	24	48	250	145	75	43	38	35	16	27
27	25	42	25	46	300	137	70	110	35	30	15	30
28	26	38	26	46	340	136	69	305	36	27	14	34
29	26	35	25	45	------	138	66	515	35	26	13	52
30	32	36	24	46	------	123	71	432	44	24	13	59
31	33	------	22	46	------	116	------	341	------	23	13	------
TOTAL	801	1,619	693	1,017	3,599	4,839	2,601	3,414	2,515	1,113	549	752
MEAN	25.8	54.0	22.4	32.8	129	156	86.7	110	83.8	35.9	17.7	25.1
MAX	33	148	40	55	340	350	129	515	267	58	22	59
MIN	23	35	15	13	46	99	66	40	35	23	13	13
AC-FT	1,590	3,210	1,370	2,020	7,140	9,600	5,160	6,770	4,990	2,210	1,090	1,490

CAL YR 1972 TOTAL 19,571 MEAN 53.5 MAX 449 MIN 12 AC-FT 38,820
WTR YR 1973 TOTAL 23,512 MEAN 64.4 MAX 515 MIN 13 AC-FT 46,640

PEAK DISCHARGE (BASE, 250 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
3- 1	-	-	380	6-18	0330	2.80	305
5-29	1400	3.60	556				

06464900 Keya Paha River near Naper, Nebr.

LOCATION.--Lat 42°55'00", long 99°05'50", in SE1/4SE1/4 sec.17, T.34 N., R.15 W., Boyd County, on left bank 8 ft (2 m) downstream from highway bridge, 3.3 mi (5.3 km) south of Naper, and 8.6 mi (13.8 km) upstream from mouth.

DRAINAGE AREA.--1,630 mi² (4,220 km²), approximately.

PERIOD OF RECORD.--October 1957 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,680 ft (512 m), from topographic map. Prior to May 2, 1958, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--16 years, 139 ft³/s (3.936 m³/s), 100,700 acre-ft/yr (0.124 km³/yr); median of yearly mean discharges, 120 ft³/s (3.398 m³/s), 86,900 acre-ft/yr (0.107 km³/yr).

EXTREMES.--Current year: Maximum discharge, 1,440 ft³/s (40.8 m³/s) May 28, gage height, 6.65 ft (2.027 m); maximum gage height, 8.91 ft (2.716 m) Mar. 1, ice jam; minimum daily discharge, 5.4 ft³/s (0.15 m³/s) Aug. 28.
Period of record: Maximum discharge, 9,280 ft³/s (263 m³/s) July 1, 1962, gage height, 10.91 ft (3.325 m); maximum gage height, 13.34 ft (4.066 m) Mar. 23, 1960, backwater from ice; minimum daily discharge, 0.70 ft³/s (0.020 m³/s) Sept. 9, 12, 1970.

REMARKS.--Records good except those for winter period, which are poor. Minor diversions for irrigation above station.

REVISIONS (WATER YEARS).--WSP 1709: 1959(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	49	78	78	46	110	840	248	291	424	71	30	33
2	48	63	81	48	120	900	262	318	501	72	27	38
3	53	100	70	50	130	780	228	325	435	67	22	88
4	52	107	60	40	120	620	195	293	288	66	17	64
5	57	112	50	30	110	465	181	255	217	77	16	43
6	60	165	40	32	90	438	148	223	177	78	15	35
7	61	186	50	36	82	370	138	210	151	58	17	34
8	63	144	48	30	76	308	117	174	127	51	19	38
9	65	138	45	28	88	264	110	159	107	43	15	41
10	69	142	45	30	110	243	114	153	85	53	14	41
11	66	130	47	32	130	226	120	142	73	59	13	39
12	63	120	49	34	120	232	121	114	65	46	15	46
13	65	110	50	40	110	364	112	103	56	40	21	54
14	64	100	52	48	100	698	108	93	52	40	23	49
15	60	90	50	68	90	818	187	86	73	31	20	56
16	61	100	50	100	96	530	219	78	81	28	23	69
17	59	108	52	114	130	377	208	75	64	25	20	78
18	56	106	56	110	180	310	178	80	47	49	20	68
19	61	110	58	100	200	256	179	78	278	88	14	60
20	61	111	62	90	260	225	305	73	181	59	14	54
21	64	101	72	86	310	265	249	65	116	71	11	53
22	67	98	82	80	360	282	211	55	96	87	9.0	46
23	68	92	72	60	480	256	196	55	83	93	7.3	42
24	68	88	76	70	450	344	178	60	74	120	7.5	41
25	66	84	72	80	430	631	170	60	70	110	8.2	40
26	64	86	76	76	540	487	142	73	62	88	7.8	58
27	63	82	80	70	700	335	138	340	56	64	6.5	69
28	58	76	74	62	780	366	133	1,050	52	53	5.4	97
29	56	72	68	90	------	394	134	860	50	50	6.8	229
30	73	78	56	100	------	276	169	590	67	43	19	197
31	83	------	50	104	------	238	------	386	------	37	29	------
TOTAL	1,923	3,177	1,871	1,984	6,502	13,138	5,198	6,917	4,208	1,917	492.5	1,900
MEAN	62.0	106	60.4	64.0	232	424	173	223	140	61.8	15.9	63.3
MAX	83	186	82	114	780	900	305	1,050	501	120	30	229
MIN	48	63	40	28	76	225	108	55	47	25	5.4	33
AC-FT	3,810	6,300	3,710	3,940	12,900	26,060	10,310	13,720	8,350	3,800	977	3,770

CAL YR 1972 TOTAL 45,342.0 MEAN 124 MAX 1,530 MIN 24 AC-FT 89,940
WTR YR 1973 TOTAL 49,227.5 MEAN 135 MAX 1,050 MIN 5.4 AC-FT 97,640

PEAK DISCHARGE (BASE, 900 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
3- 2	0030	7.27	1,000	5-28	1900	6.65	1,440
3-15	0130	6.29	982				

06465000 Niobrara River near Spencer, Nebr.

LOCATION.--Lat 42°48'33", long 98°30'19", in SE1/4NW1/4 sec.30, T.33 N., R.11 W., Boyd County, at Spencer powerplant dam 5 mi (8 km) southeast of Spencer.

DRAINAGE AREA.--12,100 mi² (31,300 km²), approximately.

PERIOD OF RECORD.--May to December 1908 (gage heights only); August 1913 to September 1914; October to December 1914, April to September 1915 (gage heights only); August 1927 to September 1936, June 1940 to current year. Published as "near Lynch" 1913-15. Monthly discharge only for some periods, published in WSP 1309.

GAGE.--Water-stage recorder and hourly log of powerplant operation. Datum of gage is 1,473.67 ft (449.175 m) above mean sea level. Elevation of taintor gate sill, 1,491.12 ft (454.493 m) above mean sea level. Prior to December 1908, nonrecording gage on former highway bridge 275 ft (83.8 m) downstream and Aug. 1, 1913, to Sept. 30, 1915, nonrecording gage at highway bridge 10 mi (16 km) downstream at different datums. Aug. 1, 1927, to Sept. 30, 1944, discharge computed as flow through powerhouse and over dam. Oct. 1, 1944, to Nov. 10, 1954, water-stage recorder at site 225 ft (68.6 m) downstream at datum 4.98 ft (1.518 m) higher, and Nov. 11, 1954, to Sept. 30, 1957, at site 0.3 mi (0.5 km) downstream at datum 9.78 ft (2.981 m) lower. Oct. 1, 1957, to Oct. 21, 1958, discharge computed as flow through powerhouse and over dam. Oct. 28, 1958, to Aug. 13, 1963, water-stage recorder at site 225 ft (68.6 m) downstream at present datum. Aug. 14, 1963, to Sept. 30, 1973, discharge computed as flow through powerhouse and over dam.

AVERAGE DISCHARGE.--43 years (1913-14, 1927-36, 1940-73), 1,405 ft³/s (39.79 m³/s), 1,018,000 acre-ft/yr (1.26 km³/yr).

EXTREMES.--Current year: Maximum daily discharge, 4,710 ft³/s (133 m³/s) Mar. 3; minimum daily, 168 ft³/s (4.76 m³/s) Dec. 7.
Period of record: Maximum discharge, 27,400 ft³/s (776 m³/s) Mar. 12, 1955, gage height, 12.16 ft (3.706 m), site and datum then in use; minimum daily, 5 ft³/s (0.14 m³/s) Nov. 14, Dec. 18, 19, 1940.

REMARKS.--Records good. Natural flow of stream affected by irrigation and power developments. Daily discharge determined from flow through turbines and taintor gates, computed from relation between discharge, head, and gate openings.

COOPERATION.--Powerplant log furnished by Nebraska Public Power District.

REVISIONS.--WRD Nebr. 1967: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,070	1,540	1,440	1,190	1,620	3,220	2,230	2,800	2,600	979	849	1,240
2	1,080	1,580	1,370	1,160	1,700	3,570	2,090	2,500	2,370	1,050	802	1,050
3	1,110	1,850	307	1,060	1,830	4,710	1,990	2,250	2,470	928	770	1,530
4	1,180	2,090	274	1,060	1,900	3,110	1,830	2,200	2,230	939	733	1,450
5	1,240	1,780	230	1,200	1,930	2,520	1,670	2,050	1,970	977	701	1,020
6	1,420	1,760	192	1,170	1,920	3,650	1,670	1,960	1,820	975	710	899
7	1,300	1,780	168	1,020	1,850	2,800	1,750	2,060	1,640	892	734	885
8	1,290	1,730	258	1,020	1,740	2,230	1,840	1,910	1,510	813	751	964
9	1,260	1,700	244	1,030	1,610	2,150	1,830	1,730	1,830	764	735	947
10	1,300	1,650	351	1,040	1,470	2,080	1,710	1,700	1,460	755	729	943
11	1,260	1,600	480	1,030	1,480	2,180	1,600	1,610	1,110	769	710	859
12	1,340	1,740	547	1,040	1,540	2,050	1,530	1,600	1,290	757	740	1,080
13	1,330	1,860	642	1,080	1,570	2,160	1,530	1,470	1,180	703	896	1,370
14	1,300	1,310	766	1,180	1,520	3,090	1,520	1,480	1,130	760	837	1,270
15	1,300	1,340	899	1,280	1,430	3,280	1,790	1,430	1,320	732	877	1,430
16	1,320	1,190	942	1,420	1,270	2,840	2,070	1,340	1,610	687	780	1,800
17	1,270	1,530	955	1,620	1,200	2,480	1,780	1,300	1,440	657	742	1,890
18	1,300	1,610	944	1,960	1,260	2,190	1,530	1,230	1,590	832	771	1,610
19	1,380	1,770	963	2,050	1,560	1,960	1,540	1,240	1,420	740	730	1,360
20	1,350	1,660	1,100	1,960	1,860	1,870	2,470	1,230	1,340	1,040	642	1,350
21	1,370	1,680	1,410	1,830	2,100	1,710	2,510	1,220	1,200	1,200	722	1,260
22	1,400	1,640	1,530	1,750	2,270	1,770	2,300	1,220	1,090	1,050	623	1,330
23	1,350	1,460	1,500	1,690	2,510	1,610	1,660	1,110	1,050	1,080	631	1,230
24	1,410	1,520	1,450	1,730	2,750	2,120	1,790	1,220	1,010	1,830	674	1,270
25	1,370	2,200	1,550	1,840	2,810	2,630	1,820	1,360	1,020	1,250	702	1,330
26	1,340	1,470	1,550	1,930	2,700	2,530	1,690	1,370	987	1,040	700	1,520
27	1,350	1,540	1,650	1,850	2,560	2,210	1,650	2,960	1,020	899	654	1,810
28	1,470	1,440	1,720	1,710	2,820	2,460	1,570	4,460	932	858	600	1,940
29	1,400	1,260	1,990	1,730	------	2,610	1,500	4,230	874	970	640	3,270
30	1,640	1,280	1,600	1,710	------	2,270	1,880	3,620	1,050	982	874	4,490
31	1,570	------	1,400	1,600	------	2,110	------	3,030	------	970	944	------
TOTAL	41,070	48,560	30,422	44,940	52,780	78,170	54,340	60,890	43,563	28,878	23,003	44,397
MEAN	1,325	1,619	981	1,450	1,885	2,522	1,811	1,964	1,452	932	742	1,480
MAX	1,640	2,200	1,990	2,050	2,820	4,710	2,510	4,460	2,600	1,830	944	4,490
MIN	1,070	1,190	168	1,020	1,200	1,610	1,500	1,110	874	657	600	859
AC-FT	81,460	96,320	60,340	89,140	104,700	155,100	107,800	120,800	86,410	57,280	45,630	88,060

CAL YR 1972 TOTAL 526,591 MEAN 1,439 MAX 5,260 MIN 168 AC-FT 1,044,000
WTR YR 1973 TOTAL 551,013 MEAN 1,510 MAX 4,710 MIN 168 AC-FT 1,093,000

06465500 Niobrara River near Verdel, Nebr.

LOCATION.--Lat 42°44'25", long 98°12'45", near center of N1/2 sec.23, T.32 N., R.8 W., Knox County, on left bank 4 ft (1 m) downstream from Pishelville Bridge, 6 mi (10 km) south of Verdel, and 7 mi (11 km) upstream from Verdigre Creek.

DRAINAGE AREA.--12,600 mi² (32,600 km²), approximately.

PERIOD OF RECORD.--April 1938 to May 1940, June 1958 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,308.12 ft (398.715 m) above mean sea level. Apr. 25, 1938, to June 16, 1939, nonrecording gage at same site and datum. June 17, 1939, to June 13, 1940, nonrecording gage 250 ft (76 m) downstream at present datum.

AVERAGE DISCHARGE.--16 years, 1,542 ft³/s (43.67 m³/s), 1,117,000 acre-ft/yr (1.38 km³/yr).

EXTREMES.--Current year: Maximum discharge, 7,000 ft³/s (198 m³/s) May 28, gage height, 5.14 ft (1.567 m); maximum gage height, 9.07 ft (2.765 m) Mar. 3 , backwater from ice; minimum daily discharge, 230 ft³/s (6.51 m³/s) Dec. 7.
Period of record: Maximum discharge, 39,000 ft³/s (1,100 m³/s) Mar. 27, 1960, gage height, 10.10 ft (3.078 m); maximum gage height, 10.62 ft (3.237 m) Mar. 12, 1966, backwater from ice; minimum daily discharge, 104 ft³/s (2.95 m³/s) Nov. 30, 1960.

REMARKS.--Records poor. Natural flow of stream affected by irrigation and power developments. Records of water temperatures and fluvial sediments for the water year 1973 are published in Part 2 of this report.

REVISIONS.--WRD Nebr. 1967: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,340	1,650	1,600	1,500	1,850	3,600	2,450	3,100	3,000	1,100	1,100	1,350
2	1,360	1,700	1,500	1,300	1,900	4,100	2,250	2,700	2,600	1,140	1,010	1,200
3	1,330	2,000	450	1,250	2,000	5,000	2,150	2,450	2,700	1,040	984	1,650
4	1,420	2,300	350	1,250	2,100	3,800	2,000	2,350	2,450	1,040	900	1,600
5	1,530	1,950	300	1,300	2,150	2,900	1,850	2,250	2,150	1,100	820	1,250
6	1,600	1,900	250	1,250	2,100	3,900	1,800	2,100	2,000	1,040	840	1,040
7	1,450	1,900	230	1,220	2,000	3,600	1,850	2,200	1,800	1,000	860	1,000
8	1,400	1,850	300	1,140	1,900	2,700	2,000	2,110	1,650	900	880	1,100
9	1,350	1,850	290	1,140	1,800	2,250	2,000	2,020	2,000	860	860	1,060
10	1,400	1,880	420	1,180	1,650	2,300	1,900	1,930	1,550	840	860	1,040
11	1,530	1,800	560	1,220	1,600	2,400	1,750	1,820	1,250	844	840	960
12	1,520	1,900	680	1,240	1,700	2,300	1,650	1,750	1,300	820	880	1,040
13	1,450	2,100	800	1,250	1,650	2,500	1,650	1,650	1,300	780	1,000	1,500
14	1,400	1,550	920	1,300	1,600	3,000	1,650	1,600	1,250	840	960	1,350
15	1,400	1,500	1,040	1,400	1,550	3,600	1,950	1,550	1,500	820	980	1,600
16	1,450	1,300	1,100	1,450	1,400	3,100	2,250	1,450	1,800	760	900	1,900
17	1,400	1,750	1,100	1,850	1,300	2,700	1,950	1,400	1,600	720	840	2,000
18	1,400	1,800	1,100	2,150	1,400	2,300	1,840	1,350	1,700	900	880	1,800
19	1,450	1,850	1,160	2,300	1,700	2,200	1,770	1,350	1,600	840	860	1,500
20	1,500	1,800	1,400	2,200	1,950	2,000	2,600	1,350	1,460	1,200	780	1,450
21	1,500	1,800	1,700	2,100	2,000	1,850	2,700	1,350	1,330	1,350	593	1,350
22	1,500	1,540	1,800	2,000	2,500	1,900	2,500	1,350	1,200	1,200	645	1,400
23	1,450	1,600	1,700	1,900	2,800	1,800	1,800	1,250	1,160	1,250	740	1,350
24	1,550	1,700	1,650	2,000	3,000	2,400	1,900	1,350	1,100	2,200	780	1,400
25	1,500	2,500	1,750	2,100	3,100	2,900	1,950	1,450	1,140	1,500	740	1,450
26	1,450	1,650	1,800	2,150	3,000	2,800	1,750	1,450	1,100	1,200	740	1,600
27	1,450	1,700	1,900	2,050	2,900	2,450	1,750	4,280	1,140	1,000	700	1,750
28	1,600	1,600	2,000	1,900	3,100	2,810	1,650	6,510	1,000	960	660	2,000
29	1,550	1,350	2,300	1,950	------	3,270	1,600	5,550	960	1,040	700	3,100
30	1,850	1,400	2,000	1,900	------	2,500	2,150	4,260	1,140	1,100	1,040	4,600
31	1,700	------	1,800	1,800	------	2,350	------	3,800	------	1,120	1,100	------
TOTAL	45,780	53,170	35,950	50,740	57,700	87,280	59,060	71,080	47,930	32,504	26,472	47,390
MEAN	1,477	1,772	1,160	1,637	2,061	2,815	1,969	2,293	1,598	1,049	854	1,580
MAX	1,850	2,500	2,300	2,300	3,100	5,000	2,700	6,510	3,000	2,200	1,100	4,600
MIN	1,330	1,300	230	1,140	1,300	1,800	1,600	1,250	960	720	593	960
AC-FT	90,800	105,500	71,310	100,600	114,400	173,100	117,100	141,000	95,070	64,470	52,510	94,000

CAL YR 1972 TOTAL 569,722 MEAN 1,557 MAX 5,440 MIN 230 AC-FT 1,130,000
WTR YR 1973 TOTAL 615,056 MEAN 1,685 MAX 6,510 MIN 230 AC-FT 1,220,000

06466500 Bazile Creek near Niobrara, Nebr.

LOCATION.--Lat 42°45'00", long 97°56'10", in NE1/4 sec.18, T.32 N., R.5 W., Knox County, on downstream side of left pier of bridge on State Highway 12, 2.5 mi (4.0 km) upstream from mouth and 4.5 mi (7.2 km) east of Niobrara.

DRAINAGE AREA.--440 mi² (1,140 km²), approximately.

PERIOD OF RECORD.--May 1952 to current year. Records for October 1931 to September 1932, published in WSP 731, have been found to be unreliable and should not be used.

GAGE.--Water-stage recorder for stages above 4.3 ft (1.31 m) and nonrecording gage read once daily. Datum of gage is 1,210.81 ft (369.055 m) above mean sea level. Prior to Dec. 16, 1952, nonrecording gage only, and Dec. 16, 1952, to June 16, 1957, water-stage recorder, above 4.2 ft (1.28 m), at present site at datum 4 ft (1.2 m) higher. June 17, 1957, to Sept. 14, 1958, water-stage recorder above 8.2 ft (2.50 m) at present datum.

AVERAGE DISCHARGE.--21 years, 90.2 ft³/s (2.554 m³/s), 65,350 acre-ft/yr (80.6 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,590 ft³/s (45.0 m³/s) June 18, gage height, 13.77 ft (4.197 m); maximum gage height, 16.05 ft (4.892 m) Feb. 24, ice jam, from graph based on gage readings; minimum daily discharge, 12 ft³/s (0.34 m³/s) Aug. 28.
Period of record: Maximum discharge, 68,600 ft³/s (1,940 m³/s) June 16, 1957, gage height, 19.96 ft (6.084 m), present datum, from high point on surge, from rating curve extended above 6,500 ft³/s (184 m³/s) on basis of contracted-opening measurements at gage heights 15.36 ft (4.682 m) and 19.96 ft (6.084 m), present datum; maximum gage height, 20.25 ft (6.172 m) Feb. 19, 1971, backwater from ice; minimum daily discharge, 0.60 ft³/s (0.017 m³/s) Aug. 14, 1970.
Flood of June 19, 1951, reached a stage of 15.36 ft (4.682 m), present datum, from floodmarks, discharge, 24,400 ft³/s (691 m³/s) on basis of contracted-opening measurement of peak flow.

REMARKS.--Records good except those for winter period, which are poor. Minor diversions for irrigation above station.

REVISIONS (WATER YEARS).--WSP 1279: 1952. WSP 1729: 1958(M). See also PERIOD OF RECORD.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38	85	65	50	76	400	340	136	154	73	41	18
2	33	130	69	46	80	700	306	130	133	105	37	37
3	33	125	62	42	84	1,350	247	125	133	75	35	148
4	38	93	54	40	80	564	231	120	280	67	33	42
5	41	77	47	39	76	298	219	108	174	62	30	35
6	44	69	41	37	70	316	235	105	145	56	30	32
7	44	63	36	36	66	263	219	103	125	50	27	33
8	44	62	34	35	62	181	195	99	115	50	26	50
9	48	58	33	35	64	154	207	93	105	51	24	51
10	48	67	32	37	70	136	199	93	97	67	21	48
11	47	69	32	43	74	231	203	87	93	58	21	42
12	45	77	32	48	68	298	207	83	192	47	22	47
13	45	69	33	54	58	259	199	79	154	44	22	48
14	45	77	33	62	52	479	188	83	151	44	21	48
15	45	67	34	70	48	431	437	85	103	42	21	53
16	45	75	36	82	45	263	455	83	87	37	19	58
17	45	73	40	110	64	203	259	79	71	31	19	75
18	44	71	43	160	80	184	235	75	660	31	17	69
19	45	69	45	220	90	184	223	73	397	45	14	62
20	48	67	52	170	102	184	203	73	178	65	14	56
21	48	65	56	130	120	167	192	71	112	65	16	53
22	50	62	60	90	140	167	164	69	95	69	14	51
23	55	60	66	70	280	174	154	69	89	75	14	50
24	56	62	58	74	660	235	151	69	81	151	18	53
25	58	71	60	80	470	284	139	69	77	93	20	60
26	56	71	64	88	350	288	133	79	69	55	17	191
27	56	65	70	100	290	243	133	223	60	44	13	174
28	55	62	74	74	260	275	122	381	60	41	12	358
29	55	50	80	56	------	408	125	330	60	44	13	500
30	65	60	70	62	------	306	128	243	73	45	18	293
31	81	------	54	72	------	251	------	188	------	42	18	------
TOTAL	1,500	2,171	1,565	2,312	3,979	9,876	6,448	3,703	4,323	1,824	667	2,835
MEAN	48.4	72.4	50.5	74.6	142	319	215	119	144	58.8	21.5	94.5
MAX	81	130	80	220	660	1,350	455	381	660	151	41	500
MIN	33	50	32	35	45	136	122	69	60	31	12	18
AC-FT	2,980	4,310	3,100	4,590	7,890	19,590	12,790	7,340	8,570	3,620	1,320	5,620

CAL YR 1972 TOTAL 26,414 MEAN 72.2 MAX 888 MIN 16 AC-FT 52,390
WTR YR 1973 TOTAL 41,203 MEAN 113 MAX 1,350 MIN 12 AC-FT 81,730

PEAK DISCHARGE (BASE, 2,000 CFS).--No peak above base.

06467000 Lewis and Clark Lake near Yankton, S. Dak.

LOCATION.--Lat 42°50'56", long 97°28'54", in SW1/4 sec.7, T.33 N., R.1 W., Cedar County, Nebr., in powerhouse of Gavins Point Dam on Missouri River, 3.75 mi (6.03 km) southwest of Yankton, 13.6 mi (21.9 km) upstream from James River, 32.5 mi (52.3 km) downstream from Niobrara River, and at mi 811.0 (1,304.9 km).

DRAINAGE AREA.--279,500 mi² (723,900 km²), approximately.

PERIOD OF RECORD.--July 1955 to current year. Prior to October 1955, published as Gavins Point Reservoir near Yankton.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level. Prior to Dec. 9, 1955, at temporary location on wall of intake structure unit 3.

EXTREMES.--Current year: Maximum contents, 477,000 acre-ft (0.588 km³) Sept. 13; maximum elevation, 1,208.6 ft (368.38 m) Sept. 14, affected by wind; minimum contents, 372,000 acre-ft (0.459 km³) Mar. 21, elevation, 1,204.8 ft (367.22 m).
Period of record: Maximum contents, 565,000 acre-ft (0.697 km³) Apr. 1, 1960, elevation, 1,210.7 ft (369.02 m), affected by wind; minimum since initial filling, 61,950 acre-ft (76.4 hm³) Apr. 23, 1956, elevation, 1,188.1 ft (362.13 m).

REMARKS.--Reservoir is formed by earthfill dam; storage began in July 1955. Maximum capacity, 541,000 acre-ft (0.667 km³) below elevation 1,210.0 ft (368.81 m), top of spillway gates. Normal maximum, 477,000 acre-ft (0.588 km³) below elevation 1,208.0 ft (368.20 m). Inactive storage, 156,000 acre-ft (0.192 km³) below elevation 1,195.0 ft (364.24 m). Dead storage, 18,000 acre-ft (22.2 hm³) below elevation 1,180.0 ft (359.66 m), crest of spillway. Figures given herein represent elevations at powerhouse and total contents adjusted for wind effect.
The spillway consists of 14 taintor gates, each 40 ft (12 m) wide by 30 ft (9 m) high; spillway capacity, 280,000 ft³/s (7,930 m³/s) at pool elevation 1,210.0 ft (368.81 m). Crest of spillway is at elevation 1,180 ft (360 m). Normal releases are through 3 power units, installation completed in January 1957; maximum release through power units is 35,000 ft³/s (991 m³/s) at pool elevation 1,210.0 ft (368.81 m). Water is used for flood control, navigation, power, and incidental uses.

COOPERATION.--Elevations and contents furnished by Corps of Engineers.

MONTHEND ELEVATION AND CONTENTS AT 2400 HOURS, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	1,208.4	472,000	-
Oct. 31	1,207.8	452,000	-20,000
Nov. 30	1,207.6	449,000	-3,000
Dec. 31	1,207.4	441,000	-8,000
CAL YR 1972	-	-	-1,000
Jan. 31	1,207.9	457,000	+16,000
Feb. 28	1,205.7	393,000	-64,000
Mar. 31	1,205.7	393,000	0
Apr. 30	1,205.4	386,000	-7,000
May 31	1,206.4	412,000	+26,000
June 30	1,205.7	395,000	-17,000
July 31	1,208.1	462,000	+67,000
Aug. 31	1,208.1	465,000	+3,000
Sept. 30	1,208.2	463,000	-2,000
WTR YR 1973	-	-	-9,000

06467500 Missouri River at Yankton, S. Dak.

LOCATION.--Lat 42°51'58", long 97°23'37", in SW1/4SW1/4 sec.18, T.93 N., R.55 W., Yankton County, near left bank in downstream end of left pier of Meridian Highway Bridge on U.S. Highway 81, 5.2 mi (8.4 km) downstream from Gavins Point Dam, 6.0 mi (9.7 km) upstream from James River, and at mi 805.8 (1,296.5 km).

DRAINAGE AREA.--279,500 mi² (723,900 km²), approximately.

PERIOD OF RECORD.--October 1930 to current year. Monthly discharge only for some periods, published in WSP 1309. Gage-height records collected at same site March 1873 to November 1886, March 1905 to May 1908 (fragmentary), August 1921 to date (except winter months prior to 1932) are contained in reports of the U.S. Weather Bureau.

GAGE.--Water-stage recorder. Datum of gage is 1,139.68 ft (347.374 m) above mean sea level. Prior to Sept. 20, 1932, nonrecording gage and Sept. 20, 1932, to Mar. 9, 1967, water-stage recorder at present site and at datum 20.00 ft (6.096 m) higher.

AVERAGE DISCHARGE.--43 years, 25,520 ft³/s (722.7 m³/s), 18,490,000 acre-ft/yr (22.8 km³/yr).

EXTREMES.--Current year: Maximum discharge, 52,600 ft³/s (1,490 m³/s) Oct. 1, gage height, 22.57 ft (6.879 m); minimum daily, 16,400 ft³/s (464 m³/s) Dec. 19.
Period of record: Maximum discharge, 480,000 ft³/s (13,600 m³/s) Apr. 13, 1952; maximum gage height, 35.5 ft (10.82 m) Apr. 13, 14, 1952; minimum daily discharge, 2,700 ft³/s (76.5 m³/s) Nov. 15, 16, 1940. Maximum stage known, 50.5 ft (15.39 m) Apr. 5, 1881, ice jam, present datum.

REMARKS.--Records good. Flow completely regulated by Lewis and Clark Lake 5.2 mi (8.4 km) upstream since July 1955. (See sta 06467000.) Many diversions for irrigation and water supply above station. Water-quality records for the water year 1973 are published in Part 2 of WRD S. Dak. 1973.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	50,300	50,600	36,800	20,200	20,800	20,000	17,900	28,600	28,300	30,000	29,900	33,700
2	49,700	50,500	36,700	20,300	20,800	20,000	17,500	28,700	28,700	30,000	29,800	33,800
3	50,400	50,500	35,200	20,300	20,900	20,000	17,400	28,700	28,700	30,100	29,900	33,000
4	50,300	50,600	32,400	20,300	20,800	20,000	17,300	28,800	28,400	29,900	29,900	32,400
5	50,600	50,700	29,300	20,300	20,700	17,500	17,200	28,800	28,400	29,900	29,800	32,600
6	50,300	50,800	26,000	20,400	20,700	18,500	19,600	28,700	28,600	29,800	30,700	32,600
7	50,200	50,900	24,000	20,400	20,700	20,000	19,800	28,700	30,100	30,000	31,800	32,600
8	50,400	51,100	20,400	20,400	20,600	20,000	20,300	28,000	30,300	30,000	32,100	32,700
9	50,300	51,100	20,200	20,400	20,600	19,900	20,900	24,600	30,200	30,000	31,700	31,900
10	50,300	51,200	20,200	20,500	20,500	20,600	21,000	23,500	30,200	29,000	31,900	31,700
11	50,400	51,200	20,100	20,500	20,500	20,600	21,400	25,200	30,300	28,900	31,900	31,900
12	50,700	51,100	20,100	20,600	20,400	20,800	22,400	27,900	30,200	29,000	32,000	31,900
13	50,400	51,000	20,100	20,600	20,300	21,000	22,300	29,800	30,200	29,700	32,100	31,900
14	50,300	51,100	20,100	20,600	20,300	21,000	22,700	30,000	30,300	30,600	32,900	31,900
15	50,400	51,100	20,100	20,700	20,200	20,600	23,600	30,100	30,300	30,900	32,700	31,500
16	50,400	50,900	20,100	20,700	20,200	20,700	23,500	30,000	29,900	30,800	31,500	31,400
17	50,100	50,800	19,300	21,000	20,200	20,700	22,000	30,000	29,800	31,700	31,500	31,400
18	50,300	50,700	16,600	20,800	20,200	21,000	22,400	30,100	30,000	31,700	32,400	31,400
19	50,500	50,500	16,400	20,800	20,000	20,900	23,000	30,200	28,200	31,900	32,500	31,400
20	50,300	48,600	18,300	20,900	20,000	21,000	23,800	30,200	27,600	31,500	32,700	31,400
21	50,300	46,000	20,500	20,800	20,100	21,100	25,400	30,200	27,700	30,700	32,700	31,300
22	50,200	43,100	20,600	20,600	19,800	21,300	24,800	30,100	29,200	30,600	32,800	31,400
23	50,400	40,300	20,500	21,100	20,000	21,100	25,200	30,200	29,300	29,900	32,200	31,500
24	50,500	37,400	20,500	20,800	20,500	21,200	25,300	30,100	29,200	29,600	31,300	31,500
25	50,400	37,000	20,400	21,000	20,100	20,800	27,000	30,300	29,000	29,700	31,300	31,400
26	50,300	37,000	20,400	20,900	20,000	20,600	29,100	31,400	29,900	29,600	31,300	28,000
27	50,300	36,900	20,400	20,900	19,800	19,600	29,400	28,900	29,800	29,800	32,100	27,400
28	50,300	36,900	20,600	21,000	20,000	18,200	29,300	23,700	29,800	29,900	32,600	31,200
29	50,400	36,800	20,400	21,000	------	18,100	29,200	23,700	29,800	29,800	32,700	31,200
30	50,600	36,800	20,200	21,000	------	18,000	29,300	23,800	29,900	29,900	33,500	31,100
31	50,500	------	20,200	20,900	------	18,400	------	25,000	------	29,700	33,800	------
TOTAL	1,560.8M	1,403.2M	697,100	640,700	569,700	623,200	690,000	878,000	882,300	934,600	986,000	949,100
MEAN	50,350	46,770	22,490	20,670	20,350	20,100	23,000	28,320	29,410	30,150	31,810	31,640
MAX	50,700	51,200	36,800	21,100	20,900	21,300	29,400	31,400	30,300	31,900	33,800	33,800
MIN	49,700	36,800	16,400	20,200	19,800	17,500	17,200	23,500	27,600	28,900	29,800	27,400
AC-FT	3,096M	2,783M	1,383M	1,271M	1,130M	1,236M	1,369M	1,742M	1,750M	1,854M	1,956M	1,883M

CAL YR 1972 TOTAL 5,692,393 MEAN 15,550 MAX 51,200 MIN 16,400 AC-FT 11,290,000
WTR YR 1973 TOTAL 10,814,700 MEAN 29,630 MAX 51,200 MIN 16,400 AC-FT 21,450,000

M Expressed in thousands.

06486000 Missouri River at Sioux City, Iowa

LOCATION.--Lat 42°29'10", long 96°24'47", in NW1/4SE1/4 sec.16, T.29 N., R.9 E., sixth principal meridian, Dakota County, Nebr., on right bank on upstream side of bridge on U.S. Highway 77 at South Sioux City, Nebr., 2.0 mi (3.2 km) downstream from Big Sioux River and at mi 732.3 (1,178.3 km).

DRAINAGE AREA.--314,600 mi² (814,800 km²), approximately.

PERIOD OF RECORD.--October 1897 to current year in reports of Geological Survey. Prior to October 1928 and October 1931 to September 1938 monthly discharge only, published in WSP 1310. January 1879 to December 1890 (monthly discharge only) in House Document 238, 73rd Congress, 2d session, Missouri River. Gage-height records collected in this vicinity September 1878 to December 1899 are contained in reports of Missouri River Commission and since July 1889 are contained in reports of U.S. Weather Bureau.

GAGE.--Water-stage recorder. Datum of gage is 1,056.98 ft (322.168 m) above mean sea level. Sept. 2, 1878, to Dec. 31, 1905, nonrecording gages at various locations within 1.7 mi (2.7 km) of present site and at various datums. Jan. 1, 1906, to Feb. 14, 1935, nonrecording gage, and Feb. 15, 1935, to Sept. 30, 1969, water-stage recorder at present site at datum 19.98 ft (6.090 m) higher, and Oct. 1, 1969, to Sept. 30, 1970, at datum 20.00 ft (6.096 m) higher.

AVERAGE DISCHARGE.--76 years, 31,910 ft³/s (903.7 m³/s), 23,120,000 acre-ft/yr (28.5 km³/yr).

EXTREMES.--Current year: Maximum discharge, 54,400 ft³/s (1,540 m³/s) Nov. 13, gage height, 22.97 ft (7.001 m); maximum gage height, 23.76 ft (7.242 m) Oct. 6; minimum daily discharge, 19,300 ft³/s (547 m³/s) Dec. 19; minimum gage height, 16.39 ft (4.996 m) Dec. 19.
Period of record: Maximum discharge, 441,000 ft³/s (12,500 m³/s) Apr. 14, 1952, gage height, 24.28 ft (7.401 m); minimum, 2,500 ft³/s (70.8 m³/s) Dec. 29, 1941; minimum gage height, -6.60 ft (-2.012 m) Dec. 14, 1968, result of freezeup.

REMARKS.--Records good. Flow partly regulated by upstream main-stem reservoirs. Records of chemical analyses, water temperatures, and suspended-sediment discharges for the water year 1973 are published in Part 2 of WRD Iowa 1973.

REVISIONS (WATER YEARS).--WSP 716: 1929-30. WSP 876: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	50,200	51,500	36,100	22,200	23,300	26,300	25,300	31,000	26,600	31,900	31,600	33,100
2	50,500	52,800	35,800	23,000	23,000	29,200	25,100	30,700	30,700	33,700	31,600	32,500
3	51,500	51,500	34,900	23,700	23,000	32,200	24,200	30,100	31,300	34,000	31,600	32,500
4	51,800	51,200	32,200	21,400	23,500	32,800	24,400	30,700	30,400	33,100	31,000	32,800
5	51,500	51,800	29,800	20,200	23,700	33,700	24,200	30,400	29,200	33,100	31,000	31,000
6	51,800	52,800	26,600	20,600	23,500	31,900	24,200	30,700	29,200	32,800	31,000	32,800
7	51,200	52,100	25,100	20,200	22,400	33,700	25,600	30,400	29,200	31,900	31,000	32,500
8	51,200	52,100	22,200	21,000	22,200	34,900	25,800	30,400	30,700	31,900	32,500	33,700
9	50,800	52,400	20,600	20,200	22,200	33,400	25,600	30,400	31,600	35,500	32,800	33,400
10	50,800	53,800	20,400	19,700	22,800	31,900	25,100	27,300	31,000	33,700	32,200	32,200
11	50,800	53,400	20,400	20,000	22,600	32,500	25,600	25,300	31,000	32,200	32,200	31,300
12	50,500	53,400	20,800	20,800	23,500	33,100	26,300	26,300	31,300	30,700	32,200	32,200
13	50,500	54,100	20,600	22,200	23,300	34,900	27,600	30,400	30,700	30,400	32,500	32,800
14	50,200	52,800	21,000	24,200	22,000	39,100	27,600	31,900	30,700	30,700	32,800	33,100
15	49,800	52,400	21,400	24,000	20,800	40,900	28,100	32,500	31,300	32,200	33,400	32,500
16	49,800	51,800	20,800	22,800	21,600	39,100	29,800	32,200	31,300	33,400	34,300	31,900
17	48,900	51,300	21,200	24,400	21,600	37,000	29,800	31,900	30,700	33,400	31,300	31,300
18	49,500	51,500	20,800	27,000	22,200	35,500	27,300	31,600	32,200	34,000	31,300	30,400
19	49,800	51,200	19,300	28,400	22,800	33,700	27,000	31,300	34,900	34,600	32,200	30,100
20	51,200	50,800	19,500	26,300	22,400	32,200	27,300	31,300	34,000	34,900	32,200	30,100
21	50,200	48,600	20,600	24,800	22,200	30,700	27,600	31,300	29,500	34,900	32,200	30,400
22	50,500	46,000	21,400	23,700	22,000	29,800	30,400	31,300	29,200	32,500	32,200	31,000
23	51,200	43,400	22,000	22,000	23,000	29,500	28,400	30,700	30,700	32,500	32,500	31,000
24	50,500	40,900	21,200	22,600	26,000	30,100	29,000	30,700	31,000	32,800	32,200	31,600
25	50,500	38,800	21,400	23,000	26,600	31,000	29,500	30,700	31,600	31,900	32,500	32,500
26	50,800	38,800	21,200	23,000	24,200	30,700	30,700	31,000	31,600	32,800	32,500	33,400
27	50,800	39,100	21,400	24,600	23,700	29,800	31,600	33,400	31,600	33,700	32,200	30,400
28	51,200	37,900	21,400	21,800	23,500	29,000	31,600	33,400	31,000	32,500	31,900	27,800
29	51,200	37,000	22,200	22,000	------	26,300	30,700	26,800	31,000	32,200	32,800	34,600
30	51,200	36,700	25,300	23,000	------	25,300	31,000	26,600	31,300	31,900	32,800	33,100
31	51,800	------	23,300	23,000	------	25,100	------	26,000	------	31,900	32,500	------
TOTAL	1,572.2M	1,451.9M	730,900	705,800	643,600	995,300	826,400	938,700	926,500	1,017.7M	997,000	958,000
MEAN	50,720	48,400	23,580	22,770	22,990	32,110	27,550	30,280	30,880	32,830	32,160	31,930
MAX	51,800	54,100	36,100	28,400	26,600	40,900	31,600	33,400	34,900	35,500	34,300	34,600
MIN	48,900	36,700	19,300	19,700	20,800	25,100	24,200	25,300	26,600	30,400	31,000	27,800
AC-FT	3,118M	2,880M	1,450M	1,400M	1,277M	1,974M	1,639M	1,862M	1,838M	2,019M	1,978M	1,900M

CAL YR 1972 TOTAL 5,970,926 MEAN 16,310 MAX 54,100 MIN 14,500 AC-FT 11,840,000
WTR YR 1973 TOTAL 11,764,000 MEAN 32,230 MAX 54,100 MIN 19,300 AC-FT 23,330,000

M Expressed in thousands.

06601000 Omaha Creek at Homer, Nebr.

LOCATION.--Lat 42°19'29", long 96°29'43", in SW1/4SE1/4 sec.11, T.27 N., R.8 E., Dakota County, on left bank 80 ft (24 m) downstream from bridge on main street of Homer.

DRAINAGE AREA.--168 mi² (435 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 1,082.45 ft (329.931 m) above mean sea level. Prior to Aug. 4, 1952, at bridge 0.5 mi (0.8 km) downstream at datum 8.03 ft (2.448 m) lower. Aug. 4, 1952, to Nov. 3, 1966, at site 80 ft (24 m) upstream at present datum.

AVERAGE DISCHARGE.--28 years, 36.6 ft³/s (1.037 m³/s), 26,520 acre-ft/yr (32.7 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,120 ft³/s (88.4 m³/s) July 9, gage height, 8.89 ft (2.710 m); minimum daily, 9.4 ft³/s (0.27 m³/s) Dec. 8.
Period of record: Maximum discharge, 18,100 ft³/s (513 m³/s) Feb. 19, 1971, gage height, 26.47 ft (8.068 m), from floodmark, from rating curve extended above 3,700 ft³/s (105 m³/s) on basis of slope-area measurements at gage heights 16.38 ft (4.993 m) and 23.62 ft (7.199 m); minimum daily, 0.1 ft³/s (0.003 m³/s) Sept. 16, 18, 19, 1948, Sept. 9, 13, 14, 1955, Oct. 7, 8, 1957.
Greatest flood known occurred June 4, 1940, stage, about 32.5 ft (9.91 m), present site and datum, discharge estimated as 51,000 ft³/s (1,440 m³/s) at site 2.5 miles upstream from present site.

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

REVISIONS.--WRD Nebr. 1972: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	19	12	30	28	41	93	61	28	31	18	13
2	12	30	12	25	26	41	89	68	29	60	19	13
3	12	20	12	22	26	40	76	48	30	33	18	14
4	12	15	11	19	32	42	67	38	28	27	17	14
5	13	14	11	18	154	44	61	36	30	24	16	12
6	12	13	10	17	81	42	59	37	25	22	17	12
7	12	13	9.8	16	31	40	55	41	22	20	18	12
8	12	13	9.4	15	24	38	52	41	20	20	16	15
9	12	13	9.6	15	20	39	54	36	17	1,090	17	16
10	12	20	9.8	14	18	40	50	36	15	87	16	14
11	12	15	10	14	18	50	53	34	14	31	18	13
12	12	14	10	17	20	48	48	31	34	25	18	13
13	12	13	11	28	16	54	46	31	36	22	17	13
14	11	12	11	92	15	65	44	31	29	21	17	14
15	11	12	10	165	15	80	47	31	52	20	16	20
16	11	12	9.8	540	14	72	52	30	31	20	16	23
17	11	12	10	660	15	68	48	29	26	19	15	19
18	11	13	10	380	16	62	45	30	743	19	15	16
19	10	13	11	187	17	58	43	30	77	20	15	14
20	12	13	13	45	20	52	46	29	37	30	15	14
21	15	13	15	30	29	49	44	29	34	49	14	14
22	15	12	14	28	125	49	44	28	32	35	13	14
23	20	12	14	24	380	80	44	27	31	26	13	13
24	14	11	14	27	72	203	44	29	29	34	13	14
25	13	12	15	29	48	146	48	29	27	28	14	15
26	13	11	15	105	46	123	48	31	27	23	13	28
27	13	12	16	760	42	97	49	62	25	21	12	21
28	12	14	16	45	42	86	49	86	24	20	11	33
29	12	14	390	28	------	77	52	49	24	20	10	42
30	15	14	930	30	------	71	55	37	28	21	10	22
31	23	------	35	33	------	72	------	32	------	19	12	------
TOTAL	399	424	1,686.4	3,458	1,390	2,069	1,605	1,187	1,604	1,937	469	510
MEAN	12.9	14.1	54.4	112	49.6	66.7	53.5	38.3	53.5	62.5	15.1	17.0
MAX	23	30	930	760	380	203	93	86	743	1,090	19	42
MIN	10	11	9.4	14	14	38	43	27	14	19	10	12
AC-FT	791	841	3,340	6,860	2,760	4,100	3,180	2,350	3,180	3,840	930	1,010

CAL YR 1972 TOTAL 18,063.6 MEAN 49.4 MAX 2,600 MIN 3.7 AC-FT 35,830
WTR YR 1973 TOTAL 16,738.4 MEAN 45.9 MAX 1,090 MIN 9.4 AC-FT 33,200

PEAK DISCHARGE (BASE, 1,000 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
12-30	-	-	a2,000	6-18	1400	8.24	2,820
1-27	-	-	a1,850	7- 9	1630	8.89	3,120

a About

06608000 Tekamah Creek at Tekamah, Nebr.

LOCATION.--Lat 41°46'30", long 96°13'10", in SE1/4 sec.19, T.21 N., R.11 E., Burt County, on left bank 30 ft (9 m) upstream from bridge 1 block east of U.S. Highway 73 in Tekamah.

DRAINAGE AREA.--23.0 mi² (59.6 km²).

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

GAGE.--Water-stage recorder and crest-stage indicator. Datum of gage is 1,032.26 ft (314.633 m) above mean sea level. Prior to Sept 15, 1949, nonrecording gage at site 30 ft (9 m) downstream at present datum.

AVERAGE DISCHARGE.--24 years, 6.42 ft³/s (0.182 m³/s), 4,650 acre-ft/yr (5.73 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 743 ft³/s (21.0 m³/s) May 27, gage height, 7.26 ft (2.213 m), from highwater mark; maximum gage height, 9.98 ft (3.042 m) Feb. 28, from highwater mark, backwater from ice; minimum daily discharge, 1.3 ft³/s (0.037 m³/s) Oct. 15.
Period of record: Maximum discharge, 6,180 ft³/s (175 m³/s) June 5, 1963, gage height, 16.62 ft (5.066 m); no flow at times in some years.

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

REVISIONS.--WSP 1630: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.8	5.1	4.3	9.6	15	50	20	9.4	16	8.5	4.9	2.7
2	1.7	6.8	3.3	8.0	12	19	16	9.4	15	8.1	4.8	2.6
3	1.7	3.9	2.9	6.8	10	17	15	8.8	15	8.0	4.7	2.7
4	1.7	3.6	2.6	5.6	12	16	14	8.6	14	7.7	4.3	2.6
5	1.6	3.6	2.7	5.0	13	19	13	8.5	14	7.3	4.2	2.5
6	1.6	3.8	2.4	4.5	15	17	13	8.5	13	7.1	4.1	2.4
7	1.5	3.9	2.6	4.0	10	14	12	24	12	6.7	4.1	2.5
8	1.6	3.6	2.7	3.6	4.5	12	13	17	12	6.5	4.1	3.2
9	1.5	4.2	2.8	3.3	4.9	11	13	11	11	6.6	4.0	2.9
10	1.5	6.5	2.9	3.1	5.0	11	12	12	11	6.5	3.9	2.9
11	1.5	4.0	2.8	5.8	5.2	15	12	11	11	6.3	6.9	2.8
12	1.4	3.8	3.0	10	5.2	11	11	10	11	6.0	4.4	2.7
13	1.4	4.8	3.1	15	5.2	37	11	9.6	11	5.8	3.9	3.0
14	1.5	5.6	3.2	28	5.0	83	10	9.0	17	5.8	3.8	2.9
15	1.3	4.7	3.1	50	3.5	16	10	8.6	15	5.7	3.8	4.2
16	1.5	4.5	3.0	56	2.5	14	15	8.4	10	5.6	3.7	4.1
17	1.5	4.5	3.1	35	4.0	14	11	8.2	9.7	5.4	3.6	3.8
18	1.4	4.4	3.4	16	6.0	13	10	8.0	106	5.2	3.5	3.2
19	1.5	4.3	3.8	16	8.0	13	9.8	8.0	13	5.5	3.4	3.0
20	2.3	4.3	4.2	17	10	13	9.6	7.8	11	7.0	3.4	3.0
21	2.6	4.2	5.2	17	11	12	9.4	7.8	10	9.2	3.3	3.0
22	5.1	4.3	8.2	15	12	12	9.5	7.8	10	6.4	3.2	3.0
23	7.2	4.4	11	14	200	12	9.2	7.9	9.6	6.0	3.2	2.9
24	2.4	4.4	12	19	150	25	9.0	7.7	9.2	8.1	3.3	3.1
25	2.0	4.8	7.0	25	100	100	9.0	7.7	8.8	6.1	3.2	3.8
26	2.1	4.5	5.0	29	68	35	8.9	17	8.6	5.6	3.0	31
27	2.1	4.5	4.3	24	50	20	8.8	221	8.3	5.3	2.8	4.8
28	1.9	4.4	4.4	19	150	17	8.8	44	7.8	5.0	2.8	14
29	1.9	4.4	70	15	------	17	8.7	25	7.7	8.0	2.6	5.7
30	4.1	4.3	80	20	------	15	8.6	22	9.4	15	2.7	4.7
31	12	------	12	25	------	18	------	17	------	5.1	2.7	------
TOTAL	74.9	134.1	281.0	524.3	897.0	698	340.3	590.7	437.1	211.1	116.3	135.7
MEAN	2.42	4.47	9.06	16.9	32.0	22.5	11.3	19.1	14.6	6.81	3.75	4.52
MAX	12	6.8	80	56	200	100	20	221	106	15	6.9	31
MIN	1.3	3.6	2.4	3.1	2.5	11	8.6	7.7	7.7	5.0	2.6	2.4
AC-FT	149	266	557	1,040	1,780	1,380	675	1,170	867	419	231	269

CAL YR 1972 TOTAL 1,703.94 MEAN 4.66 MAX 173 MIN .40 AC-FT 3,380
WTR YR 1973 TOTAL 4,440.50 MEAN 12.2 MAX 221 MIN 1.3 AC-FT 8,810

PEAK DISCHARGE (BASE, 400 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
12-30	-	-	a400	3-25	unknown	6.38	470
2-23	-	-	a400	5-27	0830	7.26	743
2-28	-	-	a600				

a About

06610000 Missouri River at Omaha, Nebr.

LOCATION.--Lat 41°15'32", long 95°55'20", in SE1/4NW1/4 sec.23, T.15 N., R.13 E., Douglas County, on right bank on left side of concrete floodwall at foot of Douglas Street, 275 ft (84 m) downstream from Interstate 480 Highway bridge in Omaha and at mi 615.9 (991.0 km).

DRAINAGE AREA.--322,800 mi² (836,100 km²), approximately.

PERIOD OF RECORD.--September 1928 to current year. April 1872 to December 1899 (gage heights only) in reports of the Missouri River Commission and since January 1875 (gage heights only) in reports of the U.S. Weather Bureau.

GAGE.--Water-stage recorder. Datum of gage is 958.24 ft (292.072 m) above mean sea level. See WSP 1730 for history of changes prior to Sept. 30, 1936.

AVERAGE DISCHARGE.--45 years, 28,850 ft³/s (817.0 m³/s), 20,900,000 acre-ft/yr (25.8 km³/yr).

EXTREMES.--Current year: Maximum discharge, 59,200 ft³/s (1,680 m³/s) Nov. 3, gage height, 9.28 ft (2.829 m); maximum gage height, 11.14 ft (3.395 m) Sept. 26; minimum daily discharge, 19,600 ft³/s (555 m³/s) Dec. 20, 21; minimum gage height, 2.88 ft (0.878 m) Dec. 21.
Period of record: Maximum discharge, 396,000 ft³/s (11,200 m³/s) Apr. 18, 1952, gage height, 30.20 ft (9.205 m); minimum, about 2,200 ft³/s (62.3 m³/s) Jan. 6, 1937; minimum gage height observed, -2.77 ft (-0.844 m) Jan. 10, 1957, result of freezeup.

REMARKS.--Records good. Flow partly regulated by upstream main-stem reservoirs. Records of chemical analyses, water temperatures, and suspended-sediment discharges for the water year 1973 are published in Part 2 of WRD Iowa 1973.

REVISIONS.--WSP 761: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	49,600	55,200	39,000	28,000	25,500	38,300	32,100	34,700	31,800	32,200	32,600	33,500
2	49,300	56,800	38,600	24,700	25,100	45,400	30,300	35,100	31,200	35,400	31,900	33,500
3	50,100	58,600	38,300	24,800	24,500	48,800	29,400	35,300	33,400	40,200	31,800	33,400
4	51,000	57,000	36,500	25,100	24,000	49,600	28,700	33,900	36,200	41,900	32,000	33,300
5	52,100	56,000	33,800	22,900	24,500	52,400	28,300	34,100	36,800	36,800	32,200	33,100
6	52,100	57,100	31,000	22,500	24,500	51,100	28,200	34,700	35,200	34,700	32,100	31,900
7	51,700	57,600	28,100	22,800	21,000	49,400	28,100	36,700	34,500	33,900	32,300	32,300
8	51,300	55,400	26,900	22,600	23,300	50,300	28,300	38,500	33,200	33,200	32,700	33,300
9	50,400	53,300	24,500	22,500	22,600	49,200	29,200	36,700	32,100	32,400	33,800	33,800
10	50,700	53,900	22,900	22,400	22,400	45,400	27,800	35,100	32,800	39,800	34,800	34,800
11	50,800	54,300	22,500	21,600	23,000	45,000	27,600	32,800	32,300	41,200	34,700	33,500
12	50,400	53,900	22,400	21,600	23,100	44,300	28,800	30,700	31,800	35,800	34,300	31,600
13	50,900	55,100	22,200	22,200	24,400	40,700	28,600	31,100	32,800	33,300	33,800	31,200
14	50,900	55,300	21,900	23,300	24,200	42,900	29,200	32,500	33,500	32,900	33,700	31,700
15	50,400	54,300	21,800	25,400	22,500	46,900	30,900	33,000	32,800	32,200	33,500	32,500
16	50,600	54,100	21,700	25,800	21,300	47,400	33,000	33,800	32,600	32,100	33,300	32,900
17	51,400	54,300	21,000	28,000	22,300	45,600	32,600	33,700	32,500	33,200	33,900	32,600
18	51,300	53,500	20,800	39,700	22,600	43,200	31,900	32,100	33,100	33,500	33,000	31,800
19	51,600	53,700	20,400	37,500	22,700	41,900	31,700	31,900	38,900	34,200	32,200	31,100
20	52,000	53,000	19,600	33,900	23,900	39,800	31,800	32,500	39,000	35,600	32,700	30,700
21	53,000	52,600	19,600	31,000	24,400	37,100	32,800	34,100	36,600	35,900	33,100	30,800
22	55,000	51,400	20,700	29,000	24,000	35,900	32,400	34,100	32,100	35,900	32,600	31,400
23	53,500	48,900	21,900	26,700	25,100	36,100	31,900	33,800	31,100	34,600	32,500	32,100
24	53,000	46,400	23,100	25,300	31,800	38,000	31,200	33,000	31,300	33,600	32,800	32,000
25	53,000	44,000	22,900	26,100	32,100	40,900	31,200	32,400	32,100	34,200	34,000	32,100
26	52,600	41,700	23,100	26,400	29,800	39,100	31,600	32,600	32,200	33,100	36,400	45,900
27	52,400	40,000	22,900	27,400	27,400	35,200	32,000	35,300	32,000	32,800	35,200	37,300
28	52,600	39,000	23,000	28,500	26,600	34,300	32,900	40,000	31,900	33,500	32,500	33,800
29	52,800	39,000	27,000	24,400	------	34,000	33,900	39,200	32,000	33,200	32,100	32,500
30	53,000	39,300	34,800	24,200	------	32,800	34,400	32,800	32,100	35,500	33,000	34,100
31	54,400	------	39,700	25,000	------	31,400	------	31,900	------	34,200	33,600	------
TOTAL	1,603.9M	1,544.7M	812,600	811,300	688,600	1,312.4M	920,800	1,058.1M	999,900	1,081.0M	1,029.1M	994,500
MEAN	51,740	51,490	26,210	26,170	24,590	42,340	30,690	34,130	33,330	34,870	33,200	33,150
MAX	55,000	58,600	39,700	39,700	32,100	52,400	34,400	40,000	39,000	41,900	36,400	45,900
MIN	49,300	39,000	19,600	21,600	21,000	31,400	27,600	30,700	31,100	32,100	31,800	30,700
AC-FT	3,181M	3,064M	1,612M	1,609M	1,366M	2,603M	1,826M	2,099M	1,983M	2,144M	2,041M	1,973M

CAL YR 1972 TOTAL 5,198,079 MEAN 14,200 MAX 66,800 MIN 5,460 AC-FT 10,310,000
WTR YR 1973 TOTAL 12,856,900 MEAN 35,220 MAX 58,600 MIN 19,600 AC-FT 25,500,000

M Expressed in thousands.

06674500 North Platte River at Wyoming-Nebraska State line

LOCATION.--Lat 41°59'25", long 104°02'57", in SW1/4NE1/4SE1/4 sec.4, T.23 N., R.58 W., Scotts Bluff County, Nebr., on right bank 650 ft (198 m) upstream from bridge on Nebraska State Highway 86, 700 ft (213 m) downstream from Wyoming-Nebraska State line, and 0.5 mi (0.8 km) south of Henry, Nebr.

DRAINAGE AREA.--26,177 mi² (67,798 km²), of which 5,888 mi² (15,250 km²), including 3,959 mi² (10,254 km²) in Great Divide Basin in southern Wyoming, is probably noncontributing.

PERIOD OF RECORD.--April 1929 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 4,020 ft (1,225 m), from topographic map. Prior to Nov. 6, 1929, nonrecording gage and Nov. 6, 1929, to Feb. 22, 1972, water-stage recorder, at sites 0.5 mi (0.8 km) upstream at different datums.

EXTREMES.--Current year: Maximum discharge, 8,700 ft³/s (246 m³/s) May 26, gage height, 6.38 ft (1.945 m); minimum daily, 190 ft³/s (5.38 m³/s) Dec. 11.
Period of record: Maximum discharge observed, 17,900 ft³/s (507 m³/s) June 2, 1929, gage height, 7.04 ft (2.146 m), site and datum then in use; minimum daily, 13 ft³/s (0.37 m³/s) May 12, 1961.

REMARKS.--Records good except those for winter period, which are poor. Natural flow of stream affected by transbasin diversions, storage reservoirs, power developments, ground-water withdrawals and diversions for irrigation, and return flow from irrigated areas. Gering-Mitchell Canal diverts from right bank 0.8 mi (1.3 km) upstream. Records of chemical analyses and water temperatures for the water year 1973 are published in Part 2 of this report.

REVISIONS.--WSP 1918: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	578	460	328	250	284	292	578	4,560	7,900	4,310	3,630	3,920
2	520	460	336	250	284	292	617	4,640	8,000	4,170	3,460	4,170
3	510	465	340	250	276	304	828	4,270	8,200	4,040	3,490	4,260
4	500	460	340	240	280	296	988	3,900	8,200	3,760	3,500	4,240
5	510	441	348	210	280	304	1,030	3,840	8,150	3,730	3,490	4,080
6	520	441	320	230	284	304	1,040	4,270	8,050	3,630	3,440	3,690
7	600	436	300	250	280	296	1,080	4,960	7,950	3,570	3,490	3,310
8	700	432	280	230	280	288	1,100	5,850	7,800	3,570	3,700	2,910
9	580	432	260	200	259	284	1,120	5,940	7,850	3,480	3,740	2,530
10	560	436	220	220	273	280	1,160	6,120	7,760	3,420	3,770	2,040
11	540	436	190	260	273	276	1,190	6,090	7,760	3,370	3,770	2,190
12	520	436	210	290	284	280	1,220	5,320	7,560	3,320	3,820	2,020
13	505	432	240	308	292	288	1,240	4,960	7,480	3,340	3,820	1,890
14	500	423	260	312	292	296	1,470	4,560	7,520	3,460	3,770	2,120
15	500	410	270	312	292	292	1,900	4,600	7,720	3,420	3,660	2,400
16	500	400	270	312	284	288	1,970	5,620	7,480	3,420	3,630	2,440
17	495	396	290	320	276	288	2,090	6,090	7,280	3,420	3,600	2,470
18	480	396	310	324	280	304	1,960	6,640	6,840	3,400	3,180	2,310
19	460	400	330	312	288	316	1,870	7,080	6,570	3,550	3,540	1,970
20	460	400	330	308	280	316	1,870	7,520	6,640	4,110	3,550	1,750
21	460	392	330	308	284	328	2,400	7,680	6,640	3,460	3,580	1,670
22	460	387	340	296	280	356	2,490	7,760	6,640	3,340	3,630	1,610
23	460	378	330	284	280	414	2,450	7,800	6,510	3,500	3,740	1,540
24	470	360	320	276	284	470	2,520	7,760	6,360	3,370	3,810	1,410
25	470	356	310	284	284	500	2,660	8,250	6,000	3,430	3,820	1,330
26	470	360	300	296	288	520	2,780	8,500	5,580	3,540	3,820	1,310
27	460	356	290	296	292	520	2,840	8,200	5,180	3,600	3,840	1,270
28	460	344	290	300	292	535	2,890	7,900	4,940	3,550	3,840	1,320
29	465	336	270	276	------	545	2,980	7,800	4,660	3,570	3,820	1,300
30	460	328	260	266	------	545	3,180	7,480	4,440	3,660	3,840	1,200
31	460	------	260	284	------	566	------	7,680	------	3,710	3,850	------
TOTAL	15,633	12,189	9,072	8,554	7,905	11,183	53,511	193,640	209,660	111,220	113,640	70,670
MEAN	504	406	293	276	282	361	1,784	6,246	6,989	3,588	3,666	2,356
MAX	700	465	348	324	292	566	3,180	8,500	8,200	4,310	3,850	4,260
MIN	460	328	190	200	259	276	578	3,840	4,440	3,320	3,180	1,200
AC-FT	31,010	24,180	17,990	16,970	15,680	22,180	106,100	384,100	415,900	220,600	225,400	140,200

CAL YR 1972 TOTAL 326,723 MEAN 893 MAX 2,560 MIN 190 AC-FT 648,100
WTR YR 1973 TOTAL 816,877 MEAN 2,238 MAX 8,500 MIN 190 AC-FT 1,620,000

06677500 Horse Creek near Lyman, Nebr.

LOCATION.--Lat 41°56'21", long 103°59'13", in SE1/4NE1/4 sec.25, T.23 N., R.58 W., Scotts Bluff County, on right bank 10 ft (3 m) upstream from county highway bridge, 1.8 mi (2.9 km) upstream from mouth, 2.2 mi (3.5 km) downstream from Owl Creek, and 3.2 mi (5.1 km) northeast of Lyman.

DRAINAGE AREA.--1,570 mi² (4,070 km²), approximately, of which about 40 mi² (100 km²) is noncontributing.

PERIOD OF RECORD.--February 1931 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 4,010 ft (1,222 m), from topographic map. See WSP 2118 for history of changes prior to Apr. 17, 1967.

AVERAGE DISCHARGE.--42 years, 64.0 ft³/s (1.812 m³/s), 46,370 acre-ft/yr (57.2 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 544 ft³/s (15.4 m³/s) Sept. 15, gage height, 5.38 ft (1.640 m); minimum daily, 12 ft³/s (0.34 m³/s) Jan. 10.
Period of record: Maximum discharge, 5,110 ft³/s (145 m³/s) June 6, 1967, gage height, 10.82 ft (3.298 m), from rating curve extended above 1,900 ft³/s (53.8 m³/s) on basis of slope-area measurement of peak flow; minimum daily, 0.4 ft³/s (0.011 m³/s) Feb. 1, 2, 1949.

REMARKS.--Records good except those for winter period, which are poor. Natural flow of stream affected by ground-water withdrawals and diversions for irrigation and return flow from irrigated areas. Records of chemical analyses for the water year 1973 are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 926: 1940(M). WRD Nebr. 1967: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	162	55	40	20	31	35	40	255	202	102	153	96
2	125	56	41	20	33	33	39	217	220	93	149	127
3	108	61	40	18	31	36	39	199	267	84	131	170
4	97	56	35	16	31	39	38	194	269	70	121	171
5	94	54	30	15	36	37	33	174	267	63	123	179
6	89	57	20	15	41	36	33	191	259	58	127	186
7	83	55	20	15	20	38	33	186	241	53	122	239
8	79	54	20	14	15	36	33	185	212	51	116	261
9	75	52	18	13	15	34	35	183	195	52	110	279
10	72	51	16	12	20	33	36	173	186	47	106	275
11	70	50	15	15	25	31	34	158	198	46	99	346
12	70	49	15	20	32	31	33	153	235	47	99	434
13	68	48	16	25	34	31	31	171	296	54	104	424
14	67	48	18	40	28	36	21	199	343	64	103	403
15	67	49	20	40	26	38	35	230	370	63	93	466
16	65	49	25	45	32	41	73	230	360	68	92	475
17	63	49	25	44	30	48	82	201	320	73	89	486
18	61	48	30	42	30	49	98	177	303	70	86	494
19	61	47	35	38	36	52	117	207	292	96	84	469
20	60	45	47	37	31	45	137	159	327	237	88	421
21	60	45	41	34	33	42	149	247	334	245	84	406
22	59	44	44	30	35	58	152	316	323	224	85	400
23	57	43	41	32	36	54	190	330	288	220	87	400
24	55	42	38	38	45	50	198	316	220	195	86	390
25	54	41	39	35	45	44	191	290	171	222	93	390
26	53	41	36	35	41	42	213	305	164	235	90	385
27	52	41	38	24	39	38	213	343	164	220	92	351
28	52	38	37	30	37	39	191	346	135	195	89	318
29	52	43	33	35	------	40	208	339	135	184	92	253
30	48	38	30	30	------	38	226	298	126	178	91	162
31	53	------	25	30	------	37	------	253	------	156	92	------
TOTAL	2,231	1,449	928	857	888	1,241	2,951	7,225	7,422	3,765	3,176	9,856
MEAN	72.0	48.3	29.9	27.6	31.7	40.0	98.4	233	247	121	102	329
MAX	162	61	47	45	45	58	226	346	370	245	153	494
MIN	48	38	15	12	15	31	21	153	126	46	84	96
AC-FT	4,430	2,870	1,840	1,700	1,760	2,460	5,850	14,330	14,720	7,470	6,300	19,550

CAL YR 1972 TOTAL 34,458 MEAN 94.1 MAX 365 MIN 14 AC-FT 68,350
WTR YR 1973 TOTAL 41,989 MEAN 115 MAX 494 MIN 12 AC-FT 83,290

06678000 Sheep Creek near Morrill, Nebr.

LOCATION.--Lat 41°57'50", long 103°56'20", in NW1/4SW1/4 sec.16, T.23 N., R.57 W., Scotts Bluff County, on right bank 40 ft (12 m) upstream from Burlington Northern Inc. bridge, 50 ft (15 m) downstream from bridge on U.S. Highway 26, 1 mi (2 km) west of Morrill, and 1.5 mi (2.4 km) upstream from mouth.

DRAINAGE AREA.--362 mi² (938 km²), of which about 25 mi² (65 km²) is noncontributing.

PERIOD OF RECORD.--October 1931 to current year.

GAGE.--Water-stage recorder. Datum of gage is 3,995.04 ft (1,217.688 m) above mean sea level. Prior to Apr. 14, 1940, nonrecording gage at site 20 ft (6 m) upstream at same datum.

AVERAGE DISCHARGE.--42 years, 54.2 ft³/s (1.535 m³/s), 39,270 acre-ft/yr (48.4 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 167 ft³/s (4.73 m³/s) Sept. 19, gage height, 3.05 ft (0.930 m); minimum daily, 2.5 ft³/s (0.071 m³/s) June 4.
Period of record: Maximum discharge, 413 ft³/s (11.7 m³/s) June 27, 1955, gage height, 6.52 ft (1.987 m), from floodmark; maximum gage height, 6.75 ft (2.057 m) Aug. 2, 1932, from floodmark, due to break in Interstate Canal (discharge not determined); minimum daily discharge, 0.1 ft³/s (0.003 m³/s) Dec. 16, 23, 1956, Jan. 18, Mar. 12, 1957, result of diversion for construction upstream.

REMARKS.--Records good above 10 ft³/s (0.28 m³/s) and fair below. Natural flow of stream affected by ground-water withdrawals and diversions for irrigation and return flow from irrigated areas. Records of chemical analyses for the water year 1973 are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WRD Nebr. 1967: Drainage area. WSP 2118: 1936(M), 1946(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	129	117	99	91	84	72	75	77	68	3.7	8.4	8.1
2	129	117	99	92	83	76	75	75	29	6.9	8.8	8.8
3	128	118	98	91	84	82	76	74	2.6	8.8	9.1	9.1
4	128	116	98	90	84	79	74	74	2.5	8.8	9.1	8.1
5	128	116	97	90	84	80	74	74	2.6	9.5	9.1	8.1
6	126	114	98	90	83	79	72	75	2.6	9.5	9.5	8.4
7	126	112	98	89	84	78	74	74	2.8	9.1	9.5	8.4
8	126	112	97	90	81	78	73	72	2.8	8.8	9.5	8.4
9	124	111	97	88	80	78	74	72	3.0	8.8	8.8	8.4
10	124	109	97	88	80	78	74	72	3.2	8.8	8.8	11
11	123	110	98	90	79	78	72	72	4.7	8.4	7.8	19
12	122	110	98	93	79	78	72	72	4.4	9.1	7.8	30
13	122	112	98	90	76	78	70	72	4.2	11	7.8	23
14	122	112	97	90	76	79	70	72	4.7	11	7.8	14
15	123	112	97	89	75	79	72	72	4.7	11	7.8	13
16	122	110	97	88	75	80	71	71	4.4	11	7.8	13
17	121	109	97	88	75	74	72	73	4.4	11	7.8	13
18	121	109	97	88	75	75	72	71	4.4	11	7.8	12
19	119	108	97	88	75	76	80	70	4.0	11	8.1	100
20	119	106	98	88	74	74	79	70	4.0	12	8.1	136
21	120	105	97	87	74	76	76	68	3.7	11	8.1	137
22	119	104	98	86	74	80	74	67	3.5	11	8.1	135
23	116	105	96	86	74	76	74	67	3.5	11	8.1	133
24	114	104	94	87	73	76	74	67	3.5	9.8	8.1	131
25	116	103	93	87	73	76	76	70	3.2	9.8	8.1	129
26	116	103	93	86	73	76	76	70	3.0	9.8	8.1	132
27	114	102	93	85	72	76	74	74	3.2	9.1	8.1	129
28	114	100	92	85	72	77	72	76	3.5	8.4	8.1	137
29	113	99	92	86	------	76	74	72	4.0	8.4	8.1	146
30	113	99	93	86	------	76	80	69	4.0	8.4	8.1	136
31	116	------	91	86	------	76	------	70	------	8.4	8.1	------
TOTAL	3,753	3,264	2,984	2,738	2,171	2,392	2,221	2,224	198.1	294.3	258.3	1,804.8
MEAN	121	109	96.3	88.3	77.5	77.2	74.0	71.7	6.60	9.49	8.33	60.2
MAX	129	118	99	93	84	82	80	77	68	12	9.5	146
MIN	113	99	91	85	72	72	70	67	2.5	3.7	7.8	8.1
AC-FT	7,440	6,470	5,920	5,430	4,310	4,740	4,410	4,410	393	584	512	3,580

CAL YR 1972 TOTAL 22,818.0 MEAN 62.3 MAX 130 MIN 2.0 AC-FT 45,260
WTR YR 1973 TOTAL 24,302.5 MEAN 66.6 MAX 146 MIN 2.5 AC-FT 48,200

06679000 Dry Spottedtail Creek at Mitchell, Nebr.

LOCATION.--Lat 41°56'45", long 103°49'35", at southeast corner of sec.20, T.23 N., R.56 W., Scotts Bluff County, on right bank 5 ft (2 m) upstream from bridge on county road, 0.5 mi (0.8 km) west of Mitchell, and 0.8 mi (1.3 km) upstream from mouth.

DRAINAGE AREA.--77.2 mi² (199.9 km²).

PERIOD OF RECORD.--October 1948 to current year.

GAGE.--Water-stage recorder. Datum of gage is 3,943.75 ft (1,202.055 m) above mean sea level. Prior to Oct. 1, 1958, at datum 1.00 ft (0.305 m) higher.

AVERAGE DISCHARGE.--25 years, 33.4 ft³/s (0.946 m³/s), 24,200 acre-ft/yr (29.8 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 330 ft³/s (9.35 m³/s) July 20, gage height, 3.95 ft (1.204 m); minimum daily, 15 ft³/s (0.42 m³/s) Dec. 12,13.
Period of record: Maximum discharge, 2,010 ft³/s (56.9 m³/s) June 24, 1951, gage height, 8.55 ft (2.606 m), present datum; minimum daily, 1.6 ft³/s (0.045 m³/s) June 28, 1966.

REMARKS.--Records good. Natural flow of stream affected by ground-water withdrawals and diversions for irrigation and return flow from irrigated areas.

REVISIONS.--WRD Nebr. 1967: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	54	35	26	33	28	35	32	27	37	67	122	97
2	54	36	25	34	28	36	33	25	46	58	86	106
3	55	37	24	34	28	40	33	28	49	51	79	127
4	54	35	24	33	28	37	33	33	42	53	77	130
5	40	35	22	32	28	37	32	40	41	59	80	122
6	35	34	23	31	28	36	32	39	38	60	80	116
7	34	34	21	31	24	35	32	36	35	64	85	112
8	34	34	21	31	24	35	32	48	33	76	91	114
9	32	33	20	30	25	36	33	85	37	96	92	119
10	32	33	18	30	26	37	33	49	41	67	90	120
11	31	34	18	30	27	37	31	47	46	66	86	155
12	32	34	15	30	26	37	28	48	48	54	86	142
13	32	33	15	35	25	37	27	50	48	90	85	120
14	31	35	16	36	25	44	21	66	58	102	79	108
15	32	35	18	37	25	39	28	97	64	71	76	114
16	32	32	20	36	25	38	28	66	55	68	73	114
17	32	28	22	34	25	38	29	58	45	68	74	110
18	32	28	25	34	25	36	28	49	44	70	76	101
19	33	28	25	32	26	37	38	49	44	102	77	101
20	34	29	30	32	25	34	41	67	40	212	74	97
21	34	29	35	31	25	36	30	61	44	156	71	94
22	32	29	40	30	25	45	21	65	47	128	71	96
23	33	28	39	30	27	37	22	48	36	127	68	97
24	32	28	38	30	27	36	23	41	35	125	77	96
25	33	28	38	30	33	35	24	38	41	116	78	109
26	32	28	38	30	36	32	26	38	42	91	79	108
27	32	28	38	27	36	32	24	68	50	85	77	89
28	33	28	38	28	36	33	24	53	55	89	83	92
29	33	27	35	29	------	33	24	34	68	96	85	102
30	33	25	29	28	------	32	29	36	83	134	89	68
31	34	------	36	28	------	32	------	36	------	138	96	------
TOTAL	1,106	940	832	976	766	1,124	871	1,525	1,392	2,839	2,542	3,276
MEAN	35.7	31.3	26.8	31.5	27.4	36.3	29.0	49.2	46.4	91.6	82.0	109
MAX	55	37	40	37	36	45	41	97	83	212	122	155
MIN	31	25	15	27	24	32	21	25	33	51	68	68
AC-FT	2,190	1,860	1,650	1,940	1,520	2,230	1,730	3,020	2,760	5,630	5,040	6,500

CAL YR 1972 TOTAL 13,321 MEAN 36.4 MAX 163 MIN 13 AC-FT 26,420
WTR YR 1973 TOTAL 18,189 MEAN 49.8 MAX 212 MIN 15 AC-FT 36,080

06679500 North Platte River at Mitchell, Nebr.

LOCATION.--Lat 41°55'38", long 103°48'48", in NE1/4NE1/4 sec.33, T.33 N., R.56 W., Scotts Bluff County, near right bank of main channel on downstream side of pier of bridge on State Highway 29, 0.5 mi (0.8 km) south of Mitchell.

DRAINAGE AREA.--28,300 mi² (73,300 km²), approximately, of which about 5,960 mi² (15,400 km²) is noncontributing.

PERIOD OF RECORD.--June 1901 to September 1910, May to December 1911, February 1912 to July 1913 (gage heights only), May 1916 to October 1918 (irrigation seasons only), May 1920 to current year. Monthly discharge only for some periods, published in WSP 1310.

GAGE.--Water-stage recorder. Datum of gage is 3,929.3 ft (1,197.65 m) above mean sea level. See WSP 1918 for history of changes prior to May 27, 1960. May 27, 1960, to Aug. 24, 1971, at datum 1.00 ft (0.305 m) higher.

EXTREMES.--Current year: Maximum discharge, 8,840 ft³/s (250 m³/s) May 26, gage height, 8.54 ft (2.603 m); minimum daily, 519 ft³/s (14.7 m³/s) Feb. 10.
Period of record: Maximum discharge, 27,500 ft³/s (779 m³/s) June 3, 1909, gage height, 6.45 ft (1.966 m), datum then in use, from graph based on gage readings, from rating curve extended above 17,000 ft³/s (481 m³/s); minimum daily observed, 25 ft³/s (0.71 m³/s) Sept. 25-29, 1908.

REMARKS.--Records good. Natural flow of stream affected by transmountain diversions, storage reservoirs, power developments, ground-water withdrawals and diversions for irrigation, and return flow from irrigated areas.

REVISIONS.--WRD Nebr. 1967: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,040	795	670	599	568	568	765	4,300	7,350	2,860	2,900	3,070
2	983	790	674	603	559	563	765	5,210	7,660	2,660	2,620	3,390
3	966	810	661	608	559	590	911	4,890	7,770	2,540	2,580	3,760
4	966	800	634	594	559	586	1,070	4,410	7,730	2,240	2,600	3,800
5	950	790	617	559	568	586	1,140	4,210	7,800	2,120	2,570	3,730
6	955	785	581	550	572	586	1,180	4,460	7,880	2,060	2,530	3,390
7	999	775	577	563	550	572	1,200	5,210	7,660	1,980	2,430	2,950
8	1,070	770	577	577	532	555	1,230	5,940	7,630	1,960	2,580	2,640
9	972	765	581	568	524	555	1,240	6,350	7,390	1,970	2,660	2,360
10	933	755	581	563	519	550	1,250	6,870	7,260	1,890	2,710	1,980
11	906	755	599	563	532	541	1,260	6,970	7,100	1,810	2,740	2,220
12	895	755	599	572	546	537	1,260	6,440	7,130	1,750	2,770	2,450
13	884	755	608	594	555	541	1,270	5,720	7,000	1,790	2,820	2,160
14	878	750	608	625	550	572	1,320	5,070	7,260	1,960	2,810	2,150
15	867	750	608	656	546	559	1,620	4,230	7,730	1,910	2,740	2,590
16	856	741	617	648	541	568	1,790	5,210	7,520	1,930	2,720	2,660
17	845	741	639	643	541	559	1,960	5,600	7,060	1,950	2,700	2,730
18	835	736	679	643	537	568	1,990	6,180	6,780	1,950	2,380	2,600
19	825	732	674	643	546	581	1,990	6,740	6,350	2,180	2,510	2,320
20	825	727	679	634	537	572	1,980	7,490	6,380	3,190	2,590	2,020
21	820	723	683	625	541	577	2,260	7,910	6,300	3,000	2,600	1,900
22	825	714	692	608	541	617	2,690	8,400	6,270	2,360	2,630	1,860
23	820	714	692	586	541	630	2,600	8,400	6,050	2,630	2,770	1,880
24	810	710	687	586	550	665	2,700	8,100	5,600	2,490	2,840	1,860
25	800	701	679	590	555	692	2,880	8,170	5,210	2,670	2,890	1,960
26	800	696	674	586	555	710	3,080	8,640	4,640	2,740	2,900	2,110
27	785	696	665	581	559	718	3,140	8,520	4,180	2,890	2,950	2,000
28	785	683	661	559	559	741	3,230	7,980	3,700	2,880	3,000	2,010
29	780	679	652	563	------	745	3,260	7,800	3,480	2,830	2,980	2,120
30	780	670	599	559	------	765	3,490	7,160	3,070	2,900	3,020	1,780
31	785	------	581	568	------	765	------	6,940	------	2,890	3,040	------
TOTAL	27,240	22,263	19,728	18,416	15,342	18,934	56,521	199,520	194,940	72,980	84,580	74,450
MEAN	879	742	636	594	548	611	1,884	6,436	6,498	2,354	2,728	2,482
MAX	1,070	810	692	656	572	765	3,490	8,640	7,880	3,190	3,040	3,800
MIN	780	670	577	550	519	537	765	4,210	3,070	1,750	2,380	1,780
AC-FT	54,030	44,160	39,130	36,530	30,430	37,560	112,100	395,700	386,700	144,800	167,800	147,700

CAL YR 1972 TOTAL 317,877 MEAN 869 MAX 2,400 MIN 227 AC-FT 630,500
WTR YR 1973 TOTAL 804,914 MEAN 2,205 MAX 8,640 MIN 519 AC-FT 1,597,000

06680000 Tub Springs near Scottsbluff, Nebr.

LOCATION.--Lat 41°54'55", long 103°42'55", in SW1/4SW1/4 sec.33, T.23 N., R.55 W., Scotts Bluff County, 50 ft (15 m) upstream from bridge, 0.2 mi (0.3 km) downstream from headgates of Enterprise Canal, 1.5 mi (2.4 km) upstream from mouth, and 3.5 mi (5.6 km) northwest of Scottsbluff.

PERIOD OF RECORD.--October 1948 to current year.

GAGE.--Water-stage recorder. Datum of gage is 3,926.54 ft (1,196.809 m) above mean sea level. See WSP 1918 for history of changes prior to Sept. 9, 1952.

AVERAGE DISCHARGE.--25 years, 36.5 ft³/s (1.034 m³/s), 26,440 acre-ft/yr (32.6 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 135 ft³/s (3.82 m³/s) July 30, gage height, 1.83 ft (0.558 m); maximum gage height, 1.84 ft (0.561 m) Sept. 23; minimum daily discharge, 24 ft³/s (0.68 m³/s) March 27.
Period of record: Maximum discharge, 1,610 ft³/s (45.6 m³/s) June 21, 1952, gage height not determined, on basis of slope-area measurement of peak flow caused by break in Interstate Canal; minimum daily, 0.70 ft³/s (0.020 m³/s) May 7, 1965.

REMARKS.--Records good. Natural flow of stream affected by diversions for irrigation, spill from Enterprise Canal, and return flow from irrigated areas.

REVISIONS (WATER YEARS).--WSP 1310: 1949(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	61	55	47	39	31	31	27	36	46	32	32	41
2	61	56	47	39	32	31	27	34	48	30	34	48
3	60	56	47	39	32	33	27	34	40	34	34	52
4	60	55	46	38	33	32	26	33	34	34	34	51
5	60	54	47	38	33	32	25	33	31	33	34	47
6	61	54	47	36	34	31	25	34	35	29	34	42
7	61	53	46	35	34	31	27	33	34	30	34	40
8	60	53	45	35	34	31	27	33	29	43	34	42
9	60	53	44	34	34	32	27	32	29	43	33	40
10	61	53	44	34	33	32	27	33	30	31	34	36
11	63	52	44	34	33	31	27	33	30	30	34	65
12	61	52	43	33	34	31	27	34	34	32	35	68
13	60	52	43	34	33	32	27	34	32	35	36	59
14	60	52	43	36	32	35	27	35	35	36	34	54
15	60	52	42	34	32	32	28	39	42	36	34	55
16	60	52	42	34	32	30	28	82	43	35	34	58
17	59	52	42	33	31	30	27	70	45	34	34	58
18	58	52	40	34	32	29	27	64	48	32	33	54
19	59	52	40	33	30	29	34	61	51	57	31	51
20	59	51	40	26	30	28	31	61	40	87	31	50
21	56	51	40	27	31	32	28	64	33	59	31	70
22	54	50	42	25	31	33	27	65	30	47	30	79
23	54	51	42	26	31	27	27	42	27	44	31	86
24	53	50	42	27	31	26	27	42	28	48	34	86
25	54	49	41	27	31	25	30	54	30	54	34	84
26	54	48	41	28	31	25	32	63	30	38	36	96
27	55	48	42	28	32	24	31	69	29	32	37	91
28	55	48	42	29	31	25	30	61	27	31	37	103
29	54	48	42	29	------	26	31	65	34	34	40	96
30	54	48	39	31	------	26	37	56	34	57	38	71
31	55	------	39	32	------	25	------	42	------	37	38	------
TOTAL	1,802	1,552	1,331	1,007	898	917	848	1,471	1,058	1,234	1,059	1,873
MEAN	58.1	51.7	42.9	32.5	32.1	29.6	28.3	47.5	35.3	39.8	34.2	62.4
MAX	63	56	47	39	34	35	37	82	51	87	40	103
MIN	53	48	39	25	30	24	25	32	27	29	30	36
AC-FT	3,570	3,080	2,640	2,000	1,780	1,820	1,680	2,920	2,100	2,450	2,100	3,720

CAL YR 1972 TOTAL 16,131 MEAN 44.1 MAX 102 MIN 23 AC-FT 32,000
WTR YR 1973 TOTAL 15,050 MEAN 41.2 MAX 103 MIN 24 AC-FT 29,850

06681000 Winters Creek near Scottsbluff, Nebr.

LOCATION.--Lat 41°51'08", long 103°37'35", in NW1/4SE1/4 sec.30, T.22 N., R.54 W., Scotts Bluff County, on right bank 700 ft (213 m) downstream from bridge on U.S. Highway 26, 1 mi (2 km) upstream from mouth, and 1.5 mi (2.4 km) east of Scottsbluff.

PERIOD OF RECORD.--October 1931 to current year. Prior to October 1971, published as Winter Creek near Scottsbluff.

GAGE.--Water-stage recorder. Datum of gage is 3,860.8 ft (1,176.77 m) above mean sea level. Prior to Nov. 19, 1938, nonrecording gage at site 700 ft (210 m) upstream at different datum. Nov. 19, 1938, to Sept. 30, 1958, water-stage recorder at present site at datum 1.00 ft (0.305 m) higher.

AVERAGE DISCHARGE.--42 years, 53.3 ft³/s (1.509 m³/s), 38,620 acre-ft/yr (47.6 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 325 ft³/s (9.20 m³/s) July 19, gage height, 4.62 ft (1.408 m); minimum daily, 21 ft³/s (0.59 m³/s) July 11,12.
Period of record: Maximum discharge, 1,090 ft³/s (30.9 m³/s) June 10, 1957, gage height, 8.95 ft (2.728 m), present datum; maximum gage height, 9.34 ft (2.847 m), present datum, Jan. 7, 1949, backwater from snowdrifts; minimum daily discharge, 0.9 ft³/s (0.025 m³/s) July 5, 1961.

REMARKS.--Records good. Natural flow of stream affected by ground-water withdrawals and diversions for irrigation and return flow from irrigated areas.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	84	57	50	37	35	42	40	40	34	36	57	79
2	83	56	50	36	35	42	40	39	40	37	47	125
3	83	57	49	36	35	43	40	38	50	36	43	118
4	79	56	49	35	36	42	40	38	51	26	40	100
5	77	55	48	36	36	42	40	38	47	25	50	76
6	72	56	48	36	36	41	40	39	39	26	44	76
7	70	54	47	35	36	42	41	37	36	27	33	73
8	67	53	47	35	35	40	42	37	40	36	36	73
9	66	53	47	35	35	40	41	39	43	28	35	77
10	65	53	47	35	35	41	41	41	45	23	36	80
11	65	53	46	35	36	41	40	41	44	21	40	88
12	64	53	46	36	36	41	40	41	45	21	46	94
13	64	54	46	36	34	43	40	41	42	25	47	95
14	64	53	45	37	34	46	40	40	43	29	59	96
15	65	53	44	36	33	45	42	46	49	31	58	102
16	63	54	44	37	33	42	41	41	56	29	42	119
17	61	52	44	36	34	42	41	42	59	26	42	152
18	62	52	43	36	34	42	40	42	53	24	43	148
19	63	52	43	36	34	41	44	41	56	79	51	131
20	63	52	43	37	34	40	42	43	42	205	55	101
21	63	51	42	36	34	44	41	43	48	163	48	90
22	63	51	43	36	35	45	40	40	47	166	49	87
23	62	50	42	36	36	41	40	38	40	139	52	88
24	61	50	40	36	37	41	40	55	33	144	55	87
25	61	50	40	36	37	41	42	50	31	209	55	82
26	61	49	40	36	40	40	42	56	31	129	65	96
27	60	49	39	36	44	40	41	54	36	102	70	111
28	60	50	39	36	43	40	40	35	31	81	65	116
29	58	50	39	36	------	40	41	31	28	40	70	111
30	58	50	39	36	------	40	45	30	34	92	70	94
31	57	------	37	36	------	40	------	28	------	85	71	------
TOTAL	2,044	1,578	1,366	1,114	1,002	1,290	1,227	1,264	1,273	2,140	1,574	2,965
MEAN	65.9	52.6	44.1	35.9	35.8	41.6	40.9	40.8	42.4	69.0	50.8	98.8
MAX	84	57	50	37	44	46	45	56	59	209	71	152
MIN	57	49	37	35	33	40	40	28	28	21	33	73
AC-FT	4,050	3,130	2,710	2,210	1,990	2,560	2,430	2,510	2,520	4,240	3,120	5,880

CAL YR 1972 TOTAL 20,950 MEAN 57.2 MAX 255 MIN 24 AC-FT 41,550
WTR YR 1973 TOTAL 18,837 MEAN 51.6 MAX 209 MIN 21 AC-FT 37,360

06681500 Gering drain near Gering, Nebr.

LOCATION.--Lat 41°49'20", long 103°37'02", in SE1/4NE1/4 sec.6, T.21 N., R.54 W., Scotts Bluff County, near left bank on downstream side of bridge piling on county road, 0.2 mi (0.3 km) downstream from bridge on State Highway 92, 1 mi (2 km) upstream from mouth, and 2 mi (3 km) east of Gering.

PERIOD OF RECORD.--February 1931 to September 1945, October 1948 to current year.

GAGE.--Water-stage recorder. Datum of gage is 3,854.62 ft (1,174.888 m) above mean sea level (levels by Corps of Engineers). See WSP 1918 for history of changes prior to June 27, 1958. June 27, 1958, to Oct. 27, 1970, at datum 2.0 ft (0.61 m) higher.

AVERAGE DISCHARGE.--39 years, 43.1 ft^3/s (1.221 m^3/s), 31,230 acre-ft/yr (38.5 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 1,960 ft^3/s (55.5 m^3/s) Sept. 15, gage height, 4.37 ft (1.332 m), top of surge; minimum daily, 22 ft^3/s (0.62 m^3/s) Feb. 8, Apr. 6.
Period of record: Maximum discharge, 9,560 ft^3/s (271 m^3/s) June 8, 1958, gage height, 14.0 ft (4.27 m), present datum, from floodmarks, from rating curve extended above 2,200 ft^3/s (62.3 m^3/s) on basis of slope-area measurements at gage heights 12.67 ft (3.862 m) and 14.0 ft (4.27 m) present datum; minimum daily, 5 ft^3/s (0.14 m^3/s) Aug. 13, 16, 19, 1940.

REMARKS.--Records fair except those above 200 ft^3/s (5.66 m^3/s), which are poor. Base flow is mainly return water from land irrigated by Fort Laramie Canal.

REVISIONS (WATER YEARS).--WSP 896: 1935(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	51	40	28	26	28	26	24	34	129	62	120	93
2	39	40	28	27	28	26	24	28	129	65	108	130
3	38	40	28	28	28	28	24	27	120	67	101	135
4	37	38	26	27	28	27	23	27	108	64	100	112
5	38	38	25	27	29	27	23	27	104	67	98	112
6	37	40	25	26	29	26	22	28	106	70	89	116
7	38	38	26	26	28	26	23	26	108	70	93	140
8	38	37	26	26	22	26	23	26	136	70	91	140
9	38	36	27	26	23	26	23	26	216	74	93	149
10	38	34	27	27	27	26	23	25	184	65	91	167
11	37	34	27	27	27	26	23	25	151	60	89	205
12	39	34	28	27	28	26	23	26	143	59	89	183
13	39	34	28	27	26	26	23	26	118	68	100	197
14	39	31	28	27	26	28	23	26	114	76	89	291
15	39	32	28	27	26	25	24	26	146	71	84	435
16	39	31	28	28	26	25	26	26	138	70	84	249
17	39	31	28	28	26	26	26	26	143	70	79	244
18	38	30	30	28	26	26	26	27	159	74	82	210
19	39	30	30	28	27	28	32	26	164	230	84	213
20	40	29	30	28	26	26	28	26	164	349	81	218
21	40	29	30	28	26	28	26	26	134	158	74	218
22	40	29	31	28	26	33	26	26	110	220	76	218
23	40	29	32	28	26	27	26	71	80	195	79	239
24	40	29	32	29	26	26	26	88	63	122	82	239
25	40	28	32	29	26	26	28	134	72	130	86	241
26	40	29	32	29	26	26	31	164	72	114	94	223
27	40	28	31	29	26	25	28	169	70	130	93	176
28	40	28	32	29	26	26	27	161	71	128	86	122
29	40	28	32	29	------	25	26	153	74	128	86	69
30	40	28	28	29	------	25	34	159	74	126	84	53
31	40	------	26	29	------	24	------	146	------	124	88	------
TOTAL	1,220	982	889	857	742	817	764	1,831	3,600	3,376	2,773	5,537
MEAN	39.4	32.7	28.7	27.6	26.5	26.4	25.5	59.1	120	109	89.5	185
MAX	51	40	32	29	29	33	34	169	216	349	120	435
MIN	37	28	25	26	22	24	22	25	63	59	74	53
AC-FT	2,420	1,950	1,760	1,700	1,470	1,620	1,520	3,630	7,140	6,700	5,500	10,980

CAL YR 1972 TOTAL 25,692 MEAN 70.2 MAX 453 MIN 25 AC-FT 50,960
WTR YR 1973 TOTAL 23,388 MEAN 64.1 MAX 435 MIN 22 AC-FT 46,390

06682000 North Platte River near Minatare, Nebr.

LOCATION.--Main channel gage: Lat 41°47'26", long 103°31'11", in NE1/4SE1/4 sec.13, T.21 N., R.54 W., Scotts Bluff County, on left bank 220 ft (67 m) upstream from bridge on State Highway 326 and 1.8 mi (2.9 km) southwest of Minatare. Nine Mile channel gage: Lat 41°47'32", long 103°31'08", in NE1/4SE1/4 sec.13, T.21 N., R.54 W., Scotts Bluff County, on left bank 50 ft (15 m) upstream from bridge on State Highway 326 and 750 ft (229 m) north of main channel bridge.

DRAINAGE AREA.--28,700 mi² (74,300 km²), approximately.

PERIOD OF RECORD.--May to August 1916, May 1917 to September 1918, May to October 1919, April to September 1922, June 1923 to current year. Monthly discharge only for some periods, published in WSP 1310.

GAGE.--Main channel: Water-stage recorder. Datum of gage is 3,811.7 ft (1,161.81 m) above mean sea level. See WRD Nebr. 1972 for history of changes prior to Nov. 2, 1966.
Nine Mile channel: Water-stage recorder. Datum of gage is 3,812.3 ft (1,161.99 m) above mean sea level. See WRD Nebr. 1972 for history of changes prior to Aug. 25, 1971.

EXTREMES.--Current year: Maximum discharge, 8,640 ft³/s (245 m³/s) May 27; minimum daily, 741 ft³/s (21.0 m³/s) Mar. 13.
Period of record: Maximum discharge, 19,500 ft³/s (552 m³/s) July 2, 1917, from graph based on mean daily discharge and discharge measurement published by State engineer of Nebraska; minimum daily, 11 ft³/s (0.31 m³/s) Aug. 16-18, 1940.
Flood of June 18, 1921, may have been greater than flood of July 2, 1917.

REMARKS.--Records good. Natural flow of stream affected by transmountain diversions, storage reservoirs, power developments, ground-water withdrawals and diversions for irrigation, and return flow from irrigated areas. River flows in two channels for which separate records are computed; figures given herein represent combined discharge.

REVISIONS.--WSP 1710: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,300	1,030	884	823	790	779	964	3,800	7,400	3,380	3,420	3,260
2	1,200	1,020	877	822	758	778	981	4,820	7,660	3,180	3,240	3,490
3	1,160	1,050	867	818	773	811	1,030	5,170	7,780	3,060	3,080	3,790
4	1,150	1,050	851	806	779	808	1,210	4,880	7,760	2,830	3,030	3,890
5	1,150	1,030	850	800	787	801	1,320	4,510	7,710	2,640	2,990	3,840
6	1,140	1,040	830	755	803	793	1,370	4,410	7,650	2,600	2,900	3,660
7	1,160	1,020	830	750	792	784	1,400	4,760	7,620	2,510	2,800	3,340
8	1,250	992	810	765	772	763	1,430	5,390	7,510	2,440	2,760	3,070
9	1,200	1,000	800	765	771	757	1,440	6,080	7,460	2,470	2,840	2,940
10	1,150	1,020	790	775	742	761	1,460	6,310	7,260	2,370	2,880	2,590
11	1,120	990	780	745	750	751	1,460	6,400	7,170	2,300	2,930	2,720
12	1,100	987	790	759	767	744	1,480	6,420	7,150	2,230	2,930	3,050
13	1,080	1,010	795	781	777	741	1,490	5,910	7,040	2,250	3,020	2,800
14	1,080	987	823	813	770	790	1,510	5,490	6,970	2,410	3,020	2,710
15	1,070	975	824	846	771	770	1,710	4,750	7,270	2,430	2,960	3,210
16	1,070	964	836	841	778	772	2,030	4,670	7,320	2,420	2,880	3,200
17	1,050	960	859	854	779	776	2,220	5,530	7,060	2,430	2,840	3,320
18	1,040	964	895	860	770	774	2,380	5,970	6,850	2,450	2,740	3,260
19	1,020	967	912	854	778	778	2,440	6,370	6,560	2,740	2,560	3,020
20	1,030	954	897	871	768	773	2,390	6,780	6,420	4,260	2,740	2,780
21	1,040	939	900	849	768	793	2,390	7,190	6,370	4,240	2,730	2,630
22	1,050	922	917	819	783	900	2,840	7,600	6,220	3,560	2,710	2,580
23	1,030	928	938	789	779	857	2,900	7,890	6,090	3,490	2,800	2,580
24	1,030	936	942	791	774	863	2,950	7,980	5,850	3,410	2,890	2,570
25	1,000	940	918	798	777	896	3,110	7,940	5,440	3,630	2,970	2,570
26	1,010	932	909	801	776	920	3,300	8,310	5,010	3,540	3,020	2,790
27	1,000	952	890	798	778	952	3,320	8,510	4,590	3,560	3,040	2,740
28	1,010	908	889	781	779	967	3,340	8,320	4,130	3,510	3,120	2,780
29	992	898	884	785	------	970	3,350	8,010	3,850	3,420	3,150	2,970
30	1,010	886	869	788	------	965	3,570	7,730	3,730	3,490	3,190	2,550
31	1,010	------	864	790	------	960	------	7,400	------	3,480	3,230	------
TOTAL	33,702	29,251	26,720	24,892	21,689	25,547	62,785	195,300	196,900	92,730	91,410	90,700
MEAN	1,087	975	862	803	775	824	2,093	6,300	6,563	2,991	2,949	3,023
MAX	1,300	1,050	942	871	803	970	3,570	8,510	7,780	4,260	3,420	3,890
MIN	992	886	780	745	742	741	964	3,800	3,730	2,230	2,560	2,550
AC-FT	66,850	58,020	53,000	49,370	43,020	50,670	124,500	387,400	390,600	183,900	181,300	179,900

CAL YR 1972 TOTAL 412,499 MEAN 1,127 MAX 2,710 MIN 330 AC-FT 818,200
WTR YR 1973 TOTAL 891,626 MEAN 2,443 MAX 8,510 MIN 741 AC-FT 1,769,000

06682500 Ninemile drain near McGrew, Nebr.

LOCATION.--Lat 41°46'15", long 103°25'18", in SE1/4SE1/4 sec.23, T.21 N., R.53 W., Scotts Bluff County, on right bank 15 ft (5 m) upstream from highway bridge, 0.5 mi (0.8 km) upstream from mouth, and 1.5 mi (2.4 km) north of McGrew.

PERIOD OF RECORD.--January 1932 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 3,780 ft (1,152 m), from topographic map. Prior to Apr. 14, 1939, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--41 years, 117 ft³/s (3.313 m³/s), 84,770 acre-ft/yr (0.105 km³/yr).

EXTREMES.--Current year: Maximum discharge, 654 ft³/s (18.5 m³/s) July 20, gage height, 4.01 ft (1.222 m); minimum daily, 44 ft³/s (1.25 m³/s) May 6,7.
Period of record: Maximum discharge, 908 ft³/s (25.7 m³/s) June 2, 1971, gage height, 5.31 ft (1.618 m); minimum daily, 24 ft³/s (0.68 m³/s) July 5, 1961, May 13, 1962.

REMARKS.--Records good except those for period of no gage-height record, which are poor. Flow affected by ground-water withdrawals and diversions for irrigation and return flow from irrigated areas.

REVISIONS (WATER YEARS).--WSP 926: 1936.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	183	118	100	83	78	71	75	65	92	172	273	235
2	168	118	100	85	77	72	74	72	96	194	242	264
3	161	120	97	85	77	74	74	73	100	206	212	299
4	158	118	96	84	78	73	73	60	101	204	197	299
5	154	116	94	84	78	73	73	45	100	198	225	294
6	152	123	93	83	77	72	72	44	104	172	227	277
7	157	121	94	83	77	72	73	44	109	165	212	248
8	155	117	92	83	77	72	73	55	110	173	211	231
9	152	111	92	84	76	72	73	67	110	179	211	245
10	147	108	93	81	76	72	73	78	114	169	211	220
11	144	108	94	79	76	71	71	83	114	166	209	250
12	144	108	95	78	76	71	71	89	116	165	217	294
13	143	109	96	80	73	73	70	79	119	180	230	294
14	139	107	96	81	73	76	68	71	134	191	209	211
15	138	108	95	79	73	74	67	62	164	191	201	219
16	123	110	94	79	72	75	66	83	192	182	206	228
17	117	110	94	79	72	77	65	151	191	171	211	261
18	112	110	93	78	74	76	64	157	192	172	206	248
19	112	110	92	79	73	77	71	158	204	239	209	235
20	115	110	90	82	73	75	69	165	207	486	217	198
21	115	109	91	80	73	78	66	162	197	374	198	189
22	115	108	91	80	73	93	66	168	185	353	191	180
23	110	108	93	81	73	81	65	162	148	320	194	186
24	109	108	93	81	72	79	64	151	154	330	200	197
25	108	105	93	81	72	80	70	151	155	316	206	176
26	108	105	94	81	72	79	73	148	144	252	215	165
27	107	104	94	80	72	77	69	150	140	257	231	175
28	107	103	94	80	72	78	69	152	148	272	220	228
29	107	101	94	80	------	77	70	126	158	279	214	240
30	118	100	96	81	------	76	86	99	178	299	215	192
31	115	------	88	81	------	75	------	91	------	273	223	------
TOTAL	4,093	3,311	2,911	2,515	2,085	2,341	2,113	3,261	4,276	7,300	6,643	6,978
MEAN	132	110	93.9	81.1	74.5	75.5	70.4	105	143	235	214	233
MAX	183	123	100	85	78	93	86	168	207	486	273	299
MIN	107	100	88	78	72	71	64	44	92	165	191	165
AC-FT	8,120	6,570	5,770	4,990	4,140	4,640	4,190	6,470	8,480	14,480	13,180	13,840

CAL YR 1972 TOTAL 48,020 MEAN 131 MAX 313 MIN 61 AC-FT 95,250
WTR YR 1973 TOTAL 47,827 MEAN 131 MAX 486 MIN 44 AC-FT 94,860

06683000 Bayard Sugar Factory drain near Bayard, Nebr.

LOCATION.--Lat 41°44'10", long 103°19'53", in SE1/4NE1/4 sec.5, T.20 N., R.52 W., Morrill County, on right bank 600 ft (183 m) upstream from mouth and 1.2 mi (1.9 km) south of Bayard.

PERIOD OF RECORD.--October 1931 to current year.

GAGE.--Water-stage recorder and concrete flume. Datum of gage is 3,746.28 ft (1,141.866 m) above mean sea level. Prior to Jan. 7, 1939, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--42 years, 28.7 ft^3/s (0.813 m^3/s), 20,790 acre-ft/yr (25.6 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 115 ft^3/s (3.26 m^3/s) July 21, gage height, 2.13 ft (0.649 m); no flow May 23-31.
Period of record: Maximum discharge, 391 ft^3/s (11.1 m^3/s) July 3, 1956, gage height, 4.32 ft (1.317 m); no flow June 1, 2, July 4-8, 1934, May 16, 17, 1936, Aug. 8, 9, 1960, Apr. 29, 30, May 4, 5, 1962, May 23-31, 1973.

REMARKS.--Records good. Flow affected by ground-water withdrawals and diversions for irrigation and return flow from irrigated areas.

REVISIONS (WATER YEARS).--WSP 1310: 1937(M), 1941.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38	35	27	24	22	26	21	42	.50	4.2	45	47
2	36	35	27	23	22	26	21	27	1.0	4.5	42	52
3	35	36	25	22	21	29	21	24	1.5	8.1	36	60
4	34	36	24	22	22	27	21	23	2.0	18	31	62
5	28	34	23	22	24	26	21	25	2.5	15	34	59
6	27	43	22	22	22	25	20	42	3.0	5.0	36	50
7	28	37	22	22	22	23	20	26	3.2	4.2	42	43
8	28	33	21	22	22	22	21	24	4.0	4.5	45	41
9	29	30	21	22	20	22	21	23	5.9	4.0	42	57
10	30	28	23	20	22	21	21	24	6.2	4.0	40	42
11	28	27	21	20	22	21	21	32	7.8	8.1	40	55
12	30	27	21	21	22	22	20	38	11	13	40	54
13	34	27	21	22	22	27	20	31	14	14	42	45
14	33	27	21	25	20	29	20	22	15	18	40	50
15	29	27	21	23	20	22	20	14	20	19	39	77
16	31	28	21	23	20	22	20	5.6	26	17	39	73
17	31	28	21	23	21	21	20	3.2	23	16	39	71
18	29	30	23	23	21	20	20	3.0	21	22	37	66
19	27	30	23	22	21	21	26	2.5	22	38	34	62
20	26	30	23	23	22	20	23	2.0	24	94	34	61
21	26	28	23	22	23	20	21	1.5	23	83	35	59
22	27	28	25	22	24	25	20	1.0	21	82	37	62
23	26	28	24	22	28	21	20	0	18	67	41	55
24	25	28	24	21	30	20	20	0	19	58	43	52
25	23	28	24	21	31	22	22	0	17	62	45	48
26	22	28	24	22	29	21	27	0	16	58	45	50
27	21	26	24	21	28	21	23	0	10	55	46	39
28	22	25	24	22	27	21	22	0	4.5	52	46	62
29	26	25	23	23	------	21	20	0	4.7	51	45	80
30	30	25	20	22	------	21	43	0	5.9	52	47	54
31	33	------	22	23	------	21	------	0	------	52	47	------
TOTAL	892	897	708	687	650	706	656	435.8	352.70	1,002.6	1,254	1,688
MEAN	28.8	29.9	22.8	22.2	23.2	22.8	21.9	14.1	11.8	32.3	40.5	56.3
MAX	38	43	27	25	31	29	43	42	26	94	47	80
MIN	21	25	20	20	20	20	20	0	.50	4.0	31	39
AC-FT	1,770	1,780	1,400	1,360	1,290	1,400	1,300	864	700	1,990	2,490	3,350

CAL YR 1972 TOTAL 7,805.27 MEAN 21.3 MAX 54 MIN .40 AC-FT 15,480
WTR YR 1973 TOTAL 9,929.10 MEAN 27.2 MAX 94 MIN 0 AC-FT 19,690

06684000 Red Willow Creek near Bayard, Nebr.

LOCATION.--Lat 41°42'50", long 103°15'10", in NE1/4NE1/4 sec.13, T.20 N., R.52 W., Morrill County, on left bank 75 ft (23 m) downstream from timber bridge, 0.2 mi (0.3 km) downstream from Wild Horse drain, 0.8 mi (1.3 km) upstream from mouth, and 4.5 mi (7.2 km) southeast of Bayard.

PERIOD OF RECORD.--October 1931 to current year. Monthly discharge only for some periods, published in WSP 1310.

GAGE.--Water-stage recorder. Datum of gage is 3,716.29 ft (1,132.725 m) above mean sea level. Prior to Nov. 18, 1938, nonrecording gage and Nov. 18, 1938, to Apr. 15, 1946, water-stage recorder at site 65 ft (19.8 m) upstream at datum 1.00 ft (0.305 m) higher, and Apr. 16, 1946, to June 12, 1957, at present datum.

AVERAGE DISCHARGE.--42 years, 85.6 ft^3/s (2.424 m^3/s), 62,020 acre-ft/yr (76.5 hm^3/yr).

EXTREMES.--Current year: Maximum discharge, 400 ft^3/s (11.3 m^3/s) Sept. 12, gage height, 2.79 ft (0.850 m); minimum daily, 42 ft^3/s (1.19 m^3/s) Apr. 24,25.
Period of record: Maximum discharge, 2,320 ft^3/s (65.7 m^3/s) July 3, 1956, gage height, 7.33 ft (2.234 m); maximum gage height, 7.8 ft (2.38 m) May 10, 1942, from floodmark, present datum; minimum daily discharge, 15 ft^3/s (0.42 m^3/s) Apr. 23, 1935, Apr. 26, 1962.

REMARKS.--Records good. Natural flow of stream affected by diversions and ground-water withdrawals for irrigation, return flow from irrigated areas, and occasional waste into creek from Tri-State canal.

REVISIONS (WATER YEARS).--WSP 1310: 1937(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	132	92	84	63	60	58	52	70	147	149	231	128
2	123	90	86	63	60	58	52	66	123	152	196	188
3	116	90	84	63	60	60	51	62	95	150	162	234
4	119	92	84	63	62	58	49	56	87	117	143	231
5	117	92	81	62	63	58	49	58	80	110	111	224
6	120	96	76	62	62	56	49	87	74	96	99	213
7	122	95	77	63	60	56	49	66	73	90	122	191
8	120	92	73	62	60	55	49	58	76	86	137	199
9	120	90	70	60	60	53	51	53	63	89	125	298
10	122	87	70	63	59	53	52	49	56	105	111	276
11	117	87	76	63	59	52	53	48	111	86	108	327
12	116	87	76	63	60	51	53	48	149	73	126	370
13	114	86	73	65	59	55	55	46	162	70	149	376
14	113	86	74	67	58	66	55	45	175	87	143	331
15	120	86	73	67	58	58	56	51	207	96	125	368
16	120	86	72	66	58	58	56	74	228	99	110	368
17	116	86	72	66	58	58	56	147	224	81	99	352
18	111	86	72	65	59	56	56	131	232	83	101	346
19	113	83	70	63	59	56	66	137	224	159	93	341
20	114	83	72	63	58	56	53	128	208	294	95	337
21	114	81	70	63	58	55	49	101	191	197	95	314
22	113	81	69	62	59	60	46	93	181	184	104	287
23	111	81	70	62	58	56	46	92	165	247	105	261
24	110	81	70	62	58	56	42	116	150	249	96	239
25	110	81	69	62	58	56	42	129	140	210	104	213
26	111	83	67	62	58	56	48	131	135	192	110	207
27	113	83	67	62	58	53	44	161	93	234	120	196
28	113	83	67	60	58	55	44	180	73	228	129	256
29	113	83	66	62	------	53	44	165	137	216	117	303
30	114	83	65	60	------	53	65	143	137	228	117	218
31	92	------	65	60	------	52	------	153	------	257	116	------
TOTAL	3,579	2,592	2,260	1,949	1,657	1,736	1,532	2,944	4,196	4,714	3,799	8,192
MEAN	115	86.4	72.9	62.9	59.2	56.0	51.1	95.0	140	152	123	273
MAX	132	96	86	67	63	66	66	180	232	294	231	376
MIN	92	81	65	60	58	51	42	45	56	70	93	128
AC-FT	7,100	5,140	4,480	3,870	3,290	3,440	3,040	5,840	8,320	9,350	7,540	16,250

CAL YR 1972 TOTAL 37,365 MEAN 102 MAX 292 MIN 26 AC-FT 74,110
WTR YR 1973 TOTAL 39,150 MEAN 107 MAX 376 MIN 42 AC-FT 77,650

06684500 North Platte River at Bridgeport, Nebr.

LOCATION.--Main channel gage: Lat 41°40'39", long 103°05'45", in NW1/4SW1/4 sec.28, T.20 N., R.50 W., Morrill County, on downstream side of pier near center of bridge on U.S. Highway 26, 0.5 mi (0.8 km) north of Bridgeport. Browns Creek channel gage: Lat 41°40'55", long 103°05'53", in NW1/4NW1/4 sec.28, T.20 N., R.50 W., Morrill County, on left bank 0.2 mi (0.3 km) upstream from culvert on U.S. Highway 26 and 0.8 mi (1.3 km) north of Bridgeport.

DRAINAGE AREA.--29,300 mi² (75,900 km²), approximately.

PERIOD OF RECORD.--June 1896 to October 1900 (no winter records most years), May 1902 to November 1906, June to August 1915, May 1916 to current year. Monthly discharge only for some years, published in WSP 1310. Published as "near Camp Clark" 1896-1900.

GAGE.--Main channel: Water-stage recorder. Datum of gage is 3,656.14 ft (1,114.391 m) above mean sea level. See WSP 1918 for history of changes prior to Oct. 7, 1927.
Browns Creek channel: Water-stage recorder. Datum of gage is 3,663.51 ft (1,116.638 m) above mean sea level. See WSP 1918 for history of changes prior to June 1, 1943.

EXTREMES.--Current year: Maximum discharge, 10,500 ft³/s (297 m³/s) May 28; minimum daily, 700 ft³/s (19.8 m³/s) Dec. 8, 9.
Period of record: Maximum discharge, 24,900 ft³/s (705 m³/s) June 26, 1899, gage height, 5.39 ft (1.643 m), site and datum then in use, from graph based on gage readings; minimum daily, 55 ft³/s (1.56 m³/s) May 28, 1934, Aug. 15, 1940, but may have been less during periods of no record for Browns Creek channel.

REMARKS.--Records good. Natural flow of stream affected by transmountain diversions, storage reservoirs, power developments, ground-water withdrawals and diversions for irrigation, and return flow from irrigated areas. River flows in two independently rated channels for which separate records are computed; figures herein represent combined discharge. Records of chemical analyses for the water year 1973 are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1390: 1897, 1915. WRD Nebr. 1967: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,040	1,500	1,280	1,070	1,060	1,060	1,200	4,060	8,800	3,720	3,910	3,570
2	1,830	1,530	1,290	1,070	1,030	1,080	1,180	4,360	8,730	3,450	3,700	3,840
3	1,780	1,560	1,290	1,030	996	1,140	1,160	5,480	8,980	3,300	3,370	4,410
4	1,820	1,600	1,220	987	1,000	1,120	1,290	5,700	9,050	3,180	3,200	4,750
5	1,820	1,570	1,210	951	1,020	1,100	1,480	5,250	8,950	2,930	3,100	4,840
6	1,820	1,620	940	951	1,040	1,070	1,560	5,220	8,680	2,760	3,050	4,950
7	1,860	1,680	800	978	1,020	987	1,570	4,930	8,530	2,660	2,990	4,350
8	1,860	1,570	700	800	900	942	1,620	5,440	8,480	2,570	3,010	3,870
9	1,820	1,570	700	740	880	951	1,680	6,020	8,330	2,570	3,030	4,300
10	1,690	1,570	800	720	900	978	1,690	6,550	8,330	2,520	3,050	3,580
11	1,620	1,560	920	760	1,010	978	1,720	6,820	8,100	2,340	3,080	3,670
12	1,560	1,540	1,100	900	1,020	969	1,760	7,040	7,960	2,170	3,100	4,380
13	1,550	1,530	1,300	1,000	1,040	996	1,810	6,960	8,000	2,050	3,240	4,100
14	1,580	1,440	1,400	1,200	1,040	1,100	1,810	6,060	7,780	2,230	3,270	3,500
15	1,600	1,380	1,450	1,300	1,040	1,070	1,850	5,740	7,820	2,370	3,210	4,100
16	1,630	1,350	1,500	1,260	1,030	1,040	2,200	4,710	8,270	2,400	3,180	4,460
17	1,630	1,350	1,600	1,170	1,020	1,060	2,360	5,350	8,470	2,350	3,180	4,570
18	1,610	1,350	1,600	1,100	1,030	1,030	2,450	6,140	7,970	2,330	3,160	4,510
19	1,630	1,350	1,550	1,070	1,070	1,030	2,530	6,460	7,470	2,620	3,070	4,270
20	1,630	1,340	1,600	1,090	1,060	1,010	2,530	6,960	7,010	5,190	3,170	3,910
21	1,620	1,330	1,500	1,090	1,080	1,000	2,390	7,540	6,920	5,770	3,140	3,580
22	1,570	1,330	1,200	1,060	1,080	1,170	2,620	8,420	6,740	5,170	3,060	3,430
23	1,560	1,330	1,270	1,010	1,080	1,190	2,890	9,190	6,380	4,840	3,100	3,370
24	1,570	1,310	1,250	1,000	1,090	1,190	2,810	9,580	6,090	4,350	3,170	3,350
25	1,570	1,300	1,280	1,040	1,080	1,220	2,890	9,410	5,560	4,530	3,290	3,270
26	1,570	1,330	1,300	1,050	1,070	1,210	3,190	9,630	5,290	4,190	3,340	3,480
27	1,520	1,340	1,300	1,070	1,040	1,200	3,230	10,000	4,840	4,040	3,390	3,550
28	1,500	1,320	1,250	1,020	1,040	1,200	3,270	10,300	4,430	4,110	3,390	4,030
29	1,460	1,300	1,180	1,040	------	1,190	3,250	10,200	4,180	3,980	3,370	4,900
30	1,460	1,270	1,090	1,050	------	1,190	3,640	9,850	4,100	4,060	3,430	3,650
31	1,470	------	1,020	1,070	------	1,200	------	9,410	------	4,060	3,430	------
TOTAL	51,250	43,120	37,890	31,647	28,766	33,671	65,630	218,780	220,240	104,810	100,180	120,540
MEAN	1,653	1,437	1,222	1,021	1,027	1,086	2,188	7,057	7,341	3,381	3,232	4,018
MAX	2,040	1,680	1,600	1,300	1,090	1,220	3,640	10,300	9,050	5,770	3,910	4,950
MIN	1,460	1,270	700	720	880	942	1,160	4,060	4,100	2,050	2,990	3,270
AC-FT	101,700	85,530	75,150	62,770	57,060	66,790	130,200	434,000	436,800	207,900	198,700	239,100

CAL YR 1972 TOTAL 539,448 MEAN 1,474 MAX 2,890 MIN 400 AC-FT 1,070,000
WTR YR 1973 TOTAL 1,056,524 MEAN 2,895 MAX 10,300 MIN 700 AC-FT 2,096,000

06685000 Pumpkin Creek near Bridgeport, Nebr.

LOCATION.--Lat 41°37'38", long 103°02'10", in SW1/4 sec.12, T.19 N., R.50 W., Morrill County, on left bank 250 ft (76 m) downstream from bridge on U.S. Highway 385 and State Highway 92, 0.5 mi (0.8 km) upstream from mouth, and 4 mi (6 km) southeast of Bridgeport.

DRAINAGE AREA.--1,020 mi² (2,640 km²), approximately.

PERIOD OF RECORD.--February 1931 to current year.

GAGE.--Water-stage recorder. Sheet piling control since December 1964. Datum of gage is 3,635.99 ft (1,108.250 m) above mean sea level. Prior to June 25, 1934, nonrecording gage on downstream side of bridge 240 ft (73 m) upstream and June 25, 1934, to May 18, 1936, water-stage recorder at upstream side of bridge 260 ft (79 m) upstream, both at datum 0.29 ft (0.088 m) higher.

AVERAGE DISCHARGE.--42 years, 31.3 ft³/s (0.886 m³/s), 22,680 acre-ft/yr (28.0 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 75 ft³/s (2.12 m³/s) May 12, gage height, 2.43 ft (0.741 m); maximum gage height, 2.64 ft (0.805 m) Jan. 1, backwater from ice; minimum daily discharge, 0.42 ft³/s (0.012 m³/s) July 9.
Period of record: Maximum discharge, 7,880 ft³/s (223 m³/s) June 9, 1965, gage height, 9.98 ft (3.042 m), from floodmark, from rating curve extended above 3,500 ft³/s (99.1 m³/s) on basis of rating extension for main channel and determination of flow over road; minimum daily, 0.4 ft³/s (0.011 m³/s) Aug. 6, 1936, May 11, 1955.

REMARKS.--Records good. Natural flow of stream affected by ground-water withdrawals and diversions for irrigation and return flow from irrigated areas. Records of chemical analyses for the water year 1973 are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1390: 1932, 1934(M), 1935, 1936(M), 1938-39. WRD Nebr. 1967: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	15	22	20	23	32	33	42	13	8.0	16	7.0
2	15	14	24	21	22	33	33	42	12	5.4	16	7.2
3	14	13	22	19	24	37	33	40	11	5.0	11	15
4	11	16	20	15	25	39	33	39	10	4.7	7.2	22
5	9.7	20	21	16	24	37	33	38	10	4.3	6.3	21
6	10	19	21	18	24	33	33	39	9.0	3.0	6.5	20
7	11	19	15	16	22	32	33	41	9.2	1.7	5.4	20
8	11	18	12	18	20	31	33	40	9.7	.46	5.4	18
9	11	17	10	18	20	30	33	38	10	.42	4.5	20
10	11	17	8.0	20	20	30	33	36	13	.46	4.0	19
11	11	16	8.5	22	23	30	34	41	14	.44	3.3	26
12	11	16	10	25	25	29	33	64	15	.60	4.0	38
13	11	16	12	31	24	31	31	65	14	.60	4.7	33
14	11	16	14	29	22	35	28	65	12	.46	4.5	30
15	11	15	16	27	23	32	28	51	15	.44	4.3	27
16	11	18	18	27	24	32	30	46	26	.45	2.2	28
17	12	18	20	26	23	31	32	53	36	.46	3.5	25
18	12	18	22	25	24	30	31	51	34	.43	5.0	25
19	12	18	21	25	25	31	33	53	33	1.6	4.0	25
20	12	17	22	25	25	32	33	53	31	31	3.7	27
21	12	17	23	24	25	30	33	51	30	21	3.3	27
22	12	16	23	22	25	29	32	48	19	12	3.2	23
23	12	20	24	22	26	30	33	47	11	19	3.0	17
24	12	21	22	21	27	31	32	44	10	20	3.3	16
25	13	22	22	23	29	32	32	42	7.8	21	3.5	17
26	14	21	23	24	30	34	36	42	6.1	22	3.5	17
27	14	22	23	21	32	34	35	43	6.7	23	3.5	16
28	14	22	24	21	33	35	34	43	5.8	23	4.0	25
29	14	20	23	21	------	35	33	42	4.5	21	4.3	34
30	14	20	19	20	------	35	41	38	5.0	20	5.0	29
31	13	------	20	23	------	33	------	18	------	19	7.0	------
TOTAL	377.7	537	584.5	685	689	1,005	984	1,395	442.8	290.92	165.1	674.2
MEAN	12.2	17.9	18.9	22.1	24.6	32.4	32.8	45.0	14.8	9.38	5.33	22.5
MAX	16	22	24	31	33	39	41	65	36	31	16	38
MIN	9.7	13	8.0	15	20	29	28	18	4.5	.42	2.2	7.0
AC-FT	749	1,070	1,160	1,360	1,370	1,990	1,950	2,770	878	577	327	1,340

CAL YR 1972 TOTAL 6,535.40 MEAN 17.9 MAX 84 MIN 2.1 AC-FT 12,960
WTR YR 1973 TOTAL 7,830.22 MEAN 21.5 MAX 65 MIN .42 AC-FT 15,530

06686000 North Platte River at Lisco, Nebr.

LOCATION.--Lat 41°29'18", long 102°37'25", in NW1/4SE1/4 sec.33, T.18 N., R.46 W., Garden County, near right bank on downstream side of pier of highway bridge, 0.5 mi (0.8 km) south of Lisco.

DRAINAGE AREA.--30,700 mi² (79,500 km²), approximately.

PERIOD OF RECORD.--May to September 1916, June to October 1917, September 1931 to current year. Monthly discharge only for some periods, published in WSP 1310.

GAGE.--Water-stage recorder. Datum of gage is 3,475.5 ft (1,059.33 m) above mean sea level. Prior to Sept. 8, 1931, nonrecording gage at present site at different datum and Sept. 8, 1931, to May 3, 1932, at present site and datum.

EXTREMES.--Current year: Maximum discharge, 9,690 ft³/s (274 m³/s) May 29, gage height, 3.68 ft (1.122 m); maximum gage height, 3.71 ft (1.131 m) Dec. 8, backwater from ice; minimum daily discharge, 600 ft³/s (17.0 m³/s) Dec. 7.
Period of record: Maximum discharge, 20,100 ft³/s (569 m³/s) June 27, 29, 1917, from graph based on daily gage readings, from rating curve extended above 15,000 ft³/s (425 m³/s); minimum daily, 8 ft³/s (0.23 m³/s) Aug. 4, 1934.

REMARKS.--Records good except those for winter period, which are fair. Natural flow of stream affected by transmountain diversions, storage reservoirs, power developments, ground-water withdrawals and diversions for irrigation, and return flow from irrigated areas. Records of chemical analyses for the water year 1973 are published in Part 2 of this report.

REVISIONS.--WRD Nebr. 1967: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,880	1,700	1,420	1,450	1,250	1,320	1,390	4,460	8,540	4,240	4,380	3,380
2	1,820	1,720	1,430	1,400	1,240	1,340	1,420	4,460	8,220	3,720	4,240	3,580
3	1,700	1,700	1,410	1,400	1,240	1,430	1,390	4,590	8,470	3,410	3,920	3,900
4	1,700	1,720	1,300	1,300	1,230	1,350	1,390	5,280	8,470	3,260	3,580	4,300
5	1,700	1,720	1,200	1,250	1,250	1,300	1,580	5,590	8,470	3,070	3,450	4,470
6	1,690	1,770	900	1,200	1,200	1,280	1,740	5,390	8,470	2,810	3,340	4,560
7	1,720	1,920	600	1,050	1,100	1,320	1,820	5,140	8,470	2,660	3,240	4,560
8	1,740	1,780	650	1,000	1,120	1,340	1,880	4,830	8,220	2,540	3,340	4,270
9	1,740	1,740	650	950	1,120	1,250	1,880	5,140	8,220	2,480	3,240	4,650
10	1,720	1,620	650	900	1,120	1,230	1,870	5,790	8,040	2,480	3,300	4,440
11	1,740	1,550	800	860	1,210	1,220	1,800	6,600	7,860	2,350	3,340	4,590
12	1,700	1,550	1,000	1,000	1,200	1,250	1,780	7,090	7,700	2,230	3,410	4,750
13	1,770	1,600	1,300	1,150	1,140	1,350	1,830	7,360	7,550	2,130	3,650	4,680
14	1,830	1,560	1,400	1,300	1,150	1,670	1,900	7,360	7,550	2,180	3,600	4,270
15	1,830	1,520	1,450	1,400	1,170	1,410	1,900	6,790	7,650	2,280	3,490	4,100
16	1,770	1,550	1,500	1,600	1,170	1,270	2,100	6,240	7,800	2,310	3,360	4,620
17	1,720	1,580	1,550	1,650	1,170	1,230	2,390	5,220	8,060	2,340	3,260	4,750
18	1,670	1,610	1,650	1,500	1,200	1,200	2,580	5,430	8,330	2,300	3,260	4,750
19	1,660	1,620	1,700	1,400	1,250	1,200	2,900	6,060	8,000	2,410	3,180	4,680
20	1,640	1,620	1,750	1,340	1,250	1,220	2,980	6,560	7,650	3,410	2,990	4,360
21	1,640	1,550	1,700	1,270	1,260	1,230	2,750	6,990	7,500	5,070	3,070	4,000
22	1,640	1,480	1,700	1,220	1,270	1,420	2,750	7,460	7,280	5,450	3,010	3,720
23	1,610	1,480	1,650	1,280	1,280	1,460	3,090	7,980	7,010	5,170	3,010	3,650
24	1,580	1,460	1,580	1,280	1,300	1,360	3,180	8,340	6,880	4,590	3,110	3,600
25	1,600	1,460	1,500	1,280	1,300	1,420	3,290	8,730	6,590	4,410	3,220	3,560
26	1,600	1,480	1,580	1,270	1,320	1,430	3,560	9,060	6,170	4,470	3,220	3,600
27	1,660	1,480	1,600	1,260	1,340	1,380	3,600	9,060	5,700	4,300	3,220	3,820
28	1,720	1,480	1,540	1,210	1,340	1,420	3,600	9,270	5,140	4,270	3,220	4,410
29	1,690	1,450	1,500	1,250	------	1,450	3,660	9,550	4,560	4,270	3,300	5,240
30	1,690	1,410	1,500	1,340	------	1,420	4,160	9,270	4,440	4,470	3,340	4,910
31	1,640	------	1,450	1,250	------	1,430	------	8,920	------	4,470	3,340	------
TOTAL	52,810	47,880	41,610	39,010	34,190	41,600	72,160	210,010	223,010	105,550	104,630	128,170
MEAN	1,704	1,596	1,342	1,258	1,221	1,342	2,405	6,775	7,434	3,405	3,375	4,272
MAX	1,880	1,920	1,750	1,650	1,340	1,670	4,160	9,550	8,540	5,450	4,380	5,240
MIN	1,580	1,410	600	860	1,100	1,200	1,390	4,460	4,440	2,130	2,990	3,380
AC-FT	104,700	94,970	82,530	77,380	67,820	82,510	143,100	416,600	442,300	209,400	207,500	254,200

CAL YR 1972 TOTAL 574,001 MEAN 1,568 MAX 3,160 MIN 520 AC-FT 1,139,000
WTR YR 1973 TOTAL 1,100,630 MEAN 3,015 MAX 9,550 MIN 600 AC-FT 2,183,000

06687000 Blue Creek near Lewellen, Nebr.

LOCATION.--Lat 41°20'07", long 102°10'21", in NE1/4 sec.30, T.16 N., R.42 W., Garden County, on right bank 130 ft (40 m) downstream from county highway bridge, 0.5 mi (0.8 km) downstream from bridge on U.S. Highway 26, 0.8 mi (1.3 km) upstream from mouth, and 1.5 mi (2.4 km) west of Lewellen.

DRAINAGE AREA.--1,120 mi² (2,900 km²), approximately, of which about 80 mi² (210 km²) contributes directly to surface runoff.

PERIOD OF RECORD.--October 1930 to current year.

GAGE.--Water-stage recorder. Datum of gage is 3,310.04 ft (1,008.900 m) above mean sea level. See WSP 1918 for history of changes prior to Apr. 10, 1958.

AVERAGE DISCHARGE.--43 years, 69.9 ft³/s (1.980 m³/s), 50,640 acre-ft/yr (62.4 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 144 ft³/s (4.08 m³/s) Mar. 4, gage height, 3.81 ft (1.161 m); maximum gage height, 5.64 ft (1.719 m) Jan. 15, backwater from ice; minimum daily discharge, 0.25 ft³/s (0.007 m³/s) July 6, Aug. 21.
Period of record: Maximum discharge, 720 ft³/s (20.4 m³/s) May 20, 1938, gage height, 6.46 ft (1.969 m), present datum, from rating curve extended above 500 ft³/s (14.2 m³/s); maximum gage height, 6.93 ft (2.112 m), present datum Dec. 21, 1945, backwater from ice; no flow for short periods in 1940, 1947, 1957, 1960-61, 1963, 1971.

REMARKS.--Records good except those for winter period, which are poor. Natural flow of stream affected by ground-water withdrawals and diversions for irrigation and return flow from irrigated areas.

REVISIONS (WATER YEARS).--WSP 1310: 1941(M). WRD Nebr. 1967: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	94	88	80	135	100	106	104	48	.38	6.1	1.0
2	16	96	92	70	108	101	104	91	45	.30	1.0	1.2
3	19	98	88	50	108	125	102	84	51	.30	.60	3.0
4	22	101	75	35	108	128	101	86	53	.30	.50	4.0
5	23	100	70	35	112	111	100	87	50	.38	.50	1.2
6	30	100	75	40	115	106	100	88	58	.25	.42	1.0
7	30	106	80	50	102	103	96	92	64	.30	.50	.60
8	30	102	80	60	101	103	94	93	65	.38	.60	.50
9	31	102	75	65	100	102	93	93	59	.38	.50	.50
10	33	100	80	70	100	101	91	91	58	.38	.42	1.8
11	42	97	80	75	96	101	93	89	51	.30	.69	30
12	64	97	85	80	97	101	91	87	66	.38	.69	53
13	63	101	80	90	94	103	88	86	59	.38	3.6	62
14	64	95	80	90	86	117	88	87	46	.30	1.6	68
15	69	96	85	95	95	116	85	86	49	.30	1.2	69
16	66	95	85	100	91	97	84	84	46	.42	.88	70
17	63	100	85	110	88	94	84	83	37	.42	.88	73
18	62	98	90	118	93	95	86	83	33	.60	.78	71
19	61	98	95	113	97	93	95	81	28	.60	.50	69
20	62	96	95	109	96	91	104	82	26	5.6	.30	69
21	65	94	90	103	98	88	93	81	17	15	.25	69
22	66	94	95	98	100	97	87	82	10	11	.30	69
23	67	93	100	94	102	112	89	81	3.6	6.9	.42	69
24	68	93	95	92	102	98	92	77	2.7	13	.38	66
25	69	92	94	94	100	94	96	68	.78	15	.38	57
26	71	91	93	94	98	95	112	75	.60	14	.38	52
27	72	91	94	79	100	97	100	89	.38	6.1	.38	48
28	77	91	95	75	100	103	93	91	.42	.38	.42	75
29	76	85	93	85	------	103	91	76	.42	.30	.50	96
30	80	87	90	100	------	103	95	70	.42	.38	1.0	91
31	87	------	85	135	------	107	------	60	------	1.6	1.0	------
TOTAL	1,661	2,883	2,687	2,584	2,822	3,185	2,833	2,607	1,028.32	96.31	27.67	1,340.80
MEAN	53.6	96.1	86.7	83.4	101	103	94.4	84.1	34.3	3.11	.89	44.7
MAX	87	106	100	135	135	128	112	104	66	15	6.1	96
MIN	13	85	70	35	86	88	84	60	.38	.25	.25	.50
AC-FT	3,290	5,720	5,330	5,130	5,600	6,320	5,620	5,170	2,040	191	55	2,660

CAL YR 1972 TOTAL 23,139.63 MEAN 63.2 MAX 122 MIN .15 AC-FT 45,900
WTR YR 1973 TOTAL 23,755.10 MEAN 65.1 MAX 135 MIN .25 AC-FT 47,120

06687500 North Platte River at Lewellen, Nebr.

LOCATION.--Lat 41°18'37", long 102°09'00", in SE1/4NW1/4 sec.33, T.16 N., R.42 W., Garden County, on right bank 28 ft (9 m) upstream from county highway bridge, 1 mi (2 km) south of Lewellen, and approximately 1.5 mi (2.4 km) upstream from high-water line of Lake McConaughy. Prior to Sept. 20 at site 0.9 mi (1.4 km) downstream.

DRAINAGE AREA.--32,600 mi² (84,400 km²), approximately.

PERIOD OF RECORD.--July to September 1931, December 1940 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 3,290 ft (1,003 m), from topographic map. July to September 1931 nonrecording gage near present site at different datum. December 1940 to Sept. 19, 1973, water-stage recorders on two channels at site 0.9 mi (1.4 km) downstream at datum approximately 6 ft (1.8 m) lower.

EXTREMES.--Current year: Maximum discharge, 9,770 ft³/s (277 m³/s) May 27; minimum daily, 600 ft³/s (17.0 m³/s) Dec. 10.
Period of record: Maximum discharge, 13,500 ft³/s (382 m³/s) June 4, 1971; minimum daily, 44 ft³/s (1.25 m³/s) July 13, 1954.

REMARKS.--Records good except those for winter period, which are poor. Natural flow of stream affected by transmountain diversions, storage reservoirs, power developments, ground-water withdrawals and diversions for irrigation, and return flow from irrigated areas. River flows in two channels for which separate records are computed; figures given herein represent combined discharge (period Oct. 1 to Sept. 19 only).

REVISIONS.--WRD Nebr. 1967: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,880	1,880	1,620	1,500	1,620	1,480	1,580	4,440	8,780	4,260	4,400	3,440
2	1,870	1,990	1,630	1,360	1,470	1,440	1,540	4,590	8,510	3,590	4,240	3,500
3	1,730	1,940	1,600	1,150	1,420	1,760	1,540	4,510	8,270	3,300	4,060	3,660
4	1,660	1,960	1,000	1,140	1,420	1,680	1,520	4,690	8,340	3,210	3,850	3,830
5	1,700	1,960	900	1,070	1,370	1,580	1,540	5,290	8,250	3,030	3,580	3,960
6	1,730	1,950	780	1,080	1,320	1,570	1,690	5,780	8,100	2,770	3,480	4,250
7	1,750	2,030	710	1,040	1,110	1,510	1,850	5,780	8,080	2,490	3,420	4,270
8	1,770	2,010	660	1,000	830	1,480	1,930	5,740	8,000	2,400	3,430	4,200
9	1,820	1,940	630	995	696	1,460	1,990	5,510	7,930	2,350	3,420	4,170
10	1,890	1,860	600	915	616	1,460	2,010	5,630	7,990	2,360	3,360	4,420
11	1,850	1,850	680	900	622	1,440	2,040	5,970	7,770	2,270	3,310	4,570
12	1,770	1,840	950	885	930	1,420	2,020	6,390	7,790	2,090	3,380	4,820
13	1,710	1,870	1,150	1,120	1,130	1,520	2,040	6,620	7,660	1,970	3,470	4,840
14	1,740	1,860	1,420	1,400	1,230	2,260	2,000	6,840	7,490	1,940	3,560	4,600
15	1,740	1,820	1,530	1,760	1,280	1,850	2,010	7,000	7,520	2,080	3,390	4,110
16	1,750	1,830	1,580	1,970	1,430	1,600	1,990	6,680	7,590	2,180	3,290	4,210
17	1,770	1,830	1,640	2,020	1,490	1,490	2,270	6,280	7,490	2,210	3,170	4,690
18	1,770	1,810	1,600	1,920	1,490	1,470	2,530	5,630	7,770	2,170	3,140	4,800
19	1,740	1,810	1,660	1,610	1,470	1,450	2,930	5,520	7,870	2,300	3,100	4,800
20	1,730	1,810	1,670	1,540	1,470	1,420	3,360	5,920	7,700	2,840	2,960	4,700
21	1,720	1,750	1,670	1,500	1,400	1,360	3,140	6,310	7,490	4,100	2,890	4,310
22	1,740	1,700	1,710	1,470	1,450	1,590	2,910	6,730	7,360	5,030	2,940	3,920
23	1,710	1,680	1,740	1,520	1,450	1,600	2,930	7,280	7,090	5,570	2,990	3,740
24	1,680	1,700	1,730	1,520	1,420	1,560	3,300	7,850	6,860	5,260	3,000	3,720
25	1,650	1,720	1,760	1,540	1,480	1,510	3,470	8,320	6,610	4,640	3,240	3,700
26	1,650	1,690	1,750	1,540	1,560	1,490	3,780	9,220	6,320	4,620	3,240	3,670
27	1,640	1,700	1,790	1,630	1,590	1,510	3,760	9,530	6,060	4,600	3,240	3,620
28	1,700	1,680	1,790	1,530	1,560	1,580	3,770	9,250	5,530	4,530	3,260	4,280
29	1,690	1,640	1,760	1,320	------	1,560	3,800	9,310	4,980	4,490	3,360	4,730
30	1,700	1,610	1,630	1,420	------	1,550	4,020	9,490	4,450	4,540	3,420	5,020
31	1,720	------	1,550	1,580	------	1,600	------	9,150	------	4,460	3,380	------
TOTAL	53,970	54,720	42,890	42,945	36,324	48,250	75,260	207,250	221,650	103,650	104,970	126,550
MEAN	1,741	1,824	1,384	1,385	1,297	1,556	2,509	6,685	7,388	3,344	3,386	4,218
MAX	1,890	2,030	1,790	2,020	1,620	2,260	4,020	9,530	8,780	5,570	4,400	5,020
MIN	1,640	1,610	600	885	616	1,360	1,520	4,440	4,450	1,940	2,890	3,440
AC-FT	107,000	108,500	85,070	85,180	72,050	95,700	149,300	411,100	439,600	205,600	208,200	251,000

CAL YR 1972 TOTAL 602,819 MEAN 1,647 MAX 3,820 MIN 506 AC-FT 1,196,000
WTR YR 1973 TOTAL 1,118,429 MEAN 3,064 MAX 9,530 MIN 600 AC-FT 2,218,000

06690000 Lake McConaughy near Keystone, Nebr.

LOCATION.--Lat 41°12'45", long 101°40'03", in NW1/4SW1/4 sec.3, T.14 N., R.38 W., Keith County, near right bank at outlet tower of Kingsley Dam on North Platte River, 4.5 mi (7.2 km) west of Keystone.

DRAINAGE AREA.--33,300 mi² (86,200 km²), approximately.

PERIOD OF RECORD.--February 1941 to current year.

GAGE.--Electric tape gage read once daily. Gage is referred to mean sea level.

EXTREMES.--Current year: Maximum contents observed, 1,808,000 acre-ft (2.23 km³) June 30 - July 3, elevation, 3,265.5 ft (995.32 m); minimum observed, 1,537,000 acre-ft (1.90 km³) Oct. 11-15, elevation, 3,256.2 ft (992.49 m).
Period of record: Maximum contents observed, 1,920,000 acre-ft (2.37 km³) July 12-16, 1971, elevation, 3,269.1 ft (996.42 m); minimum observed since operation of reservoir began, 32,860 acre-ft (40.5 hm³) Sept. 29, 1941, elevation, 3,153.4 ft (961.16 m).

REMARKS.--Reservoir is formed by earthfill dam; storage began Feb. 9, 1941. Capacity, 1,948,000 acre-ft (2.40 km³) between elevations 3,130.0 ft (954.02 m), sill of outlet gates, and 3,270.0 ft (996.70 m), top of morning-glory spillway gates. Elevation of crest of morning-glory spillway is 3,254.0 ft (991.82 m). Dead storage negligible. Figures given herein represent total contents. Water is used for power development and irrigation in South-Central Nebraska by the Central Nebraska Public Power and Irrigation District.

COOPERATION.--Records of elevations and capacity table furnished by the Central Nebraska Public Power and Irrigation District.

MONTHEND ELEVATION AND CONTENTS AT 0800, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

Date	Elevation (feet)	Contents	Change in contents (acre-feet)
Sept. 30	3,253.5	1,464,000	-
Oct. 31	3,253.6	1,466,000	+2,000
Nov. 30	3,255.5	1,518,000	+52,000
Dec. 31	3,256.4	1,542,000	+24,000
CAL YR 1972	-	-	-193,000
Jan. 31	3,257.3	1,567,000	+25,000
Feb. 28	3,258.5	1,601,000	+34,000
Mar. 31	3,259.9	1,641,000	+40,000
Apr. 30	3,263.3	1,741,000	+100,000
May 31	3,264.6	1,780,000	+39,000
June 30	3,265.5	1,808,000	+28,000
July 31	3,264.4	1,774,000	-34,000
Aug. 31	3,262.2	1,708,000	-66,000
Sept. 30	3,261.6	1,609,000	-18,000
WTR YR 1973	-	-	+226,000

06690500 North Platte River near Keystone, Nebr.

LOCATION.--Lat 41°12'30", long 101°37'50", in SW1/4 sec.1, T.14 N., R.38 W., Keith County, on right bank 0.2 mi (0.3 km) downstream from diversion dam of Sutherland Reservoir supply canal and 2.5 mi (4.0 km) southwest of Keystone.

DRAINAGE AREA.--33,300 mi² (86,200 km²), approximately.

PERIOD OF RECORD.--June to August 1917, July to September 1939, May to September 1940, January to April 1941, March 1942 to current year. Monthly discharge only for some periods, published in WSP 1310.

GAGE.--Water-stage recorder. Datum of gage is 3,105.59 ft (946.584 m) above mean sea l evel,(Nebraska Public Power District bench mark). See WSP 1918 for history of changes prior to May 1, 1964.

EXTREMES.--Current year: Maximum discharge, 7,620 ft³/s (216 m³/s) June 3, gage height, 7.19 ft (2.192 m); minimum daily, 0.50 ft³/s (0.014 m³/s) Nov. 12.
Period of record: Maximum discharge, 20,300 ft³/s (575 m³/s) June 30, 1917, from graph based on daily gage readings; an observation of no flow was made Mar. 21, 1945.

REMARKS.--Records good except those below 10 ft³/s (0.28 m³/s), which are poor. Natural flow of stream affected by transmountain diversions, storage reservoirs, power developments, ground-water withdrawals and diversions for irrigation, and return flow from irrigated areas. Flow completely regulated by Lake McConaughy since Feb. 9, 1941. (See preceding page.) Supply canal for Nebraska Public Power District diverts 0.2 mi (0.3 km) upstream from station. Records of chemical analyses for the water year 1973 are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1390: 1942, 1946-47. WSP 1630: 1958. WRD Nebr. 1967: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	56	1.5	7.0	3.4	3.0	6.0	1.9	2,960	6,580	2,540	1,520	2,760
2	70	2.5	6.5	3.4	2.9	3.5	3.0	3,530	6,890	2,380	1,530	2,800
3	56	3.0	6.5	3.4	2.7	5.0	2.5	4,130	7,000	2,270	1,530	2,800
4	6.5	3.0	6.4	3.3	2.6	3.5	13	4,380	6,960	2,270	1,550	2,840
5	24	2.8	6.3	3.3	2.5	2.5	82	4,360	6,860	2,250	1,580	2,800
6	11	2.5	6.1	3.3	2.4	2.0	70	4,530	6,860	2,250	1,580	2,780
7	7.0	2.2	6.0	3.3	2.3	3.0	61	4,770	6,820	2,250	1,760	2,780
8	6.5	2.0	5.9	3.3	2.2	2.5	58	4,860	6,820	2,230	2,360	2,780
9	6.5	1.5	5.5	3.2	2.1	3.5	60	4,710	6,860	2,160	2,900	2,780
10	5.0	1.0	5.0	3.2	2.0	3.0	58	4,470	6,930	2,050	3,030	2,760
11	4.5	.80	4.0	3.2	2.0	2.5	63	4,280	6,890	2,050	2,980	2,920
12	3.0	.50	3.8	3.2	2.4	2.7	58	4,210	6,650	2,090	3,030	2,840
13	5.0	.60	3.5	3.2	2.7	2.0	60	4,210	6,470	2,210	3,050	2,820
14	7.6	1.0	3.0	3.2	2.9	36	60	4,280	6,300	2,210	2,980	2,800
15	7.6	1.5	2.5	3.2	2.8	9.4	60	4,360	6,120	2,210	3,340	2,820
16	6.5	3.5	2.4	3.1	2.5	8.8	58	4,560	5,770	2,230	3,660	2,780
17	5.5	4.5	2.3	3.0	2.2	4.5	58	4,770	5,670	2,270	3,410	2,760
18	4.0	3.5	2.5	2.9	2.0	4.0	58	4,830	5,700	2,230	3,030	2,720
19	7.0	3.5	3.0	2.7	2.2	3.0	76	4,770	5,740	2,300	3,030	2,720
20	11	5.0	3.4	5.0	2.5	2.0	100	4,740	5,740	2,070	3,010	2,720
21	14	4.5	3.3	7.5	2.5	1.9	180	4,710	5,740	1,660	3,030	2,760
22	13	4.0	3.1	28	3.0	4.0	273	4,680	5,740	1,660	3,050	2,740
23	17	4.5	3.1	25	6.5	4.5	383	4,650	5,740	1,630	3,050	2,720
24	16	3.5	3.1	14	8.2	3.5	296	4,830	5,700	1,470	3,030	2,720
25	12	3.5	3.1	9.5	14	3.0	330	5,130	4,380	1,490	2,980	2,700
26	8.2	3.8	3.2	9.5	15	2.5	615	5,530	1,710	1,490	2,900	2,740
27	4.0	4.5	3.2	15	12	4.0	1,150	5,700	785	1,490	2,900	2,740
28	2.0	2.5	3.2	15	8.2	3.5	1,680	5,840	767	1,500	2,900	2,800
29	1.8	2.0	3.3	9.5	------	2.0	1,870	6,020	1,120	1,500	2,940	2,760
30	1.6	4.0	3.3	8.8	------	1.9	2,140	6,160	2,210	1,500	2,880	2,760
31	1.5	------	3.4	6.0	------	1.8	------	6,260	------	1,520	2,880	------
TOTAL	401.3	83.20	126.9	213.6	118.3	142.0	9,977.4	147,220	163,522	61,430	83,400	83,220
MEAN	12.9	2.77	4.09	6.89	4.23	4.58	333	4,749	5,451	1,982	2,690	2,774
MAX	70	5.0	7.0	28	15	36	2,140	6,260	7,000	2,540	3,660	2,920
MIN	1.5	.50	2.3	2.7	2.0	1.8	1.9	2,960	767	1,470	1,520	2,700
AC-FT	796	165	252	424	235	282	19,790	292,000	324,300	121,800	165,400	165,100

CAL YR 1972 TOTAL 208,105.40 MEAN 569 MAX 2,920 MIN .50 AC-FT 412,800
WTR YR 1973 TOTAL 549,854.70 MEAN 1,506 MAX 7,000 MIN .50 AC-FT 1,091,000

06691000 North Platte River near Sutherland, Nebr.

LOCATION.--Lat 41°12'37", long 101°06'53", in sec.4, T.14 N., R.33 W., Lincoln County, on left bank 80 ft (24 m) downstream from bridge on county road, 2.5 mi (4.0 km) upstream from Birdwood Creek, and 3.5 mi (5.6 km) north of Sutherland.

DRAINAGE AREA.--33,800 mi² (87,500 km²), approximately.

PERIOD OF RECORD.--June to October 1917, July 1931 to August 1933 (irrigation seasons only), May to September 1935, May 1936 to current year. Monthly discharge only for some periods, published in WSP 1310.

GAGE.--Water-stage recorder. Altitude of gage is 2,920 ft (890 m), from topographic map. Prior to Apr. 29, 1936, nonrecording gage near present site at different datums. Apr. 29, 1936, to Oct. 6, 1971, water-stage recorder at site 80 ft (24 m) upstream at present datum.

EXTREMES.--Current year: Maximum discharge, 6,870 ft³/s (195 m³/s) June 12, gage height, 5.32 ft (1.622 m);maximum gage height, 5.41 ft (1.649 m) June 4; minimum daily, 100 ft³/s (2.83 m³/s) Dec. 5,6,Jan. 8.
Period of record: Maximum discharge, 20,300 ft³/s (575 m³/s) June 29, 1917, from discharge graph based on daily gage readings, from rating curve extended above 16,000 ft³/s (453 m³/s); no flow July 24-28, 30, 31, 1931, Aug. 7, 1934, July 20-28, 1940.

REMARKS.--Records good except those for winter period, which are poor. Natural flow of stream affected by transmountain diversions, storage reservoirs, power developments, ground-water withdrawals and diversions for irrigation, and return flow from irrigated areas.

REVISIONS (WATER YEARS).--WSP 976: 1942. WRD Nebr. 1967: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	215	187	159	130	170	167	207	2,100	5,830	1,380	1,180	2,500
2	207	211	167	130	151	167	187	2,630	6,100	1,800	1,160	2,550
3	203	211	171	130	147	179	167	3,280	6,420	1,890	1,100	2,590
4	187	211	110	120	151	183	128	3,940	6,660	1,840	1,040	2,550
5	171	203	100	120	155	179	121	4,380	6,570	1,890	1,040	2,510
6	159	195	100	120	155	171	111	4,490	6,470	1,910	1,030	2,530
7	159	191	110	120	135	167	118	4,770	6,420	1,880	1,030	2,480
8	155	179	120	100	135	155	143	4,710	6,570	1,880	1,220	2,470
9	155	167	125	110	135	155	143	4,710	6,520	1,840	1,630	2,580
10	167	159	125	120	130	159	135	4,570	6,230	1,780	2,060	2,560
11	159	155	125	120	140	159	147	4,360	6,420	1,660	2,410	2,760
12	159	159	130	140	150	155	143	4,050	6,660	1,610	2,500	3,000
13	159	211	135	145	140	171	135	3,960	6,330	1,650	2,730	2,760
14	159	203	135	160	135	229	135	3,890	5,970	1,820	2,760	2,660
15	155	191	135	180	130	215	143	3,920	5,830	1,880	2,660	2,640
16	155	175	140	190	130	191	135	3,960	5,670	1,840	2,710	2,760
17	155	179	140	190	143	175	125	4,110	5,280	1,800	3,110	2,750
18	151	179	145	185	139	163	125	4,260	5,170	1,850	3,130	2,680
19	147	175	150	180	143	159	163	4,410	5,280	2,000	2,750	2,640
20	147	171	160	175	143	151	167	4,360	5,320	2,380	2,630	2,660
21	147	167	160	167	147	147	159	4,380	5,170	1,980	2,550	2,660
22	155	163	170	159	151	163	175	4,430	5,210	1,510	2,550	2,680
23	151	163	170	163	159	159	260	4,230	5,250	1,540	2,580	2,640
24	147	163	175	159	163	171	371	4,310	5,320	1,410	2,510	2,700
25	151	163	175	151	163	171	360	4,310	5,320	1,300	2,550	2,730
26	151	167	180	151	163	159	415	5,000	4,680	1,220	2,580	2,730
27	147	179	187	155	163	151	614	5,590	1,990	1,150	2,510	2,830
28	163	167	163	120	167	179	1,110	5,590	726	1,150	2,440	3,280
29	167	155	163	140	------	179	1,550	5,630	433	1,200	2,480	3,340
30	167	155	140	180	------	167	1,880	5,590	640	1,180	2,550	3,040
31	163	------	140	180	------	215	------	5,830	------	1,200	2,500	------
TOTAL	5,033	5,354	4,505	4,590	4,133	5,311	9,772	135,750	156,459	51,420	67,680	81,260
MEAN	162	178	145	148	148	171	326	4,379	5,215	1,659	2,183	2,709
MAX	215	211	187	190	170	229	1,880	5,830	6,660	2,380	3,130	3,340
MIN	147	155	100	100	130	147	111	2,100	433	1,150	1,030	2,470
AC-FT	9,980	10,620	8,940	9,100	8,200	10,530	19,380	269,300	310,300	102,000	134,200	161,200

CAL YR 1972 TOTAL 208,069 MEAN 568 MAX 2,860 MIN 57 AC-FT 412,700
WTR YR 1973 TOTAL 531,267 MEAN 1,456 MAX 6,660 MIN 100 AC-FT 1,054,000

06692000 Birdwood Creek near Hershey, Nebr.

LOCATION.--Lat 41°13'20", long 101°04'12", in NE1/4NW1/4 sec.2, T.14 N., R.33 W., Lincoln County, on left bank 60 ft (18 m) downstream from bridge on county road, 1 mi (2 km) upstream from mouth, and 5 mi (8 km) northwest of Hershey.

DRAINAGE AREA.--1,000 mi² (2,590 km²), approximately, of which about 80 mi² (210 km²) contributes directly to surface runoff.

PERIOD OF RECORD.--May 1931 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 2,920 ft (890 m), from topographic map. Jan. 1, 1931, to Dec. 16, 1934, nonrecording gage and Dec. 17, 1934, to Nov. 4, 1953, water-stage recorder, at site 50 ft (15 m) upstream at present datum.

AVERAGE DISCHARGE.--42 years, 153 ft³/s (4.333 m³/s), 110,800 acre-ft/yr (0.137 km³/yr).

EXTREMES.--Current year: Maximum discharge, 273 ft³/s (7.73 m³/s) May 26, gage height, 1.54 ft (0.469 m); maximum gage height, 4.52 ft (1.378 m) Jan. 6, backwater from ice: minimum daily discharge, 107 ft³/s (3.03 m³/s) Aug. 18,20.
Period of record: Maximum discharge, 1,770 ft³/s (50.1 m³/s) Apr. 1, 1949, gage height, 4.35 ft (1.326 m), from rating curve extended above 680 ft³/s (19.3 m³/s); maximum gage height, 5.12 ft (1.561 m) Dec. 15, 1940, backwater from ice; minimum daily discharge, 61 ft³/s (1.73 m³/s) Jan. 19, 1935, Apr. 7, 1938.

REMARKS.--Records good. Natural flow of stream affected by ground-water withdrawals and diversions for irrigation and return flow from irrigated areas.

REVISIONS (WATER YEARS).--WSP 1390: 1948(M), 1949, 1951-52(M). WRD Nebr. 1967: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	151	164	176	175	169	166	171	169	154	119	126	127
2	154	174	176	175	171	167	164	158	158	117	128	125
3	155	169	166	150	178	166	163	163	158	118	121	123
4	155	174	165	150	185	160	160	166	152	118	119	118
5	154	178	160	140	185	161	163	163	146	120	119	116
6	152	174	130	130	188	169	167	166	145	117	120	114
7	152	178	130	135	172	167	163	176	145	116	117	125
8	157	169	135	135	170	163	157	166	145	116	117	138
9	158	176	135	140	170	164	155	160	144	117	116	140
10	161	172	135	150	172	164	154	160	141	117	113	141
11	157	178	135	160	178	164	161	158	140	116	112	151
12	158	181	135	170	178	164	158	154	158	113	116	158
13	164	180	135	170	174	171	157	152	148	112	122	147
14	157	163	135	170	150	178	160	154	142	111	115	151
15	161	178	135	176	160	157	166	155	142	113	111	147
16	160	183	135	174	167	160	155	155	138	114	109	141
17	152	183	140	178	169	161	163	157	134	114	108	139
18	150	183	145	183	167	166	164	160	133	114	107	140
19	148	178	150	181	166	166	198	155	130	123	108	142
20	150	180	155	172	160	164	185	155	130	181	107	141
21	150	180	160	167	166	167	167	157	131	147	109	142
22	157	181	171	171	167	178	169	151	128	142	108	139
23	164	181	183	171	167	172	169	151	125	147	108	141
24	164	183	185	172	169	174	172	152	123	142	109	150
25	163	176	185	174	160	166	169	151	121	140	110	147
26	167	174	180	176	163	164	178	213	121	139	111	151
27	164	176	180	180	166	171	172	205	119	136	109	150
28	158	174	180	157	169	172	171	180	119	132	110	220
29	157	176	181	172	------	164	169	161	120	137	134	176
30	157	176	180	169	------	169	180	155	121	141	132	172
31	154	------	175	174	------	183	------	155	------	130	129	------
TOTAL	4,861	5,292	4,868	5,097	4,756	5,178	5,000	5,033	4,111	3,919	3,580	4,312
MEAN	157	176	157	164	170	167	167	162	137	126	115	144
MAX	167	183	185	183	188	183	198	213	158	181	134	220
MIN	148	163	130	130	150	157	154	151	119	111	107	114
AC-FT	9,640	10,500	9,660	10,110	9,430	10,270	9,920	9,980	8,150	7,770	7,100	8,550

CAL YR 1972 TOTAL 55,100 MEAN 151 MAX 333 MIN 100 AC-FT 109,300
WTR YR 1973 TOTAL 56,007 MEAN 153 MAX 220 MIN 107 AC-FT 111,100

06692500 Lincoln County drain No. 1 near North Platte, Nebr.

LOCATION.--Lat 41°09'40", long 100°47'25", in NE1/4NE1/4 sec.30, T.14 N., R.30 W., Lincoln County, on left bank 25 ft (8 m) upstream from highway bridge, 0.8 mi (1.3 km) upstream from mouth, and 1.5 mi (2.4 km) northwest of city of North Platte.

PERIOD OF RECORD.--March 1931 to September 1932 (published as Lincoln County drain at North Platte), April 1955 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 2,805 ft (855.0 m), from topographic map. Prior to Apr. 29, 1955, nonrecording gage at datum 1.0 ft (0.30 m) higher.

AVERAGE DISCHARGE.--19 years, 63.0 ft³/s (1.784 m³/s), 45,640 acre-ft/yr (56.3 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 213 ft³/s (6.03 m³/s) July 20, gage height, 2.31 ft (0.704 m); minimum daily, 24 ft³/s (0.68 m³/s) Feb. 2.
Period of record: Maximum discharge, 588 ft³/s (16.7 m³/s) June 22, 1965, gage height, 4.05 ft (1.234 m); minimum daily, 20 ft³/s (0.57 m³/s) Dec. 30, 31, 1968, Feb. 6, 7, 9, Mar. 18, 19, 1971.

REMARKS.--Records good. Discharge is chiefly return flow from irrigated area.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	105	51	38	32	30	29	30	55	108	78	122	116
2	84	50	37	32	24	29	30	54	111	78	121	121
3	78	49	36	32	29	29	30	64	117	74	117	120
4	73	48	36	28	30	29	30	69	116	78	106	137
5	71	48	35	30	30	28	30	75	112	86	109	140
6	69	47	30	30	30	29	31	72	113	91	112	126
7	69	45	30	31	29	28	52	74	115	92	106	130
8	67	43	30	31	33	30	60	68	110	108	116	141
9	65	42	31	28	30	28	55	71	111	115	122	145
10	63	42	28	28	31	29	54	71	109	110	134	145
11	62	41	28	25	30	28	57	69	110	108	162	140
12	60	41	30	31	30	29	52	74	111	100	148	140
13	60	41	31	31	31	28	49	75	123	109	173	140
14	59	40	31	31	30	28	46	69	115	115	166	132
15	57	41	32	32	31	27	45	69	113	116	152	128
16	56	41	32	33	31	27	51	69	108	111	146	128
17	55	41	33	32	31	27	47	81	113	97	140	126
18	54	40	33	32	30	27	41	94	111	87	140	124
19	53	40	33	32	30	27	60	94	93	120	152	117
20	53	39	34	32	30	27	71	95	95	171	143	114
21	53	39	34	32	30	27	69	88	100	146	130	113
22	53	40	34	31	29	27	70	78	102	140	109	111
23	51	40	35	31	29	27	69	92	104	140	97	110
24	52	40	34	31	29	29	62	109	120	135	95	110
25	51	40	34	31	29	29	62	116	130	132	98	109
26	52	40	34	32	29	29	60	132	125	134	96	108
27	51	39	34	30	29	29	58	134	111	135	90	106
28	51	38	33	30	29	29	56	114	88	140	98	110
29	50	38	33	31	------	29	52	109	86	139	102	104
30	50	38	32	31	------	29	59	103	82	134	112	100
31	49	------	30	30	------	31	------	110	------	122	110	------
TOTAL	1,876	1,262	1,015	953	833	878	1,538	2,647	3,262	3,541	3,824	3,691
MEAN	60.5	42.1	32.7	30.7	29.8	28.3	51.3	85.4	109	114	123	123
MAX	105	51	38	33	33	31	71	134	130	171	173	145
MIN	49	38	28	25	24	27	30	54	82	74	90	100
AC-FT	3,720	2,500	2,010	1,890	1,650	1,740	3,050	5,250	6,470	7,020	7,580	7,320

CAL YR 1972 TOTAL 25,454 MEAN 69.5 MAX 198 MIN 25 AC-FT 50,490
WTR YR 1973 TOTAL 25,320 MEAN 69.4 MAX 173 MIN 24 AC-FT 50,220

06693000 North Platte River at North Platte, Nebr.

LOCATION.--Lat 41°09'13", long 100°45'16", in sec.28, T.14 N., R.30 W., Lincoln County, on right bank 150 ft (46 m) downstream from bridge on U.S. Highway 83, 0.5 mi (0.8 km) north of city of North Platte, and 4.5 mi (7.2 km) upstream from confluence with South Platte River.

DRAINAGE AREA.--34,900 mi² (90,400 km²), approximately.

PERIOD OF RECORD.--February 1895 to current year. Monthly discharge only for some periods, published in WSP 1310.

GAGE.--Water-stage recorder. Datum of gage is 2,792.14 ft (851.044 m) above mean sea level (Nebraska Department of Roads bench mark). See WSP 2118 for history of changes prior to June 3, 1968.

EXTREMES.--Current year: Maximum discharge, 6,930 ft³/s (196 m³/s) June 13, gage height, 5.99 ft (1.826 m); minimum daily, 280 ft³/s (7.93 m³/s) Jan. 1,9,10.
Period of record: Maximum discharge observed, 29,600 ft³/s (838 m³/s) June 11, 1909, discharge measurement; minimum daily, 20 ft³/s (0.57 m³/s) Sept. 20, 1904.

REMARKS.--Records good except those for winter period, which are poor. Natural flow of stream affected by transmountain diversions, storage reservoirs, power developments, ground-water withdrawals and diversions for irrigation, and return flow from irrigated areas.

REVISIONS (WATER YEARS).--WRD Nebr. 1967: Drainage area. WSP 2118: 1915(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	438	459	417	280	450	431	522	2,510	6,040	1,160	1,520	2,780
2	404	487	438	300	450	417	404	2,650	6,170	1,830	1,480	2,820
3	398	480	429	310	550	417	417	2,940	6,410	2,170	1,440	2,830
4	398	487	300	330	500	445	392	3,430	6,760	2,120	1,360	2,830
5	404	487	310	340	420	431	345	3,980	6,860	2,050	1,360	2,800
6	404	473	320	340	420	438	362	4,470	6,830	2,000	1,340	2,750
7	410	445	330	330	420	431	398	4,690	6,760	1,900	1,290	2,730
8	392	445	310	310	350	424	424	4,840	6,800	1,980	1,280	2,800
9	386	438	320	280	350	431	424	4,750	6,760	1,980	1,600	2,830
10	404	424	320	280	350	438	410	4,690	6,730	1,980	2,190	2,890
11	398	417	320	350	380	445	404	4,520	6,630	1,810	2,610	2,900
12	398	417	320	400	400	431	386	4,330	6,700	1,710	2,820	3,180
13	410	487	320	430	410	445	374	4,130	6,930	1,710	3,010	3,370
14	410	466	330	430	350	522	374	4,000	6,600	1,880	3,160	3,240
15	404	473	320	480	350	494	386	3,930	6,410	2,070	3,200	3,100
16	417	466	320	500	360	452	386	3,930	6,200	2,120	3,080	3,080
17	404	452	320	500	360	417	368	4,030	5,980	2,090	3,050	3,200
18	392	445	360	450	380	398	362	4,200	5,580	2,100	3,290	3,140
19	380	445	430	450	380	392	417	4,470	5,330	2,210	3,500	3,050
20	380	445	440	450	398	398	466	4,520	5,300	2,820	3,240	3,010
21	392	431	440	440	368	392	417	4,550	5,300	2,900	2,970	3,030
22	392	424	440	400	368	417	417	4,550	5,300	2,320	2,830	3,030
23	398	431	450	370	374	424	438	4,550	5,300	2,170	2,770	3,030
24	386	431	460	370	380	431	508	4,520	5,300	2,090	2,720	3,080
25	404	431	460	400	386	438	613	4,550	5,270	1,800	2,750	3,200
26	398	431	450	430	398	417	613	5,010	5,270	1,740	2,730	3,200
27	392	424	440	420	410	417	754	6,010	4,880	1,660	2,700	3,220
28	398	417	440	330	424	452	1,110	6,260	2,240	1,620	2,660	3,730
29	410	410	400	380	------	466	1,620	5,920	1,070	1,560	2,700	3,950
30	417	404	340	400	------	438	2,240	5,820	727	1,570	2,750	3,840
31	418	------	330	450	------	501	------	5,950	------	1,550	2,770	------
TOTAL	12,436	13,372	11,624	11,930	11,136	13,490	16,751	138,700	168,437	60,670	76,170	92,640
MEAN	401	446	375	385	398	435	558	4,474	5,615	1,957	2,457	3,088
MAX	438	487	460	500	550	522	2,240	6,260	6,930	2,900	3,500	3,950
MIN	380	404	300	280	350	392	345	2,510	727	1,160	1,280	2,730
AC-FT	24,670	26,520	23,060	23,660	22,090	26,760	33,230	275,100	334,100	120,300	151,100	183,800

CAL YR 1972 TOTAL 295,596 MEAN 808 MAX 3,220 MIN 250 AC-FT 586,300
WTR YR 1973 TOTAL 627,356 MEAN 1,719 MAX 6,930 MIN 280 AC-FT 1,244,000

06762500 Lodgepole Creek at Bushnell, Nebr.

LOCATION.--Lat 41°13'43", long 103°48'03", in sec.33, T.15 N., R.57 W., Kimball County, on right bank 1.5 mi (2.4 km) east of Bushnell and 1.5 mi (2.4 km) upstream from Oliver Reservoir.

DRAINAGE AREA.--1,361 mi² (3,525 km²).

PERIOD OF RECORD.--October 1931 to current year. Records for March to September 1931 at site 1.5 mi (2.4 km) upstream not equivalent owing to diversions. Monthly discharge only for some periods, published in WSP 1310.

GAGE.--Water-stage recorder. Datum of gage is 4,812.3 ft (1,466.79 m) above mean sea level. Prior to Mar. 26, 1938, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--42 years, 12.0 ft³/s (0.340 m³/s), 8,690 acre-ft/yr (10.7 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 29 ft³/s (0.82 m³/s) Mar. 23, gage height, 2.10 ft (0.640 m); maximum gage height, 2.81 ft³/s (0.080 m³/s) Dec. 30, backwater from ice; minimum daily discharge, 2.0 ft³/s (0.057 m³/s) Mar. 16.
Period of record: Maximum discharge, 16,500 ft³/s (467 m³/s) Sept. 15, 1950, gage height, 9.98 ft (3.042 m), from rating curve extended above 2,700 ft³/s (76.5 m³/s) on basis of slope-area measurement of peak flow; minimum daily, 1.2 ft³/s (0.034 m³/s) Dec. 14, 1935.

REMARKS.--Records fair. Natural flow of stream affected by ground-water withdrawals and diversions for irrigation and return flow from irrigated areas. Diversions for irrigation of about 12,600 acres (51.0 km²) above station.

REVISIONS (WATER YEARS).--WSP 1390: 1933, 1935, 1937-38, 1941, 1948-49. WSP 1730: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.2	8.3	7.4	6.0	7.7	11	14	14	8.7	3.6	7.1	4.0
2	6.3	8.6	7.3	6.4	7.7	11	14	13	8.9	3.6	6.8	4.2
3	6.2	8.8	7.0	6.5	8.0	11	13	13	8.5	3.5	6.6	4.3
4	6.2	8.4	6.5	6.4	8.5	11	13	12	8.3	3.5	6.3	4.3
5	6.2	9.4	5.6	6.2	10	11	13	12	7.9	3.3	6.2	4.5
6	6.2	12	6.6	6.4	9.6	11	13	13	7.4	3.2	6.1	4.5
7	6.1	10	6.2	6.5	8.1	11	13	12	6.5	3.1	5.9	4.5
8	6.2	9.6	6.0	6.7	7.9	11	12	11	6.5	3.2	5.8	5.0
9	6.2	9.0	5.8	6.7	8.0	11	13	11	6.4	3.3	5.7	6.2
10	6.2	8.3	5.6	7.0	8.2	11	15	11	6.4	3.3	5.5	5.8
11	6.1	8.1	5.5	7.0	8.3	11	16	11	6.4	3.1	5.4	6.3
12	6.1	7.7	5.4	7.5	8.4	11	15	10	6.3	3.0	5.3	6.6
13	6.3	6.5	5.3	7.5	8.3	12	15	10	6.2	3.1	5.5	6.7
14	6.3	6.4	5.2	7.5	8.1	5.0	14	10	6.2	3.4	5.3	6.4
15	6.4	6.4	5.0	8.0	8.1	4.0	14	10	6.2	3.5	5.1	6.4
16	6.6	6.8	5.0	8.0	8.3	2.0	14	10	6.1	3.7	4.9	6.4
17	6.8	6.9	5.3	8.7	8.4	3.8	14	9.9	6.0	3.8	4.7	6.5
18	6.9	7.0	5.9	8.6	8.8	3.8	14	9.7	5.7	3.8	4.6	6.5
19	7.1	7.2	6.0	8.6	8.8	6.0	14	9.7	5.5	6.9	4.4	6.4
20	7.2	6.9	6.1	8.4	8.6	7.4	15	9.4	5.4	9.6	4.3	6.4
21	7.3	7.4	6.3	8.2	8.8	8.3	15	9.4	5.1	7.8	4.2	6.3
22	7.5	7.1	7.3	8.0	9.0	11	14	9.5	4.5	8.0	4.2	6.2
23	7.7	7.0	7.3	8.0	9.4	18	13	9.4	4.4	9.8	4.1	6.2
24	7.8	7.0	6.8	7.8	9.8	20	13	9.2	4.3	9.4	3.9	6.2
25	7.9	6.9	6.6	7.7	11	14	14	9.2	4.1	7.9	3.8	6.1
26	8.1	7.1	6.7	7.7	11	18	15	9.3	3.8	7.6	3.7	6.2
27	8.2	6.9	6.7	7.5	11	17	14	9.6	3.7	7.6	3.7	6.3
28	8.4	6.7	6.9	7.5	11	15	13	9.5	3.7	7.4	3.7	7.7
29	8.4	6.7	7.5	7.7	------	15	13	9.5	3.8	7.2	3.7	8.4
30	7.6	7.1	6.5	8.0	------	15	14	9.3	3.8	7.1	3.8	7.5
31	8.2	------	6.5	7.9	------	14	------	9.0	------	7.3	4.0	------
TOTAL	214.9	232.2	193.8	230.6	248.8	341.3	416	324.6	176.7	164.6	154.3	179.0
MEAN	6.93	7.74	6.25	7.44	8.89	11.0	13.9	10.5	5.89	5.31	4.98	5.97
MAX	8.4	12	7.5	8.7	11	20	16	14	8.9	9.8	7.1	8.4
MIN	6.1	6.4	5.0	6.0	7.7	2.0	12	9.0	3.7	3.0	3.7	4.0
AC-FT	426	461	384	457	493	677	825	644	350	326	306	355

CAL YR 1972 TOTAL 2,464.1 MEAN 6.73 MAX 68 MIN 2.9 AC-FT 4,890
WTR YR 1973 TOTAL 2,876.8 MEAN 7.88 MAX 20 MIN 2.0 AC-FT 5,710

06763500 Lodgepole Creek at Ralton, Nebr.

LOCATION.--Lat 41°02'00", long 102°24'00", in NE1/4NW1/4 sec.12, T.12 N., R.45 W., Deuel County, on right bank 20 ft (6 m) downstream from county road bridge at Ralton, 2.1 mi (3.4 km) north of Colorado-Nebraska State line, and 5.5 mi (8.8 km) southeast of Chappell.

DRAINAGE AREA.--3,307 mi² (8,565 km²).

PERIOD OF RECORD.--March to September 1931, June 1951 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 3,590 ft (1,094 m), from topographic map. March to September 1931, nonrecording gage at site 0.2 mi (0.3 km) downstream at different datum.

AVERAGE DISCHARGE.--22 years (1951-73), 10.5 ft³/s (0.297 m³/s), 7,610 acre-ft/yr (9.38 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 39 ft³/s (1.10 m³/s) Apr. 8, gage height, 2.38 ft (0.725 m); maximum gage height, 3.58 ft (1.091 m) Feb. 2, backwater from ice; no flow July 25,Aug. 30,Sept. 7-10.
Period of record: Maximum discharge, 4,560 ft³/s (129 m³/s) Aug. 15, 1968, gage height, 6.49 ft (1.978 m), from rating curve extended above 1,200 ft³/s (34.0 m³/s) on basis of slope-area measurement of peak flow; no flow at times in 1931, 1955, 1957, 1960, 1963-65, 1968, 1973.

REMARKS.--Records fair except those for winter period, which are poor. Natural flow of stream affected by ground-water withdrawals and diversions for irrigation and return flow from irrigated areas. Diversion for irrigation of about 24,300 acres (98.3 km²) above station.

REVISIONS.--WSP 1730: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.77	1.6	1.6	.40	1.2	3.6	9.9	14	.83	.95	2.4	.47
2	1.6	1.5	1.4	.30	1.5	4.4	10	15	4.2	1.3	4.2	1.2
3	1.1	1.0	1.0	.30	1.5	6.1	9.9	15	6.8	1.1	2.3	.83
4	1.1	1.2	1.0	.20	1.6	6.1	9.7	15	6.8	.59	1.6	.59
5	1.1	1.5	.90	.30	1.7	6.4	9.4	15	6.1	.83	1.1	.23
6	1.2	1.8	.80	.20	1.7	6.4	9.1	17	5.9	.83	.53	.09
7	1.2	1.8	.60	.10	1.0	13	9.9	22	5.5	.23	.47	0
8	1.2	1.7	.40	.10	1.0	8.9	18	17	5.3	.28	1.2	0
9	1.1	1.6	.40	.10	1.5	8.6	8.9	17	4.8	.28	1.5	0
10	1.2	1.7	.30	.10	1.7	8.1	10	18	4.6	.23	2.3	0
11	1.2	1.7	.20	.10	2.0	8.1	11	16	4.4	.20	1.4	.37
12	1.2	1.9	.20	.30	2.2	8.1	11	15	5.9	.20	1.0	1.2
13	.89	1.1	.10	.80	2.0	9.1	11	15	5.7	.20	.41	.41
14	1.2	1.2	.10	1.5	1.5	9.7	11	15	5.3	.41	.17	.20
15	1.3	1.2	.10	2.0	2.0	9.4	11	14	4.6	.47	.02	.15
16	1.2	1.2	.20	2.3	2.0	9.9	11	13	4.4	.32	.95	.17
17	1.2	1.1	.20	2.5	1.5	9.7	10	13	3.9	.32	1.3	.28
18	1.3	1.0	.20	3.0	1.5	8.6	9.9	12	3.7	.41	1.7	.32
19	1.3	1.0	.30	3.2	1.4	8.1	10	12	3.6	.71	1.0	.32
20	1.5	1.0	.40	3.1	1.3	7.8	11	11	3.7	1.3	.11	.28
21	1.4	1.0	.60	3.5	1.5	9.7	11	11	3.9	.17	.89	.37
22	1.4	1.2	.60	3.0	1.6	9.7	12	11	2.9	.06	.83	.32
23	1.5	1.4	.70	2.5	2.0	8.4	12	11	.77	.06	1.0	.41
24	1.5	1.4	.80	2.0	2.5	8.4	11	10	.89	.01	2.1	.32
25	1.4	1.5	.90	1.8	3.5	8.1	12	7.3	1.1	0	1.3	.32
26	1.1	1.5	.90	1.6	3.4	7.6	13	2.8	1.4	.17	1.1	.65
27	1.5	1.5	1.1	1.0	3.4	8.1	13	3.0	1.3	.47	1.3	.89
28	1.9	1.4	1.0	.10	3.6	8.9	14	1.0	1.2	.83	.28	2.8
29	1.8	1.4	1.0	.30	------	8.6	14	.47	1.0	.41	.13	1.6
30	2.0	1.4	.80	.50	------	9.4	14	.47	.95	.53	0	1.0
31	1.8	------	.60	.70	------	10	------	.53	------	1.2	.17	------
TOTAL	41.16	41.5	19.40	37.90	53.3	257.0	337.7	359.57	111.44	15.07	34.76	15.79
MEAN	1.33	1.38	.63	1.22	1.90	8.29	11.3	11.6	3.71	.49	1.12	.53
MAX	2.0	1.9	1.6	3.5	3.6	13	18	22	6.8	1.3	4.2	2.8
MIN	.77	1.0	.10	.10	1.0	3.6	8.9	.47	.77	0	0	0
AC-FT	82	82	38	75	106	510	670	713	221	30	69	31

CAL YR 1972 TOTAL 1,307.95 MEAN 3.57 MAX 12 MIN .08 AC-FT 2,590
WTR YR 1973 TOTAL 1,324.59 MEAN 3.63 MAX 22 MIN 0 AC-FT 2,630

06764000 South Platte River at Julesburg, Colo.

LOCATION.--Lat 40°58'46", long102°15'15", in NW1/4NE1/4 and SE1/4NE 1/4 (two channels) sec.33, T.12 N., R.44 W., Sedgwick County, on left bank of channel no. 4 (left channel) 215 ft (66 m) downstream from bridge, and on right bank of channel no. 2, 800 ft (244 m) downstream from bridge on U.S. Highway 385, 0.9 mi (1.4 km) southeast of Julesburg, 3.0 mi (4.8 km) upstream from Colorado-Nebraska State line, and 8 mi (13 km) downstream from Lodgepole Creek.

DRAINAGE AREA.--23,138 mi² (59,927 km²).

PERIOD OF RECORD.--April 1902 to current year. Monthly discharge only for some periods, published in WSP 1310. Published as "near Julesburg" 1903-8, 1915-16, and as "at Ovid" 1922-24.

GAGE.--Two water-stage recorders. Datum of gages is 3,446.76 ft (1,050.572 m) above mean sea level. See WSP 1710 or 1730 for history of changes prior to Oct. 1, 1956. Since Oct. 1, 1956, water-stage recorders on channels nos. 2 and 4. Channel no. 2: Oct. 1, 1956, to Sept. 22, 1965, at site 300 ft (90 m) downstream at present datum. Channel no. 4: Oct. 1, 1956, to Dec. 10 1958, at site 135 ft (41.1 m) downstream at present datum. Since May 11, 1973, supplementary water-stage recorder on channel no. 2 at bridge 800 ft (240 m) upstream at same datum.

AVERAGE DISCHARGE.--71 years, 485 ft³/s (13.74 m³/s), 351,400 acre-ft/yr (0.433 km³/yr).

EXTREMES.--Current year: Maximum discharge, 22,000 ft (6,700 m)³/s May 11; gage height , 8.10 ft (2.469 m); minimum daily, 42 ft (12.8 m)³/s Aug. 24.
Period of record: Maximum discharge, 37,600 ft (11,460 m)³/s June 20, 1965; gage height, 10.44 ft (3.182 m), from floodmarks in gage well; no flow Aug. 18-20, 1902, July 25 to Aug 7, 1903.

REMARKS.--Records fair. Natural flow of stream affected by transmountain diversions, storage reservoirs, power developments, groundwater withdrawals and diversions for irrigation of 1,200,000 acres (4,850 km²) above station, and return flow from irrigated areas. Records of chemical analyses and water temperatures for the water year 1973 are published in Part 2 of this report.

COOPERATION.--Records collected and computed by Colorado Division of Water Resources and reviewed by Geological Survey.

REVISIONS (WATER YEARS).--WSP 1310: 1902, 1906-7, 1948(p). WSP 1440: 1903-4. WSP 1730: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	56	108	278	353	886	887	1,290	2,530	6,460	507	436	58
2	56	92	310	371	985	900	1,270	2,460	5,610	470	342	54
3	84	133	326	389	1,100	910	1,220	2,550	5,290	382	291	49
4	86	129	222	357	1,160	883	1,160	2,690	5,050	292	249	48
5	84	131	162	348	1,180	884	1,100	3,080	4,380	189	229	48
6	89	131	142	381	1,210	873	1,060	3,540	4,010	172	203	46
7	93	131	147	410	1,150	839	1,100	3,940	3,760	161	175	46
8	102	135	152	455	835	832	1,160	3,960	3,590	153	140	52
9	100	138	157	465	758	813	1,210	4,750	3,310	147	106	80
10	100	135	162	475	727	804	1,250	11,200	3,000	126	84	176
11	114	131	167	484	791	779	1,320	18,100	2,660	109	70	526
12	125	131	172	504	959	745	1,380	16,400	2,660	97	92	1,040
13	132	107	182	534	1,010	680	1,420	13,200	3,030	103	82	1,190
14	137	99	192	563	973	751	1,440	11,600	3,420	95	79	1,330
15	137	128	202	593	931	857	1,660	11,300	4,000	87	64	1,390
16	119	148	212	633	989	846	1,960	11,200	4,600	80	58	1,340
17	112	159	222	700	970	763	1,820	10,900	5,170	76	56	1,310
18	104	149	243	835	949	702	1,700	10,800	5,640	75	56	1,300
19	99	147	263	892	975	665	1,700	10,600	5,980	92	55	1,240
20	99	140	314	1,030	954	642	1,720	10,200	5,830	130	51	1,200
21	97	135	385	1,080	931	671	1,630	9,960	4,680	172	49	1,180
22	97	131	414	1,080	913	754	1,510	9,760	3,860	309	44	1,160
23	95	146	443	1,020	913	871	1,530	9,620	3,210	387	43	1,150
24	93	229	462	990	913	997	1,560	9,340	2,600	618	42	1,130
25	91	239	492	1,060	913	1,030	1,630	9,550	2,180	850	121	1,140
26	91	254	571	1,070	913	1,120	1,970	9,580	1,870	896	101	1,150
27	91	272	643	910	913	1,140	2,320	10,000	1,590	873	86	1,140
28	95	272	693	659	912	1,140	2,420	9,650	1,080	840	82	1,240
29	96	268	707	594	------	1,180	2,580	8,730	735	818	94	1,280
30	95	278	530	620	------	1,230	2,640	7,980	571	691	84	1,280
31	93	------	404	817	------	1,280	------	7,100	------	552	68	------
TOTAL	3,062	4,826	9,971	20,672	26,813	27,468	47,730	266,270	109,826	10,549	3,732	24,373
MEAN	98.8	161	322	667	958	886	1,591	8,589	3,661	340	120	812
MAX	137	278	707	1,080	1,210	1,280	2,640	18,100	6,460	896	436	1,390
MIN	56	92	142	348	727	642	1,060	2,460	571	75	42	46
AC-FT	6,070	9,570	19,780	41,000	53,180	54,480	94,670	528,100	217,800	20,920	7,400	48,340

CAL YR 1972 TOTAL 82,357 MEAN 225 MAX 1,120 MIN 13 AC-FT 163,400
WTR YR 1973 TOTAL 555,292 MEAN 1,521 MAX 18,100 MIN 42 AC-FT 1,101,000

06765500 South Platte River at North Platte, Nebr.

LOCATION.--Lat 41°07'05", long 100°46'22", in NE1/4NE1/4 sec.8, T.13 N., R.30 W., Lincoln County, on left bank 0.5 mi (0.8 km) upstream from bridge on U.S. Highway 83, 0.7 mi (1.1 km) northwest of intersection of U.S. Highway 83 and Interstate 80 south of North Platte, and 5.5 mi (8.8 km) upstream from confluence with North Platte River. Prior to Mar. 30 at site 0.5 mi (0.8 km) downstream.

DRAINAGE AREA.--24,300 mi² (62,900 km²), approximately.

PERIOD OF RECORD.--June to November 1897, June to August 1914, May to September 1915, and May 1917 to current year. Monthly discharge only for some periods, published in WSP 1310.

GAGE.--Water-stage recorder. Datum of gage is 2,787.73 ft (849.700 m) above mean sea level. See WSP 1918 for history of changes prior to Dec. 11, 1956. Dec. 11, 1956 , to Mar. 29, 1973, at site 0.5 mi (0.8 km) downstream at same datum.

EXTREMES.--Current year: Maximum discharge, 20,900 ft³/s (592 m³/s) May 13, gage height, 12.64 ft (3.853 m); minimum daily discharge, 90 ft³/s (2.55 m³/s) Jan. 5-7.
Period of record: Maximum discharge observed, 37,100 ft³/s (1,050 m³/s) June 3, 1935, gage height, 14.02 ft (4.273 m), present datum; no flow at times in summers of most years prior to 1938.

REMARKS.--Records good except those for winter period, which are poor. Natural flow of stream affected by transmountain diversions, storage reservoirs, power developments, ground-water withdrawals and diversions for irrigation, and return flow from irrigated areas. South Platte canal diverts around station; diversion began Nov. 13, 1946.

REVISIONS (WATER YEARS).--WSP 1390: 1932-33, 1935.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	165	176	160	120	356	469	1,270	1,470	7,170	517	354	185
2	160	182	170	115	316	541	1,280	1,580	6,330	495	329	175
3	160	182	160	100	380	541	1,230	1,460	5,510	505	244	165
4	160	194	112	95	469	514	1,150	1,440	5,150	445	196	160
5	150	188	110	90	541	568	1,230	1,480	5,370	354	202	160
6	145	182	100	90	520	595	1,190	1,600	5,000	299	220	160
7	145	188	110	90	500	700	1,080	1,950	4,560	271	214	170
8	140	188	120	100	500	710	1,010	2,500	4,070	292	190	180
9	135	176	120	130	480	720	912	2,660	3,730	292	180	196
10	140	165	155	140	450	720	801	2,850	3,470	278	175	214
11	150	155	160	140	480	720	757	4,140	3,000	257	180	244
12	135	165	160	160	450	730	735	10,100	2,700	244	175	264
13	135	200	155	165	450	720	768	16,600	2,410	232	226	278
14	145	195	150	165	450	670	823	12,400	2,440	214	285	337
15	150	200	150	165	500	680	779	11,900	2,800	208	271	620
16	145	200	155	180	520	720	790	11,300	3,030	202	214	867
17	145	218	165	190	550	764	936	11,500	3,610	190	180	1,080
18	140	244	180	200	580	764	1,130	11,300	4,100	214	170	1,200
19	140	293	190	237	595	660	1,090	11,000	4,810	238	185	1,210
20	140	364	190	324	595	660	1,010	10,200	5,180	313	185	1,300
21	140	340	180	436	631	670	936	9,690	5,370	306	175	1,300
22	140	340	180	496	613	670	936	9,220	4,720	292	155	1,280
23	140	308	190	559	523	700	936	9,020	3,730	292	150	1,270
24	150	286	200	586	487	740	845	8,760	3,190	285	150	1,280
25	155	324	190	604	523	860	779	8,530	2,500	257	155	1,300
26	155	272	182	650	478	932	900	9,220	1,810	244	150	1,200
27	170	190	170	631	412	956	823	9,690	1,270	226	155	1,170
28	170	215	155	550	412	956	779	10,100	895	250	165	1,500
29	160	210	165	496	------	1,050	984	10,100	646	329	160	1,650
30	176	170	160	444	------	1,170	1,210	8,790	597	380	165	1,600
31	160	------	150	396	------	1,190	------	7,870	------	388	185	------
TOTAL	4,641	6,710	4,894	8,844	13,761	23,060	29,099	230,420	109,168	9,309	6,140	22,715
MEAN	150	224	158	285	491	744	970	7,433	3,639	300	198	757
MAX	176	364	200	650	631	1,190	1,280	16,600	7,170	517	354	1,650
MIN	135	155	100	90	316	469	735	1,440	597	190	150	160
AC-FT	9,210	13,310	9,710	17,540	27,290	45,740	57,720	457,000	216,500	18,460	12,180	45,060

CAL YR 1972 TOTAL 95,425 MEAN 261 MAX 1,100 MIN 100 AC-FT 189,300
WTR YR 1973 TOTAL 468,761 MEAN 1,284 MAX 16,600 MIN 90 AC-FT 929,800

06766000 Platte River at Brady, Nebr.

LOCATION.--Lat 41°01'10", long 100°22'16" (north channel only), on two channels in secs.11 and 23, T.12 N., R.27 W., Lincoln County, on downstream side of highway bridges 0.5 mi (0.8 km) and 2.5 mi (4.0 km), respectively, south of Brady and 18 mi (29 km) downstream from confluence of North Platte and South Platte Rivers.

DRAINAGE AREA.--60,200 mi² (155,900 km²), approximately.

PERIOD OF RECORD.--May to September 1937, May 1938 to current year. Monthly discharge only for some periods, published in WSP 1310.

GAGE.--Two water-stage recorders. Datum of gage on north channel is 2,639.19 ft (804.425 m) and on south channel, 2,641.66 ft (805.178 m) above mean sea level. No information available on gages operated by State engineer prior to Nov. 18, 1938. Nov. 18, 1938, to Sept. 30, 1942, gage on north channel at datum 1 ft (0.3 m) higher.

EXTREMES.--Current year: Maximum discharge, 18,600 ft³/s (527 m³/s) May 14; minimum daily, 146 ft³/s (4.13 m³/s) Dec. 3.
Period of record: Maximum discharge, 18,600 ft³/s (527 m³/s) May 14, 1973; no flow Aug. 22-24, 1941.

REMARKS.--Records good except those for winter period, which are poor. Natural flow of stream affected by transmountain diversions, storage reservoirs, power developments, ground-water withdrawals and diversions for irrigation, and return flow from irrigated areas. Tri-County main supply canal, capacity, about 2,000 ft³/s (56.6 m³/s), diverts 18 mi (29 km) above station; diversion started Nov. 26, 1940. River flows in two channels for which separate records are computed; figures given herein represent combined discharge.

REVISIONS (WATER YEARS).--WSP 1390: 1941(M). WRD Nebr. 1967: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	176	173	181	290	384	444	943	2,680	14,100	1,170	1,480	2,640
2	174	176	184	422	284	322	935	3,060	13,600	1,780	1,360	2,640
3	171	178	146	427	283	302	894	3,200	12,800	2,280	1,260	2,630
4	170	180	164	465	384	339	814	3,400	12,300	2,220	1,240	2,640
5	171	189	162	500	484	382	681	3,850	12,100	2,080	1,260	2,630
6	170	180	260	480	584	400	746	4,550	11,700	1,950	1,260	2,620
7	164	174	326	456	682	405	717	5,420	11,200	1,820	1,260	2,680
8	163	170	322	454	728	429	677	6,220	10,700	1,890	1,250	2,760
9	162	171	320	450	778	431	623	6,980	10,100	1,880	1,320	2,870
10	163	171	318	532	804	427	593	7,260	9,860	1,820	1,720	2,850
11	162	169	318	612	758	426	588	7,740	9,600	1,750	2,130	3,090
12	164	164	338	656	678	410	507	11,500	9,520	1,610	2,530	3,290
13	162	168	348	660	577	404	392	16,300	9,520	1,690	3,000	3,460
14	159	174	350	566	474	582	369	18,000	9,240	1,740	3,150	3,680
15	154	174	352	474	424	575	364	17,300	9,010	1,760	3,200	3,620
16	148	180	354	379	474	495	372	16,200	9,100	1,760	3,190	3,540
17	149	180	360	332	554	430	367	15,500	9,230	1,720	3,090	3,760
18	149	180	372	324	623	432	446	15,200	9,570	1,690	3,130	3,820
19	149	186	390	284	674	412	646	15,100	9,650	1,990	3,330	3,760
20	150	187	400	282	654	374	706	14,900	10,100	2,680	3,240	3,750
21	151	188	406	280	624	334	654	14,400	10,500	2,750	2,870	3,700
22	151	187	380	258	674	346	542	14,100	10,700	2,380	2,660	3,620
23	153	186	379	256	674	340	506	13,900	10,200	1,920	2,650	3,610
24	151	186	377	276	570	369	479	13,500	9,170	1,860	2,600	3,660
25	151	183	385	296	577	436	486	13,300	8,570	1,710	2,600	3,700
26	151	183	404	318	566	480	594	14,300	7,770	1,580	2,580	3,910
27	153	183	404	336	487	538	658	15,500	6,950	1,460	2,570	3,910
28	156	182	384	378	447	606	699	16,200	4,080	1,460	2,490	4,610
29	157	184	365	402	------	718	1,160	16,400	1,490	1,500	2,580	5,070
30	164	186	300	436	------	739	1,820	15,900	1,460	1,560	2,650	5,130
31	160	------	240	465	------	831	------	14,900	------	1,530	2,690	------
TOTAL	4,928	5,372	9,989	12,746	15,904	14,158	19,978	356,760	283,890	56,990	72,340	103,650
MEAN	159	179	322	411	568	457	666	11,510	9,463	1,838	2,334	3,455
MAX	176	189	406	660	804	831	1,820	18,000	14,100	2,750	3,330	5,130
MIN	148	164	146	256	283	302	364	2,680	1,460	1,170	1,240	2,620
AC-FT	9,770	10,660	19,810	25,280	31,550	28,080	39,630	707,600	563,100	113,000	143,500	205,600

CAL YR 1972 TOTAL 240,601 MEAN 657 MAX 3,040 MIN 146 AC-FT 477,200
WTR YR 1973 TOTAL 956,705 MEAN 2,621 MAX 18,000 MIN 146 AC-FT 1,898,000

06766500 Platte River near Cozad, Nebr.

LOCATION.--Lat 40°50'08", long 99°59'13" (north channel) and lat 40°49'47", long 99°59'18" (south channel), in S1/2 sec.18, T.10 N., R.23 W., Dawson County, on downstream side of highway bridges, 1.5 mi (2.4 km) south of Cozad.

DRAINAGE AREA.--60,500 mi² (156,700 km²), approximately.

PERIOD OF RECORD.--July to September 1932, May 1937 to current year (prior to April 1939, irrigation seasons only). Monthly discharge only for some periods, published in WSP 1310.

GAGE.--Two water-stage recorders. Datum of gage on south channel is 2,473.07 ft (753.792 m) and on north channel, 2,476.72 ft (754.904 m) above mean sea level (Nebraska Department of Roads bench mark). See WSP 2118 for history of changes prior to May 10, 1966.

EXTREMES.--Current year: Maximum discharge, 18,400 ft³/s (521 m³/s) May 29; minimum daily, 97 ft³/s (2.75 m³/s) Aug. 9.
Period of record: Maximum discharge, 18,400 ft³/s (521 m³/s) May 29, 1973; no flow at times in 1937-40.

REMARKS.--Records good except those for winter period, which are poor. Natural flow of stream affected by transmountain diversions, storage reservoirs, power developments, ground-water withdrawals and diversions for irrigation, and return flow from irrigated areas. River flows in two channels for which separate records are computed; figures given herein represent combined discharge.

REVISIONS.--WRD Nebr. 1967: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	137	252	308	260	641	609	1,400	1,940	16,300	990	863	1,290
2	133	258	309	358	549	584	1,490	2,580	15,500	883	686	1,320
3	127	258	294	428	516	509	1,420	2,860	14,800	1,210	508	1,450
4	117	260	265	427	534	503	1,350	3,080	14,400	1,460	344	1,580
5	109	262	162	470	572	516	1,160	3,430	13,300	1,280	269	1,630
6	105	278	142	488	617	537	1,160	3,960	13,100	930	183	1,640
7	137	274	192	500	677	540	960	4,760	12,500	653	119	1,710
8	157	275	261	501	692	540	840	5,630	11,800	488	142	1,920
9	157	275	260	490	733	546	770	6,630	11,200	535	97	2,060
10	163	267	309	470	924	549	718	7,290	10,600	419	169	2,210
11	160	269	309	510	952	546	696	7,430	10,300	386	308	2,460
12	157	276	378	891	834	542	660	7,880	10,100	297	574	2,800
13	166	292	392	971	793	542	592	10,800	10,200	194	996	3,020
14	163	296	422	871	689	564	543	16,600	10,100	197	1,350	3,190
15	163	314	432	650	604	727	532	17,400	9,600	223	1,520	3,250
16	199	314	464	565	608	764	525	16,200	9,360	252	1,660	3,290
17	221	311	474	555	662	722	525	15,000	9,450	276	1,680	3,370
18	219	308	497	535	707	714	525	14,800	9,640	237	1,660	3,730
19	215	308	514	517	783	709	621	14,800	9,910	301	1,830	3,810
20	221	313	614	479	799	696	754	14,600	10,200	1,230	2,030	3,820
21	228	314	594	455	829	660	802	14,700	10,700	1,710	1,880	3,810
22	221	311	572	403	839	640	743	14,400	11,100	1,820	1,540	3,770
23	221	308	553	413	844	645	687	14,000	11,200	1,580	1,390	3,750
24	226	306	514	426	789	694	684	13,900	10,000	1,280	1,370	3,750
25	223	308	482	450	774	738	717	13,800	9,020	1,190	1,360	3,860
26	224	306	451	546	764	797	788	15,200	8,120	1,090	1,340	3,990
27	211	308	422	623	740	918	804	16,900	7,390	968	1,270	4,320
28	227	301	398	563	660	1,010	796	17,800	6,200	856	1,140	4,790
29	231	299	395	575	------	1,100	913	18,100	2,980	826	1,050	5,680
30	247	297	290	552	------	1,160	1,340	18,200	1,300	825	1,040	5,300
31	248	------	282	648	------	1,290	------	17,400	------	825	1,160	------
TOTAL	5,733	8,718	11,951	16,590	20,125	21,611	25,515	352,070	310,370	25,411	31,528	92,570
MEAN	185	291	386	535	719	697	851	11,360	10,350	820	1,017	3,086
MAX	248	314	614	971	952	1,290	1,490	18,200	16,300	1,820	2,030	5,680
MIN	105	252	142	260	516	503	525	1,940	1,300	194	97	1,290
AC-FT	11,370	17,290	23,700	32,910	39,920	42,870	50,610	698,300	615,600	50,400	62,540	183,600

CAL YR 1972 TOTAL 205,516 MEAN 562 MAX 2,750 MIN 39 AC-FT 407,600
WTR YR 1973 TOTAL 922,192 MEAN 2,527 MAX 18,200 MIN 97 AC-FT 1,829,000

06767500 Plum Creek near Smithfield, Nebr.

LOCATION.--Lat 40°39'40", long 99°42'00", in NW1/4SW1/4 sec.15, T.8 N., R.21 W., Gosper County, on left bank just downstream from county highway bridge, 6.5 mi (10.5 km) northeast of Smithfield.

DRAINAGE AREA.--229 mi² (593 km²).

PERIOD OF RECORD.--June 1946 to September 1953, and annual maximum, water years 1954-68, October 1968 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 2,385 ft (726.9 m), from topographic map. Prior to July 5, 1955, at site 100 ft (30 m) downstream at datum 4.78 ft (1.457 m) higher. Sept. 26, 1955, to June 13, 1958, crest-stage gage at present site at datum 0.39 ft (0.119 m) lower, and June 13, 1958, to Sept. 30, 1968, at present site and datum.

AVERAGE DISCHARGE.--12 years (1946-53, 1968-73), 7.33 ft³/s (0.208 m³/s), 5,310 acre-ft/yr (6.55 hm³/yr); median of yearly mean discharges, 3.0 ft³/s (0.0849 m³/s), 2,200 acre-ft/yr (2.71 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 332 ft³/s (9.40 m³/s) Sept. 1, gage height, 15.36 ft (4.682 m); no flow for many days.
Period of record: Maximum discharge, 2,800 ft³/s (79.3 m³/s) June 23, 1947, gage height, 23.41 ft (7.135 m), present datum; no flow for long periods most years.

REMARKS.--Records poor.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1			0	0	.10	.25	.70	.37	3.4	0	.07	207
2			0	0	.20	.30	.77	.57	1.9	0	.83	42
3			0	0	.40	.35	1.4	.41	.99	0	.83	8.5
4			0	0	.50	.35	.65	.37	1.8	0	.57	3.2
5			0	0	.90	.40	.33	.37	2.2	0	.92	2.4
6			0	0	1.0	.45	.13	.37	2.0	0	.96	.15
7			0	0	.40	.50	.08	.25	1.9	0	.65	0
8			0	0	.05	1.0	.01	.21	.62	0	.78	0
9			0	0	0	2.0	0	.33	.38	0	1.2	0
10			0	0	0	2.0	.03	.33	.30	0	1.8	0
11			0	0	0	1.7	0	.10	.18	0	2.5	0
12			0	.05	0	1.3	.29	.09	.07	0	5.1	.08
13			0	.10	0	2.3	.74	.33	.01	0	7.7	.04
14			0	.15	0	4.1	.78	.10	0	0	6.2	0
15			0	.20	0	1.8	.70	0	0	0	5.6	0
16			0	.30	0	1.1	.41	0	0	0	4.4	0
17			0	.40	0	.80	.29	0	0	15	3.1	.12
18			0	.50	0	.55	.19	0	0	7.3	.76	.25
19			0	.75	0	.30	.06	0	0	44	0	.05
20			0	1.0	0	.18	0	0	0	36	0	.32
21			0	1.5	0	.01	0	0	0	6.2	0	.26
22			0	2.3	.03	.01	0	0	0	2.2	0	.03
23			0	3.1	.07	0	0	0	0	2.7	0	0
24			0	4.0	.10	.01	0	0	0	2.0	0	0
25			.01	5.0	.15	0	.05	0	0	1.9	0	.57
26			.05	3.0	.20	0	2.4	33	0	2.0	0	.01
27			.08	1.0	.20	.12	1.4	35	0	3.1	0	.04
28			.04	.05	.25	.38	.57	8.8	0	2.5	0	1.7
29			0	0	------	.23	.37	6.3	0	2.0	0	.86
30			0	0	------	.07	.61	18	0	1.3	0	1.0
31		------	0	.05	------	.15	------	6.9	------	1.0	.20	------
TOTAL	0	0	.18	23.45	4.55	22.71	12.96	112.20	15.75	129.2	44.17	268.58
MEAN	0	0	.006	.76	.16	.73	.43	3.62	.53	4.17	1.42	8.95
MAX	0	0	.08	5.0	1.0	4.1	2.4	35	3.4	44	7.7	207
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	.4	47	9.0	45	26	223	31	256	88	533

CAL YR 1972 TOTAL 136.08 MEAN .37 MAX 38 MIN 0 AC-FT 270
WTR YR 1973 TOTAL 633.75 MEAN 1.74 MAX 207 MIN 0 AC-FT 1,260

PEAK DISCHARGE (BASE, 120 CFS).--Sept. 1 (0600) 332 cfs (15.36 ft).

06768000 Platte River near Overton, Nebr.

LOCATION.--Lat 40°40'57", long 99°32'24" (north channel), and lat 40°40'48", long 99°32'23" (south channel), in sec.12, T.8 N., R.20 W., Dawson-Phelps County line, on left and right banks, respectively, just downstream from highway bridges, 4 mi (6 km) south of Overton and 4 mi (6 km) downstream from Plum Creek.

DRAINAGE AREA.--61,700 mi² (159,800 km²), approximately.

PERIOD OF RECORD.--July to September 1914 (gage heights only), October 1914 to current year. Monthly discharge only for some periods, published in WSP 1310. Published as "near Elm Creek" 1914-15.

GAGE.--Two water-stage recorders. Datum of both gages is 2,299.83 ft (700.988 m) above mean sea level. July 1914 to October 1917 nonrecording gages at site 8 mi (13 km) downstream at different datum. June 1918 to Sept. 12, 1928, nonrecording gage at present site (south channel only) at datum 2 ft (0.6 m) higher. Sept. 13, 1928, to Sept. 30, 1930, nonrecording gage and Oct. 1, 1930, to Sept. 30, 1968, water-stage recorder, at present site (south channel only) and datum.

EXTREMES.--Current year: Maximum discharge, 19,100 ft³/s (541 m³/s) May 15, gage height, 6.43 ft (1.960 m), north channel; minimum daily, 264 ft³/s (7.48 m³/s) Aug. 11.
Period of record: Maximum discharge, 37,600 ft³/s (1,060 m³/s) June 5, 1935, gage height, 6.25 ft (1.905 m), south channel; no flow at times in 1919, 1922, 1925, 1927-28, 1930-41.

REMARKS.--Records fair. Natural flow of stream affected by transmountain diversions, storage reservoirs, power developments, ground-water withdrawals and diversions for irrigation, and return flow from irrigated areas. River flows in two channels for which separate records are computed; figures given herein represent combined discharge. Records of chemical analyses and water temperatures for the water year 1973 are published in Part 2 of this report.

REVISIONS.--WRD Nebr. 1967: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,880	1,480	1,980	1,680	2,530	2,770	2,900	3,300	17,000	2,100	1,630	2,100
2	1,950	1,640	1,920	1,550	2,400	2,700	2,920	3,900	15,900	1,440	1,400	2,520
3	1,990	1,880	1,860	1,430	2,250	2,680	2,990	4,500	15,200	1,410	1,190	2,620
4	1,930	1,870	850	1,280	2,270	2,630	2,890	4,810	15,000	1,570	1,080	2,770
5	1,880	1,900	1,000	1,200	2,360	2,610	2,860	4,940	14,100	1,580	944	2,920
6	1,890	1,950	950	1,300	2,530	2,590	2,750	5,150	13,200	1,390	841	3,120
7	1,900	1,910	1,100	1,370	2,440	2,600	3,110	5,600	13,200	1,080	687	3,220
8	1,920	1,930	1,200	1,450	2,350	2,550	3,070	6,030	12,500	904	572	3,350
9	1,930	2,000	1,400	1,500	2,420	2,530	2,960	6,390	11,900	775	506	3,570
10	1,860	1,950	1,550	1,550	2,650	2,600	2,860	7,030	11,300	739	333	3,780
11	1,850	1,930	1,600	1,550	2,860	2,610	2,810	7,560	11,100	687	264	3,840
12	2,010	1,990	1,700	1,650	2,810	2,300	2,870	7,940	11,300	601	548	4,370
13	2,050	2,020	1,800	1,780	2,730	1,990	2,900	8,760	11,300	530	870	5,080
14	2,000	1,970	1,850	2,000	2,470	1,980	2,820	12,000	11,500	445	1,210	5,220
15	2,040	2,150	1,850	2,050	2,400	2,020	2,720	18,200	11,400	459	1,480	5,350
16	2,060	2,140	1,700	1,850	2,350	2,010	2,680	18,800	10,800	466	1,610	5,400
17	2,110	2,050	1,700	1,930	2,320	2,060	2,720	17,300	10,600	514	1,740	5,520
18	2,140	2,020	1,700	1,890	2,530	2,110	2,520	16,600	10,900	648	1,790	5,630
19	2,100	1,870	1,720	2,060	2,860	2,120	2,590	16,000	11,300	880	1,870	5,860
20	2,080	1,890	1,780	2,130	2,950	2,120	2,690	15,700	11,800	896	2,080	5,910
21	2,050	2,020	1,890	2,070	2,850	2,070	2,690	15,500	12,200	1,820	2,220	5,930
22	2,030	1,960	1,700	2,030	2,750	2,100	2,720	15,300	12,200	2,220	2,100	6,010
23	2,060	1,980	1,790	2,050	2,810	2,040	2,640	15,100	12,100	2,490	1,970	6,000
24	1,960	2,050	1,860	2,060	2,890	2,130	2,560	14,400	11,800	2,250	1,910	5,920
25	1,620	1,980	1,960	2,070	2,780	2,250	2,590	14,200	10,900	2,100	1,840	6,110
26	1,590	1,980	2,030	2,100	2,710	2,240	2,770	15,300	10,000	2,060	1,770	6,210
27	1,570	2,090	1,940	2,340	2,770	2,260	2,840	16,500	8,830	1,920	1,730	6,600
28	1,310	2,000	1,890	1,390	2,840	2,370	2,870	17,500	8,150	1,750	1,610	7,330
29	1,310	1,900	1,950	1,770	------	2,450	2,930	17,900	6,400	1,590	1,430	7,810
30	1,450	1,960	1,780	2,500	------	2,530	2,940	18,200	3,920	1,610	1,340	8,270
31	1,290	------	1,750	2,480	------	2,770	------	17,900	------	1,660	1,360	------
TOTAL	57,810	58,460	51,750	56,060	72,880	72,790	84,180	368,310	347,800	40,584	41,925	148,340
MEAN	1,865	1,949	1,669	1,808	2,603	2,348	2,806	11,880	11,590	1,309	1,352	4,945
MAX	2,140	2,150	2,030	2,500	2,950	2,770	3,110	18,800	17,000	2,490	2,220	8,270
MIN	1,290	1,480	850	1,200	2,250	1,980	2,520	3,300	3,920	445	264	2,100
AC-FT	114,700	116,000	102,600	111,200	144,600	144,400	167,000	730,500	689,900	80,500	83,160	294,200

CAL YR 1972 TOTAL 652,730 MEAN 1,783 MAX 4,380 MIN 154 AC-FT 1,295,000
WTR YR 1973 TOTAL 1,400,889 MEAN 3,838 MAX 18,800 MIN 264 AC-FT 2,779,000

06770000 Platte River near Odessa, Nebr.

LOCATION.--Lat 40°39'55", long 99°15'20", in E1/2 sec.16, T.8 N., R.17 W., Buffalo-Phelps County line, near right bank on downstream side of pier of highway bridge, 2.5 mi (4.0 km) south of Odessa and 5 mi (8 km) downstream from Elm Creek.

DRAINAGE AREA.--62,100 mi² (160,800 km²), approximately.

PERIOD OF RECORD.--March 1937 to current year. Monthly discharge only for some periods, published in WSP 1310.

GAGE.--Water-stage recorder. Datum of gage is 2,197.07 ft (669.667 m) above mean sea level. Prior to Oct. 7, 1938, nonrecording gage and Oct. 7, 1938, to Sept. 30, 1942, water-stage recorder, at present site at datum 1.00 ft (0.305 m) higher.

EXTREMES.--Current year: Maximum discharge, 18,500 ft³/s (524 m³/s) May 31, gage height, 5.42 ft (1.652 m); maximum gage height, 5.80 ft (1.768 m) May 16; minimum daily discharge, 175 ft³/s (4.96 m³/s) July 17.
Period of record: Maximum discharge, 22,700 ft³/s (643 m³/s) June 24, 1947, gage height, 5.52 ft (1.682 m); maximum gage height, 5.89 ft (1.795 m) Mar. 5, 1952, backwater from ice; no flow for periods in each year prior to 1947 and in 1953-57, 1963.

REMARKS.--Records good except those for winter period, which are poor. Natural flow of stream affected by transmountain diversions, storage reservoirs, power developments, ground-water withdrawals and diversions for irrigation, and return flow from irrigated areas.

REVISIONS.--WRD Nebr. 1967: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,730	1,420	1,850	1,700	2,640	2,940	3,210	3,180	17,300	2,350	1,580	1,580
2	1,800	1,510	1,820	1,400	2,520	2,890	3,240	3,420	15,900	1,520	1,430	2,260
3	1,920	1,580	1,780	1,200	2,360	2,890	3,180	3,770	15,100	1,160	1,230	2,360
4	1,800	1,730	1,280	1,080	2,380	2,860	3,210	4,160	14,600	1,250	1,100	2,280
5	1,540	1,630	1,000	1,080	2,500	2,860	3,070	4,470	13,900	1,440	985	2,280
6	1,540	1,730	1,100	1,100	2,640	2,860	2,970	4,750	12,700	1,390	910	2,530
7	1,800	1,730	1,200	1,100	2,750	2,830	3,210	5,280	12,000	1,150	737	2,590
8	1,820	1,730	1,400	1,200	2,470	2,800	3,210	5,780	11,900	895	543	2,910
9	1,700	1,780	1,600	1,300	2,360	2,830	2,970	6,500	11,200	711	483	3,160
10	1,730	1,780	1,600	1,400	2,500	2,920	2,890	6,810	10,500	576	396	3,080
11	1,730	1,780	1,850	1,450	2,780	3,140	2,860	7,580	10,100	565	270	3,160
12	1,870	1,900	1,850	1,550	3,070	2,920	2,890	8,020	10,200	554	284	3,720
13	1,920	2,040	1,850	1,650	2,890	2,520	2,920	8,480	10,300	340	501	4,120
14	2,040	2,000	1,850	1,750	2,500	2,640	2,890	9,690	10,300	270	867	4,370
15	1,990	1,950	1,850	1,800	2,520	2,520	2,830	14,700	10,300	228	1,150	4,790
16	1,920	1,900	1,850	1,800	2,470	2,470	2,800	17,400	9,900	199	1,440	4,940
17	1,970	1,970	1,850	1,900	2,550	2,500	2,800	16,900	9,410	175	1,600	4,860
18	2,040	1,970	1,850	2,100	2,690	2,500	2,780	16,200	9,470	802	1,690	4,940
19	1,990	1,900	1,900	2,200	2,970	2,470	2,580	15,500	9,630	815	1,730	5,100
20	1,990	1,850	1,900	2,200	3,000	2,440	2,640	15,300	10,000	1,140	1,800	5,180
21	1,970	1,850	1,900	2,100	3,070	2,360	2,690	15,000	10,200	1,460	1,930	5,390
22	1,990	1,900	1,950	2,000	3,000	2,410	2,720	15,100	10,600	2,080	2,000	5,550
23	2,060	1,900	1,950	2,000	3,070	2,440	2,720	15,100	10,800	2,460	1,860	5,550
24	2,020	2,020	2,000	2,250	3,180	2,640	2,690	14,400	11,500	2,400	1,690	5,220
25	1,850	2,040	2,000	2,250	3,100	2,750	2,800	13,800	10,800	2,300	1,520	5,390
26	1,560	1,970	2,050	2,300	3,070	2,690	3,040	14,400	9,630	2,160	1,430	5,590
27	1,510	2,020	2,050	2,300	3,070	2,690	2,890	15,900	8,640	2,030	1,390	5,880
28	1,400	1,920	2,100	2,100	3,070	2,800	2,860	16,800	7,820	1,960	1,370	6,670
29	1,380	1,820	2,000	2,000	------	2,780	2,890	17,200	6,900	1,670	1,210	7,140
30	1,560	1,750	1,800	2,200	------	2,780	2,940	17,700	4,280	1,520	1,120	7,530
31	1,340	------	1,700	2,640	------	3,140	------	17,900	------	1,560	1,140	------
TOTAL	55,480	55,070	54,730	55,100	77,190	84,280	87,390	351,190	325,880	39,130	37,386	130,120
MEAN	1,790	1,836	1,765	1,777	2,757	2,719	2,913	11,330	10,860	1,262	1,206	4,337
MAX	2,060	2,040	2,100	2,640	3,180	3,140	3,240	17,900	17,300	2,460	2,000	7,530
MIN	1,340	1,420	1,000	1,080	2,360	2,360	2,580	3,180	4,280	175	270	1,580
AC-FT	110,000	109,200	108,600	109,300	153,100	167,200	173,300	696,600	646,400	77,610	74,160	258,100

CAL YR 1972 TOTAL 617,780 MEAN 1,688 MAX 3,870 MIN 40 AC-FT 1,225,000
WTR YR 1973 TOTAL 1,352,946 MEAN 3,707 MAX 17,900 MIN 175 AC-FT 2,684,000

06770500 Platte River near Grand Island, Nebr.

LOCATION.--Lat 40°52'28", long 98°16'54", in SW1/4SW1/4 sec.31, T.11 N., R.8 W., Merrick County, on left bank 118 ft (36 m) (revised) downstream from bridge on U.S. Highway 34, 2 mi (3 km) upstream from Burlington Northern Inc. bridge, and 5 mi (8 km) southeast of Grand Island.

DRAINAGE AREA.--62,800 mi² (162,700 km²), approximately.

PERIOD OF RECORD.--October 1933 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,831.89 ft (558.360 m) above mean sea level (Nebraska Department of Highways bench mark). Prior to Oct. 23, 1933, nonrecording gage at bridge 30 ft (9 m) upstream at present datum.

EXTREMES.--Current year: Maximum discharge, 17,800 ft³/s (504 m³/s) June 1, gage height, 5.35 ft (1.631 m); maximum gage height, 5.40 ft (1.646 m) May 17; minimum daily discharge, 315 ft³/s (8.92 m³/s) July 18.
Period of record: Maximum discharge, 30,000 ft³/s (850 m³/s) June 6, 1935, gage height, 5.99 ft (1.826 m), from rating curve extended above 18,000 ft³/s (510 m³/s); maximum gage height, 6.16 ft (1.878 m) Mar. 27, 1960, backwater from ice; no flow at times in many years.

REMARKS.--Records good except those for winter period, which are fair. Natural flow of stream affected by transmountain diversions, storage reservoirs, power developments, ground-water withdrawals and diversions for irrigation, and return flow from irrigated areas. Records of chemical analyses and water temperatures for the water year 1973 are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 956: 1935. WSP 1390: 1942. WRD Nebr. 1967: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,370	1,730	2,010	1,900	2,600	3,940	4,590	3,080	17,700	4,830	1,440	1,260
2	1,440	1,620	2,090	2,100	2,900	3,240	4,370	3,330	17,400	3,000	1,460	1,640
3	1,450	1,560	1,900	1,900	3,000	3,130	3,920	3,470	17,000	2,140	1,410	2,540
4	1,420	1,540	1,200	1,750	2,900	3,290	3,780	3,880	15,900	1,670	1,260	2,300
5	1,430	1,570	1,000	2,000	2,800	3,380	3,730	4,360	15,500	1,260	1,110	2,120
6	1,440	1,490	900	1,900	2,600	3,300	3,580	4,600	14,100	1,320	970	2,100
7	1,490	1,450	1,040	1,850	2,500	3,160	3,460	4,820	12,900	1,390	844	2,270
8	1,590	1,470	960	1,850	2,450	3,010	3,550	5,120	11,900	1,270	742	2,570
9	1,680	1,440	940	1,800	2,700	3,040	3,670	5,690	11,300	1,050	646	2,760
10	1,790	1,470	900	1,850	2,900	3,060	3,510	6,250	10,500	1,020	602	2,820
11	1,760	1,570	1,020	1,950	3,000	3,620	3,410	6,300	9,670	817	560	2,810
12	1,710	1,640	1,120	2,050	3,000	3,740	3,350	6,380	9,100	673	504	3,270
13	1,820	2,080	1,100	2,200	2,900	3,370	3,220	6,890	8,790	594	466	4,110
14	2,040	2,340	1,100	2,350	2,600	3,110	3,190	7,470	8,890	594	532	4,150
15	2,200	1,980	1,140	2,400	2,400	3,120	3,230	8,190	8,810	532	697	4,240
16	2,240	1,840	1,100	2,400	2,300	2,780	3,080	10,300	8,750	430	757	4,420
17	2,340	1,880	1,040	2,350	2,600	2,620	2,880	15,700	8,530	344	923	4,490
18	2,380	1,890	1,120	2,450	2,700	2,650	2,880	16,900	7,990	315	1,130	4,480
19	2,310	1,930	1,200	2,350	2,800	2,470	3,110	16,100	7,920	511	1,260	4,660
20	2,520	1,900	1,400	2,300	3,300	2,290	2,990	14,900	8,170	862	1,310	4,940
21	2,560	1,840	2,200	2,250	3,500	2,180	2,830	14,400	8,370	1,150	1,350	5,080
22	2,560	1,890	2,300	2,200	3,600	2,250	2,860	14,100	8,570	1,280	1,480	5,190
23	2,420	2,150	2,200	2,300	4,400	2,390	2,940	13,900	8,770	1,690	1,600	5,290
24	2,280	2,360	2,100	2,400	4,600	3,050	2,880	13,800	9,050	2,200	1,630	5,390
25	2,170	2,550	2,200	2,500	4,800	3,400	2,880	13,400	9,280	2,290	1,580	5,260
26	2,040	2,520	2,350	2,450	5,000	3,110	2,880	13,700	9,590	2,290	1,500	5,590
27	1,760	2,420	2,350	2,300	4,970	2,900	3,060	15,300	8,800	1,950	1,400	6,040
28	1,650	2,280	2,400	2,100	4,780	2,840	3,020	15,700	7,970	1,860	1,350	7,990
29	1,540	2,220	2,350	2,050	------	2,930	2,950	16,700	7,250	1,710	1,320	9,800
30	1,510	2,130	2,250	2,200	------	3,020	2,930	17,200	6,490	1,530	1,200	9,380
31	1,620	------	2,100	2,300	------	3,720	------	17,600	------	1,440	1,040	------
TOTAL	58,530	56,750	49,080	66,750	90,600	94,110	98,730	319,530	314,960	44,012	34,073	128,960
MEAN	1,888	1,892	1,583	2,153	3,236	3,036	3,291	10,310	10,500	1,420	1,099	4,299
MAX	2,560	2,550	2,400	2,500	5,000	3,940	4,590	17,600	17,700	4,830	1,630	9,800
MIN	1,370	1,440	900	1,750	2,300	2,180	2,830	3,080	6,490	315	466	1,260
AC-FT	116,100	112,600	97,350	132,400	179,700	186,700	195,800	633,800	624,700	87,300	67,580	255,800

CAL YR 1972 TOTAL 590,513 MEAN 1,613 MAX 4,600 MIN 37 AC-FT 1,171,000
WTR YR 1973 TOTAL 1,356,085 MEAN 3,715 MAX 17,700 MIN 315 AC-FT 2,690,000

06771000 Wood River near Riverdale, Nebr.

LOCATION.--Lat 40°47'56", long 99°11'48", in NW1/4NW1/4 sec.31, T.10 N., R.16 W., Buffalo County, near right bank on downstream side of bridge on State Highway 40, 1.5 mi (2.4 km) northwest of Riverdale.

DRAINAGE AREA.--379 mi² (982 km²).

PERIOD OF RECORD.--June 1946 to September 1973 (discontinued as a continuous record station; converted to a crest-stage partial-record station).

GAGE.--Water-stage recorder. Datum of gage is 2,163.8 ft (659.53 m) above mean sea level, unadjusted.

AVERAGE DISCHARGE.--27 years, 12.5 ft³/s (0.354 m³/s), 9,060 acre-ft/yr (11.2 hm³/yr); median of yearly mean discharges, 6.9 ft³/s (0.195 m³/s), 5,000 acre-ft/yr (6.16 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 71 ft³/s (2.01 m³/s) July 25, gage height, 4.42 ft (1.347 m); maximum gage height recorded, 5.08 ft (1.548 m) Jan. 23 (backwater from ice), but may have been higher during period of no gage height record Dec. 31 to Jan. 23; no flow for many days.
Period of record: Maximum discharge, 20,000 ft³/s (566 m³/s) June 22, 1947, gage height, 19.75 ft (6.020 m), from rating curve extended above 3,000 ft³/s (85.0 m³/s) on basis of contracted opening measurement of peak flow; no flow at times in 1946, 1953-61, 1963-73.

REMARKS.--Records poor. A few small diversions above station for irrigation. Pump located in gage pool occasionally diverts flow during dry periods.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1			0	.60	2.0	2.2	7.9	2.3	1.0	.14	5.7	1.1
2			0	.60	2.2	2.5	6.9	2.2	0	.25	4.9	.82
3			0	.35	2.2	2.5	5.4	2.0	.94	.17	4.0	.97
4			0	.20	2.4	3.0	3.9	2.0	2.8	.15	7.0	.36
5			0	.10	2.6	3.6	3.0	2.1	5.3	.14	5.9	.12
6			0	0	2.6	4.0	2.6	2.1	3.9	.87	4.4	.60
7			0	0	1.5	4.8	4.0	2.0	3.3	.82	.94	.77
8			0	0	1.2	5.0	4.0	1.8	3.4	.52	0	1.8
9			0	0	1.8	4.6	3.6	1.7	3.0	.78	.03	1.4
10			0	0	2.0	4.0	2.7	1.6	2.8	1.4	1.4	.34
11			0	0	2.4	4.3	2.3	1.4	2.1	2.0	2.0	.23
12			0	0	2.4	4.8	2.2	1.3	1.7	2.0	1.9	.66
13			0	0	2.0	8.0	1.8	1.2	.78	1.8	3.4	.30
14			0	0	1.0	8.7	1.8	1.1	.93	1.2	3.1	.25
15			0	0	.50	6.5	1.8	1.1	1.3	2.3	5.1	.20
16			0	0	.50	5.5	1.6	1.1	2.0	2.8	12	.13
17			0	0	.65	4.3	1.6	.95	2.2	2.5	7.9	.02
18			0	2.0	.70	3.4	1.7	1.1	2.2	1.4	5.2	0
19			0	5.0	.85	2.8	1.8	.88	1.9	1.6	4.2	0
20			0	10	.94	3.5	1.8	.71	2.0	4.8	4.1	0
21			0	16	1.0	3.0	1.9	.60	1.5	3.7	3.0	0
22			0	22	1.0	2.6	1.6	.50	1.4	2.6	2.7	0
23			0	28	1.2	2.3	1.3	.67	1.2	2.6	2.5	0
24			0	30	1.5	2.7	1.4	.51	1.0	1.1	2.6	0
25			0	33	1.5	3.2	1.5	1.5	.78	32	1.3	0
26			0	26	1.2	3.1	2.0	1.4	.62	64	1.7	0
27			0	20	1.6	3.0	2.1	11	.10	62	2.1	.06
28			0	10	2.0	2.8	2.2	4.2	0	60	1.2	3.2
29			.50	4.0	------	2.5	2.1	3.5	0	25	.21	4.9
30			.80	2.5	------	2.7	2.6	2.4	.02	16	.50	3.8
31		------	.75	2.0	------	5.5	------	2.0	------	9.2	1.1	------
TOTAL	0	0	2.05	212.35	43.44	121.4	81.1	58.92	50.17	305.84	102.08	22.03
MEAN	0	0	.066	6.85	1.55	3.92	2.70	1.90	1.67	9.87	3.29	.73
MAX	0	0	.80	33	2.6	8.7	7.9	11	5.3	64	12	4.9
MIN	0	0	0	0	.50	2.2	1.3	.50	0	.14	0	0
AC-FT	0	0	4.1	421	86	241	161	117	100	607	202	44

CAL YR 1972 TOTAL 569.51 MEAN 1.56 MAX 131 MIN 0 AC-FT 1,130
WTR YR 1973 TOTAL 999.38 MEAN 2.74 MAX 64 MIN 0 AC-FT 1,980

PEAK DISCHARGE (BASE, 200 CFS).--No peak above base.

06771500 Wood River near Gibbon, Nebr.

LOCATION.--Lat 40°46'17", long 98°47'51", in NW1/4NW1/4 sec.9, T.9 N., R.13 W., Buffalo County, on left bank 10 ft (3 m) downstream from bridge on county highway and 2.5 mi (4.0 km) northeast of Gibbon.

DRAINAGE AREA.--572 mi² (1,481 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 2,024.88 ft (617.183 m) above mean sea level. Prior to July 26, 1949, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--24 years, 14.2 ft³/s (0.402 m³/s), 10,290 acre-ft/yr (12.7 hm³/yr); median of yearly mean discharges, 9.8 ft³/s (0.278 m³/s), 7,100 acre-ft/yr (8.75 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 88 ft³/s (2.49 m³/s) Sept. 29, gage height, 7.11 ft (2.167 m); no flow for many days.
Period of record: Maximum discharge, 4,050 ft³/s (115 m³/s) June 15, 1967, gage height, 16.79 ft (5.118 m); no flow for many days in 1952-62, 1964-73.

REMARKS.--Records fair except those for winter period, which are poor. Numerous small diversions for irrigation above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1				2.0	9.0	3.0	9.7	1.0	9.2	0	37	5.8
2				5.0	10	3.6	16	1.5	5.4	0	24	8.4
3				4.5	11	3.6	11	.82	5.7	0	18	20
4				2.5	15	4.0	10	.82	6.1	0	15	8.8
5				1.0	17	5.0	9.7	1.5	11	.18	11	4.5
6				.50	14	6.5	7.5	1.3	78	.21	8.3	2.5
7				.30	13	7.6	6.7	.61	48	2.2	6.5	1.1
8				.20	13	7.0	6.0	.43	18	3.1	5.1	.55
9				.10	12	6.2	5.1	.61	7.2	3.3	7.6	.17
10				.10	10	7.4	4.1	.46	4.9	3.5	11	.05
11				.15	9.4	7.8	3.4	.82	5.4	1.9	9.4	0
12				.50	8.0	8.5	3.1	.43	3.9	5.5	7.5	2.0
13				5.0	6.5	9.0	4.3	.03	2.5	5.3	8.6	6.7
14				10	4.0	9.5	4.7	0	1.8	4.7	7.7	21
15				20	2.2	10	4.1	.03	1.5	5.0	12	19
16				30	.60	38	3.4	.06	.69	4.2	11	11
17				35	.20	16	2.8	.02	.24	4.2	11	5.6
18				40	.10	7.7	2.1	.08	.06	3.9	5.4	3.3
19				40	.08	5.3	2.1	.10	.01	6.5	2.7	1.3
20				42	.08	4.3	1.7	0	.01	8.8	2.0	.34
21				40	.10	3.5	1.6	0	0	7.2	5.9	.13
22				38	.15	3.4	1.4	0	0	7.2	13	.01
23				38	.20	2.9	1.2	0	0	6.3	13	.02
24				36	.80	3.7	1.3	0	0	4.5	10	.07
25				30	1.5	3.6	1.6	0	0	3.3	10	.56
26				24	2.0	4.1	1.4	0	0	2.4	11	1.1
27				12	2.0	4.9	.29	.79	0	.36	7.8	1.6
28				6.0	2.8	4.3	.49	1.1	0	9.6	7.6	10
29				6.5	------	3.7	.87	.31	0	31	5.2	47
30				8.0	------	3.3	.92	14	0	54	4.4	81
31		------		8.0	------	5.3	------	16	------	54	5.5	------
TOTAL	0	0	0	485.35	164.71	212.7	128.57	42.82	209.61	242.35	314.2	263.60
MEAN	0	0	0	15.7	5.88	6.86	4.29	1.38	6.99	7.82	10.1	8.79
MAX	0	0	0	42	17	38	16	16	78	54	37	81
MIN	0	0	0	.10	.08	2.9	.29	0	0	0	2.0	0
AC-FT	0	0	0	963	327	422	255	85	416	481	623	523

CAL YR 1972 TOTAL 896.83 MEAN 2.45 MAX 177 MIN 0 AC-FT 1,780
WTR YR 1973 TOTAL 2,063.91 MEAN 5.65 MAX 81 MIN 0 AC-FT 4,090

PEAK DISCHARGE (BASE, 300 CFS).--No peak above base

06772000 Wood River near Alda, Nebr.

LOCATION.--Lat 40°51'10", long 98°28'20", in NE1/4SE1/4 sec.7, T.10 N., R.10 W., Hall County, on right bank 1.2 mi (1.9 km) south of Alda, 2.2 mi (3.5 km) upstream from old north channel of the Platte River, and 19 mi (31 km) upstream from present mouth.

DRAINAGE AREA.--628 mi² (1,627 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 1,897.66 ft (578.407 m) above mean sea level (Bureau of Reclamation bench mark).

AVERAGE DISCHARGE.--20 years, 11.6 ft³/s (0.329 m³/s), 8,400 acre-ft/yr (10.4 hm³/yr); median of yearly mean discharges, 6.7 ft³/s (0.190 m³/s), 4,900 acre-ft/yr (6.04 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 182 ft³/s (5.15 m³/s) Jan. 20, gage height, 7.29 ft (2.222 m); no flow for most of year.
Period of record: Maximum discharge, 1,630 ft³/s (46.2 m³/s) June 16, 1967, gage height, 12.22 ft (3.725 m); no flow for most of each year.

REMARKS.--Records fair. Numerous small pump diversions for irrigation above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1				0	12	0	4.8		0	0	31	5.3
2				0	18	0	5.3		0	0	32	5.2
3				0	9.7	0	7.5		.28	0	26	6.4
4				0	11	0	9.5		2.5	0	17	5.5
5				0	6.8	0	7.2		2.5	0	14	32
6				0	1.8	0	4.3		2.0	0	12	24
7				0	.01	0	4.3		3.5	0	11	6.8
8				0	0	0	4.6		33	0	11	2.5
9				0	2.0	0	3.9		24	0	10	1.2
10				0	3.6	0	3.9		11	0	10	.61
11				0	5.0	3.3	2.5		4.8	0	9.0	.51
12				0	12	5.3	2.3		2.6	0	8.0	.51
13				0	4.1	6.8	1.5		1.7	0	7.4	.46
14				0	.85	6.1	1.3		1.4	0	7.2	6.1
15				0	0	7.0	1.0		1.1	.01	7.0	28
16				0	0	7.5	.80		.56	.01	6.0	10
17				0	0	5.5	.60		.14	.61	8.0	11
18				7.7	0	23	.40		.06	2.2	12	6.1
19				63	0	9.5	.20		.01	3.8	9.0	3.1
20				160	0	4.6	0		0	5.0	6.0	1.6
21				153	0	2.4	0		0	5.7	5.0	.72
22				119	0	1.5	0		0	8.4	4.0	.28
23				60	0	1.2	0		0	7.5	5.0	.20
24				55	0	1.3	0		0	6.6	7.0	.17
25				50	0	1.2	0		0	21	11	.17
26				40	0	.99	0		0	84	9.0	.17
27				23	0	.92	0		0	32	8.0	.17
28				22	0	.85	0		0	14	7.5	5.9
29				50	------	.92	0		0	7.9	7.9	36
30				28	------	.85	0		0	5.9	6.4	60
31		------		14	------	2.9	------		------	9.5	5.2	------
TOTAL	0	0	0	844.7	86.86	93.63	65.90	0	91.15	214.13	329.6	260.67
MEAN	0	0	0	27.2	3.10	3.02	2.20	0	3.04	6.91	10.6	8.69
MAX	0	0	0	160	18	23	9.5	0	33	84	32	60
MIN	0	0	0	0	0	0	0	0	0	0	4.0	.17
AC-FT	0	0	0	1,680	172	186	131	0	181	425	654	517

CAL YR 1972 TOTAL 1,595.14 MEAN 4.36 MAX 202 MIN 0 AC-FT 3,160
WTR YR 1973 TOTAL 1,986.64 MEAN 5.44 MAX 160 MIN 0 AC-FT 3,940

PEAK DISCHARGE (BASE, 300 CFS).--No peak above base.

06774000 Platte River near Duncan, Nebr.

LOCATION.--Lat 41°22'04", long 97°29'40", in SE1/4SW1/4 sec.12, T.16 N., R.2 W., Platte County, on left bank 25 ft (8 m) downstream from highway bridge, 1.5 mi (2.4 km) south of Duncan, and 12 mi (19 km) upstream from Loup River.

DRAINAGE AREA.--64,900 mi² (168,100 km²), approximately.

PERIOD OF RECORD.--June 1895 to December 1909 (irrigation seasons only 1895-1900), July 1910 to December 1911 (gage heights and discharge measurements only), April 1912 to September 1915, June 1928 to current year. Published as "near Columbus" 1895-1915.

GAGE.--Water-stage recorder. Datum of gage is 1,478.55 ft (450.662 m) above mean sea level. June 1895 to December 1909, April 1912 to September 1915, and June to October 1928 nonrecording gage at site 7 mi (11 km) downstream at different datums. Oct. 25, 1928, to Feb. 20, 1935, nonrecording gage at present site and datum.

EXTREMES.--Current year: Maximum discharge, 16,900 ft³/s (479 m³/s) May 28, gage height, 5.53 ft (1.686 m); minimum daily, 345 ft³/s (9.77 m³/s) Aug. 14.
Period of record: Maximum discharge observed, 44,100 ft³/s (1,250 m³/s) June 23, 1905, gage height, 6.50 ft (1.981 m), site and datum then in use; no flow at times in 1931, 1933-42, 1944, 1952-57, 1959, 1963.

REMARKS.--Records good except those for winter period, which are poor. Records of chemical analyses for the water year 1973 are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 956: 1935. WSP 1390: 1897, 1899-1901, 1903-5, 1929-32, 1935(M), 1936. WRD Nebr. 1967: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	740	1,480	1,800	1,900	2,500	4,700	5,320	3,190	15,800	7,510	1,780	828
2	1,050	1,650	1,750	1,800	2,700	3,800	5,760	3,470	15,800	6,240	1,560	908
3	1,220	1,510	1,670	1,750	3,000	3,100	5,240	3,560	16,100	4,120	1,430	1,910
4	1,300	1,400	1,100	1,450	3,100	2,820	4,360	3,560	15,500	3,140	1,320	2,620
5	1,400	1,360	1,140	1,350	3,100	3,280	3,820	3,800	14,900	2,720	1,140	2,570
6	1,440	1,400	1,200	1,350	3,000	3,400	3,490	4,010	14,600	2,120	846	2,310
7	1,460	1,480	1,300	1,400	2,800	3,250	3,070	4,310	14,000	1,710	653	2,290
8	1,410	1,490	1,250	1,400	2,700	3,490	3,040	4,650	13,000	1,650	566	2,520
9	1,430	1,580	1,250	1,350	2,600	3,250	3,190	4,680	11,800	1,540	542	2,700
10	1,580	1,740	1,200	1,300	2,500	3,310	3,430	4,960	11,200	1,340	485	2,810
11	1,600	1,710	1,200	1,300	2,700	4,480	3,460	5,310	10,900	1,210	497	3,030
12	1,540	1,700	1,160	1,400	2,800	5,180	3,430	5,650	10,400	960	391	3,170
13	1,540	2,030	1,140	1,500	2,800	4,910	3,370	5,920	10,000	724	360	3,780
14	1,440	2,450	1,200	1,700	2,700	4,580	3,280	6,600	9,590	588	345	4,420
15	1,520	2,830	1,200	2,000	2,500	4,280	3,250	7,150	9,500	508	360	4,570
16	1,610	2,750	1,250	2,400	2,200	3,540	3,490	7,620	9,320	460	399	4,710
17	1,610	2,390	1,250	2,700	2,000	3,030	3,520	8,890	9,280	424	464	5,020
18	1,520	2,420	1,300	3,200	2,200	2,650	3,330	13,600	9,220	430	490	5,010
19	1,520	2,340	1,400	3,100	2,400	2,410	3,300	15,000	8,980	396	653	4,910
20	1,650	2,320	1,700	3,000	2,700	2,470	3,470	14,800	8,830	713	947	4,970
21	1,700	2,190	2,200	2,900	3,300	2,510	3,350	14,200	9,000	1,210	1,110	5,150
22	1,720	2,050	2,300	2,800	4,300	2,780	3,110	13,600	9,200	1,430	1,160	5,160
23	1,820	1,970	2,200	2,900	5,200	2,950	3,060	13,300	9,440	1,530	1,200	5,230
24	1,910	1,930	2,000	3,000	5,600	3,960	3,020	13,300	9,450	1,800	1,360	5,520
25	1,820	1,900	1,950	3,300	5,000	5,260	3,040	13,400	9,640	2,360	1,440	5,750
26	1,720	1,910	2,000	3,200	4,800	5,510	3,150	14,300	9,830	2,670	1,340	5,930
27	1,610	1,880	2,100	3,100	4,800	4,600	3,100	15,700	10,100	2,640	1,130	6,180
28	1,440	1,750	2,300	2,800	5,000	3,940	3,250	16,500	9,690	2,430	914	6,800
29	1,320	1,670	2,400	2,600	------	3,550	3,150	16,300	8,920	2,180	794	7,920
30	1,260	1,770	2,300	2,400	------	3,430	3,130	16,300	8,190	2,000	772	9,150
31	1,380	------	2,100	2,400	------	3,850	------	16,000	------	1,820	756	------
TOTAL	46,280	57,050	50,310	68,750	91,000	114,270	105,980	293,630	332,180	60,573	27,204	127,846
MEAN	1,493	1,902	1,623	2,218	3,250	3,686	3,533	9,472	11,070	1,954	878	4,262
MAX	1,910	2,830	2,400	3,300	5,600	5,510	5,760	16,500	16,100	7,510	1,780	9,150
MIN	740	1,360	1,100	1,300	2,000	2,410	3,020	3,190	8,190	396	345	828
AC-FT	91,800	113,200	99,790	136,400	180,500	226,700	210,200	582,400	658,900	120,100	53,960	253,600

CAL YR 1972 TOTAL 624,116 MEAN 1,705 MAX 6,400 MIN 44 AC-FT 1,238,000
WTR YR 1973 TOTAL 1,375,073 MEAN 3,767 MAX 16,500 MIN 345 AC-FT 2,727,000

06775500 Middle Loup River at Dunning, Nebr.

LOCATION.--Lat 41°49'50", long 100°06'00", in NW1/4SE1/4 sec.33, T.22 N., R.24 W., Blaine County, on left bank just upstream from bridge on State Highway 2 at northeast corner of Dunning, 1 mi (2 km) upstream from Dismal River.

DRAINAGE AREA.--1,850 mi² (4,790 km²), approximately, of which about 80 mi² (210 km²) contributes directly to surface runoff.

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 2,607.14 ft (794.656 m) above mean sea level. Prior to Sept. 12, 1946, nonrecording gage, and Sept. 12, 1946, to Sept. 30, 1962, water-stage recorder at site 0.2 mi (0.3 km) upstream at datum 0.03 ft (0.009 m) higher.

AVERAGE DISCHARGE.--28 years, 397 ft³/s (11.24 m³/s), 287,600 acre-ft/yr (0.355 km³/yr).

EXTREMES.--Current year: Maximum discharge, 757 ft³/s (21.4 m³/s) May 27, gage height, 2.21 ft (0.674 m); maximum gage height, 3.70 ft (1.128 m) Jan. 2, backwater from ice, minimum daily discharge, 300 ft³/s (8.50 m³/s) Dec. 10, Jan. 10.
Period of record: Maximum discharge, 1,020 ft³/s (28.9 m³/s) Apr. 20, 1971, gage height, 2.50 ft (0.762 m); maximum gage height, 7.02 ft (2.140 m) Mar. 31, 1949, backwater from ice, site and datum then in use; minimum daily discharge, 100 ft³/s (2.83 m³/s) Dec. 5, 6, 1950.

REMARKS.--Records good except those for winter period, which are poor. Records of water temperatures for the water year 1973 are published in Part 2 of this report.

REVISIONS.--WRD Nebr. 1972: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	376	406	450	400	405	465	506	521	450	368	383	377
2	381	474	480	410	393	483	485	466	440	368	424	380
3	376	396	460	370	383	520	481	477	430	387	391	394
4	372	418	450	340	391	525	436	502	420	400	373	380
5	395	445	450	330	412	524	438	499	420	369	372	371
6	392	454	420	360	428	506	450	494	410	366	371	371
7	380	452	430	370	409	466	494	503	390	351	372	376
8	386	456	410	340	360	470	467	455	390	351	382	378
9	388	483	370	310	360	477	431	451	385	347	378	390
10	397	478	300	300	340	480	409	442	375	349	395	385
11	396	492	320	310	361	461	410	439	373	348	385	387
12	388	521	360	320	390	463	416	427	435	340	404	435
13	386	560	320	360	396	480	433	419	400	336	410	417
14	386	500	310	400	370	573	429	408	375	343	382	396
15	390	460	330	420	350	492	498	411	385	345	375	442
16	391	443	320	460	350	491	436	406	425	347	370	429
17	391	438	370	470	380	508	424	401	430	334	364	406
18	407	448	420	490	382	511	429	412	410	338	362	384
19	387	460	450	480	423	500	485	407	390	374	367	388
20	376	482	470	460	420	473	488	397	380	467	367	390
21	361	469	480	450	409	480	449	396	370	420	363	397
22	375	476	490	450	413	493	442	393	365	384	362	381
23	377	474	430	430	431	485	431	400	360	403	375	372
24	357	488	410	500	454	514	444	418	365	377	407	387
25	374	484	420	453	447	472	455	413	365	375	385	417
26	382	458	440	455	429	466	457	489	375	368	376	423
27	399	468	460	497	444	484	440	656	373	364	366	420
28	406	483	476	410	449	525	443	571	371	364	365	501
29	396	494	492	370	------	482	439	490	367	396	366	572
30	425	452	470	380	------	479	512	485	372	424	372	493
31	410	------	450	375	------	531	------	460	------	386	375	------
TOTAL	12,003	14,012	12,908	12,470	11,179	15,279	13,557	14,108	11,796	11,489	11,739	12,239
MEAN	387	467	416	402	399	493	452	455	393	371	379	408
MAX	425	560	492	500	454	573	512	656	450	467	424	572
MIN	357	396	300	300	340	461	409	393	360	334	362	371
AC-FT	23,810	27,790	25,600	24,730	22,170	30,310	26,890	27,980	23,400	22,790	23,280	24,280

CAL YR 1972 TOTAL 147,625 MEAN 403 MAX 673 MIN 290 AC-FT 292,800
WTR YR 1973 TOTAL 152,779 MEAN 419 MAX 656 MIN 300 AC-FT 303,000

06775900 Dismal River near Thedford, Nebr.
(Hydrologic bench-mark station)

LOCATION.--Lat 41°46'45", long 100°31'30", in SE1/4NW1/4 sec.23, T.21 N., R.28 W., Thomas County, on right bank 25 ft (8 m) upstream from bridge on State Highway 83, 2 mi (3 km) upstream from boundary of Nebraska National Forest (Bessey Division), and 14 mi (23 km) south of Thedford.

DRAINAGE AREA.--960 mi² (2,490 km²), approximately, of which about 30 mi² (78 km²) contributes directly to surface runoff.

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

GAGE.--Water-stage recorder. Datum of gage is 2,800.13 ft (853.480 m) above mean sea level.

AVERAGE DISCHARGE.--7 years, 191 ft³/s (5.409 m³/s), 138,400 acre-ft/yr (0.171 km³/yr).

EXTREMES.--Current year: Maximum discharge, 289 ft³/s (8.18 m³/s) Mar. 26, gage height, 2.14 ft (0.652 m); maximum gage height, 2.25 ft (0.686 m) July 29; minimum daily discharge, 162 ft³/s (4.59 m³/s) Jan. 9.
Period of record: Maximum discharge, 335 ft³/s (9.49 m³/s) July 28, 1967, gage height, 2.73 ft (0.832 m); maximum gage height, 2.94 ft (0.896 m) Dec. 31, 1968, backwater from ice; minimum daily discharge, 156 ft³/s (4.42 m³/s) Jan. 27, 1972.

REMARKS.--Records good. Records of chemical analyses for the water year 1973 are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	189	192	201	181	204	206	210	202	190	191	187	184
2	190	197	200	182	202	206	209	192	189	190	190	186
3	189	195	190	186	204	211	206	196	186	191	190	186
4	191	200	184	178	205	208	206	199	187	190	190	185
5	191	199	182	181	208	211	207	200	185	190	185	182
6	188	202	181	172	201	207	207	200	178	188	180	182
7	187	204	179	176	190	205	207	197	180	184	175	183
8	189	202	178	170	193	205	202	192	180	185	180	184
9	187	206	183	162	192	205	203	190	178	183	185	187
10	188	205	185	172	197	206	204	188	176	184	180	188
11	188	209	180	180	203	206	208	186	177	180	180	188
12	188	207	181	174	207	205	206	182	183	181	185	196
13	189	214	183	179	198	211	206	180	185	179	200	192
14	186	202	181	185	186	216	209	180	181	178	190	189
15	185	206	184	188	184	202	207	185	179	178	184	213
16	187	211	184	188	192	203	201	190	181	178	184	194
17	186	210	180	187	195	204	203	185	179	176	180	194
18	184	210	186	191	200	206	204	190	175	177	180	191
19	182	212	186	192	200	204	215	190	171	180	180	196
20	180	211	186	190	197	203	204	185	174	195	182	193
21	185	204	187	190	196	200	197	185	176	186	180	194
22	184	206	187	188	196	207	196	183	178	186	180	194
23	181	206	187	184	200	207	199	185	181	183	185	196
24	182	204	182	191	201	207	198	182	184	183	185	215
25	184	201	185	197	197	205	200	184	182	181	186	206
26	187	201	182	196	199	207	201	198	185	181	184	203
27	188	199	185	195	202	203	200	225	185	181	185	200
28	186	200	184	181	206	213	196	205	186	181	184	222
29	188	199	184	188	------	209	198	189	188	231	185	234
30	190	197	183	200	------	207	209	193	190	195	184	208
31	188	------	175	204	------	211	------	191	------	187	184	------
TOTAL	5,787	6,111	5,715	5,728	5,555	6,406	6,118	5,929	5,449	5,753	5,709	5,865
MEAN	187	204	184	185	198	207	204	191	182	186	184	196
MAX	191	214	201	204	208	216	215	225	190	231	200	234
MIN	180	192	175	162	184	200	196	180	171	176	175	182
AC-FT	11,480	12,120	11,340	11,360	11,020	12,710	12,140	11,760	10,810	11,410	11,320	11,630

CAL YR 1972 TOTAL 70,395 MEAN 192 MAX 241 MIN 156 AC-FT 139,600
WTR YR 1973 TOTAL 70,125 MEAN 192 MAX 234 MIN 162 AC-FT 139,100

06776500 Dismal River at Dunning, Nebr.

LOCATION.--Lat 41°49'23", long 100°06'05", in sec.4, T.21 N., R.24 W., Blaine County, on right bank 100 ft (30 m) downstream from bridge on State Highway 2 at southeast corner of Dunning and 1 mi (2 km) upstream from mouth.

DRAINAGE AREA.--2,040 mi² (5,280 km²), approximately, of which about 45 mi² (120 km²) contributes directly to surface runoff.

PERIOD OF RECORD.--March to June 1932, September 1945 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,606.3 ft (794.40 m) above mean sea level. Mar. 1 to June 30, 1932, nonrecording gage at site 0.2 mi (0.3 km) upstream at datum 0.5 ft (0.15 m) lower. Sept. 13, 1945, to Apr. 19, 1956, nonrecording gage on bridge 100 ft (30 m) upstream at present datum.

AVERAGE DISCHARGE.--28 years (1945-73), 321 ft³/s (9.091 m³/s), 232,600 acre-ft/yr (0.287 km³/yr).

EXTREMES.--Current year: Maximum discharge, 494 ft³/s (14.0 m³/s) May 27, gage height, 1.61 ft (0.491 m); maximum gage height, 2.86 ft (0.872 m) Jan. 2, backwater from ice; minimum daily discharge, 200 ft³/s (5.66 m³/s) Dec. 10.
Period of record: Maximum discharge, 996 ft³/s (28.2 m³/s) May 26, 1952, gage height, 3.18 ft (0.969 m); maximum gage height observed, 5.21 ft (1.588 m) Jan. 19, 1947, backwater from ice; minimum daily discharge, 100 ft³/s (2.83 m³/s) Jan. 25, 1950, Jan. 9, 1962.

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

REVISIONS.--WSP 2118: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	311	312	336	260	296	360	362	377	306	319	292	308
2	315	328	344	270	301	358	356	352	309	318	343	306
3	312	319	318	250	301	361	347	337	306	321	294	312
4	314	343	309	230	312	356	340	348	304	349	286	301
5	314	356	312	220	310	351	351	354	298	318	281	296
6	298	347	290	230	305	356	365	364	292	315	283	299
7	308	329	250	230	290	355	355	364	295	304	281	301
8	310	348	230	220	280	357	339	357	295	297	279	309
9	309	347	220	210	270	357	331	351	295	297	274	310
10	316	332	200	220	280	353	335	344	292	299	275	309
11	311	339	220	230	309	350	351	342	291	293	277	311
12	305	347	240	240	321	362	353	333	373	289	296	329
13	315	353	220	280	318	377	361	331	328	279	317	325
14	314	335	210	300	304	390	361	332	317	278	293	314
15	308	328	230	340	290	360	389	334	312	277	286	380
16	311	330	220	390	290	350	354	337	315	281	283	344
17	312	329	250	390	300	340	354	335	307	276	283	319
18	300	338	280	360	333	340	360	344	304	279	275	309
19	296	340	300	341	338	344	387	342	286	292	278	309
20	296	343	320	315	336	338	381	341	288	361	280	305
21	303	341	310	297	336	338	357	341	290	335	283	306
22	311	341	340	287	336	350	346	333	294	308	282	301
23	302	341	320	295	341	350	341	330	302	305	293	301
24	304	338	300	290	344	362	355	330	306	298	295	309
25	303	333	329	286	344	359	350	327	308	292	300	332
26	309	327	309	297	340	347	347	383	309	286	300	351
27	313	333	304	299	353	359	347	460	307	285	292	325
28	309	321	299	284	360	365	352	416	304	284	289	393
29	308	321	302	260	------	356	351	333	309	303	293	393
30	312	322	280	270	------	356	390	309	316	355	298	378
31	291	------	270	280	------	368	------	309	------	307	298	------
TOTAL	9,540	10,061	8,662	8,671	8,838	11,025	10,668	10,790	9,158	9,400	8,979	9,685
MEAN	308	335	279	280	316	356	356	348	305	303	290	323
MAX	316	356	344	390	360	390	390	460	373	361	343	393
MIN	291	312	200	210	270	338	331	309	286	276	274	296
AC-FT	18,920	19,960	17,180	17,200	17,530	21,870	21,160	21,400	18,160	18,640	17,810	19,210

CAL YR 1972 TOTAL 111,173 MEAN 304 MAX 377 MIN 200 AC-FT 220,500
WTR YR 1973 TOTAL 115,477 MEAN 316 MAX 460 MIN 200 AC-FT 229,000

06779000 Middle Loup River at Arcadia, Nebr.

LOCATION.--Lat 41°25'20", long 99°08'10", in sec.26, T.17 N., R.16 W., Valley County, on left bank 80 ft (24 m) downstream from bridge on State Highway 70 at southwest edge of Arcadia.

DRAINAGE AREA.--5,040 mi² (13,100 km²), approximately, of which about 820 mi² (2,120 km²) contributes directly to surface runoff.

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

GAGE.--Water-stage recorder. Datum of gage is 2,146.30 ft (654.192 m) above mean sea level (levels by Bureau of Reclamation). Prior to Apr. 23, 1938, nonrecording gage at bridge just upstream at datum 1.23 ft (0.375 m) lower.

AVERAGE DISCHARGE.--11 years (1962-73), 653 ft³/s (18.49 m³/s), 473,100 acre-ft/yr (0.583 km³/yr) since diversion to Farwell Irrigation District canal.

EXTREMES.--Current year: Maximum discharge, 2,420 ft³/s (68.5 m³/s) May 27, gage height, 3.15 ft (0.960 m); maximum gage height, 4.36 ft (1.329 m) Feb. 20, backwater from ice; minimum daily discharge, 20 ft³/s (0.57 m³/s) Aug. 9, 11.
Period of record: Maximum discharge estimated, about 18,500 ft³/s (524 m³/s) June 22, 1947, gage height, 6.24 ft (1.902 m); maximum discharge computed, 9,700 ft³/s (275 m³/s) May 27, 1945, gage height, 5.12 ft (1.561 m); maximum gage height, 6.41 ft (1.954 m) Mar. 27, 1960, backwater from ice; minimum daily discharge, 20 ft³/s (0.57 m³/s) Aug. 9, 11, 1973.

REMARKS.--Records fair except those for winter period, which are poor. Middle Loup Public Power and Irrigation District began diversion above station Mar. 30, 1938. Farwell Irrigation District canal began diversion from river in November 1962 at point 8 mi (13 km) above station.

REVISIONS.--WRD Nebr. 1972: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	405	770	992	440	1,060	1,100	923	673	926	128	112	93
2	391	809	833	360	1,060	980	932	588	871	217	70	91
3	397	942	720	460	1,160	880	893	350	948	128	67	94
4	390	928	640	540	1,200	860	830	430	1,180	112	42	85
5	398	874	560	620	1,160	840	790	380	981	315	30	89
6	346	1070	480	740	1,200	937	706	480	368	173	26	124
7	421	1030	500	840	1,040	860	770	580	320	115	24	163
8	566	984	480	760	900	810	770	560	332	102	21	202
9	345	1,050	440	780	880	850	760	380	256	99	20	239
10	399	1,040	400	800	980	820	760	400	208	92	21	249
11	313	999	450	740	1,060	970	830	540	217	88	20	250
12	386	1,180	430	760	980	850	800	445	224	85	24	321
13	397	1,240	420	800	920	948	893	406	549	50	59	494
14	349	1,120	400	820	800	1,150	959	368	301	36	300	431
15	395	803	440	800	740	992	.1,330	374	255	41	138	526
16	451	730	480	920	700	915	937	362	222	36	111	661
17	381	1,050	560	1,020	840	790	800	362	216	34	103	610
18	445	1,010	660	1,140	980	733	744	398	258	50	96	420
19	454	1,080	800	1,140	960	800	758	515	248	72	92	364
20	495	925	860	1,120	1,040	860	839	494	204	610	89	377
21	770	948	900	1,060	1,000	810	680	419	195	751	84	406
22	783	911	1,180	920	1,100	893	568	480	174	400	78	380
23	796	864	1,060	900	1,220	915	443	590	168	344	67	376
24	822	816	1,020	860	1,180	1,010	439	494	180	282	73	380
25	770	848	980	940	1,100	1,050	447	568	201	205	78	469
26	770	816	1,040	900	1,060	810	491	688	214	176	83	604
27	822	763	1,100	860	1,020	800	564	2,060	193	143	85	652
28	809	806	1,060	820	1,060	981	432	1,760	200	137	87	993
29	796	871	1,000	820	------	820	499	1,270	158	81	92	1,020
30	783	884	800	880	------	860	527	1,210	146	91	90	861
31	809	------	580	980	------	1,060	------	1,000	------	146	89	------
TOTAL	16,854	28,161	22,265	25,540	28,400	27,954	22,114	19,624	10,913	5,339	2,371	12,024
MEAN	544	939	718	824	1,014	902	737	633	364	172	76.5	401
MAX	822	1,240	1,180	1,140	1,220	1,150	1,330	2,060	1,180	751	300	1,020
MIN	313	730	400	360	700	733	432	350	146	34	20	85
AC-FT	33,430	55,860	44,160	50,660	56,330	55,450	43,860	38,920	21,650	10,590	4,700	23,850

CAL YR 1972 TOTAL 206,109 MEAN 563 MAX 1,240 MIN 55 AC-FT 408,800
WTR YR 1973 TOTAL 221,559 MEAN 607 MAX 2,060 MIN 20 AC-FT 439,500

06780000 Middle Loup River at Rockville, Nebr.

LOCATION.--Lat 41°06'39", long 98°50'19", in NE1/4SW1/4 sec.8, T.13 N., R.13 W., Sherman County, on right bank just downstream from bridge on State Highway 68, 0.6 mi (1.0 km) southwest of Rockville.

DRAINAGE AREA.--5,310 mi² (13,800 km²), approximately, of which about 1,090 mi² (2,820 km²) contributes directly to surface runoff.

PERIOD OF RECORD.--October 1955 to September 1964, October 1967 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,956.68 ft (596.396 m) above mean sea level.

AVERAGE DISCHARGE.--15 years, 766 ft³/s (21.69 m³/s), 555,000 acre-ft/yr (0.684 km³/yr), unadjusted.

EXTREMES.--Current year: Maximum discharge, 3,110 ft³/s (88.1 m³/s) Sept. 29, gage height, 5.28 ft (1.609 m); maximum gage height, 6.62 ft (2.018 m) Jan. 19, backwater from ice; minimum daily discharge, 37 ft³/s (1.05 m³/s) Aug. 10 - 12.
Period of record: Maximum discharge, 10,400 ft³/s (295 m³/s) June 16, 1957, gage height, 4.62 ft (1.408 m); maximum gage height, 7.16 ft (2.182 m) Mar. 20, 1969, backwater from ice; minimum daily discharge, 33 ft³/s (0.93 m³/s) Aug. 15, 1970, Aug. 20, 1972.

REMARKS.--Records fair except those for winter period, which are poor. Natural flow of stream affected by many diversions for irrigation and return flow from irrigated areas.

REVISIONS.--WRD Nebr. 1972: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	402	837	795	520	1,120	1,700	1,480	803	1,190	170	202	113
2	360	1,020	837	450	1,180	1,500	1,170	666	1,360	214	179	114
3	344	1,170	640	520	1,250	1,300	1,070	400	1,380	256	109	149
4	328	1,090	400	600	1,300	1,140	990	563	1,680	196	58	135
5	324	1,000	340	740	1,250	1,100	834	434	1,380	162	52	134
6	370	1,030	520	920	1,300	1,300	815	555	688	357	41	128
7	285	977	700	1,000	1,200	1,250	964	645	556	190	40	139
8	357	954	580	880	1,060	1,000	855	679	424	134	40	190
9	471	911	470	900	1,040	1,190	873	445	395	123	41	201
10	349	916	450	920	1,100	1,160	846	472	329	123	37	224
11	368	966	480	860	1,160	1,510	824	605	285	107	37	225
12	306	1,080	460	880	1,100	1,230	773	465	299	88	37	296
13	370	1,240	440	860	1,040	1,300	890	459	404	79	110	451
14	338	1,210	430	840	980	1,500	1,060	426	700	62	145	602
15	292	1,040	470	860	900	1,250	1,480	387	379	52	364	549
16	338	800	520	980	880	1,100	1,150	387	313	50	199	916
17	346	970	620	1,100	1,040	960	857	379	278	46	159	844
18	299	965	800	1,300	1,160	920	780	387	285	45	137	680
19	379	1,000	840	1,250	1,120	960	860	404	309	73	116	453
20	424	940	960	1,200	1,200	1,040	960	462	299	611	111	388
21	1,100	958	920	1,120	1,180	1,020	813	452	248	1,370	117	379
22	1,250	942	1,000	1,040	1,300	1,080	597	442	232	809	116	386
23	1,250	912	1,060	1,000	1,450	1,040	537	490	225	556	112	359
24	1,040	927	1,100	1,020	1,400	1,120	559	507	196	480	119	383
25	974	989	1,060	1,060	1,350	1,200	736	404	196	379	117	389
26	958	942	1,100	1,000	1,300	1,160	657	712	208	278	106	650
27	851	942	1,160	960	1,400	1,100	774	1,780	190	231	94	1,090
28	1,040	880	1,140	920	1,550	1,140	525	2,000	179	196	91	1,310
29	896	837	1,060	900	------	1,290	625	1,570	179	179	93	2,460
30	1,040	809	920	960	------	1,150	548	1,440	179	129	93	1,530
31	989	------	700	920	------	1,350	------	1,300	------	132	97	------
TOTAL	18,438	29,254	22,972	28,480	33,310	37,060	25,902	21,120	14,965	7,877	3,369	15,867
MEAN	595	975	741	919	1,190	1,195	863	681	499	254	109	529
MAX	1,250	1,240	1,160	1,300	1,550	1,700	1,480	2,000	1,680	1,370	364	2,460
MIN	285	800	340	450	880	920	525	379	179	45	37	113
AC-FT	36,570	58,030	45,560	56,490	66,070	73,510	51,380	41,890	29,680	15,620	6,680	31,470

CAL YR 1972 TOTAL 216,953 MEAN 593 MAX 1,660 MIN 33 AC-FT 430,300
WTR YR 1973 TOTAL 258,614 MEAN 709 MAX 2,460 MIN 37 AC-FT 513,000

06782500 South Loup River at Ravenna, Nebr.

LOCATION.--Lat 41°00'42", long 98°54'44", in SW1/4NW1/4 sec.16, T.12 N., R.14 W., Buffalo County, 16 ft (5 m) downstream and 38 ft (12 m) left of left downstream corner of county highway bridge, 0.5 mi (0.8 km) south of Ravenna city limits, and 1.4 mi (2.3 km) upstream from Mud Creek.

DRAINAGE AREA.--1,570 mi² (4,070 km²), approximately, of which about 890 mi² (2,310 km²) contributes directly to surface runoff.

PERIOD OF RECORD.--October 1940 to September 1958, October 1967 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,983.73 ft (604.641 m) above mean sea level, adjusted. Oct. 14, 1940, to Mar. 9, 1958, nonrecording gage and crest-stage gage at same site and datum, and Mar. 10, 1958, to Sept. 30, 1958, at same site at datum 0.48 ft (0.146 m) higher.

AVERAGE DISCHARGE.--24 years, 194 ft³/s (5.494 m³/s), 140,600 acre-ft/yr (0.173 km³/yr).

EXTREMES.--Current year: Maximum discharge, 4,190 ft³/s (119 m³/s) July 24, gage height, 6.65 ft (2.027 m); minimum daily, 46 ft³/s (1.30 m³/s) July 17.
Period of record: Maximum discharge estimated, about 41,000 ft³/s (1,160 m³/s) June 22, 1947, gage height, 12.6 ft (3.84 m), from floodmark; maximum discharge computed, 17,100 ft³/s (484 m³/s) June 24, 1968, gage height, 10.32 ft (3.146 m); minimum daily, 8.6 ft³/s (0.24 m³/s) Aug. 28, 1955.

REMARKS.--Records good except those for winter period, which are poor. Minor irrigation developments above station.

REVISIONS.--WRD Nebr. 1972: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	137	165	136	110	270	285	372	241	176	101	142	113
2	135	170	122	130	280	265	270	250	413	99	209	103
3	133	175	96	145	300	266	263	269	1,100	134	162	113
4	128	175	86	165	310	288	252	257	861	133	119	122
5	126	175	72	130	300	313	226	261	541	119	102	97
6	121	174	66	110	260	387	227	249	282	110	101	92
7	121	170	70	130	220	331	222	219	212	115	98	92
8	120	173	68	120	190	328	249	225	223	104	104	105
9	125	173	64	90	200	297	220	245	198	89	138	104
10	131	183	58	100	210	269	206	230	168	80	110	105
11	130	169	64	110	230	350	200	225	162	85	96	106
12	128	160	70	130	230	295	191	215	165	92	101	171
13	134	150	66	150	210	415	189	201	173	57	203	174
14	134	160	64	160	200	406	192	190	181	55	255	159
15	136	170	72	170	180	294	210	175	175	54	218	150
16	142	186	68	280	140	252	243	163	165	51	160	139
17	138	150	80	430	150	258	214	168	152	46	156	146
18	129	140	94	410	170	306	207	168	145	58	108	146
19	132	165	100	340	200	340	242	161	142	74	115	146
20	135	167	120	370	240	320	250	159	139	176	127	146
21	144	137	125	310	270	276	242	151	140	306	119	143
22	155	130	140	245	300	230	224	150	136	354	116	139
23	157	110	150	225	320	214	240	150	128	300	103	136
24	150	130	140	225	330	269	246	154	116	1,900	119	136
25	150	147	150	200	340	312	267	168	109	1,140	123	132
26	155	136	160	225	310	327	273	241	114	538	110	132
27	155	130	180	240	280	310	265	367	115	249	101	150
28	155	116	170	270	300	267	261	435	111	128	86	388
29	160	136	160	280	------	269	257	300	111	120	79	686
30	165	142	140	240	------	252	265	258	107	199	81	602
31	165	------	130	250	------	330	------	190	------	138	88	------
TOTAL	4,326	4,664	3,281	6,490	6,940	9,321	7,185	6,835	6,960	7,204	3,949	5,173
MEAN	140	155	106	209	248	301	240	220	232	232	127	172
MAX	165	186	180	430	340	415	372	435	1,100	1,900	255	686
MIN	120	110	58	90	140	214	189	150	107	46	79	92
AC-FT	8,580	9,250	6,510	12,870	13,770	18,490	14,250	13,560	13,810	14,290	7,830	10,260

CAL YR 1972 TOTAL 57,736 MEAN 158 MAX 4,460 MIN 35 AC-FT 114,500
WTR YR 1973 TOTAL 72,328 MEAN 198 MAX 1,900 MIN 46 AC-FT 143,500

06783500 Mud Creek near Sweetwater, Nebr.

LOCATION.--Lat 41°02'15", long 98°59'35", in NE1/4SE1/4 sec.3, T.12 N., R.15 W., Buffalo County, on right bank 12 ft (4 m) downstream from bridge on State Highway 2, 0.9 mi (1.4 km) southeast of Sweetwater, and 11.6 mi (18.7 km) upstream from mouth.

DRAINAGE AREA.--707 mi² (1,831 km²), of which 655 mi² (1,696 km²) contributes directly to surface runoff.

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

GAGE.--Water-stage recorder. Datum of gage is 2,013.69 ft (613.773 m) above mean sea level.

AVERAGE DISCHARGE.--27 years, 42.2 ft³/s (1.195 m³/s), 30,570 acre-ft/yr (37.7 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,270 ft³/s (64.3 m³/s) June 2, gage height, 17.79 ft (5.422 m); minimum daily, 4.3 ft³/s (0.12 m³/s) July 18.
Period of record: Maximum discharge estimated, about 27,000 ft³/s (765 m³/s) June 22, 1947, gage height, 23.20 ft (7.071 m); maximum discharge computed, 5,600 ft³/s (159 m³/s) June 24, 1968, gage height, 20.07 ft (6.117 m); no flow at times in 1955-56.
Maximum stage known since at least 1929, that of June 22, 1947, from information by local resident.

REMARKS.--Records good except those for winter period, which are fair. Minor irrigation developments above station.

REVISIONS.--WRD Nebr. 1972: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	18	17	30	33	37	50	34	34	18	21	12
2	13	19	18	32	34	40	46	33	270	15	20	12
3	13	19	17	35	38	39	42	32	406	13	20	14
4	12	19	15	32	36	39	38	34	383	22	25	13
5	9.7	18	17	26	34	40	33	33	106	18	21	16
6	10	19	15	27	31	41	32	30	84	19	19	17
7	10	17	16	23	28	44	31	29	55	23	18	18
8	10	17	16	23	30	45	31	28	48	24	15	16
9	11	17	15	19	32	45	30	28	38	22	12	15
10	10	19	12	21	35	43	29	29	34	14	12	16
11	11	17	13	26	36	44	30	28	32	9.6	13	16
12	11	17	14	35	32	44	28	26	30	12	13	18
13	12	16	13	42	27	169	28	26	30	11	17	21
14	12	15	12	45	24	87	28	25	30	9.5	19	19
15	13	14	11	56	22	40	28	25	30	8.8	20	19
16	12	15	12	92	20	44	39	25	29	5.9	17	22
17	11	16	13	145	22	46	110	25	27	5.2	16	22
18	12	17	15	215	26	38	86	24	25	4.3	17	20
19	12	18	17	190	30	34	55	24	23	6.8	17	19
20	14	17	18	150	32	32	48	24	23	39	14	19
21	14	17	18	100	31	30	49	23	23	135	13	19
22	16	17	21	50	33	29	44	23	23	126	13	18
23	16	15	24	30	36	28	42	23	23	75	11	18
24	15	16	23	38	33	31	36	23	22	215	8.1	18
25	15	17	22	40	30	32	40	23	22	90	9.3	18
26	15	16	25	39	32	33	52	29	21	96	11	19
27	15	17	30	37	34	32	40	54	21	49	11	20
28	16	17	35	35	35	33	39	50	20	26	13	60
29	16	15	37	32	------	33	36	52	19	23	13	323
30	17	16	35	36	------	32	35	53	18	22	11	473
31	18	------	33	34	------	44	------	38	------	23	11	------
TOTAL	404.7	507	599	1,735	866	1,348	1,255	953	1,949	1,180.1	470.4	1,330
MEAN	13.1	16.9	19.3	56.0	30.9	43.5	41.8	30.7	65.0	38.1	15.2	44.3
MAX	18	19	37	215	38	169	110	54	406	215	25	473
MIN	9.7	14	11	19	20	28	28	23	18	4.3	8.1	12
AC-FT	803	1,010	1,190	3,440	1,720	2,670	2,490	1,890	3,870	2,340	933	2,640

CAL YR 1972 TOTAL 6,664.60 MEAN 18.2 MAX 278 MIN .83 AC-FT 13,220
WTR YR 1973 TOTAL 12,597.20 MEAN 34.5 MAX 473 MIN 4.3 AC-FT 24,990

PEAK DISCHARGE (BASE, 550 CFS).--June 2 (2200) 2,270 cfs (17.79 ft), June 4 (1500) 555 cfs (11.13 ft).

06784000 South Loup River at St. Michael, Nebr.

LOCATION.--Lat 41°01'53", long 98°44'25", in NE1/4NE1/4 sec.11, T.12 N., R.13 W., Buffalo County, 15 ft (5 m) upstream and 65 ft (20 m) right from right upstream corner of county highway bridge, 0.6 mi (1.0 km) northeast of St. Michael, and 3.4 mi (5.5 km) upstream from Sweet Creek.

DRAINAGE AREA.--2,350 mi² (6,090 km²), approximately, of which about 1,650 mi² (4,270 km²) contributes directly to surface runoff.

PERIOD OF RECORD.--October 1943 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 1,921.26 ft (585.600 m) above mean sea level, adjusted. Prior to June 22, 1947, water-stage recorder, and June 25 to Sept. 30, 1947, nonrecording gage, at site 40 ft (12 m) downstream at datum 2.00 ft (0.610 m) higher. Oct. 1, 1947, to July 3, 1958, nonrecording gage at site 40 ft (12 m) downstream at present datum. July 4, 1958, to Sept. 7, 1960, water-stage recorder at site 560 ft (171 m) upstream at present datum. Sept. 8, 1960, to June 24, 1968, water-stage recorder at site 60 ft (18 m) upstream at present datum. June 25 to Nov. 21, 1968, nonrecording gage at site 40 ft (12 m) downstream at present datum.

AVERAGE DISCHARGE.--30 years, 245 ft³/s (6.938 m³/s), 177,500 acre-ft/yr (0.219 km³/yr).

EXTREMES.--Current year: Maximum discharge, 4,180 ft³/s (118 m³/s) June 3, gage height, 7.05 ft (2.149 m); maximum gage height, 7.57 ft (2.307 m) July 24; minimum daily discharge, 58 ft³/s (1.64 m³/s) July 17.
Period of record: Maximum discharge estimated, about 50,000 ft³/s (1,420 m³/s) June 22, 1947, gage height, 12.0 ft (3.66 m), present datum, from graph based on gage readings; maximum discharge computed, 27,500 ft³/s (779 m³/s) June 24, 1968, gage height, 11.00 ft (3.353 m); minimum daily, 6.6 ft³/s (0.19 m³/s) Aug. 30, 1955.

REMARKS.--Records good except those for winter period, which are poor. Minor irrigation developments above station.

REVISIONS.--WRD Nebr. 1972: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	140	214	162	130	330	333	526	283	304	117	193	111
2	140	223	171	170	340	314	421	279	327	111	202	111
3	135	224	100	190	350	329	375	276	2,450	125	216	138
4	135	217	96	175	350	352	358	257	1,250	149	174	138
5	135	211	88	150	340	360	338	247	1,040	138	168	140
6	133	208	76	130	330	365	320	244	600	122	157	137
7	130	206	86	160	300	365	316	243	400	122	144	135
8	130	202	84	150	250	333	302	236	300	126	131	145
9	132	198	80	110	260	337	285	236	250	114	148	150
10	137	196	70	120	270	322	275	230	210	105	155	145
11	133	194	90	140	280	384	267	225	193	99	134	140
12	136	194	100	170	280	374	277	214	182	108	124	163
13	145	180	84	180	250	412	287	209	185	93	136	193
14	144	190	80	190	240	655	290	202	185	83	202	194
15	145	201	90	210	220	461	290	195	187	76	178	186
16	147	205	80	245	160	435	297	188	182	72	173	181
17	146	204	110	390	180	443	300	187	182	58	166	182
18	145	197	140	600	210	429	329	182	181	64	148	179
19	149	191	150	620	260	418	297	179	171	95	134	179
20	152	189	160	560	290	413	297	179	158	150	121	171
21	158	177	165	540	320	397	277	173	153	290	117	170
22	165	170	175	430	340	403	267	164	153	386	113	162
23	175	164	180	340	360	408	261	166	160	356	113	160
24	173	156	160	270	380	449	254	179	159	1,420	117	155
25	174	161	170	250	373	421	270	182	146	1,440	123	158
26	180	164	180	290	356	397	304	224	146	640	121	158
27	182	173	200	320	344	368	309	445	148	408	110	166
28	178	169	190	390	373	360	285	475	144	258	97	290
29	183	162	180	420	------	371	272	377	133	212	94	581
30	197	159	160	370	------	355	285	369	122	232	92	762
31	202	------	150	310	------	425	------	329	------	210	93	------
TOTAL	4,756	5,699	4,007	8,720	8,336	12,188	9,231	7,574	10,401	7,979	4,394	5,880
MEAN	153	190	129	281	298	393	308	244	347	257	142	196
MAX	202	224	200	620	380	655	526	475	2,450	1,440	216	762
MIN	130	156	70	110	160	314	254	164	122	58	92	111
AC-FT	9,430	11,300	7,950	17,300	16,530	24,170	18,310	15,020	20,630	15,830	8,720	11,660

CAL YR 1972 TOTAL 70,632 MEAN 193 MAX 4,670 MIN 31 AC-FT 140,100
WTR YR 1973 TOTAL 89,165 MEAN 244 MAX 2,450 MIN 58 AC-FT 176,900

06784200 Sherman Reservoir near Loup City, Nebr.

LOCATION.--Lat 41°18'10", long 98°52'45", in SW1/4NW1/4 sec.1, T.15 N., R.14 W., Sherman County, in control house of outlet works of Sherman Dam, 5 mi (8 km) northeast of Loup City.

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

GAGE.--Mercury-column pressure gage read once daily. Datum of gage is at mean sea level.

EXTREMES.--Current year: Maximum contents observed, 69,650 acre-ft (85.9 hm^3) May 29 to June 1, elevation, 2,162.5 ft (659.13 m); minimum observed, 36,590 acre-ft (45.1 hm^3) Sept. 4, 5, elevation, 2,148.6 ft (654.89 m).
Period of record: Maximum contents observed, 69,650 acre-ft (85.9 hm^3) May 29 to June 1, 1973, elevation, 2,162.5 ft (659.13 m); minimum since appreciable storage was attained, 10,010 acre-ft (12.3 hm^3) Sept. 1, 1971, elevation, 2,128.4 ft (648.74 m).

REMARKS.--Reservoir is formed by earthfill dam; closure date of dam, August 1960. First diversions from Middle Loup River, Nov. 8, 1962. Usable capacity, 60,030 acre-ft (74.0 hm^3) between elevations 2,126.0 ft (648.00 m), minimum water surface, and 2,162.0 ft (658.98 m), crest of spillway. Dead and inactive storage, 8,180 acre-ft (10.1 hm^3) below elevation 2,126.0 ft (648.00 m). Figures given herein represent total contents. Water used for irrigation of Farwell Unit of Bureau of Reclamation.

COOPERATION.--Records of elevations and capacity table furnished by Bureau of Reclamation.

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	2,151.0	41,330	-
Oct. 31	2,156.9	54,670	+13,340
Nov. 30	2,156.2	52,970	-1,700
Dec. 31	2,155.6	51,530	-1,400
CAL YR 1972	-	-	+3,940
Jan. 31	2,155.0	50,110	-1,420
Feb. 28	2,154.5	48,960	-1,150
Mar. 31	2,154.4	48,730	-230
Apr. 30	2,156.9	54,670	+5,940
May 31	2,162.5	69,650	+14,980
June 30	2,162.2	68,790	-860
July 31	2,157.2	55,420	-13,370
Aug. 31	2,151.2	41,750	-13,670
Sept. 30	2,156.2	52,970	+11,220
WTR YR 1973	-	-	+11,640

06785000 Middle Loup River at St. Paul, Nebr.

LOCATION.--Lat 41°11'55", long 98°26'50", in NE1/4SW1/4NE1/4 sec.10, T.14 N., R.10 W., Howard County, on left bank at St. Paul, 450 ft (137 m) upstream from bridge on U.S. Highway 281 and 6 mi (10 km) upstream from confluence with North Loup River.

DRAINAGE AREA.--8,090 mi² (21,000 km²), approximately, of which about 3,200 mi² (8,290 km²) contributes directly to surface runoff.

PERIOD OF RECORD.--October 1894 to September 1915, August 1928 to current year. Monthly discharge only for some periods, published in WSP 1310.

GAGE.--Water-stage recorder. Datum of gage is 1,776.61 ft (541.511 m) above mean sea level. See WSP 1918 for history of changes prior to June 5, 1957.

AVERAGE DISCHARGE.--66 years, 1,210 ft³/s (34.27 m³/s), 876,600 acre-ft/yr (1.08 km³/yr), unadjusted.

EXTREMES.--Current year: Maximum discharge, 7,450 ft³/s (211 m³/s) July 25, gage height, 5.45 ft (1.661 m); maximum gage height, 6.15 ft (1.875 m) Jan. 19, backwater from ice; minimum daily discharge, 170 ft³/s (4.81 m³/s) July 18.
Period of record: Maximum discharge, 72,000 ft³/s (2,040 m³/s) June 23, 1947, gage height, 12.69 ft (3.868 m), site then in use, present datum, from rating curve extended above 55,000 ft³/s (1,560 m³/s); minimum daily since 1929, 59 ft³/s (1.67 m³/s) July 10, 1970.

REMARKS.--Records good except those for winter period, which are poor. Diversions above station for irrigation. Records of chemical analyses for the water year 1973 are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1036: 1943. WSP 1390: 1896, , 1903, 1928(M), 1944. WRD Nebr. 1972: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	584	1,350	1,270	700	1,500	1,750	2,540	1,160	1,450	307	430	312
2	563	1,490	1,280	600	1,500	1,950	2,000	1,290	1,530	353	582	372
3	516	1,400	1,000	640	1,700	1,900	1,790	948	3,080	436	510	593
4	486	1,380	310	760	1,800	1,880	1,580	724	2,620	527	384	458
5	482	1,180	220	900	1,900	2,090	1,410	910	2,170	446	280	360
6	499	1,130	520	1,100	1,900	2,140	1,340	760	866	387	272	312
7	543	1,270	940	1,200	1,800	1,790	1,350	875	722	546	238	299
8	461	1,200	900	1,060	1,750	1,410	1,480	980	699	394	250	389
9	701	1,060	700	1,060	1,750	1,770	1,350	736	680	344	273	520
10	625	993	620	1,140	1,550	1,690	1,220	634	717	456	293	540
11	580	974	540	1,140	1,600	1,990	1,080	630	662	373	243	620
12	595	927	520	1,140	1,600	1,880	1,130	810	578	267	210	827
13	553	1,150	500	1,080	1,500	1,540	1,110	528	528	250	264	1,020
14	610	1,190	490	1,020	1,200	2,020	1,210	548	721	246	434	1,060
15	612	1,180	520	1,140	1,200	1,640	1,260	562	668	225	735	1,090
16	593	919	600	1,300	1,400	1,430	1,490	575	508	194	864	1,170
17	603	1,010	760	1,700	1,400	1,240	937	575	428	175	439	1,250
18	595	1,300	840	2,000	1,400	1,260	982	532	417	170	315	1,140
19	533	1,170	960	1,900	1,450	1,340	1,230	500	418	340	244	986
20	564	1,120	1,040	1,900	1,600	1,440	1,430	592	467	1,390	227	907
21	557	1,100	1,120	1,900	1,550	1,420	1,410	616	449	2,680	225	815
22	1,110	1,210	1,060	1,650	1,500	1,220	1,000	490	403	1,830	226	730
23	1,060	1,060	1,120	1,500	1,700	1,180	1,050	532	402	1,610	262	687
24	1,020	1,040	1,250	1,450	1,900	1,290	917	696	417	1,980	289	614
25	1,060	1,070	1,350	1,500	1,800	1,660	1,220	899	408	4,460	301	646
26	1,040	933	1,350	1,400	1,750	1,600	1,230	1,350	412	1,200	311	679
27	1,030	940	1,450	1,300	1,700	1,480	1,300	2,850	392	670	275	819
28	1,330	940	1,350	1,200	1,800	1,390	1,280	3,200	398	582	249	1,300
29	1,260	1,000	1,300	1,200	------	1,740	1,080	2,700	381	528	244	4,610
30	1,300	1,200	1,250	1,300	------	1,750	1,080	1,790	334	502	244	3,630
31	1,330	------	1,150	1,400	------	2,040	------	1,530	------	462	241	------
TOTAL	23,395	33,886	28,280	39,280	45,200	50,920	39,486	31,522	23,925	24,330	10,354	28,755
MEAN	755	1,130	912	1,267	1,614	1,643	1,316	1,017	798	785	334	959
MAX	1,330	1,490	1,450	2,000	1,900	2,140	2,540	3,200	3,080	4,460	864	4,610
MIN	461	919	220	600	1,200	1,180	917	490	334	170	210	299
AC-FT	46,400	67,210	56,090	77,910	89,650	101,000	78,320	62,520	47,460	48,260	20,540	57,040

CAL YR 1972 TOTAL 303,516 MEAN 829 MAX 5,300 MIN 177 AC-FT 602,000
WTR YR 1973 TOTAL 379,333 MEAN 1,039 MAX 4,610 MIN 170 AC-FT 752,400

06786000 North Loup River at Taylor, Nebr.

LOCATION.--Lat 41°46'37", long 99°22'45", in NE1/4SE1/4 sec.22, T.21 N., R.18 W., Loup County, on left bank 64 ft (20 m) downstream from bridge on U.S. Highway 183 and 0.4 mi (0.6 km) north of Taylor.

DRAINAGE AREA.--2,280 mi² (5,910 km²), approximately, of which about 180 mi² (470 km²) contributes directly to surface runoff.

PERIOD OF RECORD.--November 1936 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,248.21 ft (685.254 m) above mean sea level. Prior to Sept. 28, 1938, nonrecording gage at same site and datum. Sept. 28, 1938, to July 16, 1958, water-stage recorder at site 450 ft (137 m) upstream at same datum.

AVERAGE DISCHARGE.--36 years (1937-73), 461 ft³/s (13.06 m³/s), 334,000 acre-ft/yr (0.412 km³/yr).

EXTREMES.--Current year: Maximum discharge, 1,480 ft³/s (41.9 m³/s) May 28, gage height, 5.21 ft (1.588 m); maximum gage height recorded, 6.79 ft (2.070 m) Feb. 19, backwater from ice, but may have been higher during period of no gage-height record Jan. 4 to Feb. 7; minimum daily discharge, 109 ft³/s (3.09 m³/s) July 17.
Period of record: Maximum discharge, 2,770 ft³/s (78.4 m³/s) June 14, 1951, gage height, 6.50 ft (1.981 m), but may have been greater during ice breakup Mar. 10, 1955; maximum gage height, 9.5 ft (2.90 m) Feb. 25, 1957, ice jam, from floodmarks; minimum daily discharge, 45 ft³/s (1.27 m³/s) July 26, 1941.

REMARKS.--Records good except those for winter period, which are poor. North Loup Public Power and Irrigation District canal began diversion from river in April 1939 (corrected) at point 5 mi (8 km) above station. Several smaller diversions above station for irrigation.

REVISIONS (WATER YEARS).--WSP 856: 1937. WSP 1310: 1939(M). WSP 1730: 1956-57(M). WSP 1918: 1952. WRD Nebr. 1972: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	406	526	474	450	700	684	799	698	732	287	314	280
2	411	599	428	430	740	652	795	690	635	283	278	320
3	398	453	373	420	800	655	784	658	603	282	276	330
4	387	689	251	410	800	676	749	645	639	278	218	344
5	403	687	200	400	800	686	718	610	556	384	187	326
6	388	632	200	420	780	641	734	601	534	358	143	312
7	406	576	190	410	660	643	679	604	479	280	187	317
8	426	601	180	390	620	616	597	591	446	241	198	360
9	442	612	170	350	600	549	557	568	419	219	159	366
10	463	616	190	400	640	557	542	542	402	169	162	357
11	468	633	300	450	680	566	552	531	360	179	244	401
12	472	706	350	520	640	570	542	491	486	146	346	505
13	466	727	400	560	600	615	554	465	474	110	509	547
14	477	631	420	580	520	788	583	465	417	159	367	509
15	481	649	500	580	440	702	594	472	399	114	576	530
16	484	677	500	600	380	603	516	464	389	117	449	560
17	502	652	500	560	520	642	499	462	455	109	407	540
18	494	683	550	560	700	607	496	483	431	125	360	520
19	447	680	600	520	680	604	588	490	379	253	322	490
20	446	710	620	500	740	621	631	508	359	615	318	460
21	461	634	660	520	720	602	626	412	352	696	315	470
22	505	612	720	540	760	627	600	346	359	569	301	439
23	490	577	720	580	800	652	535	429	367	562	298	446
24	493	541	720	640	788	692	563	472	371	479	318	457
25	511	502	780	680	667	664	524	476	370	433	331	479
26	522	463	740	660	569	690	527	651	350	341	300	616
27	529	503	700	600	563	655	524	1,050	334	246	200	610
28	497	478	660	500	666	736	548	1,240	305	234	180	731
29	486	488	650	500	------	815	563	1,030	314	251	180	845
30	509	484	550	560	------	790	598	937	294	267	200	788
31	497	------	500	660	------	832	------	850	------	323	240	------
TOTAL	14,367	18,021	14,796	15,950	18,573	20,432	18,117	18,931	13,010	9,109	8,883	14,255
MEAN	463	601	477	515	663	659	604	611	434	294	287	475
MAX	529	727	780	680	800	832	799	1,240	732	696	576	845
MIN	387	453	170	350	380	549	496	346	294	109	143	280
AC-FT	28,500	35,740	29,350	31,640	36,840	40,530	35,940	37,550	25,810	18,070	17,620	28,270

CAL YR 1972 TOTAL 160,612 MEAN 439 MAX 937 MIN 130 AC-FT 318,600
WTR YR 1973 TOTAL 184,444 MEAN 505 MAX 1,240 MIN 109 AC-FT 365,800

Note.--No gage height record Jan. 4 to Febr. 7, Aug. 26 to Sept. 3, Sept. 15-19. Stage-discharge relation affected by ice Dec. 5 to Feb. 23.

06787500 Calamus River near Burwell, Nebr.

LOCATION.--Lat 41°48'35", long 99°10'56", in NW1/4NW1/4 sec.9, T.21 N., R.16 W., Garfield County, on left bank 130 ft (40 m) downstream from highway bridge, 1.5 mi (2.4 km) upstream from mouth, and 3 mi (5 km) northwest of Burwell.

DRAINAGE AREA.--1,060 mi² (2,750 km²), approximately, of which about 110 mi² (280 km²) contributes directly to surface runoff.

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

GAGE.--Water-stage recorder. Datum of gage is 2,156.48 ft (657.295 m) above mean sea level (levels by Bureau of Reclamation). Prior to Apr. 20, 1945, nonrecording gage at site 130 ft (40 m) upstream at present datum. Apr. 21, 1945, to Jan. 28, 1964, water-stage recorder at site 170 ft (52 m) downstream at present datum.

AVERAGE DISCHARGE.--33 years, 300 ft³/s (8.496 m³/s), 217,400 acre-ft/yr (0.268 km³/yr).

EXTREMES.--Current year: Maximum discharge, 612 ft³/s (17.3 m³/s) May 30, gage height, 3.75 ft (1.143 m); maximum gage height, 4.60 ft (1.402 m) Jan. 18, backwater from ice; minimum daily discharge, 180 ft³/s (5.10 m³/s) Dec. 9.
Period of record: Maximum discharge, 1,790 ft³/s (50.7 m³/s) May 4, 1964, gage height, 4.35 ft (1.326 m); maximum gage height, 5.90 ft (1.798 m) Jan. 26, 1967, backwater from ice; minimum daily discharge, 54 ft³/s (1.53 m³/s) Dec. 5, 1950.

REMARKS.--Records good except those for winter period, which are poor. Diversions for irrigation above station. Records of chemical analyses and water temperatures for the water year 1973 are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1918: 1958. WRD Nebr. 1972: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	249	309	293	220	315	361	439	328	474	258	280	262
2	258	323	302	240	310	379	421	322	412	252	284	274
3	265	326	306	220	317	385	396	326	372	252	280	277
4	269	323	300	210	293	371	361	334	368	264	271	287
5	282	338	250	280	299	382	331	325	319	284	267	268
6	297	357	220	270	298	395	331	319	301	275	271	277
7	310	364	200	270	289	386	322	316	296	264	271	288
8	315	354	190	260	273	379	313	316	291	256	271	293
9	292	352	180	260	280	377	302	315	285	254	274	293
10	270	347	190	270	300	377	301	314	279	266	284	284
11	260	356	230	280	278	372	300	307	270	263	309	280
12	270	376	270	290	277	363	294	306	319	244	318	306
13	295	390	280	310	271	365	273	301	313	241	303	320
14	313	335	290	340	233	414	272	297	297	240	275	304
15	319	320	300	370	200	411	322	298	287	241	330	318
16	318	294	310	400	273	424	352	303	280	232	288	327
17	297	281	320	380	319	423	350	299	280	232	269	307
18	278	270	330	380	354	392	357	307	285	245	269	292
19	275	265	330	370	334	360	359	299	275	342	270	289
20	262	261	350	350	303	343	361	299	267	426	260	283
21	256	272	340	350	294	339	335	291	269	390	258	275
22	257	287	370	340	289	350	318	291	276	347	260	259
23	273	301	340	308	310	345	315	283	274	356	269	258
24	272	309	310	318	318	362	315	287	268	317	277	263
25	265	308	323	324	336	395	311	284	269	280	283	266
26	259	323	292	355	336	416	303	326	268	278	281	299
27	256	325	285	344	337	431	296	467	261	281	264	306
28	253	331	284	290	351	459	291	533	255	273	250	369
29	268	302	304	250	------	471	291	544	252	288	248	463
30	299	280	250	280	------	454	310	589	252	275	250	454
31	289	------	230	300	------	461	------	557	------	284	258	------
TOTAL	8,641	9,579	8,769	9,429	8,387	12,142	9,842	10,683	8,914	8,700	8,542	9,041
MEAN	279	319	283	304	300	392	328	345	297	281	276	301
MAX	319	390	370	400	354	471	439	589	474	426	330	463
MIN	249	261	180	210	200	339	272	283	252	232	248	258
AC-FT	17,140	19,000	17,390	18,700	16,640	24,080	19,520	21,190	17,680	17,260	16,940	17,930

CAL YR 1972 TOTAL 104,122 MEAN 284 MAX 534 MIN 140 AC-FT 206,500
WTR YR 1973 TOTAL 112,669 MEAN 309 MAX 589 MIN 180 AC-FT 223,500

06788500 North Loup River at Ord, Nebr.

LOCATION.--Lat 41°36'27", long 98°55'17", in SW1/4NW1/4 sec.22, T.19 N., R.14 W., Valley County, on right bank 150 ft (46 m) downstream from bridge on State Highway 70 at Ord.

DRAINAGE AREA.--3,750 mi² (9,710 km²), approximately, of which about 770 mi² (1,990 km²) contributes directly to surface runoff.

PERIOD OF RECORD.--November 1936 to September 1938 (published as "near Ord"), June 1952 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,012.14 ft (613.300 m) above mean sea level. Nov. 25, 1936, to Sept. 30, 1938, nonrecording gage at site 2 mi (3 km) downstream at different datum.

AVERAGE DISCHARGE.--22 years (1937-38, 1952-73), 867 ft³/s (24.55 m³/s), 628,100 acre-ft/yr (0.774 km³/yr).

EXTREMES.--Current year: Maximum discharge, 2,450 ft³/s (69.4 m³/s) Apr. 15, gage height, 3.79 ft (1.155 m); maximum gage height, 4.52 ft (1.378 m) Jan. 27, backwater from ice; minimum daily discharge, 305 ft³/s (8.64 m³/s) July 14.
Period of record: Maximum discharge, 10,100 ft³/s (286 m³/s) June 7, 1962, gage height, 5.52 ft (1.682 m); maximum gage height, 5.56 ft (1.695 m) Feb. 9, 1966, backwater from ice; minimum daily discharge, 150 ft³/s (4.25 m³/s) Jan. 10, 1957, Nov. 30, 1960.

REMARKS.--Records good except those for winter period, which are poor. Diversions above station for irrigation. Flow includes return water from North Loup irrigation project.

REVISIONS (WATER YEARS).--WSP 1730: 1957(M). WRD Nebr. 1972: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	716	957	880	820	1,200	935	1,340	1,010	1,350	591	605	451
2	728	1,010	800	720	1,300	970	1,310	1,090	1,160	564	575	532
3	729	979	740	700	1,350	1,040	1,240	1,030	1,120	548	509	701
4	727	891	640	660	1,400	1,110	1,170	999	1,190	527	476	759
5	739	1,080	580	700	1,450	1,160	1,100	992	1,030	692	453	698
6	739	1,040	500	720	1,250	1,110	1,040	972	973	713	405	684
7	717	1,040	520	700	1,000	1,100	979	997	885	605	353	689
8	720	1,020	480	680	960	1,090	979	1,010	806	528	388	712
9	765	1,060	460	640	940	1,130	956	971	764	528	399	720
10	812	1,040	380	700	960	1,140	909	944	718	475	367	716
11	802	1,000	440	720	980	1,140	917	929	716	412	429	695
12	809	1,150	580	760	940	1,130	935	915	832	368	525	838
13	806	1,260	680	880	900	1,220	934	880	923	353	850	951
14	786	1,240	760	960	800	1,360	938	858	855	305	735	936
15	800	1,160	840	1,000	680	1,300	1,540	850	793	345	1,690	1,060
16	779	1,040	820	1,060	700	1,240	1,060	853	759	331	1,210	1,050
17	771	1,030	860	1,000	1,000	1,210	978	874	738	324	830	995
18	786	957	900	980	1,200	1,140	936	889	828	359	762	867
19	771	935	920	940	1,350	1,090	957	891	749	424	726	899
20	760	935	880	920	1,500	1,080	1,040	840	731	1,110	664	905
21	762	957	900	940	1,500	1,060	1,000	800	721	1,270	622	870
22	762	891	940	960	1,600	1,080	931	700	707	1,110	614	860
23	802	902	1,060	1,080	1,600	1,080	883	740	702	1,030	611	833
24	841	935	1,200	1,000	1,400	1,180	850	760	703	994	604	860
25	864	924	1,350	1,020	1,250	1,190	887	780	686	882	628	859
26	863	860	1,300	1,020	1,200	1,190	871	1,000	673	810	611	1,000
27	914	850	1,250	1,000	1,100	1,230	881	1,500	617	699	575	1,110
28	927	860	1,180	820	971	1,260	862	1,600	609	661	468	1,350
29	978	860	1,000	640	------	1,260	851	1,550	600	662	425	1,440
30	1,050	860	1,040	820	------	1,270	879	1,500	576	681	388	1,410
31	949	------	900	1,060	------	1,320	------	1,460	------	646	399	------
TOTAL	24,974	29,723	25,780	26,620	32,481	35,815	30,153	31,184	24,514	19,547	18,896	26,450
MEAN	806	991	832	859	1,160	1,155	1,005	1,006	817	631	610	882
MAX	1,050	1,260	1,350	1,080	1,600	1,360	1,540	1,600	1,350	1,270	1,690	1,440
MIN	716	850	380	640	680	935	850	700	576	305	353	451
AC-FT	49,540	58,960	51,130	52,800	64,430	71,040	59,810	61,850	48,620	38,770	37,480	52,460

CAL YR 1972 TOTAL 296,117 MEAN 809 MAX 1,470 MIN 300 AC-FT 587,300
WTR YR 1973 TOTAL 326,137 MEAN 894 MAX 1,690 MIN 305 AC-FT 646,900

06790500 North Loup River near St. Paul, Nebr.

LOCATION.--Lat 41°15'35", long 98°26'50", in NW1/4NW1/4NE1/4 sec.22, T.15 N., R.10 W., Howard County, on right bank 310 ft (94 m) downstream from bridge on U.S. Highway 281, 3 mi (5 km) north of St. Paul, and 4 mi (6 km) upstream from confluence with Middle Loup River.

DRAINAGE AREA.--4,290 mi² (11,100 km²), approximately, of which about 1,270 mi² (3,290 km²) contributes directly to surface runoff.

PERIOD OF RECORD.--October 1894 to September 1915, August 1928 to current year. Monthly discharge only for some periods, published in WSP 1310.

GAGE.--Water-stage recorder. Datum of gage is 1,759.29 ft (536.232 m), adjusted, above mean sea level. See WSP 1918 for history of changes prior to Oct. 1, 1954.

AVERAGE DISCHARGE.--66 years, 973 ft³/s (27.56 m³/s), 704,900 acre-ft/yr (0.869 km³/yr).

EXTREMES.--Current year: Maximum discharge, 3,600 ft³/s (102 m³/s) Apr. 15, gage height, 5.02 ft (1.530 m); maximum gage height, 5.95 ft (1.814 m) Jan. 28, backwater from ice; minimum daily discharge, 216 ft³/s (6.12 m³/s) July 18.
Period of record: Maximum discharge, 90,000 ft³/s (2,550 m³/s), estimated, June 6, 1896, gage height, 14.9 ft (4.54 m), from floodmark, datum then in use; minimum daily since 1931, 85 ft³/s (2.41 m³/s) Aug. 8, 1941.

REMARKS.--Records good except those for winter period, which are fair. Natural flow affected by diversions and ground-water withdrawals for irrigation and return flow from irrigated areas.

REVISIONS (WATER YEARS).--WSP 976: 1942. WSP 1390: 1896. WRD Nebr. 1972: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	872	1,080	955	1,000	1,100	1,250	1,620	1,090	1,730	584	662	410
2	889	1,070	955	1,040	1,250	1,350	1,380	1,310	1,490	600	642	470
3	922	1,090	960	960	1,450	1,450	1,350	1,220	1,260	554	586	659
4	882	977	520	840	1,550	1,600	1,220	1,070	1,500	488	490	780
5	818	987	320	860	1,600	1,700	1,010	1,060	1,460	564	432	789
6	819	1,120	470	840	1,550	1,500	965	1,030	1,060	789	370	735
7	793	1,090	800	820	1,450	1,350	1,060	1,050	926	669	338	733
8	774	1,010	680	800	1,300	1,290	1,080	982	835	572	310	781
9	746	1,010	600	800	1,250	1,230	948	989	764	499	299	774
10	760	1,080	560	800	1,160	1,240	888	925	693	483	340	766
11	797	1,060	560	820	1,200	1,390	828	899	676	419	317	761
12	806	1,120	660	860	1,160	1,300	834	894	690	363	319	811
13	869	1,350	720	940	1,100	1,210	806	877	818	317	503	1,030
14	867	1,110	720	1,000	1,000	1,600	830	858	918	293	729	1,080
15	834	982	720	1,060	860	1,610	1,420	846	877	262	2,160	1,190
16	861	964	800	1,120	740	1,420	1,370	868	796	241	1,860	1,370
17	908	947	880	1,080	800	1,270	1,200	856	757	236	1,110	1,240
18	943	914	960	1,020	1,000	1,180	1,130	869	735	216	743	1,140
19	958	878	1,000	980	1,200	1,130	1,180	874	830	236	674	1,010
20	929	884	960	960	1,400	1,050	1,270	885	796	1,040	641	1,000
21	904	935	1,000	940	1,600	988	1,270	824	782	1,750	598	1,010
22	859	915	1,100	940	1,500	1,000	1,240	847	798	1,490	589	936
23	810	902	1,160	980	1,550	1,020	1,150	775	818	1,200	599	914
24	822	842	1,350	1,020	1,550	1,190	1,080	793	817	1,170	615	859
25	821	875	1,500	1,100	1,450	1,470	1,100	794	807	1,020	634	890
26	793	852	1,650	1,120	1,300	1,430	1,160	970	786	903	636	908
27	848	956	1,600	1,140	1,250	1,230	1,100	1,550	761	801	617	1,170
28	864	982	1,550	980	1,200	1,270	1,030	2,260	691	710	590	1,510
29	886	1,010	1,500	840	------	1,400	1,020	2,200	670	667	529	2,270
30	1,010	1,050	1,400	940	------	1,230	1,010	2,130	636	701	466	1,880
31	1,160	------	1,200	1,020	------	1,570	------	1,950	------	689	404	------
TOTAL	26,824	30,042	29,810	29,620	35,520	40,918	33,549	34,545	27,177	20,526	19,802	29,876
MEAN	865	1,001	962	955	1,269	1,320	1,118	1,114	906	662	639	996
MAX	1,160	1,350	1,650	1,140	1,600	1,700	1,620	2,260	1,730	1,750	2,160	2,270
MIN	746	842	320	800	740	988	806	775	636	216	299	410
AC-FT	53,210	59,590	59,130	58,750	70,450	81,160	66,540	68,520	53,910	40,710	39,280	59,260

CAL YR 1972 TOTAL 311,417 MEAN 851 MAX 2,950 MIN 160 AC-FT 617,700
WTR YR 1973 TOTAL 358,209 MEAN 981 MAX 2,270 MIN 216 AC-FT 710,500

06791500 Cedar River near Spalding, Nebr.

LOCATION.--Lat 41°42'41", long 98°26'48", in NE1/4NE1/4NE1/4 sec.15, T.20 N., R.10 W., Greeley County, on left bank 15 ft (5 m) downstream from bridge on county road, 0.4 mi (0.6 km) upstream from small tributary, and 4.7 mi (7.6 km) northwest of Spalding.

DRAINAGE AREA.--762 sq mi (revised), approximately, of which about 50 mi² (130 km²) contributes directly to surface runoff.

PERIOD OF RECORD.--October 1944 to September 1953, October 1957 to current year. Monthly discharge only for some periods, published in WSP 1310.

GAGE.--Water-stage recorder. Datum of gage is 1,896.24 ft (577.974 m) above mean sea level. Prior to Jan. 4, 1961, at two sites 6.5 mi (10.5 km) upstream at different datum.

AVERAGE DISCHARGE.--25 years, 154 ft³/s (4.361 m³/s), 111,600 acre-ft/yr (0.138 km³/yr).

EXTREMES.--Current year: Maximum discharge, 414 ft³/s (11.7 m³/s) Apr. 16, gage height, 4.19 ft (1.277 m); maximum gage height, 5.05 ft (1.539 m) Jan. 16, backwater from ice; minimum daily discharge, 75 ft³/s (2.12 m³/s) May 22.
Period of record: Maximum discharge, 4,000 ft³/s (113 m³/s) June 23, 1947, gage height, 7.50 ft (2.286 m), site and datum then in use, from rating curve extended above 640 ft³/s (18.1 m³/s) on basis of slope-area measurement of peak flow; minimum daily, 30 ft³/s (0.85 m³/s) Jan. 30, 1946.

REMARKS.--Records good except those for winter periods, which are poor. Low and medium flow regulated by powerplant 20 mi (32 km) above station.

REVISIONS.--WSP 1086: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	148	171	140	160	180	192	294	175	326	136	155	117
2	143	181	134	180	186	185	278	195	381	135	131	122
3	145	154	143	170	184	209	246	158	355	168	133	138
4	137	169	130	160	167	198	235	155	366	131	144	126
5	148	150	120	155	193	209	258	162	267	144	128	178
6	133	119	110	140	195	241	220	175	247	152	114	113
7	146	145	100	120	145	219	192	144	254	146	127	112
8	121	136	94	125	140	192	174	148	260	145	114	144
9	144	133	92	130	140	203	134	154	289	124	104	132
10	110	114	90	120	162	187	164	148	170	116	120	145
11	162	160	120	114	182	199	131	122	207	110	145	131
12	147	121	130	130	172	206	129	144	135	112	140	180
13	137	173	120	150	92	270	124	110	178	83	150	129
14	157	203	110	170	170	234	145	137	215	98	160	135
15	126	123	130	210	140	289	188	127	133	91	140	168
16	145	169	140	260	120	279	354	112	162	87	150	157
17	146	144	130	240	110	228	327	125	157	100	130	213
18	132	139	125	250	140	271	276	112	153	87	125	159
19	128	156	130	230	170	249	307	118	152	134	120	178
20	143	141	135	240	220	247	352	143	118	216	108	155
21	141	140	150	220	194	176	260	124	146	267	113	182
22	133	158	160	170	158	187	238	75	153	212	121	157
23	137	152	170	190	152	178	216	149	137	207	125	136
24	123	118	160	180	197	204	219	118	165	172	118	132
25	142	176	180	230	169	203	205	126	156	155	106	161
26	108	123	200	200	174	214	162	129	169	154	104	163
27	145	138	220	180	176	221	174	236	90	141	104	158
28	128	125	270	160	167	226	168	303	91	157	114	249
29	129	138	260	150	------	242	160	278	147	144	104	231
30	137	138	230	160	------	220	137	262	135	133	104	251
31	136	------	190	170	------	245	------	252	------	98	85	------
TOTAL	4,257	4,407	4,613	5,464	4,595	6,823	6,467	4,916	5,914	4,355	3,836	4,752
MEAN	137	147	149	176	164	220	216	159	197	140	124	158
MAX	162	203	270	260	220	289	354	303	381	267	160	251
MIN	108	114	90	114	92	176	124	75	90	83	85	112
AC-FT	8,440	8,740	9,150	10,840	9,110	13,530	12,830	9,750	11,730	8,640	7,610	9,430

CAL YR 1972 TOTAL 54,439 MEAN 149 MAX 293 MIN 66 AC-FT 108,000
WTR YR 1973 TOTAL 60,399 MEAN 165 MAX 381 MIN 75 AC-FT 119,800

06792000 Cedar River near Fullerton, Nebr.

LOCATION.--Lat 41°23'45", long 98°00'15", in NE1/4NE1/4 sec.4, T.16 N., R.6 W., Nance County, near left bank on downstream side of pier of highway bridge, 3 mi (5 km) northwest of Fullerton and 5.8 mi (9.3 km) upstream from mouth.

DRAINAGE AREA.--1,220 mi² (3,160 km²), approximately, of which about 480 mi² (1,240 km²) contributes directly to surface runoff.

PERIOD OF RECORD.--September 1931 to June 1932, October 1940 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,638.39 ft (499.381 m) above mean sea level. Prior to Nov. 5, 1942, nonrecording gage, Nov. 5, 1942, to June 23, 1947, water-stage recorder, June 24, 1947, to Apr. 6, 1948, nonrecording gage, Apr. 7, 1948, to Apr. 15, 1971, water-stage recorder, all at present site at datum 2.00 ft (0.610 m) higher.

AVERAGE DISCHARGE.--33 years (1940-73), 245 ft³/s (6.938 m³/s), 177,500 acre-ft/yr (0.219 km³/yr).

EXTREMES.--Current year: Maximum discharge, 931 ft³/s (26.4 m³/s) May 27, gage height, 4.03 ft (1.228 m); maximum gage height, 5.52 ft (1.682 m) Jan 27, backwater from ice; minimum daily discharge, 50 ft³/s (1.42 m³/s) July 17.
Period of record: Maximum discharge, 64,700 ft³/s (1,830 m³/s) Aug. 13, 1966, gage height, 16.90 ft (5.151 m), present datum, from high point on surge, from rating curve extended above 6,600 ft³/s (187 m³/s) on basis of flow-over-highway-embankment and contracted-opening measurement of peak flow; minimum daily, 33 ft³/s (0.93 m³/s) Dec. 11, 1941.

REMARKS.--Records good except those for winter period, which are poor. Natural flow affected by power developments, ground-water and surface-water withdrawals for irrigation, and return flow from irrigated areas.

REVISIONS (WATER YEARS).--WSP 1086: Drainage area. WSP 1390: 1932, 1941, 1943. WSP 1710: 1951(P), 1952(M), 1953, 1955(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	204	160	182	230	390	410	390	272	327	191	191	113
2	216	229	205	250	370	450	450	254	375	203	171	101
3	207	217	131	210	320	408	395	283	519	191	178	204
4	193	198	99	200	350	400	433	265	489	203	140	201
5	201	187	131	190	370	386	412	271	492	228	131	170
6	213	176	130	180	320	448	456	264	399	178	138	195
7	206	141	120	170	310	455	386	287	337	179	117	199
8	220	168	110	160	250	354	348	268	344	168	117	180
9	204	159	120	180	230	341	340	243	350	159	113	182
10	218	143	130	190	260	360	266	254	357	140	88	214
11	221	133	140	200	300	399	339	257	320	98	129	190
12	214	154	160	220	330	383	253	216	398	80	179	187
13	232	201	175	250	330	412	271	203	272	78	178	221
14	213	232	170	300	280	548	249	209	226	77	197	192
15	220	254	160	350	240	372	272	201	304	57	207	198
16	201	216	170	400	205	392	284	195	238	61	196	242
17	209	220	180	380	190	346	479	174	202	50	199	252
18	211	196	170	400	250	306	435	177	233	56	175	232
19	207	220	165	380	270	338	407	182	216	114	176	230
20	165	202	160	420	300	330	453	182	216	460	153	231
21	196	203	180	350	350	320	503	185	199	524	141	198
22	196	215	210	320	310	280	392	182	190	412	114	224
23	178	228	240	280	330	300	377	176	212	290	107	212
24	179	215	230	320	400	290	343	172	208	317	106	200
25	170	199	260	400	380	320	392	190	195	254	109	165
26	180	230	300	500	420	310	331	330	215	233	104	222
27	150	206	350	520	450	330	292	583	220	228	100	238
28	160	216	390	400	420	340	289	372	226	223	86	248
29	145	228	370	300	------	360	264	406	163	220	80	304
30	187	228	330	320	------	380	254	366	163	226	95	313
31	178	------	260	350	------	360	------	365	------	213	94	------
TOTAL	6,094	5,974	6,128	9,320	8,925	11,428	10,755	7,984	8,605	6,111	4,309	6,258
MEAN	197	199	198	301	319	369	359	258	287	197	139	209
MAX	232	254	390	520	450	548	503	583	519	524	207	313
MIN	145	133	99	160	190	280	249	172	163	50	80	101
AC-FT	12,090	11,850	12,150	18,490	17,700	22,670	21,330	15,840	17,070	12,120	8,550	2,410

CAL YR 1972 TOTAL 76,878 MEAN 210 MAX 1,050 MIN 68 AC-FT 152,500
WTR YR 1973 TOTAL 91,891 MEAN 252 MAX 583 MIN 50 AC-FT 182,300

PEAK DISCHARGE (BASE, 1,500 CFS).--No peak above base.

06792500 Loup River power canal near Genoa, Nebr.

LOCATION.--Lat 41°25'03", long 97°47'37", in NE1/4NE1/4 sec.32, T.17 N., R.4 W., Nance County, at skimming weir on downstream end of settling basin on left bank, 2 mi (3 km) downstream from point of diversion and 3.5 mi (5.6 km) southwest of Genoa.

PERIOD OF RECORD.--December 1936 to current year.

GAGE.--Water-stage recorder and concrete weir. Datum of gage is 1,566.26 ft (477.396 m) above mean sea level. Prior to Oct. 1, 1956, at datum 3.0 ft (0.91 m) higher.

EXTREMES.--Current year: Maximum daily discharge, 2,930 ft³/s (83.0 m³/s) Mar. 17, 30, July 22; minimum daily, 210 ft³/s (5.95 m³/s) Nov. 15.
Period of record: Maximum daily discharge, 3,410 ft³/s (96.6 m³/s) Apr. 27, 1944; no flow Aug. 16, 24-27, 30, 31, 1966, flood damage to canal being repaired.

REMARKS.--Records excellent. Canal diverts from Loup River in sec.6, T.16 N., R.4 W.; water is used in powerplants near Monroe and Columbus and is returned to Platte River 1.5 mi (2.4 km) downstream from Loup River. Diversion began Dec. 2, 1936.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,430	2,700	2,180	1,700	2,050	1,840	2,880	2,410	2,820	1,010	1,290	671
2	1,450	2,600	2,120	1,990	2,010	1,830	2,890	2,730	2,760	1,040	1,180	750
3	1,440	2,560	406	2,000	2,010	1,860	2,820	2,670	2,920	1,070	1,180	1,100
4	1,420	2,560	396	1,620	2,030	1,850	2,880	2,250	2,850	1,100	1,090	1,210
5	1,400	2,270	486	1,490	2,030	1,850	2,870	2,040	2,920	1,260	921	1,240
6	1,410	2,150	259	1,510	1,990	1,870	2,640	2,090	2,880	1,210	835	1,200
7	1,460	2,390	245	1,500	1,970	1,990	2,550	2,060	2,540	1,210	752	1,160
8	1,410	2,570	374	1,440	2,010	2,440	2,790	2,080	2,140	1,210	695	1,210
9	1,360	2,230	592	1,400	2,000	2,780	2,840	2,060	1,950	1,020	672	1,270
10	1,540	2,400	645	1,400	2,020	2,790	2,790	1,890	1,780	885	632	1,300
11	1,550	2,360	708	1,350	2,020	2,660	2,520	1,800	1,710	864	751	1,250
12	1,530	2,320	818	1,410	2,020	2,430	2,370	1,800	1,810	813	765	1,340
13	1,560	1,860	995	1,500	2,020	2,840	2,240	1,870	1,730	617	774	1,590
14	1,520	1,310	1,050	1,650	2,000	2,890	2,310	1,650	1,660	537	946	1,920
15	1,550	210	1,170	1,800	2,020	2,910	2,380	1,620	1,890	467	1,400	2,080
16	1,520	1,130	1,210	2,020	1,970	2,920	2,870	1,550	1,680	432	2,870	2,320
17	1,470	2,220	1,280	2,100	1,950	2,930	2,790	1,500	1,510	361	2,390	2,660
18	1,520	2,210	1,440	2,100	1,800	2,900	2,600	1,470	1,500	400	1,760	2,250
19	1,530	2,520	1,600	2,080	1,840	2,870	2,530	1,490	1,490	490	1,370	2,040
20	1,540	2,460	1,760	2,090	1,980	2,790	2,700	1,450	1,450	1,340	1,200	1,740
21	1,580	2,440	1,820	2,070	1,980	2,750	2,850	1,480	1,420	2,820	1,100	1,720
22	1,660	2,430	1,960	2,040	1,970	2,610	2,610	1,520	1,340	2,930	973	1,680
23	2,160	2,390	2,100	2,050	1,950	2,700	2,270	1,510	1,300	2,750	910	1,650
24	2,140	2,320	1,960	2,050	1,900	2,830	2,130	1,430	1,300	2,590	904	1,590
25	2,080	2,300	2,160	2,050	1,900	2,820	2,160	1,560	1,180	2,740	915	1,520
26	1,980	2,400	2,230	2,050	1,860	2,800	2,500	2,080	1,130	2,820	910	1,680
27	1,900	2,370	2,250	2,030	1,890	2,840	2,250	2,420	1,160	2,430	887	1,850
28	1,920	1,890	2,230	2,020	1,840	2,900	2,150	2,740	1,140	1,860	825	2,480
29	2,170	1,510	2,230	2,020	------	2,900	2,060	2,810	1,080	1,550	766	2,850
30	2,250	1,660	1,940	2,050	------	2,930	2,040	2,790	1,020	1,430	715	2,880
31	2,670	------	1,550	2,030	------	2,880	------	2,780	------	1,370	663	------
TOTAL	52,120	64,740	42,164	56,610	55,030	80,200	76,280	61,600	54,060	42,626	33,041	50,201
MEAN	1,681	2,158	1,360	1,826	1,965	2,587	2,543	1,987	1,802	1,375	1,066	1,673
MAX	2,670	2,700	2,250	2,100	2,050	2,930	2,890	2,810	2,920	2,930	2,870	2,880
MIN	1,360	210	245	1,350	1,800	1,830	2,040	1,430	1,020	361	632	671
AC-FT	103,400	128,400	83,630	112,300	109,200	159,100	151,300	122,200	107,200	84,550	65,540	99,570

CAL YR 1972 TOTAL 578,912 MEAN 1,582 MAX 2,860 MIN 65 AC-FT 1,148,000
WTR YR 1973 TOTAL 668,672 MEAN 1,832 MAX 2,930 MIN 210 AC-FT 1,326,000

06793000 Loup River near Genoa, Nebr.

LOCATION.--Lat 41°25'05", long 97°43'25", in SW1/4NE1/4 sec.25, T.17 N., R.4 W., Nance County, on right bank on downstream side of bridge on State Highway 39, 2 mi (3 km) south of Genoa, 3 mi (5 km) upstream from Beaver Creek, and 6 mi (10 km) downstream from diversion dam of Loup River Public Power District.

DRAINAGE AREA.--14,400 mi² (37,300 km²), approximately, of which about 6,000 mi² (15,500 km²) contributes directly to surface runoff.

PERIOD OF RECORD.--August 1928 to June 1932, October 1943 to current year (October 1953 to April 1955, monthly discharge only).

GAGE.--Water-stage recorder. Datum of gage is 1,540.13 ft (469.432 m) above mean sea level, unadjusted. Aug. 17, 1928, to June 30, 1932, nonrecording gage at datum 1.49 ft (0.454 m) higher and Apr. 26 to Dec. 22, 1949, at present datum.

EXTREMES.--Current year: Maximum discharge, 10,000 ft³/s (283 m³/s) May 28, gage height, 7.94 ft (2.420 m); maximum gage height, 8.36 ft (2.548 m) Jan. 21, backwater from ice; no flow for many days.
Period of record: Maximum discharge, 129,000 ft³/s (3,650 m³/s) Aug. 13, 1966, gage height, 13.93 ft (4.246 m), from rating curve extended above 42,000 ft³/s (1,190 m³/s) on basis of indirect measurement of peak flow; no flow at times during 1956, 1959, 1961, 1963, 1970, 1973.

REMARKS.--Records fair except those for winter period, which are poor. Natural flow of stream affected by power developments, ground-water withdrawals and diversions for irrigation, and return flow from irrigated areas. Records do not include flow of Loup River power canal which diverts at point 6 mi (10 km) upstream and returns to Platte River below mouth of Loup River; diversion began Dec. 2, 1936. (See preceding page.)

REVISIONS.--WSP 1086: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	59	24	1,600	1,400	3,600	5,640	50	274	2.2	3.5	0
2	12	41	18	800	1,300	4,000	3,300	81	48	5.5	3.2	0
3	12	62	1,020	350	1,400	3,800	1,280	81	1,320	4.3	2.3	3.2
4	12	20	257	56	1,500	3,500	776	18	1,860	4.6	2.2	16
5	15	17	135	40	1,700	2,200	244	18	2,070	4.9	1.3	33
6	13	89	14	50	1,900	2,500	128	15	1,040	2.5	.09	34
7	11	61	15	100	2,000	2,000	102	16	49	.75	0	35
8	11	91	17	200	1,500	1,280	214	15	25	.25	0	30
9	10	70	18	340	1,200	304	120	15	20	0	.67	5.3
10	12	38	19	410	1,000	548	81	15	20	0	0	19
11	16	61	45	380	1,060	1,420	70	16	28	0	1.9	61
12	9.5	13	40	300	1,120	2,010	68	16	36	0	.89	68
13	8.8	470	30	180	800	500	53	16	25	0	.55	76
14	9.2	1,000	25	100	600	1,920	51	17	16	0	0	87
15	11	2,000	23	80	410	2,620	55	11	57	0	1.5	66
16	10	1,140	26	200	250	1,140	1,790	12	83	0	1,210	23
17	9.3	118	28	1,000	140	940	166	12	68	0	24	63
18	7.3	234	33	3,000	120	220	76	11	71	0	7.7	140
19	7.3	230	41	4,000	110	344	67	11	74	0	3.0	97
20	8.7	64	47	4,900	150	296	81	11	68	11	.24	96
21	9.7	50	70	5,200	220	142	115	12	62	1,340	0	80
22	10	46	50	4,500	1,700	81	86	10	59	1,080	0	46
23	9.6	37	35	2,500	3,000	184	86	8.2	52	130	0	9.6
24	8.6	33	26	1,900	3,500	1,160	66	8.6	10	19	0	59
25	7.7	31	23	1,800	3,300	2,380	66	8.2	37	2,630	0	50
26	8.8	28	94	2,100	3,000	2,260	72	203	39	507	0	87
27	8.0	23	450	2,400	2,700	632	41	2,500	30	13	0	110
28	8.1	450	832	2,800	3,000	608	35	5,500	3.1	7.6	0	142
29	8.8	790	2,230	2,500	------	1,520	31	2,600	.81	5.6	0	3,250
30	19	539	2,570	1,700	------	1,020	61	1,510	.62	4.6	0	6,890
31	16	------	1,960	1,500	------	1,700	------	752	------	4.0	0	------
TOTAL	332.4	7,905	10,215	46,986	40,080	46,829	15,021	13,569.0	7,545.53	5,776.80	1,263.04	11,676.1
MEAN	10.7	264	330	1,516	1,431	1,511	501	438	252	186	40.7	389
MAX	19	2,000	2,570	5,200	3,500	4,000	5,640	5,500	2,070	2,630	1,210	6,890
MIN	7.3	13	14	40	110	81	31	8.2	.62	0	0	0
AC-FT	659	15,680	20,260	93,200	79,500	92,890	29,790	26,910	14,970	11,460	2,510	23,160

CAL YR 1972 TOTAL 119,675.50 MEAN 327 MAX 6,690 MIN 1.3 AC-FT 237,400
WTR YR 1973 TOTAL 207,198.87 MEAN 568 MAX 6,890 MIN 0 AC-FT 411,000

06794000 Beaver Creek at Genoa, Nebr.

LOCATION.--Lat 41°26'32", long 97°44'11", in NE1/4SE1/4 sec.14, T.17 N., R.4 W., Nance County, on left bank in city park at southwest corner at Genoa, 0.2 mi (0.3 km) downstream from Union Pacific Railroad bridge, 0.2 mi (0.3 km) upstream from bridge on State Highway 39, and 2.5 mi (4.0 km) upstream from mouth.

DRAINAGE AREA.--647 (revised) mi² (1,676 km²), of which about 410 mi² (1,062 km²) contributes directly to surface runoff.

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

GAGE.--Water-stage recorder. Datum of gage is 1,542.13 ft (470.041 m) above mean sea level, unadjusted. October 1940 to Nov. 5, 1942, nonrecording gage and Nov. 6, 1942, to Nov. 1, 1955, water-stage recorder, at site 0.4 mi (0.6 km) upstream at datum 4.62 ft (1.408 m) higher.

AVERAGE DISCHARGE.--33 years, 128 ft³/s (3.625 m³/s), 92,740 acre-ft/yr (0.114 km³/yr).

EXTREMES.--Current year: Maximum discharge, 2,230 ft³/s (63.2 m³/s) May 26, gage height, 9.87 ft (3.008 m); maximum gage height, 10.43 ft (3.179 m) Jan. 27, backwater from ice; minimum daily discharge, 23 ft³/s (0.65 m³/s) July 19, Aug. 30, 31.
Period of record: Maximum discharge, 21,200 ft³/s (600 m³/s) July 19, 1950, gage height, 18.70 ft (5.700 m), site and datum then in use, from rating curve extended above 8,500 ft³/s (241 m³/s); minimum daily, 3.0 ft³/s (0.085 m³/s) July 29, 1956.

REMARKS.--Records good except those for winter period, which are poor. Natural flow affected slightly by ground-water and surface-water withdrawals for irrigation. At times diurnal fluctuation at low flow caused by powerplants above station.

REVISIONS (WATER YEARS).--WSP 1086: Drainage area. WSP 1310: 1942(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	70	85	96	300	140	202	350	107	210	80	64	26
2	72	97	90	200	130	208	411	108	197	81	54	31
3	72	99	80	130	124	206	423	109	248	78	48	54
4	73	104	62	100	130	206	346	118	201	78	43	63
5	69	98	54	90	150	206	267	105	190	88	38	68
6	68	92	56	88	146	216	206	102	198	87	31	63
7	70	91	60	90	120	224	176	95	221	85	28	61
8	73	89	62	88	100	218	155	94	185	76	27	64
9	71	90	64	84	104	204	150	101	175	72	32	64
10	73	90	64	86	100	204	150	103	165	71	26	68
11	75	90	66	86	110	208	145	101	180	67	37	69
12	72	92	66	86	120	206	140	94	372	56	60	68
13	72	102	60	92	110	287	135	90	180	48	52	69
14	72	104	64	98	90	339	135	87	140	42	52	64
15	72	109	66	120	78	331	140	87	125	32	50	76
16	70	108	66	200	70	353	151	86	115	34	43	76
17	71	107	68	450	76	333	194	86	110	28	41	85
18	69	104	70	400	90	282	324	86	120	24	41	89
19	66	104	70	370	110	224	437	86	110	23	40	90
20	68	99	80	280	130	187	376	84	100	47	40	83
21	71	99	94	260	160	175	257	81	95	95	42	73
22	73	101	110	220	190	170	174	78	94	107	34	76
23	74	102	104	180	220	182	137	79	94	101	34	74
24	74	101	100	190	280	196	121	76	93	95	34	74
25	75	99	120	220	250	254	118	76	91	90	35	74
26	76	98	170	440	210	333	116	630	89	91	34	77
27	75	98	350	500	208	348	119	1,010	86	92	34	84
28	75	97	500	240	189	324	118	364	84	75	27	143
29	74	97	600	150	------	284	115	328	83	73	27	143
30	78	94	680	130	------	278	111	300	81	67	23	201
31	80	------	450	136	------	309	------	235	------	90	23	------
TOTAL	2,243	2,940	4,642	6,104	3,935	7,697	6,197	5,186	4,432	2,173	1,194	2,350
MEAN	72.4	98.0	150	197	141	248	207	167	148	70.1	38.5	78.3
MAX	80	109	680	500	280	353	437	1,010	372	107	64	201
MIN	66	85	54	84	70	170	111	76	81	23	23	26
AC-FT	4,450	5,830	9,210	12,110	7,810	15,270	12,290	10,290	8,790	4,310	2,370	4,660

CAL YR 1972 TOTAL 41,415 MEAN 113 MAX 1,280 MIN 27 AC-FT 82,150
WTR YR 1973 TOTAL 49,093 MEAN 135 MAX 1,010 MIN 23 AC-FT 97,380

PEAK DISCHARGE (BASE, 1,100 CFS).--May 26 (2045) 2,230 cfs (9.87 ft).

06794500 Loup River at Columbus, Nebr.

LOCATION.--Lat 41°25'05", long 97°21'45", in SE1/4NW1/4 sec.30, T.17 N., R.1 E., Platte County, on left bank 1,250 ft (381 m) downstream from bridge on U.S. Highway 30 at Columbus, 3.5 mi (5.6 km) upstream from mouth, and 14 mi (23 km) downstream from Looking-glass Creek.

DRAINAGE AREA.--15,200 mi² (39,400 km²), approximately, of which about 6,530 mi² (16,900 km²) contributes directly to surface runoff.

PERIOD OF RECORD.--October 1894 to September 1915 (published as "near Columbus" 1900-1901), March to September 1931, October 1933 to current year. Monthly discharge only for some periods, published in WSP 1310.

GAGE.--Water-stage recorder. Datum of gage is 1,428.29 ft (435.343 m) above mean sea level, unadjusted. See WRD Nebr. 1969 for history of changes prior to June 15, 1967.

EXTREMES.--Current year: Maximum discharge, 7,400 ft³/s (210 m³/s) May 28, gage height, 6.00 ft (1.829 m), from floodmark; maximum gage height observed, 7.40 ft (2.256 m) Jan. 20, backwater from ice; minimum daily discharge, 62 ft³/s (1.76 m³/s) Aug. 31.
Period of record: Maximum discharge, 119,000 ft³/s (3,370 m³/s) Aug. 14, 1966, gage height, 14.42 ft (4.395 m), present site and datum, from rating curve extended above 52,100 ft³/s (1,480 m³/s) by logarithmic plotting and volumetric study; minimum daily, 11 ft³/s (0.31 m³/s) Aug. 28, 1955.

REMARKS.--Records poor. Natural flow of stream affected by power developments, ground-water withdrawals and diversions for irrigation, and return flow from irrigated areas. Records do not include flow of Loup River power canal which diverts at point 25 mi (40 km) upstream and returns to Platte River below mouth of Loup River; diversion began Dec. 2, 1936. (See sta 06792500.)

REVISIONS (WATER YEARS).--WSP 956: 1937-41. WSP 1086: Drainage area. WSP 1390: 1895, 1897, 1900-1901, 1915, 1941(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	162	187	332	2,000	1,650	3,700	3,520	353	874	159	160	67
2	157	264	264	1,100	1,550	4,300	2,660	341	456	185	135	64
3	160	213	600	600	1,600	4,100	1,400	507	666	176	114	147
4	154	226	380	250	1,700	3,960	910	331	4,060	229	104	103
5	151	197	187	230	2,000	2,800	702	299	2,520	224	94	124
6	151	194	78	250	2,150	2,980	463	297	1,900	185	83	156
7	148	261	110	300	2,200	2,660	428	293	666	155	68	159
8	143	206	140	390	1,700	2,140	470	294	312	149	68	170
9	143	257	200	520	1,700	846	486	245	294	141	69	145
10	151	229	190	600	1,200	846	306	245	276	130	68	102
11	143	213	210	540	1,300	1,700	294	240	265	119	94	119
12	143	219	220	500	1,350	2,720	300	220	557	101	86	170
13	140	261	230	380	1,000	1,310	318	210	639	92	86	186
14	140	2,120	210	300	800	1,720	294	210	270	86	78	166
15	138	1,580	200	280	640	2,950	294	200	330	86	83	209
16	148	1,940	190	600	640	2,020	1,370	205	324	74	944	160
17	146	300	220	1,600	500	1,230	1,070	215	288	70	760	139
18	148	270	235	3,600	520	756	566	210	372	70	163	190
19	143	316	220	4,600	450	566	539	220	260	73	128	194
20	157	272	220	5,400	380	574	711	225	265	204	94	171
21	154	257	250	5,200	480	534	639	215	253	930	83	167
22	148	254	280	5,600	1,700	456	648	210	248	1,890	83	153
23	148	254	280	2,900	3,100	470	502	205	250	666	69	118
24	148	264	280	1,900	3,900	1,020	414	210	218	306	70	113
25	148	257	260	1,900	3,800	2,090	414	205	177	1,290	72	139
26	148	236	260	2,700	3,400	2,390	372	330	212	1,890	71	182
27	146	222	300	3,000	3,100	1,580	347	3,450	191	245	69	202
28	146	382	1,600	3,200	2,800	873	274	5,390	161	190	69	300
29	148	755	3,900	2,800	------	1,230	262	4,240	143	195	66	1,230
30	160	661	3,700	2,000	------	1,760	313	2,410	156	153	64	6,550
31	178	------	2,600	1,750	------	1,190	------	1,370	------	149	62	------
TOTAL	4,638	13,237	18,346	56,990	47,310	57,471	21,386	23,595	17,603	10,612	4,257	12,095
MEAN	150	441	592	1,838	1,690	1,854	713	761	587	342	137	403
MAX	178	2,120	3,900	5,600	3,900	4,300	3,520	5,390	4,060	1,890	944	6,550
MIN	138	187	78	230	380	456	262	200	143	70	62	64
AC-FT	9,200	26,260	36,390	113,000	93,840	114,000	42,420	46,800	34,920	21,050	8,440	23,990

CAL YR 1972 TOTAL 204,884 MEAN 560 MAX 7,950 MIN 56 AC-FT 406,400
WTR YR 1973 TOTAL 287,540 MEAN 788 MAX 6,550 MIN 62 AC-FT 570,300

06795500 Shell Creek near Columbus, Nebr.

LOCATION.--Lat 41°31'33", long 97°16'55", in NE1/4NW1/4 sec.23, T.18 N., R.1 E., Platte County, on right bank 80 ft (24 m) upstream from county road bridge, 1 mi (2 km) upstream from Loseke Creek, and 7 mi (11 km) northeast of Columbus.

DRAINAGE AREA.--270 mi² (700 km²), approximately.

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

GAGE.--Water-stage recorder. Altitude of gage is 1,435 ft (437.4 m), from topographic map.

AVERAGE DISCHARGE.--26 years, 43.9 ft³/s (1.243 m³/s), 31,810 acre-ft/yr (39.2 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,390 ft³/s (96.0 m³/s) May 27, gage height, 20.82 ft (6.346 m); minimum daily, 5.1 ft³/s (0.14 m³/s) Aug. 30,31.
Period of record: Maximum discharge, 5,970 ft³/s (169 m³/s) June 3, 1950, gage height, 21.38 ft (6.517 m); minimum daily, 0.4 ft³/s (0.011 m³/s) July 27, 1954.
Flood of June 2, 1947, reached a stage of 21.7 ft (6.61 m), from floodmark, discharge, 4,600 ft³/s (130 m³/s).

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.7	16	14	42	125	450	127	30	109	15	13	5.4
2	8.5	18	12	32	135	580	124	30	83	15	12	6.4
3	8.1	20	9.0	28	150	459	68	35	170	15	10	8.6
4	7.4	19	8.0	23	110	387	50	29	208	17	10	10
5	7.6	14	7.4	22	90	289	41	24	74	38	9.9	14
6	8.1	12	7.0	21	70	347	37	23	55	73	9.5	9.6
7	8.4	12	7.2	18	50	404	34	23	45	30	7.2	8.1
8	8.8	11	7.4	18	40	221	33	23	37	17	5.6	7.3
9	8.3	11	7.6	14	47	89	32	23	32	15	6.0	8.3
10	8.6	12	7.8	16	54	67	32	22	28	14	8.8	8.7
11	8.8	13	8.0	15	60	195	31	19	25	14	10	8.3
12	8.8	13	8.2	13	41	223	30	18	36	13	11	8.1
13	9.1	15	8.4	17	33	101	29	17	381	12	13	8.6
14	8.7	19	8.6	19	25	210	27	17	64	11	11	8.3
15	8.4	19	9.0	21	18	147	27	16	41	9.2	9.1	9.3
16	8.1	18	9.4	22	15	70	27	16	34	9.3	8.3	10
17	8.4	17	10	24	19	49	28	15	28	9.4	8.0	11
18	8.7	17	11	130	30	40	26	15	26	10	6.8	11
19	8.5	16	12	300	60	36	25	15	43	7.4	7.6	10
20	8.2	16	15	500	110	32	27	14	27	13	7.2	9.9
21	8.7	17	14	250	86	30	32	14	22	21	5.7	9.7
22	9.7	18	18	130	70	29	27	13	20	29	8.1	9.4
23	10	19	16	116	150	35	24	14	19	19	9.0	9.4
24	10	18	15	100	300	150	23	13	19	18	7.6	9.9
25	9.9	19	17	90	600	283	23	13	18	16	7.6	9.6
26	9.3	19	18	80	500	223	26	14	17	15	7.2	11
27	9.1	20	19	90	410	107	25	1,720	17	13	6.2	12
28	9.6	16	20	100	380	69	24	2,020	16	12	5.7	18
29	9.4	20	60	110	------	63	23	279	16	22	5.4	36
30	10	16	300	130	------	71	23	200	16	35	5.1	69
31	11	------	100	135	------	59	------	164	------	19	5.1	------
TOTAL	274.9	490	784.0	2,626	3,778	5,515	1,105	4,888	1,726	576.3	256.7	374.9
MEAN	8.87	16.3	25.3	84.7	135	178	36.8	158	57.5	18.6	8.28	12.5
MAX	11	20	300	500	600	580	127	2,020	381	73	13	69
MIN	7.4	11	7.0	13	15	29	23	13	16	7.4	5.1	5.4
AC-FT	545	972	1,560	5,210	7,490	10,940	2,190	9,700	3,420	1,140	509	744

CAL YR 1972 TOTAL 10,452.9 MEAN 28.6 MAX 1,130 MIN 2.4 AC-FT 20,730
WTR YR 1973 TOTAL 22,394.8 MEAN 61.4 MAX 2,020 MIN 5.1 AC-FT 44,420

PEAK DISCHARGE (BASE, 700 CFS).--May 27 (2200) 3,390 cfs (20.82 ft).

06796000 Platte River at North Bend, Nebr.

LOCATION.--Lat 41°27'10", long 96°45'50", in SE1/4 sec.7, T.17 N., R.6 E., Dodge County, on left bank 30 ft (9 m) upstream from bridge on State Highway 79, 1 mi (2 km) south of North Bend, and 5 mi (8 km) downstream from Shell Creek.

DRAINAGE AREA.--81,100 mi² (210,000 km²), approximately.

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

GAGE.--Water-stage recorder. Datum of gage is 1,262.32 ft (384.755 m) above mean sea level. Prior to Sept. 12, 1951, nonrecording gage and Sept. 12, 1951, to Sept. 30, 1970, water-stage recorder, at present site at datum 2.00 ft (0.610 m) higher.

AVERAGE DISCHARGE.--24 years, 4,008 ft³/s (113.5 m³/s), 2,904,000 acre-ft/yr (3.58 km³/yr).

EXTREMES.--Current year: Maximum discharge, 36,300 ft³/s (1,030 m³/s) May 28, gage height, 8.12 ft (2.475 m); minimum daily, 694 ft³/s (19.7 m³/s) Aug. 23.
Period of record: Maximum discharge, 112,000 ft³/s (3,170 m³/s) Mar. 29, 1960, gage height, 10.04 ft (3.060 m), present datum; maximum gage height, 12.24 ft (3.731 m) Feb. 20, 1971, ice jam; minimum daily discharge, 126 ft³/s (3.57 m³/s) Aug. 29, 1955.

REMARKS.--Records fair except those for winter period, which are poor. Natural flow of stream affected by transmountain diversions, storage reservoirs, power developments, ground-water withdrawals and diversions for irrigation, and return flow from irrigated areas. Records of chemical analyses for the water year 1973 are published in Part 2 of this report.

REVISIONS.--WRD Nebr. 1967: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,370	3,970	5,020	8,400	6,400	12,500	11,100	6,430	25,200	8,720	3,820	789
2	1,890	5,150	4,930	6,400	6,200	12,800	12,800	6,630	25,300	8,280	3,500	1,140
3	2,680	4,680	3,970	5,000	6,400	13,100	11,200	6,890	24,400	6,700	3,140	1,790
4	3,000	3,820	2,860	4,200	6,800	11,900	9,230	7,160	26,600	5,570	3,280	2,990
5	2,610	4,360	2,000	3,400	7,200	10,200	8,200	6,570	25,400	4,510	2,740	3,480
6	2,890	3,410	1,700	3,000	7,600	10,000	7,560	7,010	24,900	4,680	2,300	2,920
7	2,590	3,720	1,600	3,100	8,000	10,500	7,180	7,160	21,400	3,210	2,380	3,190
8	2,980	3,960	1,700	3,100	7,400	9,530	6,730	7,720	17,800	3,590	1,390	4,000
9	2,550	4,360	1,900	2,800	6,800	9,110	7,060	8,170	16,100	3,150	1,250	3,600
10	2,600	4,330	2,000	2,800	6,600	8,360	6,720	8,260	14,900	3,140	1,520	2,910
11	2,890	4,310	2,100	2,700	6,400	9,170	6,570	7,660	13,300	2,400	1,360	3,340
12	3,220	4,540	2,200	3,000	6,600	11,600	6,420	8,690	13,200	2,580	1,750	4,120
13	2,870	4,630	2,300	3,200	6,400	10,500	6,420	8,280	13,800	3,490	1,320	4,660
14	3,000	5,030	2,400	3,500	6,000	11,100	6,020	8,240	12,400	1,630	1,910	5,530
15	2,940	5,720	2,500	3,900	5,600	12,200	6,190	8,930	11,700	2,440	2,000	6,970
16	2,940	5,660	2,600	4,800	5,400	10,500	6,340	8,830	12,000	1,010	2,770	7,420
17	2,930	6,400	2,800	6,000	5,000	9,070	8,080	9,660	11,200	924	5,250	7,590
18	2,920	5,200	3,100	8,000	4,900	7,910	6,920	11,500	11,200	1,060	3,550	8,890
19	3,000	5,290	3,500	9,000	5,000	7,030	6,740	17,300	10,800	1,020	2,220	6,990
20	3,200	5,860	3,900	10,200	5,600	6,790	6,670	18,100	10,300	1,490	2,230	6,820
21	2,890	5,630	4,300	10,400	6,400	6,400	6,960	18,000	10,400	4,590	2,330	6,520
22	3,160	5,460	4,800	11,000	8,200	6,430	6,560	16,700	10,300	8,980	1,900	7,370
23	3,290	5,720	5,000	7,000	11,000	6,380	5,910	17,000	10,600	8,400	694	7,240
24	4,100	5,180	4,700	6,800	13,000	8,120	6,140	16,200	10,800	7,200	2,530	7,120
25	3,550	5,560	4,600	6,600	14,000	11,600	5,990	16,100	10,800	5,960	1,810	7,990
26	4,020	5,310	4,500	7,200	13,000	12,100	5,390	17,500	11,000	10,600	1,810	8,810
27	3,510	5,340	4,500	8,200	12,000	11,300	6,030	28,900	10,700	8,030	1,150	8,630
28	4,190	5,220	5,400	9,000	12,000	9,880	6,350	32,200	11,100	6,070	1,400	10,300
29	3,750	5,090	7,000	8,000	------	8,940	6,130	29,500	10,300	5,980	1,170	12,100
30	4,050	4,920	8,000	7,400	------	9,110	6,380	28,100	9,290	3,560	1,240	20,200
31	5,170	------	8,200	6,600	------	9,490	------	25,800	------	3,950	764	------
TOTAL	97,750	147,830	116,080	184,700	215,900	303,620	215,990	425,190	447,190	142,914	66,478	185,419
MEAN	3,153	4,928	3,745	5,958	7,711	9,794	7,200	13,720	14,910	4,610	2,144	6,181
MAX	5,170	6,400	8,200	11,000	14,000	13,100	12,800	32,200	26,600	10,600	5,250	20,200
MIN	1,890	3,410	1,600	2,700	4,900	6,380	5,390	6,430	9,290	924	694	789
AC-FT	193,900	293,200	230,200	366,400	428,200	602,200	428,400	843,400	887,000	283,500	131,900	367,800

CAL YR 1972 TOTAL 1,381,669 MEAN 3,775 MAX 10,900 MIN 879 AC-FT 2,741,000
WTR YR 1973 TOTAL 2,549,061 MEAN 6,984 MAX 32,200 MIN 694 AC-FT 5,056,000

06797500 Elkhorn River at Ewing, Nebr.

LOCATION.--Lat 42°16'03", long 98°20'11", in NW1/4SW1/4 sec.35, T.27 N., R.9 W., Holt County, on right bank 350 ft (107 m) downstream from bridge on State Highway 420, 0.8 mi (1.3 km) north of Ewing, and 1.5 mi (2.4 km) upstream from South Fork Elkhorn River.

DRAINAGE AREA.--1,400 mi² (3,630 km²), approximately, of which about 740 mi² (1,920 km²) contributes directly to surface runoff.

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

GAGE.--Water-stage recorder. Altitude of gage is 1,836 ft (559.6 m), revised, from topographic map. c Prior to Oct. 22, 1952, at site 300 ft (90 m) upstream at same datum.

AVERAGE DISCHARGE.--26 years, 180 ft³/s (5.098 m³/s), 130,400 acre-ft/yr (0.161 km³/yr); median of yearly mean discharges, 120 ft³/s (3.398 m³/s), 86,900 acre-ft/yr (0.107 km³/yr).

EXTREMES.--Current year: Maximum discharge, 1,390 ft³/s (39.4 m³/s) June 2, gage height, 6.59 ft (2.009 m); minimum daily, 11 ft³/s (0.31 m³/s) Aug. 29.
Period of record: Maximum discharge, 7,500 ft³/s (212 m³/s) June 10, 1962, gage height, 10.60 ft (3.231 m); minimum daily, 5.7 ft³/s (0.16 m³/s) Aug. 25, 1968.
Maximum stage known, 11.32 ft (3.450 m) June 23, 24, 1947, from floodmark at site 300 ft (90 m) upstream, discharge, 6,600 ft³/s (187 m³/s).

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	50	81	74	78	120	432	1,100	266	1,230	71	53	27
2	49	98	70	80	140	560	1,030	311	1,330	68	50	26
3	47	98	54	80	150	530	910	346	1,140	66	46	39
4	45	97	56	80	160	514	862	388	1,020	66	43	39
5	45	92	58	70	155	502	775	397	928	69	39	39
6	46	89	58	72	155	514	615	367	755	74	35	36
7	48	85	58	74	150	474	482	332	570	68	34	34
8	50	84	58	74	145	428	407	316	438	59	33	35
9	50	83	58	70	140	410	370	266	352	55	31	36
10	50	82	56	72	150	397	334	232	285	53	30	37
11	51	80	58	72	160	449	311	205	230	50	31	37
12	51	81	62	74	155	478	292	182	221	46	29	38
13	52	88	60	74	150	456	267	161	209	42	28	41
14	52	86	58	74	150	745	245	146	177	38	28	43
15	52	88	60	76	150	875	546	133	161	36	29	52
16	51	87	58	78	150	849	720	123	144	34	29	55
17	51	87	60	80	155	951	725	114	126	32	29	57
18	51	94	64	78	160	987	650	109	156	32	25	56
19	51	93	66	78	175	909	590	106	152	33	23	56
20	52	91	70	78	190	785	550	102	131	45	21	54
21	54	90	76	78	210	635	555	97	119	59	19	52
22	57	88	84	78	240	518	522	90	110	69	17	50
23	59	85	82	78	280	459	575	87	103	74	17	48
24	60	84	80	82	380	478	522	87	98	73	17	47
25	62	86	80	86	360	550	410	86	93	68	18	48
26	59	82	86	90	330	595	354	92	89	63	17	64
27	58	82	84	88	340	600	306	194	82	59	14	66
28	57	80	82	88	360	745	271	526	78	54	12	83
29	56	72	82	90	------	862	243	620	74	57	11	123
30	68	72	82	96	------	825	235	695	72	56	25	141
31	78	------	80	106	------	916	------	928	------	56	32	------
TOTAL	1,662	2,585	2,114	2,472	5,560	19,428	15,774	8,104	10,673	1,725	865	1,559
MEAN	53.6	86.2	68.2	79.7	199	627	526	261	356	55.6	27.9	52.0
MAX	78	98	86	106	380	987	1,100	928	1,330	74	53	141
MIN	45	72	54	70	120	397	235	86	72	32	11	26
AC-FT	3,300	5,130	4,190	4,900	11,030	38,540	31,290	16,070	21,170	3,420	1,720	3,090

CAL YR 1972 TOTAL 56,884 MEAN 155 MAX 2,480 MIN 35 AC-FT 112,800
WTR YR 1973 TOTAL 72,521 MEAN 199 MAX 1,330 MIN 11 AC-FT 143,800

PEAK DISCHARGE (BASE, 500 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
3- 2	2200	5.20	635	4-16	1530	5.51	760
3-18	2030	6.04	1,020	6- 2	0430	6.59	1,390
4- 1	2030	6.21	1,130				

06798500 Elkhorn River at Neligh, Nebr.

LOCATION.--Lat 42°07'20", long 98°01'40", in sec.20, T.25 N., R.6 W., Antelope County, on right bank 10 ft (3 m) downstream from bridge on old State Highway 14 at Neligh.

DRAINAGE AREA.--2,200 mi² (5,700 km²), approximately, of which about 1,200 mi² (3,110 km²) contributes directly to surface runoff.

PERIOD OF RECORD.--October 1930 to September 1958, August 1960 to current year. Monthly discharge only for some periods, published in WSP 1310.

GAGE.--Water-stage recorder. Datum of gage is 1,713.88 ft (522.391 m) above mean sea level. Prior to Apr. 16, 1933, nonrecording gage at site 30 ft (9 m) downstream at present datum. Apr. 16, 1933, to Jan. 23, 1939, nonrecording gage at bridge 10 ft (3 m) upstream at present datum.

AVERAGE DISCHARGE.--41 years, 285 ft³/s (8.071 m³/s), 206,500 acre-ft/yr (0.255 km³/yr); median of yearly mean discharges, 230 ft³/s (6.514 m³/s), 167,000 acre-ft/yr (0.206 km³/yr).

EXTREMES.--Current year: Maximum discharge, 2,290 ft³/s (64.9 m³/s) Apr. 17, gage height, 6.39 ft (1.948 m); minimum daily, 64 ft³/s (1.81 m³/s) Aug. 29.
Period of record: Maximum discharge, about 12,000 ft³/s (340 m³/s) June 23, 1947, gage height, 12.53 ft (3.819 m), from main channel rating curve extended above 4,900 ft³/s (139 m³/s) and field estimate of flow through break in highway fill; minimum daily, 12 ft³/s (0.34 m³/s) July 2, 1932.
Flood of Mar. 29, 1960, reached a stage of 12.24 ft (3.731 m), from floodmark, discharge, 12,300 ft³/s (348 m³/s).

REMARKS.--Records fair except those for winter period, which are poor. Records of fluvial sediments for the water year 1973 are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1006: 1935, 1942. WSP 1390: 1931-32, 1937(M). WSP 1730: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	119	206	190	180	270	760	2,060	484	1,280	157	138	77
2	123	258	185	190	280	960	2,200	496	1,470	158	132	80
3	124	250	110	195	300	920	1,820	532	1,370	163	122	118
4	118	233	120	200	310	907	1,290	585	1,240	158	116	123
5	119	222	130	190	300	944	988	596	1,180	168	106	104
6	127	218	140	200	280	838	785	592	1,070	169	98	98
7	127	212	145	210	270	790	658	566	924	154	92	98
8	129	201	145	195	250	709	581	523	745	144	92	116
9	127	201	150	180	250	619	544	495	591	137	90	113
10	133	197	140	190	260	572	513	474	496	137	87	110
11	133	196	150	200	280	678	496	433	420	131	91	107
12	129	202	160	210	270	785	492	401	393	120	92	103
13	129	227	150	220	260	826	471	372	415	113	88	115
14	130	216	140	230	250	1,220	466	353	365	108	84	120
15	126	209	145	235	240	1,800	1,380	325	333	105	82	142
16	130	205	140	245	230	1,960	1,900	297	303	104	83	167
17	127	205	150	260	250	1,760	1,960	278	276	101	83	166
18	125	205	160	250	260	1,510	1,190	266	288	103	81	156
19	127	209	165	250	270	1,210	824	254	306	104	77	145
20	133	217	175	245	290	934	746	244	270	145	75	137
21	141	217	185	240	310	730	717	230	256	175	74	133
22	148	217	195	240	340	653	736	213	247	171	72	126
23	154	216	195	230	390	604	715	201	229	174	70	118
24	155	218	190	250	520	678	695	194	204	185	72	117
25	157	221	200	260	700	934	577	195	184	174	76	123
26	156	217	210	280	640	1,110	513	214	178	164	74	218
27	150	219	195	250	600	1,070	487	492	173	153	68	218
28	146	213	190	245	660	1,290	480	956	166	148	65	266
29	143	185	185	240	------	1,530	466	1,040	164	160	64	453
30	163	190	185	250	------	1,530	463	1,120	157	161	65	374
31	220	------	180	260	------	1,540	------	1,110	------	146	69	------
TOTAL	4,268	6,402	5,100	7,020	9,530	32,271	27,213	14,531	15,693	4,490	2,678	4,541
MEAN	138	213	165	226	340	1,041	907	469	523	145	86.4	151
MAX	220	258	210	280	700	1,960	2,200	1,120	1,470	185	138	453
MIN	118	185	110	180	230	572	463	194	157	101	64	77
AC-FT	8,470	12,700	10,120	13,920	18,900	64,010	53,980	28,820	31,130	8,910	5,310	9,010

CAL YR 1972 TOTAL 103,271 MEAN 282 MAX 3,440 MIN 100 AC-FT 204,800
WTR YR 1973 TOTAL 133,737 MEAN 366 MAX 2,200 MIN 64 AC-FT 265,300

PEAK DISCHARGE (BASE, 1,000 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
3-16	1000	5.98	2,020	4-17	0130	6.39	2,290
4- 2	0600	6.17	2,280	6- 2	1500	5.85	1,550

06799000 Elkhorn River near Norfolk, Nebr.

LOCATION.--Lat 42°00'20", long 97°28'40", in SW1/4 sec.31, T.24 N., R.1 W., Madison County, on left bank 75 ft (23 m) downstream from bridge on county road, 3.5 mi (5.6 km) west-southwest of Norfolk, and 7 mi (11 km) upstream from North Fork Elkhorn River.

DRAINAGE AREA.--2,790 mi² (7,230 km²), approximately, of which about 1,790 mi² (4,640 km²) contributes directly to surface runoff.

PERIOD OF RECORD.--July 1896 to November 1903 (no winter records), October 1945 to current year. Gage height records collected at site 3.2 mi (5.1 km) downstream since May 1941 are contained in reports of U.S. Weather Bureau. Published as "at Norfolk" prior to October 1957.

GAGE.--Water-stage recorder. Datum of gage is 1,522.83 ft (464.159 m) above mean sea level. See WSP 1918 for history of changes prior to Aug. 30, 1958.

AVERAGE DISCHARGE.--28 years, 518 ft³/s (14.67 m³/s), 375,300 acre-ft/yr (0.463 km³/yr); median of yearly mean discharges, 430 ft³/s (12.18 m³/s), 312,000 acre-ft/yr (0.385 km³/yr).

EXTREMES.--Current year: Maximum discharge, 2,240 ft³/s (63.4 m³/s) Mar. 17, gage height, 3.76 ft (1.146 m); maximum gage height, 5.53 ft (1.686 m) Feb. 24, backwater from ice; minimum daily discharge, 124 ft³/s (3.51 m³/s) Aug. 30, 31.
Period of record: Maximum discharge, 16,900 ft³/s (479 m³/s) June 14, 1967, gage height, 8.52 ft (2.597 m); maximum gage height observed, 13.63 ft (4.154 m) Mar. 11, 1949, site and datum then in use, backwater from ice; minimum daily discharge, 50 ft³/s (1.42 m³/s) Aug. 26, 1968.
Flood of May 13, 1944, reached a stage of 11.8 ft (3.60 m), previous site and datum, discharge, 14,300 ft³/s (405 m³/s).

REMARKS.--Records fair except those for winter period, which are poor. Records of water temperatures and fluvial sediments for the water year 1973 are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1390: 1898-1900. WSP 1730: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	217	345	335	270	740	1,100	2,040	585	1,600	228	197	125
2	208	372	350	300	760	1,550	2,060	617	1,600	224	195	131
3	205	366	244	280	800	1,700	1,930	682	1,600	232	188	163
4	208	345	128	270	680	1,500	1,650	718	1,580	236	181	164
5	205	325	150	260	600	1,550	1,480	730	1,460	252	174	172
6	199	310	240	290	480	1,590	1,230	716	1,260	252	168	160
7	196	305	240	270	450	1,540	1,080	690	1,040	240	165	156
8	196	290	240	260	440	1,480	933	671	1,040	220	158	166
9	205	300	230	240	440	1,240	781	689	990	211	150	173
10	208	290	240	240	470	1,110	720	684	853	208	147	174
11	211	290	220	240	500	1,410	702	630	770	205	159	175
12	208	295	230	245	560	1,450	681	582	648	205	158	176
13	208	330	240	250	520	1,450	790	529	606	193	153	180
14	208	345	250	270	470	1,810	711	494	630	186	148	183
15	211	335	260	300	430	1,900	790	468	606	180	145	204
16	211	330	270	350	410	2,130	1,710	444	501	178	145	222
17	211	325	260	600	430	2,120	1,880	420	450	172	147	248
18	214	325	280	840	480	1,890	1,770	408	408	168	146	242
19	217	310	290	800	540	1,680	1,470	396	396	168	142	234
20	220	310	300	740	640	1,480	1,170	384	402	188	138	235
21	224	335	320	680	740	1,310	930	372	390	248	133	229
22	228	372	340	660	900	1,230	966	350	360	285	130	213
23	228	384	370	640	1,100	1,150	966	335	340	280	130	208
24	232	378	330	740	1,500	1,210	930	325	315	280	130	214
25	240	366	350	840	1,100	1,520	966	321	295	275	132	216
26	240	360	340	900	900	1,610	864	455	290	256	133	281
27	236	355	320	800	800	1,610	770	1,240	280	230	131	350
28	236	350	340	680	780	1,660	693	1,390	265	213	127	391
29	236	335	320	640	------	1,960	634	1,420	248	209	125	477
30	252	335	310	660	------	1,900	598	1,300	236	210	124	563
31	285	------	290	700	------	1,890	------	1,500	------	205	124	------
TOTAL	6,803	10,013	8,627	15,255	18,660	48,730	33,895	20,545	21,459	6,837	4,623	6,825
MEAN	219	334	278	492	666	1,572	1,130	663	715	221	149	228
MAX	285	384	370	900	1,500	2,130	2,060	1,500	1,600	285	197	563
MIN	196	290	128	240	410	1,100	598	321	236	168	124	125
AC-FT	13,490	19,860	17,110	30,260	37,010	96,660	67,230	40,750	42,560	13,560	9,170	13,540

CAL YR 1972 TOTAL 180,581 MEAN 493 MAX 3,880 MIN 128 AC-FT 358,200
WTR YR 1973 TOTAL 202,272 MEAN 554 MAX 2,130 MIN 124 AC-FT 401,200

PEAK DISCHARGE (BASE, 2,000 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
3-17	0100	3.76	2,240	4-17	1900	3.76	2,000
4- 3	0130	3.86	2,120				

06799100 North Fork Elkhorn River near Pierce, Nebr.

LOCATION.--Lat 42°10'44", long 97°29'04", in SW1/4 sec.31, T.26 N., R.1 W., Pierce County, on left downstream wingwall of county road bridge, 2.5 mi (4.0 km) southeast of Pierce.

DRAINAGE AREA.(REVISED)--700 mi² (1,810 km²), approximately, of which about 30 mi² (78 km²) is noncontributing.

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

GAGE.--Water-stage recorder. Datum of gage is 1,553.07 ft (473.376 m) above mean sea level (U.S. Weather Bureau levels).

AVERAGE DISCHARGE.--13 years, 93.4 ft³/s (2.645 m³/s), 67,670 acre-ft/yr (83.4 hm³/yr); median of yearly mean discharges, 84 ft³/s (2.379 m³/s), 60,900 acre-ft/yr (75.1 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,090 ft³/s (30.9 m³/s) Apr. 16, gage height, 10.36 ft (3.158 m); maximum gage height, 11.28 ft (3.438 m). Feb. 24 (backwater from ice); minimum daily discharge, 21 ft³/s (0.59 m³/s) Aug. 23.
Period of record: Maximum discharge, 15,200 ft³/s (430 m³/s) Feb. 19, 1971, gage height, 15.10 ft (4.602 m); minimum daily, 13 ft³/s (0.37 m³/s) July 21, 22, 28, 1968, July 31, 1970.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	44	49	42	40	120	638	658	103	171	60	35	26
2	43	69	40	45	120	902	704	104	138	55	35	26
3	42	64	38	42	120	860	419	88	117	55	33	35
4	41	62	36	40	110	628	255	91	102	53	32	33
5	42	57	35	38	94	402	217	81	98	52	31	30
6	44	50	36	42	86	446	202	77	91	50	30	28
7	44	47	36	45	84	538	180	76	76	47	26	29
8	43	45	36	44	82	378	165	74	76	45	25	35
9	42	45	35	42	82	254	150	72	70	45	25	36
10	43	45	35	45	90	210	140	71	66	44	24	33
11	42	45	37	52	100	353	134	68	61	43	27	31
12	42	45	38	60	100	550	125	64	594	40	28	31
13	42	44	36	66	100	473	113	63	277	36	26	32
14	41	40	35	70	96	756	110	61	188	36	23	33
15	40	42	36	74	88	904	159	63	183	35	23	37
16	40	45	35	78	78	562	912	58	136	35	23	41
17	39	47	37	82	82	288	642	57	104	32	22	41
18	39	47	39	88	92	227	288	56	106	34	23	38
19	38	47	41	560	100	198	205	55	130	32	22	36
20	39	47	43	540	110	182	180	54	130	42	23	36
21	41	48	46	250	130	171	171	52	102	48	24	35
22	41	48	46	130	140	164	157	50	84	46	23	35
23	41	48	46	98	160	172	137	49	74	43	21	34
24	40	47	43	102	700	383	125	50	66	46	23	36
25	39	47	45	110	640	666	120	49	62	46	23	36
26	40	46	43	112	350	714	118	71	59	37	23	82
27	40	43	47	110	190	460	114	480	56	37	24	69
28	39	41	48	100	220	336	111	412	55	36	22	89
29	38	37	47	102	------	634	108	414	54	41	23	178
30	41	38	46	110	------	541	105	331	59	39	24	177
31	47	------	44	112	------	384	------	236	------	37	26	------
TOTAL	1,277	1,425	1,247	3,429	4,464	14,374	7,224	3,630	3,585	1,327	792	1,438
MEAN	41.2	47.5	40.2	111	159	464	241	117	120	42.8	25.5	47.9
MAX	47	69	48	560	700	904	912	480	594	60	35	178
MIN	38	37	35	38	78	164	105	49	54	32	21	26
AC-FT	2,530	2,830	2,470	6,800	8,850	28,510	14,330	7,200	7,110	2,630	1,570	2,850

CAL YR 1972 TOTAL 31,880 MEAN 87.1 MAX 2,210 MIN 25 AC-FT 63,230
WTR YR 1973 TOTAL 44,212 MEAN 121 MAX 912 MIN 21 AC-FT 87,690

PEAK DISCHARGE (BASE, 870 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
2-24	-	-	a900	4-16	1730	10.36	1,090
3- 2	1130	9.73	966	6-12	1500	9.77	974
3-15	0930	9.68	956				

a About

06799350 Elkhorn River at West Point, Nebr.

LOCATION.--Lat 41°50'23", long 96°43'34", in SW1/4NW1/4 sec. 34, T.22 N., R.6 E., Cuming county, on left bank 50 ft (15 m) upstream from bridge on State Highway 32 and 1 mi (2 km) west of West Point.

DRAINAGE AREA.--5,100 mi² (13,200 km²), approximately.

PERIOD OF RECORD.--October 1972 to current year. March 1960 to September 1972 (no winter records 1960-68) in files of Corps of Engineers. Gage-height records collected since 1940 are in reports of U.S. weather Bureau.

GAGE.--Water-stage recorder. Datum of gage is 1,291.26 ft (393.576 m) above mean sea level.

AVERAGE DISCHARGE.--5 years (1968-73), 838 ft³/s (23.73 m³/s) (607,100 acre-ft/yr (0.749 km³/yr)).

EXTREMES.--Current year: Maximum discharge, 6,100 ft³/s (173 m³/s) May 27, gage height, 8.92 ft (2.719 m); maximum gage height, 11.14 ft (3.395 m) Jan. 21, backwater from ice; minimum daily discharge, 82 ft³/s (2.32 m³/s) Dec. 5.
Flood of March 31, 1960 reached a stage of 16.09 ft (4.904 m), backwater from ice; observed by Corps of Engineers.

REMARKS.--Records fair except those for winter period, which are poor. Some small diversions above station for irrigation.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	355	435	723	560	980	2,000	3,860	1,010	2,180	550	269	165
2	340	508	430	580	960	2,300	3,930	1,030	2,200	505	256	197
3	335	548	270	540	920	3,200	3,490	1,030	2,300	490	255	270
4	320	548	150	520	980	3,900	2,880	1,010	2,230	535	239	289
5	310	540	82	460	1,000	4,500	2,330	1,050	2,050	650	235	247
6	330	500	180	440	920	3,900	1,880	1,170	1,880	670	234	233
7	325	487	320	420	840	3,520	1,420	1,270	1,700	630	235	226
8	325	461	310	390	800	2,480	1,190	1,270	1,720	490	237	233
9	340	516	300	370	780	2,000	1,010	1,150	1,650	520	244	230
10	360	572	310	340	800	1,700	807	1,120	1,710	390	231	240
11	360	604	320	330	820	2,480	891	1,090	1,550	384	249	240
12	360	532	330	320	820	2,760	889	979	2,620	337	279	240
13	360	580	340	320	800	3,000	860	950	4,100	330	293	250
14	360	540	350	320	600	3,440	867	850	2,280	300	268	280
15	370	540	370	340	580	3,500	1,050	810	1,900	310	288	310
16	376	626	340	380	580	3,510	1,910	799	2,320	260	253	350
17	372	589	340	900	640	3,020	3,250	852	1,600	250	237	360
18	364	545	380	1,200	720	2,900	2,890	812	1,770	245	227	370
19	359	525	410	1,400	820	2,480	2,270	725	1,270	250	222	360
20	349	549	440	1,600	980	2,280	1,880	690	1,090	245	210	340
21	349	591	450	1,450	1,200	2,040	1,640	609	1,270	730	209	340
22	356	598	460	1,200	1,500	1,840	1,530	541	1,160	775	201	340
23	377	642	450	960	2,500	1,810	1,480	462	1,070	532	193	320
24	378	652	450	1,000	4,600	2,500	1,320	527	950	490	197	320
25	388	695	420	1,050	4,400	3,310	1,390	529	870	513	193	340
26	402	725	410	1,100	5,200	3,660	1,220	655	710	381	193	460
27	402	807	480	1,000	3,200	3,530	947	3,550	650	337	181	454
28	390	746	530	940	2,300	3,120	990	4,820	550	281	177	950
29	383	661	600	900	------	3,200	1,010	3,260	460	274	177	1,430
30	396	686	700	980	------	3,370	1,010	2,300	430	278	173	1,550
31	435	------	620	1,020	------	3,210	------	2,310	------	297	162	------
TOTAL	11,226	17,548	12,265	23,330	41,240	90,460	52,091	39,230	48,240	13,229	7,017	11,934
MEAN	362	585	396	753	1,473	2,918	1,736	1,265	1,608	427	226	398
MAX	435	807	723	1,600	5,200	4,500	3,930	4,820	4,100	775	293	1,550
MIN	310	435	82	320	580	1,700	807	462	430	245	162	165
AC-FT	22,270	34,810	24,330	46,280	81,800	179,400	103,300	77,810	95,680	26,240	13,920	23,670

WTR YR 1973 TOTAL 367,810 MEAN 1,008 MAX 5,200 MIN 82 AC-FT 729,600

PEAK DISCHARGE (BASE, 4,500 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
2-26	-	-	a5,600	6-12	1100	8.85	5,920
3- 3	-	-	a5,000	6-13	0730	8.65	5,420
5-27	1300	8.92	6,100				

a About

06799450 Logan Creek at Pender, Nebr.

LOCATION.--Lat 42°06'40", long 96°42'00", in NW1/4 sec.26, T.25 N., R.6 E., Thurston County, on right bank 200 ft (61 m) downstream from bridge on Nebraska State Highway 94 at Pender and 0.7 mi (1.1 km) downstream from Rattlesnake Creek.

DRAINAGE AREA.--731 mi² (1,890 km²), approximately.

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

GAGE.--Water-stage recorder. Datum of gage is 1,300.96 ft (396.533 m) above mean sea level. Prior to Apr. 23, 1966, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--8 years, 157 ft³/s (4.446 m³/s), 113,700 acre-ft/yr (0.140 km³/yr).

EXTREMES.--Current year: Maximum discharge, about 4,000 ft³/s (113 m³/s) Feb. 24, gage height, 13.42 ft (4.090 m), backwater from ice; minimum daily, 50 ft³/s (1.42 m³/s) Dec. 4, 16.
Period of record: Maximum discharge, 36,900 ft³/s (1,050 m³/s) Feb. 19, 1971, gage height, 23.11 ft (7.044 m); minimum daily, 14 ft³/s (0.40 m³/s) July 28, 1968.

REMARKS.--Records fair except those for winter period, which are poor. Records of chemical analysis for the water year 1973 are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	72	62	55	62	169	995	468	139	111	110	75	66
2	70	73	54	72	233	771	367	150	111	104	73	67
3	69	74	52	66	182	519	283	144	111	103	72	70
4	68	66	50	60	171	355	239	131	110	100	71	70
5	67	61	57	58	233	291	223	126	107	97	71	66
6	65	58	56	60	243	293	214	123	105	95	71	65
7	65	52	54	58	203	289	206	120	101	92	69	65
8	63	52	54	60	160	249	197	119	100	89	66	67
9	63	55	56	58	170	221	194	115	97	121	66	68
10	63	54	58	56	170	201	183	109	95	110	66	67
11	61	54	58	68	150	363	185	106	93	86	66	66
12	59	54	60	72	140	379	179	103	537	84	65	64
13	60	53	58	78	120	317	174	99	354	81	65	65
14	58	53	52	84	118	1,080	170	97	144	81	64	66
15	58	58	54	90	108	364	169	95	177	79	64	69
16	57	64	50	150	100	253	176	91	147	77	64	73
17	57	59	54	520	104	213	178	90	112	77	64	73
18	56	58	58	1,500	110	194	168	90	557	72	63	69
19	57	58	60	1,000	116	189	167	87	418	89	64	67
20	58	58	62	544	130	177	172	86	144	87	63	64
21	60	58	66	219	170	174	165	84	131	95	62	64
22	59	57	72	182	220	177	153	81	124	95	62	64
23	59	57	76	166	600	177	148	80	118	86	62	62
24	59	56	68	175	1,300	624	144	80	116	92	65	64
25	58	55	66	180	983	516	147	81	112	113	65	64
26	58	55	68	240	424	438	152	88	109	94	64	67
27	57	54	62	710	228	287	144	156	105	83	63	68
28	54	53	60	241	270	261	140	280	102	80	61	73
29	54	56	200	200	------	269	138	192	100	78	60	104
30	57	56	110	230	------	269	138	135	107	79	63	90
31	60	------	68	239	------	255	------	125	------	76	64	------
TOTAL	1,881	1,733	2,028	7,498	7,325	11,160	5,781	3,602	4,855	2,805	2,033	2,067
MEAN	60.7	57.8	65.4	242	262	360	193	116	162	90.5	65.6	68.9
MAX	72	74	200	1,500	1,300	1,080	468	280	557	121	75	104
MIN	54	52	50	56	100	174	138	80	93	72	60	62
AC-FT	3,730	3,440	4,020	14,870	14,530	22,140	11,470	7,140	9,630	5,560	4,030	4,100

CAL YR 1972 TOTAL 44,588 MEAN 122 MAX 5,090 MIN 33 AC-FT 88,440
WTR YR 1973 TOTAL 52,768 MEAN 145 MAX 1,500 MIN 50 AC-FT 104,700

PEAK DISCHARGE (BASE, 1,500 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
1-17	-	-	a1800	3-24	unknown	7.03	1510
2-24	-	-	a4000	6-12	1930	6.97	1530
3-14	0800	7.48	1790				

a About

06799500 Logan Creek near Uehling, Nebr.

LOCATION.--Lat 41°42'50", long 96°31'15", on south line of SE1/4SE1/4 sec.9, T.20 N., R.8 E., Dodge County, near right bank on downstream side of bridge on county road, 2 mi (3 km) southwest of Uehling and 8 mi (13 km) upstream from mouth.

DRAINAGE AREA.--1,030 mi² (2,670 km²), approximately.

PERIOD OF RECORD.--March 1941 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,208.73 ft (368.421 m) above mean sea level. See WSP 1918 for history of changes prior to July 15, 1963.

AVERAGE DISCHARGE.--32 years, 187 ft³/s (5.296 m³/s), 135,500 acre-ft/yr (0.167 km³/yr).

EXTREMES.--Current year: Maximum discharge, about 3,700 ft³/s (105 m³/s) Feb. 24, gage height, 14.52 ft (4.426 m), backwater from ice; minimum daily, 58 ft³/s (1.64 m³/s) Dec. 6.
Period of record: Maximum discharge, 25,200 ft³/s (714 m³/s) Feb. 20, 1971, gage height, 20.15 ft (6.142 m), from floodmark; maximum gage height, 20.15 ft (6.142 m), Mar. 27, 1962, present datum, Feb. 20, 1971; minimum daily discharge, 14 ft³/s (0.40 m³/s) Dec. 28, 1941, Nov. 27, 1942.
Flood of June 5, 1940, reached a stage of 20.6 ft (6.28 m), present datum, from floodmarks, discharge, 22,200 ft³/s (629 m³/s).

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	82	95	93	130	360	1,650	677	200	208	171	111	86
2	80	106	86	140	300	2,000	904	218	188	163	109	87
3	77	114	74	102	290	1,200	538	216	177	154	106	91
4	76	108	66	96	300	1,040	422	188	177	150	102	90
5	76	96	60	92	360	920	370	179	178	142	99	88
6	76	89	58	86	440	736	335	171	169	141	97	82
7	76	84	60	88	280	671	309	183	162	137	98	82
8	75	81	62	86	270	529	302	186	153	132	96	90
9	74	84	66	84	260	424	297	169	148	159	94	89
10	74	95	70	90	250	359	281	164	145	195	92	89
11	74	93	74	96	240	418	276	153	140	158	96	85
12	74	88	76	100	220	664	264	148	157	131	93	84
13	74	90	74	114	210	532	253	144	858	123	92	86
14	74	90	70	140	190	1,260	240	139	347	121	90	86
15	72	80	68	180	180	1,020	220	139	222	120	87	97
16	72	96	70	300	170	800	205	136	299	116	85	99
17	72	93	72	700	180	640	210	134	196	114	83	100
18	71	89	76	2,900	200	470	200	133	572	116	84	96
19	71	87	78	2,500	220	410	210	130	1,440	114	84	90
20	71	88	82	1,600	260	390	210	129	679	147	85	87
21	75	87	88	900	310	380	205	129	286	155	83	84
22	78	88	94	500	470	370	200	126	214	160	78	83
23	82	89	100	400	1,000	370	187	121	198	154	76	81
24	83	90	92	420	3,000	370	185	124	180	167	78	82
25	83	91	88	580	3,500	1,020	185	124	173	163	84	87
26	82	91	86	900	2,500	760	197	135	168	162	84	112
27	78	89	86	1,500	1,600	560	194	331	159	137	81	99
28	75	87	90	1,900	1,300	475	186	455	154	123	80	123
29	76	82	100	400	------	430	181	463	146	121	77	132
30	79	81	400	450	------	446	188	298	165	120	78	152
31	97	------	240	500	------	448	------	229	------	116	85	------
TOTAL	2,379	2,721	2,899	18,074	18,860	21,762	8,631	5,794	8,458	4,382	2,767	2,819
MEAN	76.7	90.7	93.5	583	674	702	288	187	282	141	89.3	94.0
MAX	97	114	400	2,900	3,500	2,000	904	463	1,440	195	111	152
MIN	71	80	58	84	170	359	181	121	140	114	76	81
AC-FT	4,720	5,400	5,750	35,850	37,410	43,160	17,120	11,490	16,780	8,690	5,490	5,590

CAL YR 1972 TOTAL 57,860 MEAN 158 MAX 3,500 MIN 40 AC-FT 114,800
WTR YR 1973 TOTAL 99,546 MEAN 273 MAX 3,500 MIN 58 AC-FT 197,400

PEAK DISCHARGE (BASE, 1,500 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
1-18	-	-	a3600	3-1	-	-	a3300
1-28	-	-	a2600	3-14	1545	6.54	1720
2-24	-	-	a3700	6-19	1200	6.32	1610

a About

06800000 Maple Creek near Nickerson, Nebr.

LOCATION.--Lat 41°32'44", long 96°30'09", in NE1/4SW1/4 sec.10, T.18 N., R.8 E., Dodge County, on right bank 120 ft (37 m) upstream from bridge on U.S. Highways 77 and 275, 1.5 mi (2.4 km) northwest of Nickerson, and 4 mi (6 km) upstream from mouth.

DRAINAGE AREA.--450 mi² (1,170 km²), approximately.

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

GAGE.--Water-stage recorder. Datum of gage is 1,194.56 ft (364.102 m) above mean sea level. Prior to July 28, 1960, nonrecording gage at site 120 ft (37 m) downstream at present datum.

AVERAGE DISCHARGE.--22 years, 61.4 ft³/s (1.739 m³/s), 44,480 acre-ft/yr (54.8 hm³/yr); median of yearly mean discharges, 54 ft³/s (1.529 m³/s), 39,120 acre-ft/yr (48.2 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 914 ft³/s (25.9 m³/s) May 27, gage height, 8.18 ft (2.493 m); maximum gage height, 12.2 ft (3.72 m), occurred during period Dec. 30 to Jan. 17, from floodmark, backwater from ice; minimum daily discharge, 3.1 ft³/s (0.088 m³/s) Oct. 19.
Period of record: Maximum discharge, 10,800 ft³/s (306 m³/s) June 21, 1960, gage height, 14.67 ft (4.471 m); maximum gage height, 16.10 ft (4.907 m) Feb. 19, 1971, from floodmark, backwater from ice; minimum daily discharge, 0.1 ft³/s (0.003 m³/s) Jan. 15, 16, 1956.
Maximum stage known since 1944, 16.28 ft (4.962 m) June 11, 1944, from floodmarks, discharge, 35,000 ft³/s (991 m³/s), from indirect measurement of peak flow.

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

REVISIONS (WATER YEARS).--WSP 1630: 1957-58.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.3	21	12	13	72	450	322	155	127	44	25	12
2	6.8	29	10	12	66	494	204	72	109	40	23	12
3	6.4	24	8.4	12	62	400	154	72	101	78	22	14
4	6.4	18	7.6	11	72	300	127	50	117	116	22	18
5	5.5	14	6.6	11	82	200	113	44	106	218	19	21
6	5.2	12	6.0	10	90	313	106	44	93	108	19	18
7	5.2	11	6.4	13	50	334	101	51	80	65	18	16
8	4.9	9.6	6.8	12	38	261	91	56	72	53	18	15
9	4.6	10	6.4	9.0	31	200	94	54	64	47	19	15
10	4.6	18	6.8	11	28	166	86	45	59	44	18	15
11	4.3	25	7.2	12	30	196	85	40	53	41	19	15
12	4.3	20	8.0	15	31	287	88	39	56	40	28	14
13	4.6	16	7.6	20	29	187	78	38	118	36	33	15
14	4.0	15	7.0	27	30	352	71	36	99	32	25	15
15	3.4	18	6.6	35	29	248	75	34	74	30	21	16
16	3.7	22	5.4	80	26	152	85	33	82	28	19	19
17	3.4	21	6.6	140	28	122	80	34	69	27	19	24
18	3.4	19	11	200	31	109	68	34	132	26	18	23
19	3.1	18	14	100	37	99	65	35	358	24	17	20
20	3.4	17	15	80	60	94	74	35	113	24	16	16
21	4.9	17	15	80	100	93	78	34	72	45	15	14
22	6.4	17	16	84	170	91	59	34	62	65	14	14
23	8.6	16	16	88	280	106	57	32	59	48	14	13
24	9.6	18	17	90	600	361	58	29	56	40	14	13
25	7.8	19	17	86	450	413	61	27	50	36	14	12
26	6.8	22	17	120	360	348	64	29	46	34	14	31
27	6.0	21	16	180	300	241	66	696	42	29	14	27
28	5.2	16	15	150	360	189	64	574	39	26	12	33
29	5.2	13	18	80	------	166	64	256	36	27	12	47
30	6.8	14	22	82	------	160	58	226	33	47	12	61
31	13	------	17	84	------	144	------	162	------	33	12	------
TOTAL	174.8	530.6	351.4	1,947.0	3,542	7,276	2,796	3,100	2,577	1,551	565	598
MEAN	5.64	17.7	11.3	62.8	127	235	93.2	100	85.9	50.0	18.2	19.9
MAX	13	29	22	200	600	494	322	696	358	218	33	61
MIN	3.1	9.6	5.4	9.0	26	91	57	27	33	24	12	12
AC-FT	347	1,050	697	3,860	7,030	14,430	5,550	6,150	5,110	3,080	1,120	1,190

CAL YR 1972 TOTAL 10,496.0 MEAN 28.7 MAX 838 MIN 1.2 AC-FT 20,820
WTR YR 1973 TOTAL 25,008.8 MEAN 68.5 MAX 696 MIN 3.1 AC-FT 49,600

PEAK DISCHARGE (BASE, 800 CFS).--May 27 (1500) 914 cfs (8.18 ft).

06800500 Elkhorn River at Waterloo, Nebr.

LOCATION.--Lat 41°17'25", long 96°17'05", in SW1/4 sec.3, T.15 N., R.10 E., Douglas County, on right bank 100 ft (30 m) upstream from bridge at north edge of Waterloo and 3.5 mi (5.6 km) downstream from Rawhide Creek.

DRAINAGE AREA.--6,900 mi² (17,900 km²), approximately, of which about 5,900 mi² (15,300 km²) contributes directly to surface runoff.

PERIOD OF RECORD.--April 1899 to November 1903, May 1911 to September 1915, August 1928 to current year. Published as "at Arlington" 1899-1903, July 1913 to September 1915. Monthly discharge only for some periods, published in WSP 1310.

GAGE.--Water-stage recorder. Datum of gage is 1,106.73 ft (337.331 m) above mean sea level. See WSP 1918 for history of changes prior to Oct. 1, 1960.

AVERAGE DISCHARGE.--53 years, 1,144 ft³/s (32.40 m³/s), 828,800 acre-ft/yr (1.02 km³/yr); median of yearly mean discharges, 1,000 ft³/s (28.32 m³/s), 724,500 acre-ft/yr (0.893 km³/yr).

EXTREMES.--Current year: Maximum discharge, 8,900 ft³/s (252 m³/s) Feb. 24, gage height, 6.60 ft (2.012 m); maximum gage height, 9.00 ft (2.743 m) Jan. 18, backwater from ice; minimum daily discharge, 274 ft³/s (7.76 m³/s) Dec. 4.
Period of record: Maximum discharge, 100,000 ft³/s (2,830 m³/s) June 12, 1944, gage height, 16.6 ft (5.06 m) from floodmark in gage well, site and datum then in use, from rating curve extended above 22,000 ft³/s (623 m³/s) on basis of current-meter measurement of peak flow in main channel and velocity-area studies of overflow section; minimum observed, 50 ft³/s (1.42 m³/s) Nov. 12, 1940.
Stage and discharge of the flood of June 12, 1944, are the greatest known since at least 1880.

REMARKS.--Records good except those for winter period, which are poor. Some small diversions above station for irrigation. Records of chemical analyses, water temperatures, and fluvial sediments for the water year 1973 are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1390: 1914(M), 1915, 1936, 1943(M). WSP 1730: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	590	876	743	924	1,880	5,560	5,340	1,680	3,600	1,200	656	332
2	560	924	771	806	1,570	6,240	5,320	1,840	3,400	1,280	626	332
3	560	980	668	700	1,520	5,960	4,760	1,760	3,420	1,160	590	344
4	554	972	274	560	1,580	5,400	4,360	1,540	3,460	1,110	572	356
5	548	916	330	540	1,660	5,360	3,940	1,370	3,220	1,220	536	372
6	530	868	360	520	1,400	5,640	3,410	1,400	2,940	1,330	495	415
7	524	828	340	520	1,200	4,880	3,050	1,600	2,780	1,070	485	415
8	524	778	430	540	1,100	3,770	2,700	2,510	2,640	1,030	490	420
9	512	757	440	560	1,000	3,350	2,450	2,040	2,480	1,010	475	450
10	530	844	500	580	1,060	3,080	2,110	1,720	2,160	1,360	475	435
11	530	876	500	620	1,100	3,340	2,050	1,580	1,940	1,030	460	425
12	542	836	520	620	1,200	4,000	2,020	1,480	1,680	810	530	435
13	554	876	500	660	1,000	3,920	1,820	1,390	3,670	715	530	460
14	560	924	480	680	720	5,000	1,760	1,310	3,780	662	512	460
15	542	924	450	700	660	5,660	1,760	1,240	1,980	626	500	470
16	536	940	450	1,050	800	4,860	2,100	1,180	1,720	590	480	530
17	542	948	500	2,000	820	4,420	3,470	1,120	1,620	560	475	608
18	524	972	500	3,200	840	3,960	4,420	1,100	1,180	566	445	620
19	512	932	540	5,800	1,040	3,590	3,760	1,120	5,200	560	415	596
20	542	900	540	4,780	1,080	3,320	3,440	1,020	2,940	602	405	590
21	572	868	560	3,290	1,350	3,050	2,990	980	2,110	765	415	566
22	620	876	560	2,600	1,800	2,820	2,540	972	1,540	1,070	392	542
23	722	892	580	1,990	3,050	2,620	2,200	932	1,360	1,020	388	518
24	694	884	600	1,400	7,000	3,940	2,100	908	1,220	972	376	495
25	626	916	620	1,210	7,800	5,580	2,050	900	1,120	948	372	500
26	596	892	640	1,400	5,460	5,700	2,110	1,130	1,160	868	368	830
27	596	876	660	3,360	4,000	5,000	1,930	3,590	1,020	836	364	989
28	590	785	680	3,720	3,680	4,280	1,560	7,580	980	750	352	757
29	572	757	900	2,140	------	3,880	1,480	6,620	972	687	344	1,040
30	578	757	2,500	1,680	------	4,320	1,450	5,120	1,070	694	340	1,090
31	701	------	2,330	1,990	------	4,480	------	4,200	------	715	332	------
TOTAL	17,683	26,374	20,466	51,140	57,370	136,980	84,450	62,932	68,362	27,816	14,195	16,392
MEAN	570	879	660	1,650	2,049	4,419	2,815	2,030	2,279	897	458	546
MAX	722	980	2,500	5,800	7,800	6,240	5,340	7,580	5,200	1,360	656	1,090
MIN	512	757	274	520	660	2,620	1,450	900	972	560	332	332
AC-FT	35,070	52,310	40,590	101,400	113,800	271,700	167,500	124,800	135,600	55,170	28,160	32,510

CAL YR 1972 TOTAL 401,547 MEAN 1,097 MAX 7,020 MIN 274 AC-FT 796,500
WTR YR 1973 TOTAL 584,160 MEAN 1,600 MAX 7,800 MIN 274 AC-FT 1,159,000

PEAK DISCHARGE (BASE, 6,000 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
2-24	2130	6.60	8,900	5-28	0200	6.39	8,380
3- 6	1700	6.06	7,550	6-19	0900	5.83	6,980
3-14	2300	5.60	6,400				

06803000 Salt Creek at Roca, Nebr.

LOCATION.--Lat 40°39'29", long 96°39'55", in NW1/4SW1/4 sec.17, T.8 N., R.7 E., Lancaster County, on left bank 15 ft (5 m) downstream from highway bridge at west edge of Roca.

DRAINAGE AREA.--167 mi² (433 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 1,192.50 ft (363.474 m) above mean sea level, Kansas City supplementary adjustment of 1943. Prior to May 16, 1956, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--22 years, 41.3 ft³/s (1.170 m³/s), 29,920 acre-ft/yr (36.9 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,220 ft³/s (91.2 m³/s) May 31, gage height, 17.65 ft (5.380 m); minimum daily, 3.0 ft³/s (0.085 m³/s) Aug. 29.
Period of record: Maximum discharge, 16,700 ft³/s (473 m³/s) July 10, 1958, gage height, 22.70 ft (6.919 m); minimum daily, 0.2 ft³/s (0.006 m³/s) July 23, 1955.
Flood of May 8, 1950, reached a stage of 26.0 ft (7.92 m), from floodmark established by Corps of Engineers, discharge, 67,000 ft³/s (1,900 m³/s), but may have been exceeded by flood of July 5, 1908.

REMARKS.--Records fair except those for winter period, which are poor. Flood flow affected by several detention dams.

REVISIONS.--WRD Nebr. 1971: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.2	16	19	210	54	50	1,670	85	74	10	6.6	5.6
2	4.4	13	19	170	52	56	688	146	63	11	6.0	5.6
3	4.2	11	18	130	52	54	516	90	147	10	5.6	13
4	4.8	10	17	96	60	60	400	68	124	15	5.2	15
5	5.3	9.0	15	78	110	72	319	61	94	12	5.0	8.9
6	5.5	15	14	60	90	64	258	61	78	11	4.8	8.2
7	4.7	19	13	47	64	62	207	746	67	10	5.4	11
8	4.7	16	12	38	56	64	180	842	54	9.4	10	13
9	5.4	25	11	31	52	74	172	370	45	9.0	8.1	12
10	5.5	37	10	26	54	110	133	237	38	8.6	7.0	9.6
11	4.9	26	10	22	60	900	116	172	32	8.2	6.4	6.9
12	5.2	20	11	21	66	450	98	123	28	8.0	6.5	6.2
13	5.5	153	11	20	64	280	82	94	26	7.8	6.7	11
14	5.2	142	11	19	56	310	76	74	23	25	7.3	11
15	5.0	66	12	23	50	252	265	62	22	16	7.1	6.5
16	4.8	43	12	150	47	202	452	55	19	11	8.6	6.4
17	4.7	32	12	820	43	163	261	48	17	9.6	7.9	11
18	4.6	28	13	580	40	136	183	45	15	9.8	6.5	8.4
19	4.7	30	13	400	38	119	211	41	14	11	6.9	7.6
20	5.0	33	14	280	42	103	266	37	13	38	7.7	7.6
21	5.3	35	15	200	110	88	156	35	12	41	6.9	7.0
22	5.7	36	18	150	88	81	118	35	12	23	6.3	6.2
23	8.1	33	19	110	94	95	98	32	12	13	5.6	7.6
24	5.9	26	17	84	100	721	85	29	12	8.5	5.9	10
25	5.8	32	16	66	74	1,150	75	27	13	15	6.3	12
26	5.7	44	16	88	56	672	75	46	12	14	5.4	1,560
27	5.7	36	16	150	49	371	72	298	12	13	4.6	339
28	5.6	26	20	94	48	285	64	256	10	11	3.7	844
29	5.6	21	90	70	------	268	58	156	9.8	9.0	3.0	559
30	11	20	350	60	------	225	56	120	9.6	8.0	3.4	124
31	20	------	280	58	------	1,870	------	92	------	7.2	5.1	------
TOTAL	182.7	1,053.0	1,124	4,351	1,769	9,407	7,410	4,583	1,107.4	413.1	191.5	3,653.3
MEAN	5.89	35.1	36.3	140	63.2	303	247	148	36.9	13.3	6.18	122
MAX	20	153	350	820	110	1,870	1,670	842	147	41	10	1,560
MIN	4.2	9.0	10	19	38	50	56	27	9.6	7.2	3.0	5.6
AC-FT	362	2,090	2,230	8,630	3,510	18,660	14,700	9,090	2,200	819	380	7,250

CAL YR 1972 TOTAL 7,633.6 MEAN 20.9 MAX 405 MIN 3.1 AC-FT 15,140
WTR YR 1973 TOTAL 35,245.0 MEAN 96.6 MAX 1,870 MIN 3.0 AC-FT 69,910

PEAK DISCHARGE (BASE, 850 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
1-17	-	-	a900	5- 7	1915	14.01	1,800
3-11	Unknown	12.90	1,470	9-26	1300	17.11	2,960
3-25	1415	12.94	1,480	9-28	1430	12.83	1,450
3-31	1730	17.65	3,220				

a About

06803500 Salt Creek at Lincoln, Nebr.

LOCATION.--Lat 40°50'49", long 96°40'54", in NW1/4SW1/4 sec.7, T.10 N., R.7 E., Lancaster County, near center of channel on downstream side of pier of bridge on North 27th Street at north edge of Lincoln, 1 mi (2 km) downstream from Oak Creek.

DRAINAGE AREA.--684 mi² (1,772 km²).

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

GAGE.--Water-stage recorder for stages above 6.2 ft (1.89 m); nonrecording gage read twice daily. Datum of gage is 1,113.9 ft (339.52 m) above mean sea level.

AVERAGE DISCHARGE.--24 years, 201 ft³/s (5.692 m³/s), 145,600 acre-ft/yr (0.180 km³/yr).

EXTREMES.--Current year: Maximum discharge, 8,730 ft³/s (247 m³/s) Mar. 31, gage height, 15.41 ft (4.697 m); minimum daily, 55 ft³/s (1.56 m³/s) Oct. 1.
Period of record: Maximum discharge, 28,200 ft³/s (799 m³/s) June 2, 1951, gage height, 26.15 ft (7.971 m); minimum daily, 22 ft³/s (0.62 m³/s) Mar. 15, 1957.
Flood of June 2, 1951, may have been equaled or exceeded in discharge by flood of July 6, 1908, which reached a stage of 33.6 ft (10.24 m). Channel changes since 1908 have materially altered the stage-discharge relation.

REMARKS.--Records fair. Flood flow affected by several detention dams. Records of chemical analyses and water temperatures for the water year 1972 are published in Part 2 of this report.

REVISIONS.--WRD Nebr. 1971: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	55	205	96	259	262	264	4,780	331	414	122	119	79
2	70	145	99	243	256	278	1,810	372	378	156	114	77
3	65	117	67	224	253	267	1,120	354	420	114	112	336
4	65	89	99	210	270	325	900	303	657	272	112	180
5	67	62	99	190	396	399	748	297	533	259	102	143
6	62	102	84	164	357	360	636	325	408	224	109	112
7	63	99	79	143	281	328	552	1,900	357	167	162	112
8	65	75	79	130	216	292	524	2,980	311	145	119	167
9	75	243	75	124	245	303	504	954	275	145	140	127
10	94	346	62	112	221	450	444	672	234	143	114	122
11	75	148	70	112	197	1,960	399	542	226	119	119	117
12	65	109	70	114	221	936	372	444	218	135	94	164
13	67	561	77	104	275	756	340	348	210	109	99	140
14	62	400	75	137	234	878	325	331	213	114	96	114
15	59	267	79	199	232	562	910	297	205	117	124	112
16	62	191	77	888	221	447	1,190	281	197	109	102	112
17	63	159	75	1,470	191	378	656	256	167	99	96	132
18	63	140	84	913	175	343	486	243	191	135	112	124
19	60	130	89	453	189	325	618	237	170	151	99	117
20	70	137	99	360	289	297	738	216	156	934	96	117
21	60	130	102	551	438	275	489	221	154	406	99	117
22	194	127	106	420	354	262	393	232	148	226	84	106
23	189	117	106	286	346	417	378	205	143	167	96	102
24	112	117	104	309	363	2,100	354	199	140	140	89	114
25	94	137	96	328	303	3,020	343	170	140	213	84	127
26	77	140	96	429	262	1,860	348	665	145	167	84	2,260
27	72	143	96	599	240	956	337	2,040	135	151	99	1,270
28	70	122	89	331	240	740	309	1,250	132	145	99	2,110
29	62	109	286	295	------	736	292	660	127	124	99	1,670
30	99	106	852	306	------	624	297	524	127	130	94	652
31	210	------	408	289	------	5,060	------	462	------	127	94	------
TOTAL	2,566	4,973	3,975	10,692	7,527	26,198	21,592	18,311	7,331	5,765	3,261	11,232
MEAN	82.8	166	128	345	269	845	720	591	244	186	105	374
MAX	210	561	852	1,470	438	5,060	4,780	2,980	657	934	162	2,260
MIN	55	62	62	104	175	262	292	170	127	99	84	77
AC-FT	5,090	9,860	7,880	21,210	14,930	51,960	42,830	36,320	14,540	11,430	6,470	22,280

CAL YR 1972 TOTAL 45,567 MEAN 125 MAX 2,370 MIN 42 AC-FT 90,380
WTR YR 1973 TOTAL 123,423 MEAN 338 MAX 5,060 MIN 55 AC-FT 244,800

PEAK DISCHARGE (BASE, 3,000 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
3-25	1200	10.54	3,430	5-27	0430	10.13	3,060
3-31	1630	15.41	8,730	9-26	1030	10.18	3,100
5- 8	0030	11.78	4,640				

06803510 Little Salt Creek near Lincoln, Nebr.

LOCATION.--Lat 40°53'36", long 96°40'52", in NW1/4SW1/4 sec.30, T.11 N., R.7 E., Lancaster County, on left bank 10 ft (3 m) downstream from county road bridge and 1.6 mi (2.6 km) north of intersection of Interstate Highway 80 and North 14th Street north of Lincoln.

DRAINAGE AREA.--43.6 mi² (112.9 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 1,117.73 ft (340.684 m) above mean sea level (Lancaster County Engineer bench mark).

EXTREMES.--Current year: Maximum discharge, 872 ft³/s (24.7 m³/s) May 7, gage height, 7.08 ft (2.158 m); minimum daily, 1.2 ft³/s (0.034 m³/s) Sept. 16, 17.
Period of record: Maximum discharge, 872 ft³/s (24.7 m³/s) May 7, 1973, gage height, 7.08 ft (2.158 m); minimum daily, 0.20 ft³/s (0.006 m³/s) Sept. 29, 30, 1969.

REMARKS.--Records fair except those for winter period, which are poor. Records of chemical analyses and water temperatures for the water year 1973 are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.7	26	9.1	22	20	18	87	14	7.1	5.7	3.9	2.7
2	1.5	20	8.6	9.6	21	17	43	10	7.6	16	4.3	3.6
3	1.4	15	8.0	8.2	18	17	28	6.7	10	12	3.9	10
4	9.1	11	7.4	7.4	20	29	22	5.7	71	100	3.6	3.6
5	5.0	8.6	7.2	6.8	24	31	19	13	31	52	3.6	2.3
6	1.5	9.6	7.0	6.4	21	23	17	15	18	17	3.6	1.9
7	1.3	21	6.0	6.2	17	20	13	315	14	7.6	4.3	2.1
8	1.3	14	5.0	6.0	15	16	21	73	12	6.4	3.9	5.3
9	1.9	21	5.0	5.8	14	20	21	27	9.1	6.0	4.3	5.3
10	3.1	48	4.6	5.6	14	42	16	17	7.6	5.0	3.9	3.6
11	2.3	24	4.2	5.4	13	81	15	12	7.1	5.7	3.3	4.3
12	1.9	18	4.2	5.8	15	32	12	7.6	7.6	5.0	3.1	5.0
13	2.3	71	4.0	7.0	24	58	12	6.4	8.6	4.3	2.9	3.9
14	2.5	37	4.2	20	28	52	13	5.3	8.1	4.3	2.7	1.9
15	2.5	32	3.8	98	12	30	130	5.0	8.6	3.9	2.9	1.3
16	2.7	26	3.4	150	10	26	68	3.6	8.6	3.6	3.3	1.2
17	2.9	24	3.8	100	9.4	20	33	3.3	9.1	3.6	2.9	1.2
18	2.7	21	3.8	40	10	20	26	3.6	8.6	3.1	2.7	10
19	2.9	18	4.0	24	11	18	83	3.6	7.1	3.1	2.9	2.5
20	5.3	17	4.0	19	13	17	49	2.7	5.7	34	2.9	1.9
21	7.1	15	4.4	30	16	15	24	2.5	5.3	16	2.9	2.3
22	8.6	14	5.0	22	25	15	18	3.1	5.0	8.1	2.7	2.3
23	22	13	6.4	19	26	48	15	2.5	5.0	6.0	3.1	2.3
24	18	12	8.4	20	27	202	14	1.7	5.0	5.7	2.9	2.1
25	13	16	7.6	21	28	154	14	1.3	4.3	6.0	2.9	2.6
26	10	17	8.0	30	25	63	15	47	4.3	5.7	2.7	62
27	7.6	14	9.0	28	22	44	10	176	4.3	5.0	2.5	30
28	5.3	12	14	20	22	43	9.6	52	3.9	4.6	2.3	159
29	3.6	10	60	13	------	51	7.6	20	3.9	3.9	2.3	35
30	4.3	10	100	14	------	37	10	18	5.0	3.9	2.5	15
31	30	------	50	15	------	409	------	10	------	3.6	2.7	------
TOTAL	185.3	615.2	380.1	785.2	520.4	1,668	865.2	883.6	312.5	366.8	98.4	386.2
MEAN	5.98	20.5	12.3	25.3	18.6	53.8	28.8	28.5	10.4	11.8	3.17	12.9
MAX	30	71	100	150	28	409	130	315	71	100	4.3	159
MIN	1.3	8.6	3.4	5.4	9.4	15	7.6	1.3	3.9	3.1	2.3	1.2
AC-FT	368	1,220	754	1,560	1,030	3,310	1,720	1,750	620	728	195	766

CAL YR 1972 TOTAL 3,448.7 MEAN 9.42 MAX 304 MIN 1.2 AC-FT 6,840
WTR YR 1973 TOTAL 7,066.9 MEAN 19.4 MAX 409 MIN 1.2 AC-FT 14,020

NOTE.--No gage-height record Dec. 6 to Jan. 1, Jan 7-10, Jan. 25 to Feb. 27, Sept. 13, 14, 24, 25.

06803520 Stevens Creek near Lincoln, Nebr.

LOCATION.--Lat 40°51'25", long 96°35'42", in NW1/4NE1/4 sec.11, T.10 N., R.7 E., Lancaster County, on left bank 20 ft (6 m) upstream from county road bridge on Havelock Avenue and 1.6 mi (2.6 km) east of 70th Street at east edge of Lincoln.

DRAINAGE AREA.--47.8 mi² (123.8 km²).

PERIOD OF RECORD.--October 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,125.57 ft (343.074 m) above mean sea level (Lancaster County Engineer bench mark).

AVERAGE DISCHARGE.--5 years, 13.1 ft³/s (0.371 m³/s), 9,490 acre-ft/yr (11.7 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,760 ft³/s (49.8 m³/s) Mar. 31, gage height, 14.72 ft (4.487 m); minimum daily, 0.68 ft³/s (0.019 m³/s) Oct. 5, 6, 9.
Period of record: Maximum discharge, 2,220 ft³/s (62.9 m³/s) Apr. 4, 1969, gage height, 15.84 ft (4.828 m); minimum daily, 0.21 ft³/s (0.006 m³/s) Sept. 15, 1971.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.88	6.0	6.6	26	17	12	153	29	25	5.4	4.1	1.6
2	.80	5.8	7.2	14	19	21	72	32	23	5.4	4.2	1.9
3	.80	3.9	6.4	9.0	22	17	59	23	37	5.6	4.1	4.5
4	.76	2.6	7.9	8.0	28	45	48	20	27	8.8	3.9	4.2
5	.68	2.1	3.9	7.2	40	60	39	23	25	6.9	3.6	2.4
6	.68	2.1	3.9	6.8	24	43	35	27	22	6.1	3.3	2.0
7	.72	2.5	3.8	6.6	21	32	30	502	18	4.8	3.3	2.0
8	.76	2.7	3.7	6.4	19	21	36	183	15	4.1	5.0	2.9
9	.68	4.2	4.1	6.2	17	25	43	79	12	3.8	4.7	4.1
10	.73	12	4.1	6.0	16	47	32	51	11	3.8	4.5	3.4
11	.77	7.2	4.4	6.4	14	333	36	39	9.6	3.7	3.6	2.9
12	.71	3.6	4.4	7.0	13	68	30	31	8.8	3.5	3.4	3.1
13	.75	33	4.5	9.0	21	60	25	28	9.7	3.2	3.5	6.0
14	.78	40	4.8	11	30	136	24	26	9.6	4.3	3.1	4.3
15	.79	15	4.3	50	17	56	517	24	9.5	4.7	3.0	3.5
16	.77	11	4.0	226	8.8	41	216	23	8.2	3.8	3.1	4.1
17	.86	9.2	4.0	194	5.4	35	74	20	7.0	3.3	2.8	5.0
18	.85	8.8	3.9	69	4.9	38	56	20	7.0	12	2.6	4.7
19	.88	7.7	3.7	27	5.6	28	51	19	6.8	9.5	2.3	3.9
20	.94	7.8	4.3	20	12	23	50	18	6.1	180	2.3	3.7
21	1.1	8.5	4.7	18	60	22	33	17	6.0	45	2.2	3.3
22	2.8	8.8	5.1	18	50	21	29	26	5.8	18	2.1	3.3
23	7.3	8.0	8.9	14	39	100	35	17	5.9	12	1.9	2.9
24	4.0	7.7	9.6	11	43	200	27	15	5.9	18	1.8	2.9
25	1.9	11	6.5	17	23	125	24	15	5.4	15	2.2	3.6
26	1.3	15	6.9	30	14	72	26	198	5.4	9.8	2.2	398
27	1.2	11	6.6	70	13	44	24	330	5.3	7.2	2.0	59
28	1.3	7.9	7.3	44	12	41	21	135	4.7	6.1	1.7	302
29	1.1	6.9	84	26	------	64	20	86	4.5	5.3	1.6	87
30	1.4	6.4	111	14	------	54	20	49	5.0	4.8	1.7	31
31	4.3	------	75	15	------	789	------	31	------	4.3	1.6	------
TOTAL	43.29	278.4	419.5	992.6	608.7	2,673	1,885	2,136	351.2	428.2	91.4	963.2
MEAN	1.40	9.28	13.5	32.0	21.7	86.2	62.8	68.9	11.7	13.8	2.95	32.1
MAX	7.3	40	111	226	60	789	517	502	37	180	5.0	398
MIN	.68	2.1	3.7	6.0	4.9	12	20	15	4.5	3.2	1.6	1.6
AC-FT	86	552	832	1,970	1,210	5,300	3,740	4,240	697	849	181	1,910

CAL YR 1972 TOTAL 2,259.13 MEAN 6.17 MAX 163 MIN .52 AC-FT 4,480
WTR YR 1973 TOTAL 10,870.49 MEAN 29.8 MAX 789 MIN .68 AC-FT 21,560

PEAK DISCHARGE (BASE, 500 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
3-11	0530	9.64	632	5-26	2300	10.14	802
3-31	1700	14.72	1,760	9-26	0900	9.98	777
4-15	2100	14.42	1,660	9-28	1300	8.37	542
5- 7	1930	11.31	994				

06803530 Rock Creek near Ceresco, Nebr.

LOCATION.--Lat 41°00'56", long 96°32'39", in NE1/4NE1/4 sec.17, T.12 N., R.8 E., Lancaster County, on right bank 10 ft (3 m) downstream from bridge on east-west county road and 5.7 mi (9.2 km) southeast of Ceresco.

DRAINAGE AREA.--119 mi² (308 km²).

PERIOD OF RECORD.--April 1970 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1115.18 ft (339.907 m) above mean sea level.

EXTREMES.--Current year: Maximum discharge, 1,660 ft³/s (47.0 m³/s) Mar. 31, gage height, 9.70 ft (2.957 m); minimum daily, 5.2 ft³/s (0.15 m³/s) Oct. 5, 6, 19.
Period of record: Maximum discharge, 4,120 ft³/s (117 m³/s) May 1, 1972, gage height, 14.2 ft (4.33 m), from floodmark; minimum daily, 0.8 ft³/s (0.023 m³/s) July 4, 5, 1970.

REMARKS.--Records fair except those for winter period, which are poor. Records of chemical analyses, water temperatures, and fluvial sediments for the water year 1973 are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.5	24	16	25	20	45	225	42	28	12	11	6.8
2	5.5	18	16	16	16	34	83	33	27	17	11	7.4
3	5.9	10	13	13	15	30	56	26	30	16	11	12
4	5.7	8.9	11	12	25	47	47	22	207	80	9.9	10
5	5.2	9.3	9.4	11	70	60	41	34	84	188	9.4	7.4
6	5.2	11	8.8	11	30	48	36	34	44	49	9.0	6.8
7	5.4	15	9.2	10	18	35	33	591	27	15	9.4	6.8
8	5.4	11	9.6	9.8	13	28	38	282	22	12	9.4	9.4
9	5.5	16	10	9.4	13	32	46	65	19	11	8.8	12
10	5.9	68	11	9.8	14	53	36	46	17	15	8.4	8.4
11	5.9	19	11	11	15	160	36	35	16	11	8.8	8.4
12	5.5	13	10	12	13	48	31	28	16	9.9	8.4	8.8
13	5.4	40	10	20	11	90	28	26	18	9.8	8.0	13
14	5.4	38	9.8	32	9.6	111	27	24	17	15	7.7	9.4
15	5.5	32	9.6	300	9.2	45	262	23	18	9.2	8.0	9.4
16	5.9	29	9.4	450	8.8	32	154	22	15	9.0	8.0	10
17	5.5	26	10	280	9.0	28	51	20	14	8.4	7.0	11
18	5.5	25	12	110	9.4	27	41	21	15	8.5	6.8	9.4
19	5.2	24	15	30	15	24	46	20	13	9.0	6.8	8.8
20	6.5	24	20	21	100	23	74	19	12	152	7.0	8.2
21	7.3	23	23	47	350	21	33	19	12	88	7.4	7.7
22	12	22	22	26	240	22	28	24	12	27	8.0	7.7
23	24	21	20	23	140	47	27	19	12	17	7.4	7.0
24	9.3	21	19	22	73	364	26	18	9.6	148	7.7	6.1
25	7.5	28	18	45	30	261	52	17	12	35	7.4	6.6
26	7.5	25	17	120	24	89	36	62	12	18	7.0	130
27	7.3	20	17	210	24	53	28	580	11	14	6.8	76
28	6.8	17	25	20	31	51	25	172	11	13	6.6	406
29	7.1	17	90	19	------	83	25	59	11	12	6.8	188
30	8.0	16	300	18	------	53	58	55	12	12	6.8	33
31	35	------	40	19	------	817	------	37	------	11	6.8	------
TOTAL	243.3	671.2	821.8	1,962.0	1,346.0	2,861	1,729	2,475	773.6	1,051.8	252.5	1,051.5
MEAN	7.85	22.4	26.5	63.3	48.1	92.3	57.6	79.8	25.8	33.9	8.15	35.1
MAX	35	68	300	450	350	817	262	591	207	188	11	406
MIN	5.2	8.9	8.8	9.4	8.8	21	25	17	9.6	8.4	6.6	6.1
AC-FT	483	1,330	1,630	3,890	2,670	5,670	3,430	4,910	1,530	2,090	501	2,090

CAL YR 1972 TOTAL 8,535.4 MEAN 23.3 MAX 1,870 MIN 3.0 AC-FT 16,930
WTR YR 1973 TOTAL 15,238.7 MEAN 41.7 MAX 817 MIN 5.2 AC-FT 30,230

06803555 Salt Creek at Greenwood, Nebr.

LOCATION.--Lat 40°57'56", long 96°27'01", at center of sec.31, T.12 N., R.9 E., Cass County, on right bank just downstream from county road bridge, 0.5 mi (0.8 km) west of Greenwood.

DRAINAGE AREA.--1,051 mi² (2,722 km²).

PERIOD OF RECORD.--November 1951 to current year. Records furnished by Corps of Engineers prior to Oct. 1, 1972.

GAGE.--Water-stage recorder. Datum of gage is 1,068.14 ft (325.569 m) above mean sea level, datum of 1954. Prior to Nov. 5, 1964, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--21 years (1952-73), 260 ft³/s (7.363 m³/s), 188,400 acre-ft/yr (0.232 km³/yr).

EXTREMES.--Current year: Maximum discharge, 14,300 ft³/s (405 m³/s) Mar. 31, gage height , 15.17 ft (4.624 m); minimum daily, 72 ft³/s (2.04 m³/s) Oct. 2-4.
Period of record: Maximum discharge, 41,000 ft³/s (1,160 m³/s) June 24, 1963, gage height, 23.46 ft (7.151 m); minimum daily, 14 ft³/s (0.40 m³/s) Jan. 10, 1957.

REMARKS.--Records fair except those for winter period, which are poor. Records of water temperatures and fluvial sediments for the water year 1973 are published in Part 2 of this report.

REVISIONS.--WRD Nebr. 1971: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	74	279	180	347	351	374	6,900	480	559	167	175	115
2	72	249	180	260	315	371	2,970	504	511	221	178	113
3	72	184	153	235	301	350	1,760	484	559	285	171	350
4	72	162	146	220	401	470	1,260	416	831	717	167	247
5	76	139	140	210	667	563	1,060	448	1,170	616	155	182
6	84	134	130	200	521	495	940	460	698	423	148	133
7	78	217	120	190	367	422	775	3,700	565	305	173	120
8	74	153	118	180	298	368	740	4,510	476	221	190	177
9	78	155	114	170	270	380	700	1,700	422	204	192	244
10	97	587	110	165	260	515	685	1,070	378	216	182	162
11	100	251	108	160	250	2,770	620	839	347	211	147	169
12	95	182	106	155	260	1,540	548	676	338	203	140	145
13	97	425	104	150	330	980	510	590	326	188	131	220
14	97	571	106	210	320	1,600	484	534	322	229	131	164
15	90	389	108	500	300	880	2,050	482	317	220	136	142
16	84	284	110	1,800	280	563	3,000	450	297	185	140	152
17	85	253	120	1,940	260	466	1,240	419	272	194	131	169
18	86	230	120	1,300	240	422	800	403	276	203	136	159
19	88	227	118	626	270	396	830	408	260	307	140	147
20	98	227	130	443	481	368	1,400	380	222	1,970	142	142
21	121	218	135	605	713	343	780	360	194	1,610	138	150
22	170	210	160	559	543	330	613	403	187	620	128	145
23	253	204	190	346	579	359	546	362	182	322	122	136
24	200	194	170	334	563	3,070	520	339	182	260	116	140
25	88	210	155	416	436	4,110	502	327	174	319	114	152
26	100	230	140	825	350	2,760	527	1,050	179	270	110	3,930
27	114	232	150	1,420	320	1,410	491	4,390	172	220	108	2,180
28	110	210	160	517	317	1,010	453	2,570	162	200	115	3,550
29	107	192	543	367	------	1,080	428	1,160	165	193	123	2,890
30	116	182	1,480	400	------	923	430	814	165	180	118	1,050
31	296	------	635	369	------	7,250	------	643	------	172	118	------
TOTAL	3,372	7,380	6,439	15,619	10,563	36,938	34,562	31,371	10,908	11,651	4,415	17,775
MEAN	109	246	208	504	377	1,192	1,152	1,012	364	376	142	593
MAX	296	587	1,480	1,940	713	7,250	6,900	4,510	1,170	1,970	192	3,930
MIN	72	134	104	150	240	330	428	327	162	167	108	113
AC-FT	6,690	14,640	12,770	30,980	20,950	73,270	68,550	62,220	21,640	23,110	8,760	35,260

CAL YR 1972 TOTAL 71,025 MEAN 194 MAX 3,860 MIN 72 AC-FT 140,900
WTR YR 1973 TOTAL 190,993 MEAN 523 MAX 7,250 MIN 72 AC-FT 378,800

PEAK DISCHARGE (BASE, 2,200 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
12-30	1200	7.93	2,540	5- 7	2145	11.91	7,760
1-16	-	-	a2,500	5-27	0630	10.58	6,000
3-11	1145	8.13	3,270	7-20	1645	8.33	4,010
3-25	1500	9.60	4,820	9-26	0800	9.98	5,280
3-31	1845	15.17	14,300	9-28	1630	10.17	5,500
4-15	Unknown	-	a6,000				

a About

06804000 Wahoo Creek at Ithaca, Nebr.

LOCATION.--Lat 41°08'40", long 96°32'10", in NW1/4NW1/4 sec.33, T.14 N., R.8 E., Saunders County, on right bank 16 ft (5 m) downstream from bridge on State Highway 63 and 0.5 mi (0.8 km) south of Ithaca.

DRAINAGE AREA.--271 mi² (702 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 1,110.48 ft (338.474 m) above mean sea level. Prior to Oct. 27, 1959, nonrecording gages at same site and datum. Oct. 28, 1959, to Feb. 22, 1961, nonrecording gage at site 1.5 mi (2.4 km) upstream at datum 8.21 ft (2.502 m) higher.

AVERAGE DISCHARGE.--24 years, 78.1 ft³/s (2.212 m³/s), 56,580 acre-ft/yr (69.8 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,180 ft³/s (90.1 m³/s) May 27, gage height, 18.60 ft (5.669 m); minimum daily, 21 ft³/s (0.59 m³/s) Oct. 3, 16-19, Dec. 6.
Period of record: Maximum discharge, 77,400 ft³/s (2,190 m³/s) June 24, 1963, gage height, 22.93 ft (6.989 m), from rating curve extended above 13,000 ft³/s (368 m³/s) on basis of indirect measurement of peak flow; minimum daily, 3.3 ft³/s (0.093 m³/s) June 11, 1955.
Maximum stage known since about 1910, 23.22 ft (7.077 m), from floodmark, Aug. 2, 1959, discharge, 45,300 ft³/s (1,280 m³/s).

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

REVISIONS.--WRD Nebr. 1971: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	68	49	50	58	109	487	168	137	54	46	34
2	22	61	50	40	55	91	195	90	136	153	46	35
3	21	44	43	34	54	84	154	74	134	136	44	38
4	22	34	32	30	66	80	135	67	186	640	43	42
5	22	31	25	28	225	88	120	67	269	317	43	37
6	22	29	21	27	126	91	113	71	169	276	42	35
7	22	34	24	27	65	85	105	211	122	91	42	34
8	22	37	25	26	52	78	103	522	109	75	42	36
9	22	35	26	26	47	71	115	172	99	76	43	40
10	22	59	27	27	48	78	103	126	92	118	42	39
11	22	52	27	30	50	162	101	111	86	74	41	37
12	22	38	26	33	48	110	95	95	82	67	41	37
13	22	57	26	38	46	94	87	88	88	65	41	43
14	22	81	25	45	44	205	85	86	84	62	40	40
15	22	68	25	100	47	113	94	81	83	60	39	38
16	21	56	24	700	53	86	123	80	77	60	39	39
17	21	54	27	600	51	80	96	78	69	57	39	42
18	21	53	32	380	48	79	87	79	67	55	38	41
19	21	52	38	136	52	77	86	77	71	57	37	39
20	22	52	45	83	119	70	126	74	62	73	36	38
21	24	51	43	78	369	68	90	70	60	108	36	38
22	28	49	41	64	190	67	76	68	58	85	35	37
23	39	50	40	54	251	77	72	66	57	68	35	37
24	32	51	38	63	265	372	72	65	56	319	35	37
25	26	56	37	74	100	375	74	64	53	159	35	37
26	25	59	36	348	71	234	83	75	52	66	35	397
27	24	54	35	448	67	149	78	1,770	52	53	35	269
28	24	49	37	68	68	125	74	776	50	49	34	276
29	24	46	221	62	------	126	77	246	48	69	34	355
30	25	47	497	54	------	111	98	190	50	67	34	85
31	64	------	114	56	------	344	------	160	------	50	34	------
TOTAL	771	1,507	1,756	3,829	2,735	3,979	3,404	5,967	2,758	3,659	1,206	2,332
MEAN	24.9	50.2	56.6	124	97.7	128	113	192	91.9	118	38.9	77.7
MAX	64	81	497	700	369	375	487	1,770	269	640	46	397
MIN	21	29	21	26	44	67	72	64	48	49	34	34
AC-FT	1,530	2,990	3,480	7,590	5,420	7,890	6,750	11,840	5,470	7,260	2,390	4,630

CAL YR 1972 TOTAL 18,376 MEAN 50.2 MAX 1,640 MIN 14 AC-FT 36,450
WTR YR 1973 TOTAL 33,903 MEAN 92.9 MAX 1,770 MIN 21 AC-FT 67,250

PEAK DISCHARGE (BASE, 1,500 CFS).--May 27 (1830) 3,180 cfs (18.60 ft).

06805500 Platte River near South Bend, Nebr.
(International Hydrological Decade River Station)

LOCATION.--Lat 41°01'30", long 96°17'50", in NE1/4 sec.9, T.12 N., R.10 E., Cass County, at the right downstream side of bridge on Interstate Highway 80, 5 mi (8 km) northwest of South Bend.

DRAINAGE AREA.--88,800 mi² (230,000 km²), approximately.

PERIOD OF RECORD.--May 1953 to current year. Prior to October 1961, published as Platte River at Louisville.

GAGE.--Water-stage recorder. Datum of gage is 1,038.53 ft (316.544 m) above mean sea level. Prior to Dec. 5, 1961, at site 7 mi (11 km) downstream at datum 31.43 ft (9.580 m) lower.

AVERAGE DISCHARGE.--20 years, 5,690 ft³/s (161.1 m³/s), 4,122,000 acre-ft/yr (5.08 km³/yr).

EXTREMES.--Current year: Maximum discharge, 48,200 ft³/s (1,370 m³/s) May 27, gage height, 9.46 ft (2.883 m); minimum daily, 1,300 ft³/s (36.8 m³/s) Dec. 5.
Period of record: Maximum discharge, 124,000 ft³/s (3,510 m³/s) Mar. 30, 1960, gage height, 12.45 ft (3.795 m), site and datum then in use; minimum daily, 240 ft³/s (6.80 m³/s) Sept. 3, 1955.
Maximum discharge known since at least 1881, 124,000 ft³/s (3,510 m³/s) Mar. 30, 1960, gage height, 12.45 ft (3.795 m), site and datum then in use.

REMARKS.--Records good except those for winter period, which are poor. Natural flow of stream affected by storage reservoirs, power developments, ground-water withdrawals and diversions for irrigation, and return flow from irrigated areas. Records of water temperatures and fluvial sediments for the water year 1973 are published in Part 2 of this report.

REVISIONS.--WRD Nebr. 1967: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3,360	6,500	5,900	8,800	9,500	16,800	25,800	9,100	25,800	11,200	4,880	1,910
2	3,200	5,660	6,140	7,600	8,250	18,700	23,900	9,300	24,500	10,400	4,680	1,640
3	3,020	6,460	6,060	6,400	8,000	19,200	20,900	9,200	24,300	9,500	4,380	2,400
4	3,440	5,900	3,700	5,000	8,550	18,700	18,300	9,300	26,600	8,700	4,090	2,760
5	3,700	5,390	1,300	4,200	10,300	17,800	15,200	9,720	30,800	7,420	4,030	3,500
6	3,640	5,980	1,400	3,700	10,800	18,400	13,400	9,550	26,100	6,740	3,600	3,890
7	3,760	5,460	1,500	3,500	10,500	17,000	11,900	13,700	23,400	6,060	3,530	3,810
8	3,700	5,430	1,600	3,300	9,650	15,400	11,100	16,900	21,000	4,850	3,470	4,080
9	3,940	5,740	1,700	3,200	9,150	13,700	11,200	12,200	17,600	4,650	2,900	4,540
10	3,790	6,880	1,650	3,100	8,780	12,900	11,100	11,400	16,700	4,920	2,660	4,320
11	3,790	6,180	1,600	3,100	8,300	16,000	10,200	10,500	15,000	4,580	2,680	3,870
12	3,550	5,780	2,000	3,300	8,170	16,500	10,000	8,800	14,200	3,910	2,670	4,130
13	3,760	6,700	2,300	3,500	8,360	18,500	9,350	9,500	15,200	3,580	2,600	4,880
14	3,440	7,600	2,500	3,800	8,000	19,300	9,250	9,820	16,600	3,470	2,420	4,960
15	3,490	7,280	2,700	4,300	7,100	21,400	11,800	10,300	13,900	2,910	2,450	5,630
16	3,640	7,020	3,000	5,600	6,930	19,200	14,400	10,700	13,300	2,860	2,720	6,660
17	3,550	7,150	3,300	7,000	6,850	15,800	12,000	10,200	13,100	2,490	2,730	7,140
18	3,580	7,380	3,700	11,000	7,170	13,900	14,700	11,200	12,300	2,300	4,250	7,410
19	3,470	6,260	4,000	14,000	6,720	12,300	12,200	15,800	15,500	2,400	3,950	8,070
20	3,730	6,300	4,500	15,000	7,360	11,400	12,500	19,900	13,600	3,410	3,420	7,170
21	4,060	6,540	5,000	14,000	9,460	10,900	11,500	19,400	12,000	4,280	3,220	7,430
22	4,320	6,380	5,400	13,000	9,760	9,950	11,000	18,300	11,700	4,250	3,190	7,290
23	5,250	6,220	5,400	12,500	13,200	10,200	10,300	16,000	10,300	6,790	3,030	7,450
24	4,650	6,460	5,200	12,000	18,300	16,400	9,350	16,100	10,700	7,560	2,210	7,310
25	5,070	6,340	5,000	11,000	18,300	24,000	9,300	15,300	11,200	7,260	3,110	7,370
26	4,620	6,580	4,800	12,200	16,600	25,200	9,150	16,800	11,500	6,340	2,740	14,700
27	4,780	6,300	6,000	14,900	15,000	22,000	8,200	33,900	11,400	8,800	2,550	12,900
28	4,480	6,140	6,800	13,000	14,400	18,000	8,450	45,000	11,800	7,430	2,510	13,300
29	4,890	5,820	7,600	11,300	------	15,700	8,550	38,000	12,200	6,510	2,350	15,400
30	4,520	5,860	10,000	10,200	------	14,200	8,500	32,000	11,700	6,240	2,140	13,800
31	5,460	------	9,400	9,660	------	24,000	------	28,000	------	4,970	2,240	------
TOTAL	123,650	189,690	131,150	253,160	283,460	523,450	373,500	505,890	494,000	176,780	97,400	199,720
MEAN	3,989	6,323	4,231	8,166	10,120	16,890	12,450	16,320	16,470	5,703	3,142	6,657
MAX	5,460	7,600	10,000	15,000	18,300	25,200	25,800	45,000	30,800	11,200	4,880	15,400
MIN	3,020	5,390	1,300	3,100	6,720	9,950	8,200	8,800	10,300	2,300	2,140	1,640
AC-FT	245,300	376,300	260,100	502,100	562,200	1,038M	740,800	1,003M	979,800	350,600	193,200	396,100

CAL YR 1972 TOTAL 1,927,640 MEAN 5,267 MAX 17,900 MIN 1,120 AC-FT 3,823,000
WTR YR 1973 TOTAL 3,351,850 MEAN 9,183 MAX 45,000 MIN 1,300 AC-FT 6,648,000

WEEPING WATER CREEK BASIN

06806500 Weeping Water Creek at Union, Nebr.

LOCATION.--Lat 40°47'35", long 95°54'40", in NW1/4 sec.36, T.10 N., R.13 E., Cass County, near left bank on downstream side of pier of bridge on U.S. Highways 73 and 75, 1.5 mi (2.4 km) southeast of Union and 2.8 mi (4.5 km) downstream from South Branch Weeping Water Creek.

DRAINAGE AREA.--241 mi² (624 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 929.72 ft (283.379 m) above mean sea level. Prior to May 14, 1951, nonrecording gage at site 2 mi (3 km) upstream at different datum. May 15, 1951, to Aug. 22, 1968, water-stage recorder for stages above 7.9 ft (2.41 m) and nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--23 years, 79.7 ft³/s (2.257 m³/s), 57,740 acre-ft/yr (71.2 hm³/yr); median of yearly mean discharges, 69 ft³/s (1.954 m³/s), 50,000 acre-ft/yr (61.6 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 5,780 ft³/s (164 m³/s) Sept. 26, gage height, 21.78 ft (6.639 m), from floodmark; minimum daily, 4.3 ft³/s (0.12 m³/s) Oct. 7.
Period of record: Maximum discharge, 60,300 ft³/s (1,710 m³/s) May 9, 1950, gage height, 26.80 ft (8.169 m), from floodmark, present site and datum, from rating curve extended above 12,000 ft³/s (340 m³/s) on basis of measurement of peak flow through bridges and over highway embankment; minimum daily, 0.1 ft³/s (0.003 m³/s) Sept. 10-12, 14, 15, 17, 18, 1955.

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

REVISIONS.--WSP 2118: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.2	64	40	58	209	89	1,500	306	131	106	75	41
2	7.9	54	39	66	173	94	449	317	129	671	73	39
3	6.7	43	35	60	114	83	346	208	159	1,700	71	42
4	5.8	34	34	54	144	103	287	170	197	700	68	42
5	5.3	28	33	50	214	136	244	164	152	300	65	38
6	5.3	26	32	47	164	122	221	191	141	160	64	36
7	4.3	28	31	44	101	108	194	1,340	126	120	62	36
8	4.6	29	30	43	76	88	198	1,360	117	105	65	41
9	5.0	28	31	43	72	103	239	430	106	96	71	51
10	6.2	39	33	47	76	168	204	337	100	226	72	46
11	6.2	39	32	50	80	836	263	287	94	110	63	44
12	5.6	37	32	60	76	322	217	248	90	92	75	41
13	7.2	82	31	70	76	254	166	232	92	85	67	51
14	7.7	136	30	80	76	353	163	218	94	84	58	46
15	8.1	84	31	94	76	240	312	204	95	88	54	45
16	7.9	62	32	318	74	176	559	198	89	85	53	76
17	9.7	56	33	844	80	157	379	186	81	79	52	72
18	8.9	51	32	327	86	146	251	186	80	76	50	59
19	8.8	47	30	148	109	136	221	177	80	86	47	53
20	10	44	40	91	247	125	213	167	76	942	46	49
21	15	42	44	75	375	115	197	157	72	625	45	46
22	24	42	50	65	177	108	169	151	71	231	44	43
23	78	42	50	51	190	114	164	143	70	151	41	73
24	56	40	48	66	172	402	160	138	68	141	42	197
25	34	45	58	66	110	741	157	136	66	134	44	70
26	23	54	64	78	76	587	157	150	65	132	42	3,520
27	19	56	70	335	65	281	154	456	66	110	38	750
28	16	47	68	204	68	222	147	417	62	94	37	1,090
29	15	43	100	86	------	233	144	233	58	88	35	648
30	43	40	70	104	------	318	347	163	119	86	35	207
31	109	------	62	101	------	1,530	------	145	------	79	36	------
TOTAL	572.4	1,462	1,345	3,825	3,556	8,490	8,422	9,215	2,946	7,782	1,690	7,592
MEAN	18.5	48.7	43.4	123	127	274	281	297	98.2	251	54.5	253
MAX	109	136	100	844	375	1,530	1,500	1,360	197	1,700	75	3,520
MIN	4.3	26	30	43	65	83	144	136	58	76	35	36
AC-FT	1,140	2,900	2,670	7,590	7,050	16,840	16,710	18,280	5,840	15,440	3,350	15,060

CAL YR 1972 TOTAL 11,726.6 MEAN 32.0 MAX 195 MIN 4.3 AC-FT 23,260
WTR YR 1973 TOTAL 56,897.4 MEAN 156 MAX 3,520 MIN 4.3 AC-FT 112,900

PEAK DISCHARGE (BASE, 3,000 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
3-31	2200	17.66	3,160	9-26	1400	21.78	5,780
7- 3	1145	17.82	3,210				

06807000 Missouri River at Nebraska City, Nebr.
(International Hydrological Decade River Station)

LOCATION.--Lat 40°40'55", long 95°50'48", in NW1/4NE1/4 sec.9, T.8 N., R.14 E., Otoe County, on right bank 0.7 mi (1.1 km) upstream from Waubonsie Highway Bridge at Nebraska City and at mi 562.6 (905.2 km).

DRAINAGE AREA.--414,400 mi² (1,073,000 km²), approximately.

PERIOD OF RECORD.--August 1929 to current year. Gage-height records collected in this vicinity from August 1878 to December 1899 are contained in reports of Missouri River Commission.

GAGE.--Water-stage recorder. Datum of gage is 905.36 ft (275.954 m) above mean sea level, datum of 1929, supplementary adjustment of 1954. See WSP 1918 or 1919 for history of changes prior to Apr. 1, 1963.

AVERAGE DISCHARGE.--44 years, 34,740 ft³/s (983.8 m³/s), 25,170,000 acre-ft/yr (31.0 km³/yr).

EXTREMES.--Current year: Maximum discharge, 86,800 ft³/s (2,460 m³/s) May 28, gage height, 16.99 ft (5.179 m); minimum daily, 25,400 ft³/s (719 m³/s) Dec. 11; minimum gage height, 5.50 ft (1.676 m) Dec. 21. Period of record: Maximum discharge, 414,000 ft³/s (11,700 m³/s) Apr. 19, 1952; maximum gage height, 27.66 ft (8.431 m) Apr. 18, 1952; minimum discharge, 1,600 ft³/s (45.3 m³/s) Dec. 31, 1946, discharge measurement; minimum gage height observed, -0.28 ft (-0.085 m) Dec. 24, 1960, result of freezeup.

REMARKS.--Records good. Flow partly regulated by upstream main-stem reservoirs. Records of chemical analyses and water temperatures for the water year 1973 are published in Part 2 of this report.

REVISIONS.--WSP 761: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	55,000	63,000	46,800	39,100	37,900	50,300	66,600	45,400	58,400	44,200	37,400	35,600
2	53,100	65,400	47,500	33,100	37,600	65,000	57,000	45,400	57,000	48,600	36,800	35,400
3	53,200	65,000	47,200	33,600	35,600	68,600	55,600	45,000	56,600	56,200	36,600	35,400
4	53,400	64,200	46,400	34,100	35,100	73,000	51,400	44,800	58,400	61,000	36,100	35,600
5	54,800	60,200	40,600	31,600	36,100	73,800	47,800	44,200	64,200	50,600	36,100	35,800
6	54,800	59,400	36,100	29,200	36,600	73,000	46,400	44,200	60,600	41,800	35,600	35,600
7	55,200	61,800	32,600	29,200	36,600	71,000	44,800	47,200	59,000	40,000	34,800	35,600
8	55,200	60,600	31,100	28,600	35,800	69,000	42,700	61,000	56,200	39,400	34,800	35,600
9	55,200	58,000	28,800	29,000	34,800	66,600	43,300	54,800	53,800	38,200	35,400	36,600
10	55,600	59,800	26,600	29,000	34,600	64,200	42,100	49,600	52,400	44,200	35,800	38,200
11	55,900	61,000	25,400	28,400	34,600	62,200	40,900	45,100	51,700	49,600	36,400	37,900
12	55,200	61,800	25,600	27,700	34,600	62,200	40,300	40,900	48,600	44,200	36,800	36,800
13	57,000	64,600	26,100	28,100	33,800	59,400	40,000	40,500	48,600	39,700	35,800	36,400
14	55,200	67,000	26,600	29,000	33,600	58,700	40,000	40,900	50,300	37,900	36,100	36,800
15	53,400	66,600	26,100	31,400	33,800	60,600	41,500	42,700	49,600	36,800	36,100	37,600
16	53,100	65,800	26,800	33,100	30,200	66,600	51,700	44,200	47,200	35,800	36,400	39,400
17	55,200	64,600	26,800	37,900	30,800	65,000	48,200	45,100	46,100	36,100	37,100	40,000
18	54,200	64,200	26,800	47,500	31,400	63,000	47,500	44,500	45,800	35,800	36,800	40,000
19	54,800	64,200	26,600	51,700	31,100	55,600	45,800	45,100	49,200	35,800	36,400	40,000
20	55,200	63,400	26,100	46,800	31,600	52,400	43,000	49,600	54,500	39,100	35,800	40,000
21	55,900	62,200	25,900	43,900	34,800	48,600	43,300	50,000	50,300	41,200	36,400	38,500
22	56,200	60,200	26,600	43,000	34,800	45,100	42,400	50,600	46,100	40,300	36,100	38,200
23	59,000	56,200	27,700	39,100	37,400	43,900	41,800	50,000	43,600	40,000	36,100	38,200
24	57,600	53,100	28,600	36,400	46,100	47,800	41,500	49,600	43,000	41,800	35,800	39,400
25	57,000	51,400	28,400	36,600	53,100	58,700	41,200	49,600	44,200	42,700	35,600	39,400
26	57,000	48,900	28,400	37,400	49,600	63,800	41,200	48,900	43,900	40,900	38,800	63,700
27	56,200	47,200	28,400	42,700	45,400	58,700	41,200	56,200	43,600	38,200	39,100	59,400
28	56,200	47,500	29,000	46,100	42,700	54,800	41,200	80,800	42,700	40,900	36,600	52,000
29	57,300	47,200	29,900	39,700	------	54,200	43,000	81,200	43,300	38,800	35,100	47,200
30	58,400	46,400	40,600	37,100	------	51,400	44,800	69,800	44,200	38,500	35,100	46,400
31	59,800	------	52,400	36,800	------	54,200	------	61,000	------	40,000	35,600	------
TOTAL	1,725.3M	1,780.9M	992,500	1,116.9M	1,030.1M	1,861.4M	1,358.2M	1,567.9M	1,513.1M	1,298.3M	1,123.4M	1,206.7M
MEAN	55,650	59,360	32,020	36,030	36,790	60,050	45,270	50,580	50,440	41,880	36,240	40,220
MAX	59,800	67,000	52,400	51,700	53,100	73,800	66,600	81,200	64,200	61,000	39,100	63,700
MIN	53,100	46,400	25,400	27,700	30,200	43,900	40,000	40,500	42,700	35,800	34,800	35,400
AC-FT	3,422M	3,532M	1,969M	2,215M	2,043M	3,692M	2,694M	3,110M	3,001M	2,575M	2,228M	2,393M

CAL YR 1972 TOTAL 6,003,590 MEAN 16,400 MAX 80,800 MIN 10,000 AC-FT 11,910,000
WTR YR 1973 TOTAL 16,574,700 MEAN 45,410 MAX 81,200 MIN 25,400 AC-FT 32,880,000

M Expressed in thousands.

06811500 Little Nemaha River at Auburn, Nebr.

LOCATION.--Lat 40°23'33", long 95°48'46", in NE1/4NW1/4 sec.23, T.5 N., R.14 E., Nemaha County, on left bank at downstream side of bridge on U.S. Highway 136, 1 mi (2 km) downstream from Longs Creek and Willow Creek and 1 mi (2 km) east of Auburn.

DRAINAGE AREA.--793 mi² (2,054 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 889.87 ft (271.232 m) above mean sea level. See WSP 2119 for history of changes prior to July 24, 1967.

AVERAGE DISCHARGE.--24 years, 275 ft³/s (7.788 m³/s), 199,200 acre-ft/yr (0.246 km³/yr); median of yearly mean discharges, 190 ft³/s (5.381 m³/s), 138,000 acre-ft/yr (0.170 km³/yr).

EXTREMES.--Current year: Maximum discharge, 26,500 ft³/s (750 m³/s) Sept. 26, gage height, 24.2 ft (7.38 m), from floodmark; minimum daily, 24 ft³/s (0.68 m³/s) Oct. 5.
Period of record: Maximum discharge, 164,000 ft³/s (4,640 m³/s) May 9, 1950, gage height, 27.65 ft (8.428 m), from floodmark, from rating curve extended above 49,000 ft³/s (1,390 m³/s) on basis of computations of peak flow through bridge and culvert openings and over highway and railway embankments at gage heights 24.96 ft (7.608 m) and 27.65 ft (8.428 m); minimum daily, 4.2 ft³/s (0.12 m³/s) Aug. 7, 1956.

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

REVISIONS.--WSP 2119: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	195	124	300	2,420	312	7,520	523	369	144	163	75
2	27	146	121	230	1,850	348	2,180	480	363	151	142	74
3	27	118	113	180	602	326	1,380	449	381	2,050	130	76
4	26	92	85	140	870	446	1,020	351	474	583	120	77
5	24	76	60	120	1,080	825	820	323	390	351	108	75
6	25	69	45	100	654	618	722	329	293	261	98	69
7	25	75	48	94	350	552	634	4,230	231	222	95	68
8	25	69	45	88	140	400	609	4,810	220	197	98	81
9	25	66	44	86	200	558	710	1,190	200	184	104	85
10	27	78	45	88	500	1,280	618	772	190	376	97	82
11	30	89	45	90	760	6,380	627	621	180	251	105	78
12	29	86	46	94	800	1,580	571	505	175	181	494	86
13	29	297	47	98	760	1,210	480	439	180	153	152	110
14	30	1,400	49	110	680	1,750	469	409	190	141	110	94
15	27	455	48	150	540	1,060	781	383	170	129	100	90
16	28	227	50	350	350	585	3,630	369	155	124	93	200
17	27	183	52	7,300	370	486	1,430	355	145	108	90	130
18	26	167	54	780	400	456	736	348	140	117	87	110
19	26	159	62	400	460	436	608	347	150	584	82	95
20	28	156	66	315	470	406	596	338	144	2,910	79	92
21	32	154	68	302	490	378	488	329	138	1,840	77	86
22	51	153	74	296	489	360	432	321	129	638	74	80
23	95	148	80	256	450	368	407	320	124	425	73	154
24	100	138	88	237	390	1,720	390	317	122	348	73	256
25	69	146	98	226	350	5,090	376	315	118	328	74	220
26	51	213	110	390	320	2,800	366	327	114	308	74	10,800
27	43	205	130	1,500	300	1,120	363	917	111	252	68	4,940
28	40	155	160	1,240	292	771	344	1,060	109	226	64	7,070
29	38	138	1,830	343	------	723	331	622	104	180	60	3,480
30	59	128	2,380	308	------	822	338	475	129	188	61	977
31	643	------	1,050	270	------	10,000	------	426	------	177	61	------
TOTAL	1,760	5,781	7,317	16,481	17,337	44,166	29,976	23,000	5,938	14,127	3,306	29,910
MEAN	56.8	193	236	532	619	1,425	999	742	198	456	107	997
MAX	643	1,400	2,380	7,300	2,420	10,000	7,520	4,810	474	2,910	494	10,800
MIN	24	66	44	86	140	312	331	315	104	108	60	68
AC-FT	3,490	11,470	14,510	32,690	34,390	87,600	59,460	45,620	11,780	28,020	6,560	59,330

CAL YR 1972 TOTAL 37,912 MEAN 104 MAX 2,380 MIN 15 AC-FT 75,200
WTR YR 1973 TOTAL 199,099 MEAN 545 MAX 10,800 MIN 24 AC-FT 394,900

PEAK DISCHARGE (BASE, 5,000 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
1-17	0830	16.27	12,500	5- 7	2230	16.65	10,300
3-11	0600	15.76	9,860	7- 3	1330	13.33	5,300
3-25	1630	15.17	7,560	9-26	1800	24.24	26,500
3-31	2100	23.95	26,000	9-28	1330	17.64	9,960

06813500 Missouri River at Rulo, Nebr.

LOCATION.--Lat 40°03'14", long 95°25'12", in NW1/4NW1/4 sec.17, T.1 N., R.18 E., Richardson County, on downstream end of middle pier of bridge on U.S. Highway 159 at Rulo, 3.2 mi (5.1 km) upstream from Nemaha River and at mi 498.0 (801.3 km).

DRAINAGE AREA.--418,900 mi² (1,085,000 km²), approximately.

PERIOD OF RECORD.--October 1949 to current year in reports of Geological Survey. Gage-height record collected at site 80 ft upstream January 1886 to December 1899 published in reports of Missouri River Commission; September 1929 to September 1950 in files of Kansas City Office of Corps of Engineers.

GAGE.--Water-stage recorder. Datum of gage is 837.23 ft (255.188 m) above mean sea level. Prior to Sept. 13, 1950, nonrecording gage at site 80 ft (24 m) upstream at same datum.

AVERAGE DISCHARGE.--24 years, 38,490 ft³/s (1,090 m³/s), 27,890,000 acre-ft/yr (34.4 km³/yr).

EXTREMES.--Current year: Maximum discharge, 120,000 ft³/s (3,400 m³/s) Apr. 1, gage height, 19.69 ft (6.002 m); maximum gage height, 20.74 ft (6.322 m) Dec. 29, backwater from ice; minimum daily discharge, 24,000 ft³/s (680 m³/s) Jan. 9; minimum gage height not determined, occurred during period of no gage-height record Jan. 6-9.
Period of record: Maximum discharge, 358,000 ft³/s (10,100 m³/s) Apr. 22, 1952, gage height, 25.60 ft (7.803 m); minimum daily, 4,420 ft³/s (125 m³/s) Jan. 13, 1957; minimum gage height, 0.65 ft (0.198 m) Jan. 7, 1971, result of freezeup.
Flood in 1881 reached a stage of 22.9 ft (6.98 m), from floodmark, discharge not determined.

REMARKS.--Records good except those for winter period, which are poor. Flow partly regulated by upstream main-stem reservoirs.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	58,000	65,500	50,400	50,000	49,100	52,600	113,000	59,500	69,500	54,400	44,600	37,900
2	57,600	68,500	50,800	38,200	60,000	76,800	85,400	60,000	67,500	52,200	41,900	37,900
3	55,400	69,500	50,400	35,600	43,200	77,400	73,000	57,600	66,500	86,200	41,300	38,200
4	54,900	70,000	50,000	35,200	42,000	78,400	70,000	55,400	70,000	85,000	40,700	38,400
5	55,800	67,000	44,900	33,400	42,500	83,400	61,500	51,800	73,500	77,400	39,900	38,400
6	56,200	65,000	38,900	32,000	42,800	81,200	57,200	52,200	76,800	57,600	39,900	39,200
7	56,700	66,500	35,400	30,000	41,000	80,600	55,400	61,000	69,500	50,800	37,600	38,900
8	56,700	66,500	32,700	27,000	38,600	77,400	54,000	74,000	65,500	48,300	40,700	40,200
9	55,800	64,000	31,000	24,000	36,400	77,400	54,000	68,500	62,000	46,300	38,400	41,900
10	54,900	63,000	29,000	28,000	34,700	77,900	53,600	58,000	60,500	46,300	38,400	42,800
11	56,200	65,000	28,100	32,000	34,500	90,000	51,300	53,600	60,500	56,700	38,600	42,800
12	56,200	63,500	27,300	30,000	35,200	80,000	52,200	51,300	59,000	53,600	67,000	40,700
13	57,200	65,500	27,100	29,500	38,900	69,000	54,000	50,400	59,000	45,600	45,600	40,200
14	57,600	69,000	26,900	30,000	41,600	77,900	52,600	50,800	59,000	43,200	39,200	40,200
15	56,200	68,000	27,500	32,000	37,400	79,600	54,900	52,200	59,500	42,200	38,600	40,700
16	56,200	68,500	27,500	35,000	32,900	77,900	75,600	54,900	57,200	40,400	38,900	43,200
17	56,700	68,500	27,500	50,000	31,400	72,500	69,900	55,400	54,400	39,900	39,200	44,200
18	56,700	68,500	27,500	81,800	32,000	68,500	61,500	54,400	52,200	40,200	39,400	42,800
19	55,800	68,000	27,500	74,000	33,400	67,000	60,000	54,400	51,300	41,600	38,900	42,200
20	56,700	66,500	27,000	66,500	34,700	65,000	57,200	54,000	57,600	46,700	38,900	41,900
21	56,200	65,500	26,500	57,600	40,200	60,000	56,700	58,500	55,400	59,500	38,900	40,200
22	58,000	63,500	26,000	52,200	41,900	55,000	56,200	59,000	52,200	48,700	38,900	39,900
23	61,000	61,500	27,000	47,500	39,900	50,000	54,000	58,500	49,100	44,200	38,900	40,700
24	62,500	57,600	28,000	42,800	48,300	70,000	52,600	56,700	47,500	45,200	38,900	44,600
25	61,500	54,900	29,000	41,600	65,000	95,000	51,300	56,700	48,700	50,400	39,200	44,600
26	59,000	54,000	29,000	42,500	61,500	88,900	51,300	56,200	49,500	50,400	40,400	70,000
27	58,000	53,100	29,000	45,600	54,400	76,800	52,600	59,000	50,400	45,600	44,200	90,000
28	56,700	52,200	30,000	56,700	51,800	71,000	49,500	78,200	50,400	44,900	41,000	72,000
29	58,000	51,300	38,000	48,700	------	68,000	47,900	93,900	50,000	44,900	38,200	65,000
30	59,500	50,400	50,000	41,000	------	65,500	50,000	87,200	52,600	41,900	37,200	60,000
31	62,500	------	70,000	40,400	------	83,500	------	75,200	------	46,000	37,400	------
TOTAL	1,780.4M	1,900.5M	1,069.9M	1,310.8M	1,185.3M	2,294.2M	1,788.4M	1,868.5M	1,756.8M	1,576.3M	1,260.9M	1,379.7M
MEAN	57,430	63,350	34,510	42,280	42,330	74,010	59,610	60,270	58,560	50,850	40,670	45,990
MAX	62,500	70,000	70,000	81,800	65,000	95,000	113,000	93,900	76,800	86,200	67,000	90,000
MIN	54,900	50,400	26,000	24,000	31,400	50,000	47,900	50,400	47,500	39,900	37,200	37,900
AC-FT	3,531M	3,770M	2,122M	2,600M	2,351M	4,551M	3,547M	3,706M	3,485M	3,127M	2,501M	2,737M

CAL YR 1972 TOTAL 6,289,700 MEAN 17,180 MAX 91,300 MIN 10,600 AC-FT 12,480,000
WTR YR 1973 TOTAL 19,171,700 MEAN 52,530 MAX 113,000 MIN 24,000 AC-FT 38,030,000

M Expressed in thousands.

06814000 Turkey Creek near Seneca, Kans.

LOCATION.--Lat 39°56'52", long 96°06'30", in SW1/4NW1/4SW1/4 sec.20, T.1 S., R.12 E., Nemaha County, at downstream side of highway bridge 2.0 mi (3.2 km) downstream from Clear Creek, 5.0 mi (8.0 km) upstream from Big Nemaha River, and 8.0 mi (12.9 km) northwest of Seneca.

DRAINAGE AREA.--276 mi² (715 km²).

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

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

AVERAGE DISCHARGE.--25 years, 123 ft³/s (3.483 m³/s), 89,110 acre-ft/yr (0.110 km³/yr).

EXTREMES.--Current year: Maximum discharge, 9,200 ft³/s (261 m³/s) Mar. 31, gage height, 23.04 ft (7.023 m); minimum daily, 0.26 ft³/s (0.007 m³/s) Oct. 19.
Period of record: Maximum discharge, 20,400 ft³/s (578 m³/s) June 29, 1965, gage height, 24.70 ft (7.529 m); no flow at times in 1956-57.

REMARKS.--Records good except those for October and winter period, which are poor.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.34	15	31	90	2,050	104	6,210	404	67	16	34	11
2	.32	49	28	60	1,580	105	897	162	66	30	31	10
3	.32	17	23	50	408	104	518	131	92	738	28	10
4	.30	9.1	20	40	699	378	411	113	97	199	25	11
5	.30	4.1	15	30	413	497	328	105	80	66	25	10
6	.30	3.4	12	25	265	618	281	237	67	42	24	8.8
7	.29	12	12	23	197	488	244	1,610	58	32	35	9.0
8	.28	4.6	14	21	129	239	243	2,380	52	26	86	16
9	.28	4.2	14	20	160	921	260	442	46	23	44	16
10	.28	64	14	20	159	1,200	240	286	41	23	29	14
11	.28	25	16	25	164	4,240	210	224	38	38	22	12
12	.27	15	18	30	176	1,190	190	178	40	24	42	12
13	.29	525	20	35	997	787	180	151	414	17	56	17
14	.29	512	20	50	547	1,450	250	136	88	16	27	14
15	.29	161	20	150	179	444	600	124	58	16	21	13
16	.28	82	22	544	147	315	1,800	117	48	15	20	17
17	.27	69	22	848	135	275	1,600	107	40	14	18	21
18	.27	60	24	515	148	251	500	102	35	20	17	18
19	.26	53	26	190	144	226	260	96	32	231	16	14
20	.35	46	30	120	140	202	200	89	30	4,070	15	12
21	.33	45	35	140	172	185	250	84	28	479	14	11
22	5.0	49	45	133	146	174	230	79	26	179	14	10
23	8.0	42	80	93	135	219	180	73	25	139	13	584
24	6.0	33	100	114	129	1,290	160	68	24	106	12	655
25	4.0	49	80	191	121	2,090	150	65	22	108	13	144
26	2.2	240	50	472	107	2,040	140	65	22	81	12	2,860
27	1.6	142	44	369	100	524	130	218	21	72	11	6,960
28	1.1	56	50	324	101	372	123	166	18	52	10	5,040
29	.90	36	400	128	------	328	114	120	17	46	9.5	3,530
30	.80	34	1,530	144	------	302	156	89	16	41	9.2	660
31	2.0	------	329	132	------	4,700	------	76	------	37	11	------
TOTAL	37.79	2,456.4	3,144	5,126	9,848	26,258	17,055	8,297	1,708	6,996	743.7	20,719.8
MEAN	1.22	81.9	101	165	352	847	569	268	56.9	226	24.0	691
MAX	8.0	525	1,530	848	2,050	4,700	6,210	2,380	414	4,070	86	6,960
MIN	.26	3.4	12	20	100	104	114	65	16	14	9.2	8.8
AC-FT	75	4,870	6,240	10,170	19,530	52,080	33,830	16,460	3,390	13,880	1,480	41,100

CAL YR 1972 TOTAL 11,967.82 MEAN 32.7 MAX 1,530 MIN .11 AC-FT 23,740
WTR YR 1973 TOTAL 102,389.69 MEAN 281 MAX 6,960 MIN .26 AC-FT 203,100

PEAK DISCHARGE (BASE, 3,100 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
2- 1	2200	18.51	3,360	5- 8	1100	18.07	3,140
3-11	1400	20.38	4,680	7-20	1300	23.01	9,050
3-31	2300	23.04	9,200	9-27	0600	22.74	8,120

06814500 North Fork Big Nemaha River at Humboldt, Nebr.

LOCATION.--Lat 40°09'25", long 95°56'40", in N1/2 sec.10, T.2 N., R.13 E., Richardson County, on right pile bent of bridge on State Highway 105 at south edge of Humboldt, 800 ft (244 m) downstream from Long Branch Creek.

DRAINAGE AREA.--548 mi² (1,419 km²).

PERIOD OF RECORD.--October 1952 to current year. Prior to October 1965 published as North Fork Nemaha River at Humboldt.

GAGE.--Water-stage recorder. Datum of gage is 944.44 ft (287.865 m) above mean sea level. Prior to Apr. 5, 1968, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--21 years, 189 ft³/s (5.352 m³/s), 136,900 acre-ft/yr (0.169 km³/yr); median of yearly mean discharges, 110 ft³/s (3.115 m³/s), 79,700 acre-ft/yr (98.3 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 31,600 ft³/s (895 m³/s) Sept. 26, gage height, 24.90 ft (7.590 m); minimum daily, 7.7 ft³/s (0.22 m³/s) Oct. 15.
Period of record: Maximum discharge, 51,000 ft³/s (1,440 m³/s) July 10, 1958, gage height, 31.70 ft (9.662 m); minimum daily, 6.2 ft³/s (0.18 m³/s) Aug. 8, 9, 1957, July 12, 1966.

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

REVISIONS.--WSP 2119: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	214	73	150	5,020	138	4,600	1,310	132	56	58	51
2	16	128	69	117	945	141	926	429	123	111	56	51
3	14	76	51	117	438	138	627	333	158	3,390	54	51
4	14	67	45	90	787	325	463	274	155	430	51	51
5	11	61	40	70	690	532	350	245	128	175	49	47
6	9.8	56	36	60	431	709	292	277	109	123	46	45
7	11	67	34	56	238	469	247	5,810	105	96	125	46
8	12	51	32	54	132	240	248	2,040	101	83	195	61
9	12	58	30	52	168	1,130	282	565	94	77	88	58
10	15	135	28	53	187	3,450	234	349	84	95	68	51
11	13	74	27	54	211	6,280	223	279	81	109	225	48
12	9.8	57	26	56	184	984	207	230	92	71	3,600	49
13	12	1,640	26	58	808	1,650	173	203	192	60	221	57
14	12	901	26	70	459	1,930	249	192	81	59	107	50
15	7.7	312	27	160	178	793	1,470	182	79	62	85	47
16	12	160	28	500	110	480	2,770	171	73	60	79	82
17	15	123	29	2,150	120	399	1,060	160	68	54	72	76
18	12	112	31	1,020	140	362	484	168	66	54	67	56
19	12	103	35	358	200	332	373	175	66	113	61	52
20	14	99	40	208	340	301	386	170	61	1,610	59	54
21	18	104	70	294	272	279	357	170	63	988	57	51
22	43	104	120	220	217	268	255	162	65	240	56	48
23	64	90	200	140	216	395	230	152	65	168	54	1,760
24	43	81	300	158	208	2,250	221	155	63	128	52	1,070
25	34	123	250	263	181	7,370	218	150	62	279	56	358
26	36	347	180	595	145	2,410	209	168	61	282	52	19,000
27	30	187	160	1,160	130	765	206	495	59	115	49	4,540
28	32	107	190	475	136	650	196	324	56	82	47	10,800
29	26	83	1,100	168	------	704	192	227	55	72	47	3,920
30	43	75	2,000	178	------	719	771	212	52	66	47	1,010
31	260	------	400	190	------	14,000	------	168	------	60	47	------
TOTAL	880.3	5,795	5,703	9,294	13,291	50,593	18,519	15,945	2,649	9,368	5,930	43,640
MEAN	28.4	193	184	300	475	1,632	617	514	88.3	302	191	1,455
MAX	260	1,640	2,000	2,150	5,020	14,000	4,600	5,810	192	3,390	3,600	19,000
MIN	7.7	51	26	52	110	138	173	150	52	54	46	45
AC-FT	1,750	11,490	11,310	18,430	26,360	100,400	36,730	31,630	5,250	18,580	11,760	86,560

CAL YR 1972 TOTAL 24,574.4 MEAN 67.1 MAX 2,000 MIN 7.2 AC-FT 48,740
WTR YR 1973 TOTAL 181,607.3 MEAN 498 MAX 19,000 MIN 7.7 AC-FT 360,200

PEAK DISCHARGE (BASE, 5,000 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
2- 1	1000	13.08	11,800	5- 7	1130	13.39	10,900
3-10	2245	13.18	12,000	7- 3	0630	16.55	16,600
3-13	2030	10.47	6,500	8-12	0445	14.95	13,700
3-25	1645	12.28	10,300	9-23	1530	10.91	6,490
3-31	1245	19.97	22,700	9-26	1100	24.90	31,600
4-15	2100	10.59	5,860	9-28	0930	15.64	15,000

06815000 Big Nemaha River at Falls City, Nebr.

LOCATION.--Lat 40°02'00", long 95°35'30", on line between secs.22 and 23, T.1 N., R.16 E., Richardson County, near right bank on downstream side of pier of bridge on U.S. Highway 73, 1 mi (2 km) south of Falls City and 13 mi (21 km) upstream from mouth.

DRAINAGE AREA.--1,340 mi² (3,471 km²).

PERIOD OF RECORD.--March 1944 to current year. Prior to October 1965, published as Nemaha River at Falls City.

GAGE.--Water-stage recorder for stages above 6.1 ft (1.86 m); nonrecording gage read twice daily. Datum of gage is 861.24 ft (262.506 m) above mean sea level (levels by Corps of Engineers). Prior to Oct. 16, 1952, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--29 years, 575 ft³/s (16.28 m³/s), 416,600 acre-ft/yr (0.514 km³/yr); median of yearly mean discharges, 400 ft³/s (11.33 m³/s), 290,000 acre-ft/yr (0.358 km³/yr).

EXTREMES.--Current year: Maximum discharge, 38,200 ft³/s (1,080 m³/s) Aug 12, gage height, 26.40 ft (8.047 m); minimum daily, 27 ft³/s (0.76 m³/s) Oct. 18.
Period of record: Maximum discharge, 51,400 ft³/s (1,460 m³/s) June 17, 1954, gage height, 27.44 ft (8.364 m); maximum gage height, 28.90 ft (8.809 m) June 29, 1965; minimum daily discharge, 4.3 ft³/s (0.12 m³/s) Dec. 15, 16, 1953.

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

REVISIONS.--WSP 1086: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38	334	218	736	7,670	520	19,600	2,260	470	141	266	216
2	36	764	202	408	6,720	524	6,320	1,160	440	167	245	216
3	35	250	185	310	2,230	528	2,260	700	470	4,900	222	206
4	32	130	166	290	2,090	1,430	1,760	594	540	2,220	201	211
5	32	94	135	280	1,980	3,470	1,420	526	410	740	190	206
6	32	91	110	270	1,330	1,890	1,190	598	360	436	180	141
7	32	94	112	260	990	2,780	1,030	8,780	338	320	156	141
8	30	94	118	260	640	1,400	995	6,330	314	266	2,890	289
9	29	81	124	250	548	2,410	1,100	3,230	289	235	1,920	366
10	32	220	120	250	584	4,220	975	1,500	263	224	664	296
11	30	380	116	240	620	14,100	840	1,120	245	222	443	245
12	29	158	112	250	828	6,660	780	960	237	224	16,200	196
13	29	1,430	108	270	4,540	2,500	691	825	655	193	2,050	598
14	30	3,730	104	290	3,070	6,100	715	745	720	175	975	486
15	30	1,300	100	350	900	2,380	1,930	682	366	165	668	292
16	30	684	104	1,200	664	1,280	11,200	624	310	158	554	370
17	28	536	108	4,100	644	1,020	4,230	582	278	152	494	538
18	27	504	114	2,820	688	910	1,710	550	235	141	440	429
19	29	452	124	1,270	696	825	1,320	530	219	227	404	275
20	30	384	140	720	652	760	1,200	502	203	8,010	380	224
21	35	352	180	716	764	705	1,150	466	193	11,500	342	188
22	58	344	230	796	684	637	1,120	443	188	1,810	331	172
23	130	313	300	564	664	646	840	415	183	985	317	954
24	146	277	500	472	640	2,960	760	401	172	795	303	3,840
25	79	295	450	588	624	10,900	682	380	172	1,200	303	2,390
26	61	632	380	1,350	576	7,880	628	373	167	870	282	18,100
27	51	704	340	1,770	528	2,940	594	562	163	562	257	18,400
28	44	412	350	1,680	508	1,710	562	770	154	450	232	29,000
29	43	277	1,000	700	------	1,870	522	628	149	380	201	16,200
30	44	229	5,540	524	------	1,670	510	554	145	342	196	5,220
31	71	------	2,450	632	------	22,000	------	502	------	300	196	------
TOTAL	1,382	15,545	14,340	24,616	43,072	109,625	68,634	38,292	9,048	38,510	32,502	100,405
MEAN	44.6	518	463	794	1,538	3,536	2,288	1,235	302	1,242	1,048	3,347
MAX	146	3,730	5,540	4,100	7,670	22,000	19,600	8,780	720	11,500	16,200	29,000
MIN	27	81	100	240	508	520	510	373	145	141	156	141
AC-FT	2,740	30,830	28,440	48,830	85,430	217,400	136,100	75,950	17,950	76,380	64,470	199,200

CAL YR 1972 TOTAL 65,108 MEAN 178 MAX 5,540 MIN 22 AC-FT 129,100
WTR YR 1973 TOTAL 495,971 MEAN 1,359 MAX 29,000 MIN 27 AC-FT 983,800

PEAK DISCHARGE (BASE, 15,000 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
2- 1	1500	18.03	15,600	7-21	0500	18.19	17,900
3-11	0900	16.25	16,800	8-12	0700	26.40	38,200
3-31	1700	25.70	36,100	9-26	2100	25.26	34,800
5- 7	1700	16.54	15,600	9-28	1130	25.93	36,800

06821500 Arikaree River at Haigler, Nebr.

LOCATION.--Lat 40°01'45", long 101°58'10", in NE1/4NE1/4 sec.29, T.1 N., R.41 W., Dundy County, on left bank 57 ft (17 m) downstream from bridge on U.S. Highway 34, 1.3 mi (2.1 km) upstream from Burlington Northern Inc. bridge, 1.8 mi (2.9 km) upstream from confluence with North Fork Republican River, 2 mi (3 km) northwest of Haigler, and 3.2 mi (5.1 km) downstream from Kansas-Nebraska State line.

DRAINAGE AREA.--1,640 mi² (4,250 km²), approximately, of which about 980 mi² (2,540 km²) contributes directly to surface runoff.

PERIOD OF RECORD.--October 1931 to current year. Monthly discharge only for some periods, published in WSP 1310.

GAGE.--Water-stage recorder. Datum of gage is 3,250.98 ft (990.899 m) above mean sea level. See WSP 1919 for history of changes prior to Sept. 29, 1964.

AVERAGE DISCHARGE.--42 years, 25.6 ft³/s (0.725 m³/s), 18,550 acre-ft/yr (22.9 hm³/yr); median of yearly mean discharges, 21 ft³/s (0.595 m³/s), 15,200 acre-ft/yr (18.7 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,420 ft³/s (68.5 m³/s) July 20, gage height, 8.17 ft (2.490 m); minimum daily, 0.12 ft³/s (0.003 m³/s) June 23.
Period of record: Maximum discharge, 50,000 ft³/s (1,420 m³/s) May 31, 1935, gage height, 11.2 ft (3.41 m), site and datum then in use, from floodmarks, from rating curve extended above 3,800 ft³/s (108 m³/s) on basis of slope-area measurement of peak flow; no flow for some periods in most years.

REMARKS.--Records fair except those for winter period, which are poor. Natural flow affected by ground-water withdrawals and diversions for irrigation of about 1,500 acres (6.07 km²) in Colorado and by return flow from Pioneer Canal.

REVISIONS (WATER YEARS).--WSP 1919: 1951, 1954, 1956, 1960. WSP 2119: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	1.7	15	12	12	25	67	47	23	19	3.5	1.8
2	21	8.3	20	12	18	23	42	50	27	3.9	1.9	1.2
3	15	20	10	7.5	25	32	37	41	48	3.8	.73	2.6
4	9.6	13	7.6	4.0	30	49	34	37	46	4.7	.66	6.1
5	16	10	4.2	4.0	32	33	31	35	28	3.5	21	5.5
6	9.7	9.1	1.0	4.6	22	28	30	35	33	1.6	17	2.1
7	11	12	1.0	5.4	10	24	30	52	30	1.3	1.8	1.7
8	10	12	1.0	6.0	5.8	23	33	43	24	1.2	1.9	1.3
9	14	10	1.1	6.0	6.4	23	42	36	20	2.2	2.2	1.5
10	7.2	10	1.2	6.0	8.0	24	36	31	21	2.9	1.4	3.5
11	8.2	9.6	1.3	6.5	12	22	43	29	19	3.2	.80	23
12	13	10	1.3	8.0	11	23	41	26	17	1.3	2.7	549
13	11	7.0	1.3	10	9.2	28	37	26	22	1.4	6.8	42
14	10	3.8	1.5	17	7.8	27	33	25	19	1.4	3.8	26
15	16	4.1	1.5	25	5.4	25	27	24	22	2.6	1.4	20
16	11	9.7	1.5	28	5.0	25	28	24	21	2.9	1.4	25
17	2.3	19	1.8	24	10	24	26	35	4.3	2.7	1.4	28
18	2.1	22	1.8	20	20	23	26	31	4.5	3.8	1.6	10
19	2.0	26	2.0	18	24	22	30	34	2.6	41	2.0	8.3
20	1.9	23	6.0	15	27	23	35	32	.79	1,020	2.6	8.7
21	1.8	21	10	13	32	22	25	33	.44	128	3.2	10
22	1.6	18	15	16	31	25	24	73	.37	89	3.7	11
23	1.4	15	18	16	30	26	23	34	.12	42	3.7	16
24	1.2	15	20	14	29	28	46	22	.18	58	3.5	9.6
25	1.1	14	22	18	26	37	149	28	.34	21	3.4	9.6
26	1.1	13	24	21	25	37	156	29	1.8	17	3.4	31
27	1.1	13	28	17	26	30	73	27	.75	12	3.3	26
28	1.1	11	22	12	25	50	53	38	.91	17	3.2	37
29	1.2	9.0	18	8.0	------	50	45	30	6.6	11	3.2	36
30	1.3	12	14	7.0	------	38	41	27	11	5.2	2.2	27
31	1.1	------	12	6.4	------	74	------	25	------	2.6	2.4	------
TOTAL	229.0	381.3	285.1	387.4	524.6	943	1,343	1,059	454.70	1,527.2	111.79	980.5
MEAN	7.39	12.7	9.20	12.5	18.7	30.4	44.8	34.2	15.2	49.3	3.61	32.7
MAX	24	26	28	28	32	74	156	73	48	1,020	21	549
MIN	1.1	1.7	1.0	4.0	5.0	22	23	22	.12	1.2	.66	1.2
AC-FT	454	756	565	768	1,040	1,870	2,660	2,100	902	3,030	222	1,940

CAL YR 1972 TOTAL 8,270.60 MEAN 22.6 MAX 789 MIN .50 AC-FT 16,400
WTR YR 1973 TOTAL 8,226.59 MEAN 22.5 MAX 1,020 MIN .12 AC-FT 16,320

PEAK DISCHARGE (BASE, 800 CFS).--July 20 (0500) 2,420 cfs (8.17 ft), Sept. 12 (0730) 2,100 cfs (7.81 ft).

06823000 North Fork Republican River at Colorado-Nebraska State line

LOCATION.--Lat 40°04'10", long 102°03'05", in sec.10, T.1 N., R.42 W., Dundy County, Nebr., on right bank 100 ft (30 m) east of Colorado-Nebraska State line and 9.5 mi (15.3 km) upstream from confluence with Arikaree River.

DRAINAGE AREA.--1,360 mi² (3,520 km²), approximately, of which about 100 mi² (260 km²) contributes directly to surface runoff.

PERIOD OF RECORD.--October 1930 to current year. Prior to October 1932, published as North Fork of Arikaree River at Colorado-Nebraska State line. Monthly discharge only for some periods, published in WSP 1310.

GAGE.--Water-stage recorder. Steel piling control since January 1965. Datum of gage is 3,336.09 ft (1,016.840 m) above mean sea level. Prior to Oct. 17, 1934, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--43 years, 49.1 ft³/s (1.391 m³/s), 35,570 acre-ft/yr (43.9 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 314 ft³/s (8.89 m³/s) July 20, gage height, 2.81 ft (0.856 m); minimum daily, 4.0 ft³/s (0.11 m³/s) July 12.
Period of record: Maximum discharge, 2,110 ft³/s (59.8 m³/s) Apr. 28, 1947, gage height, 5.92 ft (1.804 m), from rating curve extended above 800 ft³/s (22.7 m³/s) on basis of slope-area measurement of peak flow; no flow Aug. 25, 26, 1932.

REMARKS.--Records good. Natural flow affected by diversion in Pioneer Canal for irrigation of about 2,700 acres (10.9 km²) in Colorado and Nebraska.

REVISIONS (WATER YEARS).--WSP 1240: 1947(M). WSP 1390: 1934. WSP 2119: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	63	74	74	65	66	85	74	48	12	15	11
2	12	67	74	73	70	64	80	74	52	10	12	11
3	23	72	73	74	74	70	72	73	46	9.1	13	11
4	25	72	71	67	74	70	68	68	55	11	11	11
5	19	71	63	68	75	67	67	67	49	11	23	10
6	21	70	56	75	75	65	65	69	44	10	28	14
7	22	74	50	70	70	63	69	90	43	8.9	27	15
8	22	73	50	75	67	63	72	82	40	10	15	18
9	23	71	52	72	66	63	72	72	30	9.2	15	17
10	32	68	52	72	64	62	73	65	27	7.9	15	18
11	22	68	53	73	66	61	80	60	26	5.4	14	20
12	19	69	55	88	67	61	82	61	26	4.0	16	44
13	22	78	55	74	65	67	77	59	26	5.4	14	32
14	26	74	56	77	61	94	70	62	17	7.4	13	31
15	27	82	57	80	61	79	65	59	11	8.0	12	25
16	48	74	57	80	62	67	63	36	10	7.9	10	26
17	52	78	60	77	61	64	62	38	10	5.4	10	35
18	57	80	62	74	64	64	62	38	9.1	6.0	9.5	49
19	57	80	65	71	65	63	67	33	8.5	30	9.9	44
20	56	79	70	70	66	62	77	33	8.3	208	11	41
21	57	78	76	66	65	63	68	34	8.1	116	12	41
22	56	76	80	63	65	67	64	39	8.1	87	9.3	40
23	58	77	81	61	66	67	62	62	6.8	71	8.4	40
24	59	76	79	62	66	64	65	43	4.6	114	9.3	47
25	57	75	74	64	66	66	83	42	6.3	100	9.9	42
26	57	74	71	65	67	63	109	45	5.9	60	9.8	42
27	57	76	72	62	67	63	96	51	4.6	48	11	50
28	59	75	75	50	67	76	82	52	7.5	37	9.6	78
29	60	73	76	54	------	80	73	50	6.9	35	9.8	85
30	60	72	74	58	------	76	71	51	16	34	11	77
31	58	------	69	60	------	84	------	49	------	29	9.8	------
TOTAL	1,234	2,215	2,032	2,149	1,867	2,104	2,201	1,731	660.7	1,117.6	403.3	1,025
MEAN	39.8	73.8	65.5	69.3	66.7	67.9	73.4	55.8	22.0	36.1	13.0	34.2
MAX	60	82	81	88	75	94	109	90	55	208	28	85
MIN	11	63	50	50	61	61	62	33	4.6	4.0	8.4	10
AC-FT	2,450	4,390	4,030	4,260	3,700	4,170	4,370	3,430	1,310	2,220	800	2,030

CAL YR 1972 TOTAL 15,461.3 MEAN 42.2 MAX 102 MIN 6.7 AC-FT 30,670
WTR YR 1973 TOTAL 18,739.6 MEAN 51.3 MAX 208 MIN 4.0 AC-FT 37,170

PEAK DISCHARGE (BASE, 130 CFS).--July 20 (0800) 314 cfs (2.81 ft); July 24 (1600) 190 cfs (2.23 ft).

06823500 Buffalo Creek near Haigler, Nebr.

LOCATION.--Lat 40°02'45", long 101°52'15", in NW1/4NW1/4 sec.20, T.1 N., R.40 W., Dundy County, on right bank 90 ft (27 m) downstream from county highway bridge, 0.8 mi (1.3 km) upstream from mouth, and 4 mi (6 km) northeast of Haigler.

DRAINAGE AREA.--260 mi² (670 km²), approximately, of which about 13 mi² (34 km²) contributes directly to surface runcff.

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

GAGE.--Water-stage recorder. Concrete control since June 1954. Datum of gage is 3,204.57 ft (976.753 m) above mean sea level.

AVERAGE DISCHARGE.--33 years, 8.00 ft³/s (0.227 m³/s), 5,800 acre-ft/yr (7.15 hm³/yr).

EXTREMES.--Current year: Maximum discharge, about 35 ft³/s (0.99 m³/s) Jan. 29, gage height, 4.89 ft (1.490 m), backwater from ice; no flow on many days.
Period of record: Maximum discharge, about 140 ft³/s (3.96 m³/s) June 27, 1948, gage height, 4.37 ft (1.332 m); maximum gage height recorded, 5.78 ft (1.762 m) Mar. 7, 1960, backwater from ice; no flow at times in 1955, 1968, 1973.

REMARKS.--Records good except those for winter period, which are poor. Natural flow affected by diversion about 0.5 mi (0.8 km) upstream for irrigation of 880 acres (3.56 km²).

REVISIONS (WATER YEARS).--WSP 2119: 1948-50(M), 1957(M), drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.6	7.1	8.9	7.8	12	9.4	11	10	7.9	.07	.04	0
2	5.6	7.4	9.0	8.0	11	9.4	9.9	11	8.1	.06	.04	0
3	5.6	6.9	8.2	7.6	9.0	10	9.2	10	8.1	.04	.03	0
4	5.6	6.8	7.4	6.0	10	11	8.9	9.7	9.1	.03	.03	.03
5	5.8	6.6	7.4	6.4	11	10	8.9	9.6	8.6	.03	.03	.04
6	5.4	8.1	6.8	6.8	11	9.9	8.4	10	8.4	.01	.02	.02
7	5.3	8.7	7.0	7.2	8.8	9.6	7.4	11	8.4	.01	.02	0
8	5.4	8.6	7.0	7.5	7.2	9.5	14	10	7.9	.08	.02	0
9	5.4	8.4	7.2	7.5	7.8	9.6	11	9.9	7.5	.07	0	.19
10	5.5	7.8	7.2	7.8	8.6	9.5	11	9.9	6.8	.07	0	.82
11	5.4	7.6	7.3	8.0	9.3	9.4	11	9.8	3.9	.05	0	.67
12	5.4	7.7	7.3	9.0	9.3	9.3	11	9.4	.19	.02	.02	.63
13	5.4	1.6	7.4	11	9.1	11	10	9.5	.14	.03	.01	.84
14	5.6	9.0	7.6	13	6.8	16	9.8	9.4	.10	.02	0	1.7
15	6.0	12	7.6	11	7.4	12	9.3	9.3	.08	.02	0	1.3
16	5.9	13	7.8	10	9.0	11	9.3	9.1	.08	0	0	1.3
17	5.6	10	7.8	10	10	10	9.2	8.9	.05	0	0	1.3
18	5.8	8.7	8.4	10	10	9.8	10	8.5	0	0	0	1.1
19	5.8	8.9	9.0	10	9.8	10	11	8.2	0	.05	0	.86
20	5.9	9.0	9.6	10	10	11	9.8	7.8	0	.08	0	.78
21	5.8	9.0	10	9.9	9.9	10	9.1	8.2	0	.05	0	.71
22	5.9	9.0	12	6.2	9.7	10	8.8	8.6	.05	.04	0	.61
23	6.8	9.0	11	8.4	9.6	9.4	8.8	8.2	.38	.03	0	.61
24	6.8	8.6	11	10	9.7	9.6	9.4	7.6	.36	6.6	0	1.3
25	6.6	8.3	11	10	9.4	9.7	11	7.3	.34	9.5	0	1.3
26	6.6	7.5	10	9.9	9.3	9.7	13	7.5	.33	6.1	0	1.4
27	6.5	7.6	11	1.0	9.2	9.4	11	10	.25	4.1	0	1.4
28	6.6	7.8	10	1.4	9.1	10	10	10	.08	4.1	0	6.6
29	6.6	8.2	10	18	------	10	9.6	8.8	.13	2.9	0	9.8
30	6.8	9.2	5.0	14	------	9.9	9.4	8.1	.13	.07	0	9.1
31	6.6	------	7.0	12	------	12	------	7.9	------	.05	0	------
TOTAL	183.6	248.1	263.9	275.4	263.0	317.1	300.2	283.2	87.39	34.28	.26	44.41
MEAN	5.92	8.27	8.51	8.88	9.39	10.2	10.0	9.14	2.91	1.11	.008	1.48
MAX	6.8	13	12	18	12	16	14	11	9.1	9.5	.04	9.8
MIN	5.3	1.6	5.0	1.0	6.8	9.3	7.4	7.3	0	0	0	0
AC-FT	364	492	523	546	522	629	595	562	173	68	.5	88

CAL YR 1972 TOTAL 2,152.42 MEAN 5.88 MAX 13 MIN .05 AC-FT 4,270
WTR YR 1973 TOTAL 2,300.84 MEAN 6.30 MAX 18 MIN 0 AC-FT 4,560

PEAK DISCHARGE (BASE, 20 CFS).--Jan. 29 (1000) about 35 cfs (4.89 ft, backwater from ice).

06824000 Rock Creek at Parks, Nebr.

LOCATION.--Lat 40°02'30", long 101°43'40", in SW1/4NE1/4 sec.21, T.1 N., R.39 W., Dundy County, on right bank at west edge of Parks, 100 ft (30 m) downstream from county road bridge and 0.5 mi (0.8 km) upstream from mouth.

DRAINAGE AREA.--20 mi² (52 km²), approximately, of which about 17 mi² (44 km²) contributes directly to surface runoff.

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

GAGE.--Water-stage recorder. Datum of gage is 3,093.35 ft (942.853 m) above mean sea level.

AVERAGE DISCHARGE.--33 years, 14.3 ft³/s (0.405 m³/s), 10,360 acre-ft/yr (12.8 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 38 ft³/s (1.08 m³/s) Nov. 3, gage height, 2.09 ft (0.637 m); maximum gage height, 2.80 ft (0.853 m) Jan. 11, backwater from ice; minimum daily discharge, 7.5 ft³/s (0.21 m³/s) Feb. 27.
Period of record: Maximum discharge, 493 ft³/s (14.0 m³/s) July 5, 1965, gage height, 6.00 ft (1.829 m), from rating curve extended above 40 ft³/s (1.13 m³/s) on basis of slope-conveyance study; minimum daily, 3.1 ft³/s (0.088 m³/s) Feb. 19-23, 1943, Oct. 3, 1959.

REMARKS.--Records good except those for winter period, which are poor. One diversion about 2 mi (3 km) above station for irrigation of 215 acres (870,000 m²); flow regulated at times by reservoir at State fish hatchery 7 mi (11 km) upstream.

REVISIONS (WATER YEARS).--WSP 1630: 1951(M). WSP 2119: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	14	16	15	17	13	17	17	13	12	11	10
2	13	20	16	15	17	13	15	17	14	11	11	10
3	13	30	16	15	16	9.1	14	16	14	11	11	9.9
4	13	20	15	13	16	13	13	16	14	10	11	9.9
5	13	17	13	11	16	15	14	15	14	11	11	10
6	12	19	12	12	16	16	14	16	14	10	11	10
7	12	25	11	13	17	15	16	17	14	9.8	11	11
8	13	17	12	14	16	15	18	17	14	9.7	11	11
9	13	15	14	14	17	14	16	16	11	9.8	11	11
10	14	14	15	14	16	9.8	16	15	11	9.7	11	11
11	14	14	15	14	16	12	17	15	12	9.5	11	12
12	13	15	15	16	16	13	17	14	13	9.0	13	14
13	13	11	15	18	16	15	16	14	13	9.0	12	14
14	13	23	15	17	17	19	15	15	13	9.4	12	13
15	13	18	15	15	16	17	15	15	13	9.6	12	12
16	13	17	16	15	16	16	15	15	12	9.8	12	12
17	17	17	16	15	16	15	15	14	12	9.9	12	12
18	16	17	16	15	16	15	14	14	11	10	11	12
19	17	17	17	15	17	14	15	14	11	13	11	12
20	20	17	19	15	17	14	14	14	11	14	11	12
21	23	16	19	15	17	14	14	13	11	13	11	12
22	17	17	20	15	16	13	14	15	11	13	11	11
23	17	16	19	17	15	13	14	14	11	12	11	11
24	20	16	18	15	10	14	14	14	10	14	11	12
25	16	16	18	15	13	15	16	13	10	13	12	12
26	14	16	17	15	14	14	19	13	10	12	11	12
27	17	16	17	14	7.5	15	19	15	10	12	11	13
28	20	15	17	13	11	17	18	14	11	12	10	17
29	16	16	17	13	------	17	17	14	12	12	10	17
30	14	15	16	15	------	17	16	14	12	12	10	17
31	12	------	16	16	------	19	------	13	------	11	10	------
TOTAL	464	516	493	454	430.5	450.9	467	458	362	343.2	345	362.8
MEAN	15.0	17.2	15.9	14.6	15.4	14.5	15.6	14.8	12.1	11.1	11.1	12.1
MAX	23	30	20	18	17	19	19	17	14	14	13	17
MIN	12	11	11	11	7.5	9.1	13	13	10	9.0	10	9.9
AC-FT	920	1,020	978	901	854	894	926	908	718	681	684	720

CAL YR 1972 TOTAL 5,112.3 MEAN 14.0 MAX 30 MIN 9.1 AC-FT 10,140
WTR YR 1973 TOTAL 5,146.4 MEAN 14.1 MAX 30 MIN 7.5 AC-FT 10,210

PEAK DISCHARGE (BASE, 25 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
10-21	0430	1.76	27	11- 3	0115	2.09	38
10-23	2215	1.70	25	11- 6	2330	1.94	32
10-27	2130	1.73	26				

06824500 Republican River at Benkelman, Nebr.

LOCATION.--Lat 40°01'55", long 101°32'30", in SE1/4SW1/4 sec.19, T.1 N., R.37 W., Dundy County, on right bank 150 ft (46 m) downstream from bridge on U.S. Highway 34, 0.6 mi (1.0 km) south of Burlington Northern Inc. track, 1 mi (2 km) southwest of Benkelman, 2 mi (3 km) upstream from South Fork Republican River, and 11 mi (18 km) downstream from Rock Creek.

DRAINAGE AREA.--4,830 mi² (12,500 km²), approximately, of which about 1,230 mi² (3,190 km²) contributes directly to surface runoff.

PERIOD OF RECORD.--October 1894 to September 1895 (published as North Fork Republican River at Benkelman), October 1902 to November 1906, October 1946 to current year. Monthly discharge only for some periods, published in WSP 1310.

GAGE.--Water-stage recorder. Datum of gage is 2,975.34 ft (906.884 m) above mean sea level. Prior to Dec. 17, 1946, nonrecording gages at several sites within 1.5 mi (2.4 km) of present site at various datums; Dec. 17, 1946, to May 26, 1972, water-stage recorder at site 150 ft (46 m) upstream at same datum.

AVERAGE DISCHARGE.--32 years, 92.8 ft³/s (2.628 m³/s), 67,230 acre-ft/yr (82.9 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,270 ft³/s (36.0 m³/s) July 20, gage height, 4.30 ft (1.311 m); minimum daily, 0.06 ft³/s (0.002 m³/s) Sept. 1.
Period of record: Maximum discharge, 6,040 ft³/s (171 m³/s) Sept. 7, 1951, gage height, 7.58 ft (2.310 m); maximum gage height, 7.80 ft (2.377 m) Aug. 9, 1950; no flow at times in most years.
Maximum stage since at least 1826, 13.1 ft (3.99 m) May 31, 1935, from elevations furnished by State Highway Department.

REMARKS.--Records good except those for winter period, which are poor. Natural flow affected by irrigation developments above station. Records of chemical analyses for the water year 1973 are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1310: 1895. WSP 1919: 1952, 1956. WSP 2119: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35	115	118	105	120	134	202	194	78	53	38	.06
2	35	137	118	110	130	137	190	192	82	54	36	.19
3	36	164	93	100	140	155	162	166	85	36	31	.78
4	35	152	78	90	150	169	154	156	102	24	27	.75
5	38	135	70	82	165	149	150	146	107	32	24	1.3
6	38	95	66	75	174	140	140	149	85	20	35	2.1
7	37	99	66	70	147	125	155	180	78	7.6	34	2.6
8	38	91	68	70	144	123	150	199	77	3.2	33	4.7
9	40	103	70	68	123	122	168	174	74	3.8	26	6.4
10	43	104	70	70	158	117	159	153	65	2.3	22	7.1
11	44	102	70	85	218	126	177	144	59	2.8	19	12
12	44	103	72	100	200	117	182	125	57	1.2	23	177
13	43	86	72	120	170	134	162	122	53	14	16	160
14	41	90	75	130	140	201	141	123	50	20	17	82
15	44	92	75	135	112	159	144	124	38	15	16	57
16	49	100	75	130	98	142	128	130	23	12	14	49
17	67	120	78	125	100	130	126	101	13	11	12	48
18	79	135	80	115	102	135	124	101	5.8	14	10	54
19	71	132	90	105	135	133	125	97	2.7	43	8.0	55
20	82	129	100	100	131	123	126	97	2.4	336	6.0	51
21	101	123	105	96	135	117	136	95	4.2	191	4.0	50
22	97	118	110	98	138	119	127	110	22	155	3.8	49
23	108	108	105	100	145	134	122	112	24	119	2.3	49
24	167	102	105	103	142	139	123	101	11	99	2.8	57
25	140	98	110	100	137	159	196	86	8.9	184	5.6	56
26	114	100	120	96	130	157	267	87	5.8	119	2.1	63
27	105	118	126	94	125	152	218	102	1.9	84	.40	96
28	111	120	126	90	126	168	207	106	13	71	.10	127
29	109	98	120	92	------	191	181	104	50	61	.44	137
30	109	105	115	95	------	200	171	91	40	51	.41	125
31	80	------	110	100	------	204	------	85	------	41	.11	------
TOTAL	2,180	3,374	2,856	3,049	3,935	4,511	4,813	3,952	1,317.7	1,879.9	469.06	1,579.98
MEAN	70.3	112	92.1	98.4	141	146	160	127	43.9	60.6	15.1	52.7
MAX	167	164	126	135	218	204	267	199	107	336	38	177
MIN	35	86	66	68	98	117	122	85	1.9	1.2	.10	.06
AC-FT	4,320	6,690	5,660	6,050	7,810	8,950	9,550	7,840	2,610	3,730	930	3,130

CAL YR 1972 TOTAL 28,881.63 MEAN 78.9 MAX 595 MIN .54 AC-FT 57,290
WTR YR 1973 TOTAL 33,916.64 MEAN 92.9 MAX 336 MIN .06 AC-FT 67,270

PEAK DISCHARGE (BASE, 550 CFS).--July 20 (1500) 1,270 cfs (4.30 ft); Sept. 12 (2000) 1,000 cfs (3.97 ft).

06827500 South Fork Republican River near Benkelman, Nebr.

LOCATION.--Lat 40°00'34", long 101°32'32", in NE1/4SW1/4 sec.31, T.1 N., R.37 W., Dundy County, on right bank 100 ft (30 m) upstream from bridge on State Highway 61, 1 mi (2 km) downstream from Kansas-Nebraska State line, 2.5 mi (4.0 km) southwest of Benkelman, and 4 mi (6 km) upstream from mouth.

DRAINAGE AREA.--2,740 mi² (7,100 km²), approximately, of which about 2,190 mi² (5,670 km²) contributes directly to surface runoff.

PERIOD OF RECORD.--October 1894 to September 1895, October 1902 to November 1906, October 1930 to September 1932, August 1937 to current year. Published as South Fork of Republican River at Benkelman prior to 1906 and as Republican River at Benkelman 1931-32. Monthly discharge only for some periods, published in WSP 1310.

GAGE.--Water-stage recorder. Datum of gage is 2,990.91 ft (911.629 m) above mean sea level. Prior to Dec. 10, 1947, nonrecording gages at several sites within 3.5 mi (5.6 km) of present site at various datums. Dec. 10, 1947, to Sept. 28, 1966, water-stage recorder 130 ft (40 m) downstream at datum 2.00 ft (0.610 m) higher, and Sept. 29, 1966, to Mar. 7, 1968, at present site at datum 2.00 ft (0.610 m) higher.

AVERAGE DISCHARGE.--43 years, 56.3 ft³/s (1.594 m³/s), 40,790 acre-ft/yr (50.3 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 5,820 ft³/s (165 m³/s) July 25, gage height, 7.15 ft (2.179 m); no flow for many days.

Period of record: Maximum discharge determined, 19,600 ft³/s (555 m³/s) Aug. 16, 1958, gage height, 8.70 ft (2.652 m), site and datum then in use, but may have been higher during flood of June 24, 1945; no flow at times in most years.

Maximum stage known since at least 1923, 10.1 ft (3.08 m) May 31, 1935, from floodmarks at site 0.2 mile downstream, at datum 2.00 ft (0.610 m) higher, discharge, 150,000 ft³/s (4,250 m³/s), by slope-area measurement.

REMARKS.--Records fair except those for winter period, which are poor. Natural flow affected by irrigation development above station, and since July 6, 1950, by storage in Bonny Reservoir.

REVISIONS (WATER YEARS).--WSP 1310: 1904-6, 1931. WSP 1390: 1940, 1945, 1947. WSP 1919: 1951-52, 1954-56. WSP 2119: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	28	30	28	44	38	147	101	62	65	35	0
2	0	29	35	25	46	36	133	104	66	34	29	0
3	0	29	25	22	50	49	117	102	70	22	24	0
4	0	22	5.0	17	52	55	105	97	80	17	22	0
5	0	19	1.0	12	55	49	97	93	80	21	22	0
6	0	12	.80	12	58	44	95	91	68	10	32	0
7	0	12	.50	13	28	44	103	105	62	5.2	20	0
8	0	12	.50	13	16	41	95	107	62	2.2	16	0
9	0	13	.50	13	18	42	124	91	58	.41	12	0
10	0	12	.50	13	30	41	98	85	54	.07	11	0
11	0	14	1.0	14	45	37	108	81	50	0	9.2	.24
12	0	16	1.5	18	59	30	107	74	47	0	11	.17
13	0	16	1.9	20	39	36	102	74	47	1.1	6.8	2.1
14	0	16	2.0	25	13	101	93	79	47	33	6.0	3.8
15	0	16	2.0	30	15	116	81	79	44	6.3	4.8	1.4
16	0	20	2.4	30	15	124	78	74	39	1.6	4.1	1.2
17	0	25	2.8	28	30	129	73	73	38	81	2.5	2.0
18	0	30	3.0	26	52	127	74	70	35	14	.64	2.5
19	0	31	7.0	26	50	131	77	70	32	9.0	.14	2.6
20	0	28	12	24	33	134	69	66	34	55	.07	2.1
21	0	27	15	24	38	133	61	65	63	59	.01	1.9
22	.85	21	20	26	38	106	57	82	80	40	0	1.1
23	3.3	22	25	32	38	100	55	76	81	33	0	.21
24	6.5	25	30	39	38	110	63	68	78	17	.13	2.4
25	9.1	30	36	42	38	99	89	66	79	1,520	.03	3.2
26	15	35	42	38	38	80	158	62	79	355	0	5.1
27	17	39	48	33	35	70	131	74	76	106	0	14
28	22	29	45	26	35	83	105	84	90	72	0	44
29	30	25	40	28	------	102	94	70	94	55	0	40
30	32	27	36	34	------	95	89	66	75	48	0	34
31	29	------	32	40	------	138	------	68	------	40	0	------
TOTAL	164.75	680	503.40	771	1,046	2,520	2,878	2,497	1,870	2,722.88	268.42	164.02
MEAN	5.31	22.7	16.2	24.9	37.4	81.3	95.9	80.5	62.3	87.8	8.66	5.47
MAX	32	39	48	42	59	138	158	107	94	1,520	35	44
MIN	0	12	.50	12	13	30	55	62	32	0	0	0
AC-FT	327	1,350	998	1,530	2,070	5,000	5,710	4,950	3,710	5,400	532	325

CAL YR 1972 TOTAL 14,302.32 MEAN 39.1 MAX 1,230 MIN 0 AC-FT 28,370
WTR YR 1973 TOTAL 16,085.47 MEAN 44.1 MAX 1,520 MIN 0 AC-FT 31,910

06828500 Republican River at Stratton, Nebr.

LOCATION.--Lat 40°08'28", long 101°13'42", in SW1/4NW1/4 sec.13, T.2 N., R.35 W., Hitchcock County, on right bank at downstream side of county bridge, 0.5 mi (0.8 km) south of Stratton, 0.2 mi (0.3 km) downstream from Muddy Creek, 10 mi (16 km) upstream from Trenton Dam, and 19 mi (31 km) downstream from South Fork Republican River.

DRAINAGE AREA.--8,450 mi² (21,900 km²), approximately, of which about 3,800 mi² (9,840 km²) contributes directly to surface runoff.

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

GAGE.--Water-stage recorder. Datum of gage is 2,775.49 ft (845.969 m) above mean sea level. Prior to Aug. 1, 1967, at site 0.3 mi (0.5 km) downstream at present datum.

AVERAGE DISCHARGE.--23 years, 143 ft³/s (4.050 m³/s), 103,600 acre-ft/yr (0.128 km³/yr); median of yearly mean discharges, 120 ft³/s (3.398 m³/s), 86,900 acre-ft/yr (0.107 km³/yr).

EXTREMES.--Current year: Maximum discharge, 2,940 ft³/s (83.3 m³/s) July 20, gage height, 8.58 ft (2.615 m); no flow July 10-12, Aug. 23, Aug. 26 to Sept. 10.
Period of record: Maximum discharge, 26,800 ft³/s (759 m³/s) July 31, 1962, gage height, 9.34 ft (2.847 m), site then in use; no flow at times in most years.
Maximum flood since at least 1826 occurred May 31, 1935, discharge, about 200,000 ft³/s (5,660 m³/s), based on slope-area measurement at Max.

REVISIONS.--The figures of maximum discharge for some water years have been revised, as shown in the following table. They supersede figures published in the water-supply papers or annual reports indicated.

WSP	Wtr Yr	Date	Discharge(cfs)	G.H.(ft)
2119	1968	Aug. 28, 1968	1,340	7.68
2119	1969	May 21, 1969	5,740	9.64
2119	1970	June 19,1970	3,540	8.90
WRD Nebr.	1971	Apr. 19, 1971	1,610	7.88
WRD Nebr.	1972	June 17,1972	2,260	8.30

REMARKS.--Records good except those for winter period, which are poor. Natural flow affected by irrigation development above station and by storage in Bonny Reservoir. (See sta 06826000.)

REVISIONS.--WSP 2119: Drainage area.
Revised figures of discharge, in cubic feet per second, for highwater period in the water year 1972, superseding those published in WRD Nebr. 1972, are given below:

June 16	317	June 18	1,180
June 17	1,240	June 19	692

Month	Cfs-day	Maximum	Minimum	Mean	Runoff(Ac-ft)
June 1972	7,747	1,240	32	258	15,370
WTR YR 1972	37,065.08	1,240	0	102	73,520

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	113	133	150	140	162	340	306	188	66	108	0
2	20	160	147	150	150	170	323	333	181	57	99	0
3	20	155	110	140	160	200	291	306	174	46	79	0
4	19	147	85	110	172	232	274	284	224	35	57	0
5	21	134	70	85	190	228	258	273	231	21	42	0
6	23	120	65	80	180	197	251	281	204	17	32	0
7	26	111	65	80	145	170	264	296	152	5.5	53	0
8	29	113	70	75	100	162	263	332	134	.57	48	0
9	27	107	70	75	110	166	293	318	123	.10	37	0
10	32	100	70	80	135	173	287	296	110	0	31	0
11	33	99	75	90	160	165	284	275	94	0	22	102
12	35	104	75	105	175	164	299	248	91	0	37	116
13	38	100	75	130	145	170	309	221	82	4.3	39	200
14	35	92	75	150	110	250	283	216	79	1.9	23	103
15	34	96	78	170	90	290	271	209	66	19	18	64
16	37	120	80	170	98	269	240	200	53	5.3	14	55
17	42	160	80	160	104	270	217	190	43	.34	7.1	46
18	69	200	95	140	170	268	208	179	35	30	3.2	47
19	59	202	110	130	232	266	215	178	30	44	1.6	53
20	59	198	130	130	180	262	227	167	30	1,280	.81	52
21	58	177	140	135	151	265	219	161	32	709	.22	54
22	55	161	160	135	166	255	214	239	52	342	.04	49
23	56	146	160	140	173	239	199	244	54	262	0	48
24	66	146	150	140	170	267	201	221	51	191	.01	59
25	77	151	160	150	160	264	259	185	49	755	.01	61
26	81	161	180	130	156	257	451	154	51	756	0	65
27	81	156	190	120	163	248	387	183	52	365	0	109
28	81	178	195	100	170	264	362	209	53	222	0	297
29	91	140	200	110	------	290	329	187	81	166	0	270
30	103	118	180	125	------	292	298	169	83	136	0	204
31	105	------	160	130	------	326	------	181	------	126	0	------
TOTAL	1,531	4,165	3,633	3,815	4,255	7,201	8,316	7,241	2,882	5,663.01	751.99	2,054
MEAN	49.4	139	117	123	152	232	277	234	96.1	183	24.3	68.5
MAX	105	202	200	170	232	326	451	333	231	1,280	108	297
MIN	19	92	65	75	90	162	199	154	30	0	0	0
AC-FT	3,040	8,260	7,210	7,570	8,440	14,280	16,490	14,360	5,720	11,230	1,490	4,070

CAL YR 1972 TOTAL 40,457.97 MEAN 111 MAX 1,240 MIN 0 AC-FT 80,250
WTR YR 1973 TOTAL 51,508.00 MEAN 141 MAX 1,280 MIN 0 AC-FT 102,200

06829000 Swanson Lake near Trenton, Nebr.

LOCATION.--Lat 40°10'10", long 101°03'35", in SE1/4NE1/4 sec.5, T.2 N., R.33 W., Hitchcock County, in gate-control house at right end of spillway on downstream side of Trenton Dam on Republican River, 2.5 mi (4.0 km) west of Trenton.

DRAINAGE AREA.--8,620 mi² (22,300 km²), approximately, of which about 3,940 mi² (10,200 km²) contributes directly to surface runoff.

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

GAGE.--Water-stage recorder. Gage is referred to mean sea level. Prior to Nov. 13, 1953, nonrecording gage at same site and datum.

EXTREMES.--Current year: Maximum contents, 126,600 acre-ft (0.156 km³) May 2, 3, elevation, 2,753.28 ft (839.200 m); minimum contents, 72,830 acre-ft (89.8 hm³) Oct. 10-12, elevation, 2,741.32 ft (835.554 m).
Period of record: Maximum contents, 148,900 acre-ft (0.184 km³) Aug. 2, 3, 1962, elevation, 2,757.42 ft (840.462 m); minimum since operation of reservoir began, 19,950 acre-ft (24.6 hm³) Oct. 24, 1954, elevation, 2,722.61 ft (829.852 m).

REMARKS.--Reservoir is formed by earthfill dam; storage began May 4, 1953. Capacity, 116,100 acre-ft (0.143 km³) between elevations 2,710.0 ft (826.01 m), sill of outlet gates, and 2,752.0 ft (838.81 m), top of storage pool. Top of flood-control pool is at elevation 2,773.0 ft (845.21 m), capacity, 254,000 acre-ft (0.313 km³). Top of superstorage flood-control pool at elevation 2,785.0 ft (848.87 m), capacity, 361,600 acre-ft (0.446 km³). Dead storage, 4,100 acre-ft (5.06 hm³). Figures given herein represent total contents. Water used for irrigation in Frenchman-Cambridge irrigation project.

COOPERATION.--Capacity table furnished by Bureau of Reclamation.

REVISIONS.--WSP 2119: Drainage area.

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

2,735	50,280	2,750	110,500
2,740	67,730	2,755	135,600
2,745	87,930		

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	73,030	74,890	83,030	88,920	96,890	106,300	120,700	126,500	121,400	115,700	105,000	83,990
2	72,990	75,120	83,240	89,180	97,210	106,700	121,500	126,600	121,300	115,300	104,900	83,580
3	72,990	75,480	83,450	89,310	97,570	107,300	122,000	126,600	121,300	114,500	104,600	83,200
4	72,990	75,720	83,580	89,560	98,060	107,700	122,000	126,400	121,500	113,700	104,200	82,870
5	72,950	76,000	83,620	89,690	98,460	108,100	122,100	126,300	121,600	112,500	103,700	82,540
6	72,910	76,240	83,660	89,860	99,140	108,500	122,200	126,000	121,600	111,500	103,300	82,240
7	72,870	76,360	83,660	90,040	99,410	108,900	122,700	125,900	121,500	110,500	102,900	82,040
8	72,870	76,690	83,700	90,170	99,680	109,000	123,000	125,700	121,500	109,400	102,400	81,740
9	72,870	76,890	83,740	90,380	99,860	109,500	123,000	125,600	121,300	108,300	101,700	81,580
10	72,830	77,050	83,830	90,510	100,100	109,800	122,800	125,400	121,200	107,200	101,100	81,290
11	72,830	77,210	84,040	90,640	100,400	110,000	123,100	125,100	121,000	106,100	100,400	82,040
12	72,830	77,530	84,250	90,820	100,900	110,300	122,900	124,800	120,700	104,900	99,720	82,410
13	72,870	78,300	84,410	90,990	101,200	110,900	122,800	124,500	120,700	104,100	99,050	82,450
14	72,910	78,380	84,500	91,210	101,500	111,400	123,000	124,200	120,700	102,500	98,420	82,580
15	72,910	78,550	84,540	91,430	101,700	111,800	123,100	124,000	120,400	101,400	97,660	82,580
16	72,950	78,750	84,670	91,730	101,900	112,200	123,200	123,700	120,200	100,200	96,890	82,580
17	72,950	79,070	84,960	92,120	102,100	112,700	123,200	123,400	119,900	99,320	96,140	82,620
18	73,070	79,520	85,040	92,250	102,500	113,100	123,200	123,000	119,700	98,240	95,430	82,620
19	73,150	79,890	85,210	92,430	103,000	113,600	123,400	122,700	119,400	98,420	94,580	82,620
20	73,150	80,180	85,300	92,820	103,400	113,900	123,300	122,200	119,200	100,200	93,790	82,620
21	73,190	80,470	85,510	93,170	103,800	114,300	123,300	122,100	119,000	101,100	93,040	82,740
22	73,300	80,750	85,720	93,310	104,100	114,800	123,200	122,100	118,800	101,900	92,120	82,780
23	73,380	81,000	85,930	93,610	104,400	115,200	123,200	121,900	118,700	102,100	91,340	82,830
24	73,460	81,210	86,270	93,660	104,700	115,900	123,100	121,700	118,500	102,300	90,510	82,990
25	73,540	81,410	86,650	93,830	104,800	116,500	123,200	121,600	118,400	102,900	89,690	83,030
26	73,660	81,660	86,990	94,190	105,100	116,700	124,000	121,600	118,200	104,400	88,830	83,330
27	73,820	82,040	87,290	95,070	105,700	117,300	124,300	121,600	117,800	104,800	87,760	83,990
28	73,940	82,290	87,760	95,740	106,100	117,800	124,700	121,500	117,400	104,900	86,870	84,620
29	74,130	82,540	88,190	96,230	------	118,300	124,800	121,500	117,000	105,100	86,140	85,250
30	74,450	82,870	88,450	96,450	------	119,000	126,400	121,200	116,300	105,300	85,300	85,630
31	74,610	------	88,790	96,580	------	119,900	------	121,400	------	105,300	84,580	------
MAX	74,610	82,870	88,790	96,580	106,100	119,900	126,400	126,600	121,600	115,700	105,000	85,630
MIN	72,830	74,890	83,030	88,920	96,890	106,300	120,700	121,200	116,300	98,240	84,580	81,290
(†)	+1,510	+8,260	+5,920	+7,790	+9,520	+13,800	+6,500	-5,000	-5,100	-11,000	-20,720	+1,050
(‡)	2,741.77	2,743.80	2,745.20	2,746.98	2,749.07	2,751.95	2,753.23	2,752.25	2,751.22	2,748.90	2,744.21	2,744.46

CAL YR 1972 MAX 109,800 MIN 69,450 †+19,490
WTR YR 1973 MAX 126,600 MIN 72,830 †+12,530

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

06829500 Republican River at Trenton, Nebr.

LOCATION.--Lat 40°10'00", long 101°02'40", in SE1/4 sec.4, T.2 N., R.33 W., Hitchcock County, on left bank 300 ft (91 m) upstream from Elm Creek, 0.9 mi (1.4 km) downstream from centerline of spillway of Trenton Dam, and 1.5 mi (2.4 km) southwest of Trenton.

DRAINAGE AREA.--8,620 mi² (22,300 km²), approximately, of which about 3,940 mi² (10,200 km²) contributes directly to surface runoff.

PERIOD OF RECORD.--October 1946 to current year. Monthly discharge only for some periods, published in WSP 1310.

GAGE.--Water-stage recorder. Datum of gage is 2,671.06 ft (814.139 m) above mean sea level. See WSP 2119 for history of changes prior to Oct. 1, 1959.

AVERAGE DISCHARGE.--27 years, 103 ft³/s (2.917 m³/s), 74,620 acre-ft/yr (92.0 hm³/yr), unadjusted.

EXTREMES.--Current year: Maximum discharge, 364 ft³/s (10.3 m³/s) May 3, gage height, 5.22 ft (1.591 m); minimum daily, 0.90 ft³/s (0.025 m³/s) Dec. 7-11.
Period of record: Maximum discharge, 16,800 ft³/s (476 m³/s) June 16, 1948, gage height, 5.64 ft (1.719 m), former site and datum; no flow at times in 1947-50, 1952-54.
Maximum flood known since about 1826 occurred May 31, 1935, discharge, about 200,000 ft³/s (5,660 m³/s). Discharge of 21,100 ft³/s (598 m³/s) was measured July 3, 1946, gage height, 6.0 ft (1.83 m), former site and datum.

REMARKS.--Records fair. Natural flow affected by irrigation development above station, since July 6, 1950, by storage in Bonny Reservoir, since 1953 by storage in Swanson Lake (see sta 06829000), and since June 1957 by Meeker-Driftwood Canal which diverts directly from Swanson Lake for irrigation of about 16,400 acres (66.4 km²). Records of chemical analyses for the water year 1973 are published in Part 2 of this report.

REVISIONS.--WSP 2119: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.5	1.5	1.1	1.2	1.3	1.1	1.3	302	145	94	1.2	75
2	1.5	1.4	1.1	1.2	1.3	1.1	1.3	299	149	94	1.2	74
3	1.6	1.3	1.1	1.2	1.3	1.3	1.3	299	149	110	1.2	74
4	1.6	1.3	.99	1.1	1.2	1.5	61	296	158	119	1.2	58
5	1.6	1.3	.98	1.1	1.2	1.5	99	296	156	117	1.2	46
6	1.6	1.3	.93	1.1	1.3	1.5	99	299	155	117	1.2	46
7	1.5	1.2	.90	1.1	1.3	1.4	99	299	156	117	1.2	47
8	1.5	1.2	.90	1.1	1.2	1.4	99	299	158	115	25	46
9	1.4	1.2	.90	1.1	1.2	1.3	129	302	158	137	68	46
10	2.4	1.2	.90	1.1	1.2	1.3	151	299	161	146	79	24
11	2.4	1.2	.90	1.1	1.2	1.3	151	296	161	145	77	1.7
12	2.2	1.2	.93	1.1	1.2	1.2	172	301	129	144	77	1.7
13	2.0	1.3	.98	1.1	1.2	1.4	204	304	101	147	76	1.7
14	2.0	1.3	1.0	1.1	1.1	1.4	202	307	100	127	78	1.6
15	1.7	1.2	1.1	1.1	1.2	1.4	202	308	98	116	77	1.6
16	1.7	1.2	1.1	1.1	1.2	1.2	202	306	45	116	77	1.6
17	1.5	1.2	1.1	1.1	1.2	1.2	202	309	22	117	78	1.4
18	1.6	1.2	1.1	1.1	1.2	1.1	204	309	13	135	79	1.4
19	1.4	1.2	1.1	1.1	1.2	1.1	205	309	1.2	45	79	1.4
20	1.4	1.1	1.1	1.1	1.2	1.1	202	310	1.2	1.5	79	1.4
21	1.3	1.1	1.1	1.1	1.2	1.1	202	310	1.2	1.5	78	1.4
22	1.3	1.1	1.1	1.2	1.2	1.2	202	313	1.2	1.5	79	1.4
23	1.2	1.1	1.1	1.2	1.2	1.2	203	313	1.2	1.5	80	1.4
24	1.2	1.1	1.1	1.2	1.2	1.4	204	314	1.2	1.5	80	1.4
25	1.2	1.2	1.1	1.2	1.1	1.3	205	216	1.2	1.5	78	1.4
26	1.1	1.2	1.3	1.2	1.1	3.0	205	157	13	1.4	77	1.4
27	1.1	1.2	1.2	1.5	1.1	1.4	206	166	35	1.4	77	1.4
28	1.1	1.2	1.2	1.5	1.1	1.4	207	158	45	1.4	77	1.4
29	1.1	1.1	1.2	1.5	------	1.3	207	149	50	1.4	78	1.4
30	1.4	1.1	1.2	1.4	------	2.1	254	144	79	1.4	77	1.4
31	1.3	------	1.3	1.4	------	1.4	------	146	------	1.4	75	------
TOTAL	47.4	36.4	33.11	36.7	33.6	42.6	4,781.9	8,435	2,444.4	2,275.4	1,813.4	565.5
MEAN	1.53	1.21	1.07	1.18	1.20	1.37	159	272	81.5	73.4	58.5	18.9
MAX	2.4	1.5	1.3	1.5	1.3	3.0	254	314	161	147	80	75
MIN	1.1	1.1	.90	1.1	1.1	1.1	1.3	144	1.2	1.4	1.2	1.4
AC-FT	94	72	66	73	67	84	9,480	16,730	4,850	4,510	3,600	1,120

CAL YR 1972 TOTAL 4,121.99 MEAN 11.3 MAX 174 MIN .63 AC-FT 8,180
WTR YR 1973 TOTAL 20,545.41 MEAN 56.3 MAX 314 MIN .90 AC-FT 40,750

06831500 Frenchman Creek near Imperial, Nebr.
(Formerly published as Frenchman River near Imperial)

LOCATION.--Lat 40°25'45", long 101°37'25", in SW1/4NW1/4 sec.3, T.5 N., R.38 W., Chase County, on right bank 0.2 mi (0.3 km) downstream from bridge on county highway, 5.8 mi (9.3 km) upstream from Enders Dam, and 6.1 mi (9.8 km) south of Imperial.

DRAINAGE AREA.--880 mi² (2,280 km²), approximately, of which about 720 mi² (1,860 km²) contributes directly to surface runoff.

PERIOD OF RECORD.--October 1940 to current year. Published as Frenchman River near Imperial October 1965 to September 1972.

GAGE.--Water-stage recorder. Prior to Mar. 7, 1941, nonrecording gage at bridge 0.2 mi (0.3 km) upstream at different datum. Mar. 7, 1941, to Sept. 30, 1958, water-stage recorder at site 0.2 mi (0.3 km) downstream at datum 4.35 ft (1.326 m) lower.

AVERAGE DISCHARGE.--33 years, 70.2 ft³/s (1.988 m³/s), 50,860 acre-ft/yr (62.7 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 128 ft³/s (3.62 m³/s) Sept. 28, gage height, 1.81 ft (0.552 m); minimum daily, 21 ft³/s (0.59 m³/s) July 2, 6.
Period of record: Maximum discharge, 2,340 ft³/s (66.3 m³/s) Mar. 22, 1960, gage height, 8.43 ft (2.569 m); minimum daily, 21 ft³/s (0.59 m³/s) July 2, 6, 1973.
Flood of June 7, 1940, reached a stage of 12.4 ft (3.78 m), from floodmarks, site and datum in use Mar. 7, 1941, to Sept. 30, 1958 (discharge not determined but believed greater than that of Mar. 22, 1960).

REMARKS.--Records good except those for winter period, which are fair. Natural flow affected by irrigation development and regulation at low flow from powerplants above station.

REVISIONS (WATER YEARS).--WSP 976: 1942(M). WSP 2119: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38	39	68	60	60	51	53	67	57	43	45	43
2	43	64	68	60	69	43	50	65	64	21	43	24
3	55	73	66	58	67	59	54	65	54	49	33	39
4	46	78	63	50	59	53	41	65	62	46	46	55
5	25	78	60	50	70	53	32	41	65	27	48	35
6	50	66	57	51	74	52	48	65	58	21	47	50
7	46	69	50	51	63	52	56	73	55	32	34	48
8	39	64	52	51	63	51	59	67	46	35	37	48
9	46	64	52	53	62	39	57	61	53	54	49	24
10	40	58	53	56	64	44	57	55	55	41	27	38
11	44	49	53	59	65	62	62	58	55	36	59	47
12	43	28	53	65	67	54	72	64	55	33	53	47
13	38	60	54	66	58	52	79	60	51	35	44	52
14	44	56	54	67	58	66	67	57	47	43	43	35
15	33	77	54	71	57	71	70	61	47	38	43	50
16	47	71	59	71	58	53	64	61	46	44	43	32
17	45	68	65	67	63	49	65	61	46	35	46	54
18	48	67	68	69	60	50	64	57	45	36	33	38
19	24	65	69	76	63	60	50	50	44	56	27	31
20	46	58	69	62	68	56	65	55	40	51	37	40
21	43	58	69	56	66	48	64	53	36	56	52	60
22	48	58	73	54	62	43	60	55	43	46	41	27
23	43	59	69	74	64	51	58	60	43	48	37	47
24	35	63	76	63	63	54	61	58	48	43	41	34
25	50	66	70	65	53	50	62	53	40	43	43	59
26	25	72	68	65	53	50	67	46	35	33	54	50
27	51	67	72	60	54	52	78	53	44	40	49	31
28	25	67	71	45	56	53	79	61	34	44	37	79
29	41	67	68	63	------	52	64	54	36	46	37	76
30	60	66	65	74	------	52	64	43	46	45	40	49
31	52	------	60	70	------	54	------	53	------	47	50	------
TOTAL	1,313	1,895	1,948	1,902	1,739	1,629	1,822	1,797	1,450	1,267	1,318	1,342
MEAN	42.4	63.2	62.8	61.4	62.1	52.5	60.7	58.0	48.3	40.9	42.5	44.7
MAX	60	78	76	76	74	71	79	73	65	56	59	79
MIN	24	28	50	45	53	39	32	41	34	21	27	24
AC-FT	2,600	3,760	3,860	3,770	3,450	3,230	3,610	3,560	2,880	2,510	2,610	2,660

CAL YR 1972 TOTAL 19,692 MEAN 53.8 MAX 82 MIN 24 AC-FT 39,060
WTR YR 1973 TOTAL 19,422 MEAN 53.2 MAX 79 MIN 21 AC-FT 38,520

PEAK DISCHARGE (BASE, 150 CFS).--No peak above base.

06832000 Enders Reservoir near Enders, Nebr.

LOCATION.--Lat 40°25'05", long 101°30'55", in NE1/4 sec.9, T.5 N., R.37 W., Chase County, near right bank in control house at outlet tube of Enders Dam on Frenchman Creek, 2.2 mi (3.5 km) southeast of Enders.

DRAINAGE AREA.--950 mi² (2,460 km²), approximately, of which about 790 mi² (2,050 km²) contributes directly to surface runoff.

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

GAGE.--Water-stage recorder. Datum of gage is at mean sea level. Prior to Sept. 3, 1960, mercury-column pressure gage at same datum.

EXTREMES.--Current year: Maximum contents, 40,000 acre-ft (49.3 hm³) June 17, elevation, 3,109.58 ft (947.800 m); minimum, 9,060 acre-ft (11.2 hm³) Sept. 3, elevation, 3,080.99 ft (939.086 m).
Period of record: Maximum contents observed, 55,330 acre-ft (68.2 hm³) Mar. 25, 1960, elevation, 3,118.20 ft (950.427 m); minimum since operation of reservoir began, 8,940 acre-ft (11.0 hm³) Sept. 6, 1971, elevation, 3,080.79 ft (939.025 m).

REMARKS.--Reservoir is formed by earthfill dam; storage began Oct. 23, 1950. Capacity, 36,010 acre-ft (44.4 hm³) between elevations 3,080.0 ft (938.78 m), sill of outlet gates, and 3,112.3 ft (948.63 m), top of storage pool. Top of flood-control pool at elevation 3,127.0 ft (953.11 m), capacity, 74,520 acre-ft (91.9 hm³). Top of superstorage flood-control pool at elevation 3,129.5 ft (953.87 m), capacity, 80,730 acre-ft (99.5 hm³). Dead storage, 8,470 acre-ft (10.4 hm³). Figures given herein represent total contents. Water used for irrigation in Frenchman-Cambridge irrigation project.

COOPERATION.--Capacity table furnished by Bureau of Reclamation.

REVISIONS.--WSP 2119: Drainage area.

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

3,080	8,470	3,100	26,540
3,085	11,770	3,110	40,660
3,090	15,830		

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12,670	16,150	20,490	24,500	28,350	31,290	34,130	37,010	39,160	37,650	22,200	9,180
2	12,790	16,320	20,580	24,680	28,480	31,360	34,230	37,130	39,270	37,080	21,840	9,100
3	12,900	16,510	20,690	24,770	28,610	31,460	34,330	37,220	39,320	36,570	21,470	9,060
4	13,010	16,690	20,860	24,860	28,700	31,530	34,390	37,360	39,380	35,880	21,080	9,080
5	13,080	16,870	20,950	24,970	28,820	31,590	34,430	37,370	39,460	35,170	20,630	9,080
6	13,180	17,040	21,070	25,090	28,910	31,700	34,490	37,480	39,550	34,360	20,160	9,090
7	13,310	17,200	21,170	25,220	29,020	31,780	34,620	37,600	39,630	33,500	19,650	9,100
8	13,400	17,350	21,290	25,310	29,120	32,040	34,690	37,740	39,650	32,650	19,180	9,100
9	13,520	17,480	21,420	25,440	29,230	32,100	34,770	37,770	39,780	31,850	18,690	9,120
10	13,640	17,610	21,540	25,590	29,360	32,150	34,890	37,850	39,780	31,020	18,230	9,280
11	13,750	17,730	21,670	25,720	29,480	32,260	35,000	37,880	39,790	30,270	17,840	9,600
12	13,860	17,830	21,820	25,860	29,580	32,360	35,090	37,960	39,820	29,500	17,420	9,760
13	13,980	18,020	21,930	26,010	29,670	32,510	35,270	38,020	39,870	28,760	17,010	9,910
14	14,060	18,130	22,060	26,130	29,780	32,580	35,370	38,080	39,930	28,120	16,600	10,030
15	14,180	18,320	22,190	26,280	29,890	32,660	35,390	38,140	39,980	27,470	16,150	10,140
16	14,300	18,480	22,330	26,390	30,000	32,750	35,480	38,220	39,950	26,860	15,650	10,250
17	14,450	18,610	22,470	26,530	30,120	32,830	35,600	38,290	40,000	26,180	15,170	10,370
18	14,530	18,780	22,600	26,650	30,220	32,920	35,710	38,390	39,840	25,540	14,650	10,510
19	14,590	18,910	22,740	26,790	30,320	32,990	35,820	38,420	39,760	25,290	14,100	10,620
20	14,740	19,040	22,900	26,880	30,440	33,060	35,880	38,480	39,710	25,230	13,570	10,730
21	14,850	19,160	23,050	26,980	30,530	33,100	35,940	38,540	39,700	24,890	13,060	10,880
22	14,960	19,280	23,200	27,070	30,670	33,230	36,040	38,590	39,680	24,600	12,520	10,980
23	15,080	19,390	23,310	27,230	30,790	33,310	36,110	38,660	39,630	24,310	11,950	11,110
24	15,180	19,540	23,460	27,350	30,870	33,400	36,170	38,700	39,550	24,060	11,460	11,210
25	15,320	19,660	23,600	27,470	30,950	33,480	36,370	38,740	39,410	23,880	10,930	11,440
26	15,430	19,820	23,750	27,610	31,030	33,570	36,480	38,790	39,220	23,730	10,460	11,640
27	15,520	19,940	23,880	27,720	31,080	33,670	36,620	38,900	38,970	23,600	10,150	11,880
28	15,610	20,060	24,020	27,800	31,210	33,710	36,770	38,930	38,760	23,450	9,980	12,210
29	15,720	20,200	24,140	27,980	------	33,820	36,840	38,990	38,450	23,250	9,640	12,420
30	15,840	20,370	24,260	28,130	------	33,940	36,900	39,000	38,090	22,900	9,370	12,590
31	15,990	------	24,360	28,260	------	34,060	------	39,060	------	22,520	9,260	------
MAX	15,990	20,370	24,360	28,260	31,210	34,060	36,900	39,060	40,000	37,650	22,200	12,590
MIN	12,670	16,150	20,490	24,500	28,350	31,290	34,130	37,010	38,090	22,520	9,260	9,060
(†)	+3,430	+4,380	+3,990	+3,900	+2,950	+2,850	+2,840	+2,160	-970	-15,570	-13,260	+3,330
(‡)	3,090.17	3,094.64	3,098.20	3,101.36	3,103.60	3,105.65	3,107.58	3,108.99	3,108.36	3,096.61	3,081.30	3,086.09

CAL YR 1972 MAX 38,370 MIN 9,910 †+1,200
WTR YR 1973 MAX 40,000 MIN 9,060 † +30

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

06832500 Frenchman Creek near Enders, Nebr.
(Formerly published as Frenchman River near Enders)

LOCATION.--Lat 40°25'05", long 101°30'35", in NW1/4NW1/4 sec.10, T.5 N., R.37 W., Chase County, on left bank 0.2 mi (0.3 km) downstream from Enders Dam and 2.5 mi (4.0 km) southeast of Enders.

DRAINAGE AREA.--950 mi² (2,460 km²), approximately, of which about 790 mi² (2,050 km²) contributes directly to surface runoff.

PERIOD OF RECORD.--February 1946 to current year. Published as Frenchman River near Enders October 1965 to September 1972.

GAGE.--Water-stage recorder. Datum of gage is 3,026.22 ft (922.392 m) above mean sea level (Bureau of Reclamation bench mark). Prior to June 14, 1948, at site 800 ft (240 m) upstream at datum 6.03 ft (1.838 m) higher. June 14, 1948, to Sept. 14, 1972, at present site at datum 5.00 ft (1.524 m) higher.

AVERAGE DISCHARGE.--27 years, 69.5 ft³/s (1.968 m³/s), 50,350 acre-ft/yr (62.1 hm³/yr), unadjusted.

EXTREMES.--Current year: Maximum discharge, 512 ft³/s (14.5 m³/s) July 8, gage height, 9.59 ft (2.923 m); no flow for many days.
Period of record: Maximum discharge, 763 ft³/s (21.6 m³/s) Aug. 20, 1953, gage height, 11.31 ft (3.447 m), present datum; maximum gage height, 11.65 ft (3.551 m), present datum, July 18, 1958, backwater from downstream tributary; no flow for many days in 1972,73.

REMARKS.--Records good. Flow regulated by Enders Reservoir. (See preceding page.)

REVISIONS (WATER YEARS).--WSP 2119: 1956, drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.5			0	1.2	1.7	2.4	2.3	2.1	264	266	119
2	1.4			0	1.0	1.9	2.4	2.4	2.2	298	254	99
3	1.4			0	.96	1.9	2.7	2.4	2.2	339	249	81
4	1.4			0	.96	1.9	2.4	2.2	2.2	383	263	78
5	1.3			0	.94	1.9	2.7	2.2	2.2	427	300	76
6	1.3			0	.96	1.9	2.7	2.2	2.0	452	300	75
7	1.4			0	.96	1.9	2.7	2.3	1.9	450	306	76
8	1.4			0	.43	1.9	2.7	2.2	1.7	505	305	77
9	1.4			0	0	2.0	2.7	2.1	1.5	500	303	58
10	1.5			0	0	2.0	2.7	2.0	1.4	477	296	5.4
11	1.4			0	0	2.0	2.7	1.9	1.3	452	288	7.4
12	.95			0	0	2.3	2.5	1.9	1.3	430	280	6.1
13	0			0	0	2.5	2.2	1.9	1.2	434	277	5.7
14	0			0	0	2.2	2.2	1.9	1.2	405	270	5.6
15	0			0	0	2.0	2.3	1.9	1.1	378	274	5.0
16	0			0	6.1	2.0	2.2	1.9	1.0	368	296	5.1
17	0			0	2.1	2.0	2.2	2.2	17	379	311	4.8
18	0			0	2.0	2.0	2.1	2.0	30	376	312	4.8
19	0			0	2.0	2.0	1.9	2.0	40	347	323	4.8
20	0			0	2.0	2.0	1.9	2.0	34	134	317	4.5
21	0			0	1.9	2.1	2.0	2.0	28	255	326	4.2
22	0			0	1.9	2.2	2.1	2.1	39	222	336	4.2
23	0			0	1.9	2.2	2.1	2.0	51	236	352	3.9
24	0			0	1.9	2.2	2.2	1.9	65	192	370	3.8
25	0			0	1.9	2.2	2.7	1.8	95	174	352	1.5
26	0			0	1.9	2.2	2.7	1.8	120	133	333	1.4
27	0			0	1.8	2.2	2.5	2.5	142	128	237	.65
28	0			0	1.7	2.2	2.2	2.3	174	141	164	.13
29	0			5.2	------	2.2	2.2	2.2	192	175	219	0
30	0			2.0	------	2.2	2.2	2.2	220	218	208	0
31	0	------		1.6	------	2.3	------	2.2	------	266	143	------
TOTAL	16.35	0	0	8.8	36.51	64.2	71.2	64.9	1,273.5	9,938	8,830	817.98
MEAN	.53	0	0	.28	1.30	2.07	2.37	2.09	42.5	321	285	27.3
MAX	1.5	0	0	5.2	6.1	2.5	2.7	2.5	220	505	370	119
MIN	0	0	0	0	0	1.7	1.9	1.8	1.0	128	143	0
AC-FT	32	0	0	17	72	127	141	129	2,530	19,710	17,510	1,620

CAL YR 1972 TOTAL 19,403.05 MEAN 53.0 MAX 390 MIN 0 AC-FT 38,490
WTR YR 1973 TOTAL 21,121.44 MEAN 57.9 MAX 505 MIN 0 AC-FT 41,890

06834000 Frenchman Creek at Palisade, Nebr.
(Formerly published as Frenchman River at Palisade)

LOCATION.--Lat 40°20'50", long 101°07'40", in SE1/4SW1/4 sec.36, T.5 N., R.34 W., Hayes County, on right bank at downstream side of bridge on U.S. Highway 6, 0.4 mi (0.6 km) upstream from Burlington Northern Inc. bridge, 1 mi (2 km) west of Palisade, and 2 mi (3 km) upstream from Stinking Water Creek.

DRAINAGE AREA.--1,110 mi² (2,870 km²), approximately, of which about 950 mi² (2,460 km²) contributes directly to surface runoff.

PERIOD OF RECORD.--October 1894 to October 1896, June 1950 to current year. Published as Frenchman River at Palisade, October 1894 to September 1896, October 1965 to September 1972.

GAGE.--Water-stage recorder. Datum of gage is 2,747.49 ft (837.435 m) above mean sea level. October 1894 to October 1896, nonrecording gage at railroad bridge 0.4 mi (0.6 km) downstream at different datum.

AVERAGE DISCHARGE.--25 years, 92.3 ft³/s (2.614 m³/s), 66,870 acre-ft/yr (82.5 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 778 ft³/s (22.0 m³/s) July 20, gage height, 5.98 ft (1.823 m); minimum daily, 21 ft³/s (0.59 m³/s) Oct. 26-29, Jan. 7-9.
Period of record: Maximum discharge, 5,560 ft³/s (157 m³/s) June 17, 1956, gage height, 8.79 ft (2.679 m); minimum daily, 13 ft³/s (0.37 m³/s) Mar. 12, 1951.

REMARKS.--Records good except those for winter period, which are poor. Natural flow affected by irrigation development above station and, since Oct. 23, 1950, by storage in Enders Reservoir. (See sta 06832000.) Records of water temperatures and fluvial sediments for the water year 1973 are published in Part 2 of this report.

REVISIONS.--WSP 2119: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34	26	37	26	37	35	42	41	32	178	262	189
2	34	27	35	26	35	35	40	39	32	214	264	161
3	33	27	32	25	34	36	38	39	33	240	255	142
4	32	26	29	23	34	38	37	38	34	271	251	122
5	31	25	26	23	34	36	37	39	32	301	259	113
6	31	24	25	22	36	36	37	38	31	339	286	109
7	31	24	27	21	32	36	38	40	30	363	286	106
8	31	24	26	21	25	36	40	39	30	365	289	106
9	30	24	25	21	29	36	39	38	29	406	288	106
10	30	23	24	22	35	36	38	37	29	407	287	104
11	29	24	24	25	36	37	38	36	29	397	281	113
12	28	25	25	31	33	37	39	35	29	379	277	88
13	29	25	23	42	30	38	38	35	28	369	285	77
14	26	29	22	40	27	40	38	34	28	378	268	66
15	27	32	23	39	28	38	38	34	28	364	266	61
16	28	42	24	39	31	37	37	34	26	343	269	57
17	28	38	24	40	34	36	36	34	25	337	283	55
18	29	37	25	41	35	37	36	34	25	346	293	53
19	26	37	25	41	32	36	36	33	31	363	298	51
20	23	37	27	37	32	36	36	33	41	573	308	50
21	23	36	32	36	32	35	36	33	45	309	305	48
22	23	32	40	34	33	37	34	34	43	319	312	46
23	23	31	43	31	33	37	34	33	41	295	322	44
24	22	31	41	35	34	37	35	32	48	291	342	44
25	22	32	37	33	34	38	38	31	52	252	369	43
26	21	32	38	32	34	38	44	34	64	232	355	49
27	21	33	34	30	35	37	42	37	85	189	342	63
28	21	30	35	27	35	38	39	36	101	170	277	179
29	21	28	37	31	------	39	38	35	149	168	231	157
30	24	32	32	34	------	38	38	33	157	189	233	79
31	24	------	28	37	------	41	------	33	------	222	242	------
TOTAL	835	893	925	965	919	1,147	1,136	1,101	1,387	9,569	8,885	2,681
MEAN	26.9	29.8	29.8	31.1	32.8	37.0	37.9	35.5	46.2	309	287	89.4
MAX	34	42	43	42	37	41	44	41	157	573	369	189
MIN	21	23	22	21	25	35	34	31	25	168	231	43
AC-FT	1,660	1,770	1,830	1,910	1,820	2,280	2,250	2,180	2,750	18,980	17,620	5,320

CAL YR 1972 TOTAL 28,392 MEAN 77.6 MAX 400 MIN 17 AC-FT 56,320
WTR YR 1973 TOTAL 30,443 MEAN 83.4 MAX 573 MIN 21 AC-FT 60,380

06835000 Stinking Water Creek near Palisade, Nebr.

LOCATION.--Lat 40°22'10", long 101°06'50", at southwest corner of NW1/4 sec.30, T.5 N., R.33 W., Hayes County, on right bank 25 ft (8 m) downstream from county bridge, 1.2 mi (1.9 km) upstream from mouth, and 1.8 mi (2.9 km) northwest of Palisade.

DRAINAGE AREA.--1,500 mi² (3,890 km²), approximately, of which about 380 mi² (980 km²) contributes directly to surface runoff.

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

GAGE.--Water-stage recorder. Datum of gage is 2,740.99 ft (835.454 m) above mean sea level.

AVERAGE DISCHARGE.--24 years, 43.6 ft³/s (1.235 m³/s), 31,590 acre-ft/yr (39.0 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 375 ft³/s (10.6 m³/s) Sept. 11, gage height, 6.59 ft (2.009 m); minimum daily, 17 ft³/s (0.48 m³/s) July 9-14.
Period of record: Maximum discharge, 3,030 ft³/s (85.8 m³/s) June 17, 1956, gage height, 11.30 ft (3.444 m), from rating curve extended above 1,200 ft³/s (34.0 m³/s) on basis of slope-area measurement of peak flow; minimum daily, 6.0 ft³/s (0.17 m³/s) Aug. 4, 1955.

REMARKS.--Records good except those for winter period, which are fair. Natural flow affected by irrigation development above station. Records of water temperatures and fluvial sediments for the water year 1973 are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1730: 1952(M). WSP 1919: 1951(P), 1955. WSP 2119: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	39	40	34	44	53	70	51	42	30	33	23
2	25	40	42	36	49	52	69	53	41	25	35	22
3	25	44	38	33	47	54	60	53	40	23	31	22
4	24	47	35	31	50	57	52	50	42	21	32	21
5	24	51	24	30	54	58	49	46	41	20	30	21
6	24	50	31	29	51	57	47	44	38	20	29	21
7	25	47	38	29	43	56	48	45	37	18	29	22
8	26	44	38	28	39	53	50	46	35	18	29	23
9	26	42	35	28	37	51	49	45	34	17	28	24
10	26	40	33	30	38	52	51	45	32	17	27	24
11	27	38	33	34	40	52	58	42	31	17	26	177
12	28	38	34	38	40	52	62	40	31	17	26	50
13	28	36	34	37	37	51	65	40	32	17	52	67
14	29	37	35	40	36	55	59	39	32	17	45	50
15	28	38	35	41	38	62	53	39	32	20	40	41
16	29	42	34	50	41	58	48	39	31	18	31	36
17	29	42	33	57	43	53	46	38	30	18	28	34
18	30	41	32	70	47	51	45	39	28	18	26	33
19	31	41	31	72	47	50	45	39	27	20	26	32
20	32	42	33	63	49	48	45	38	27	50	24	32
21	31	43	35	57	49	47	46	38	27	115	24	31
22	32	41	40	53	50	47	46	38	27	108	23	31
23	32	40	45	55	52	48	44	38	26	49	22	32
24	32	38	50	42	52	49	43	37	25	40	23	31
25	32	38	50	47	52	51	50	36	25	36	29	31
26	33	39	49	47	51	54	63	37	24	33	27	54
27	33	39	48	38	51	55	94	43	23	30	26	52
28	33	37	45	29	52	54	79	51	22	30	26	109
29	37	37	41	29	------	57	65	64	25	30	25	147
30	37	37	36	30	------	61	55	57	34	29	23	144
31	37	------	33	37	------	63	------	47	------	30	23	------
TOTAL	910	1,228	1,160	1,274	1,279	1,661	1,656	1,357	941	951	898	1,437
MEAN	29.4	40.9	37.4	41.1	45.7	53.6	55.2	43.8	31.4	30.7	29.0	47.9
MAX	37	51	50	72	54	63	94	64	42	115	52	177
MIN	24	36	24	28	36	47	43	36	22	17	22	21
AC-FT	1,800	2,440	2,300	2,530	2,540	3,290	3,280	2,690	1,870	1,890	1,780	2,850

CAL YR 1972 TOTAL 13,813 MEAN 37.7 MAX 167 MIN 17 AC-FT 27,400
WTR YR 1973 TOTAL 14,752 MEAN 40.4 MAX 177 MIN 17 AC-FT 29,260

PEAK DISCHARGE (BASE, 150 CFS).--Sept. 11 (0830) 375 cfs (6.59 ft); Sept. 28 (2400) 182 cfs (4.86 ft).

06835500 Frenchman Creek at Culbertson, Nebr.
(Formerly published as Frenchman River at Culbertson)

LOCATION.--Lat 40°14'05", long 100°52'40", in SW1/4SE1/4 sec.12, T.3 N., R.32 W., Hitchcock County, on right bank 19 ft (6 m) upstream from bridge on U.S. Highways 6 and 34, 2 mi (3 km) west of Culbertson, and 4.5 mi (7.2 km) upstream from mouth.

DRAINAGE AREA.--2,770 mi² (7,170 km²), approximately, of which about 1,470 mi² (3,810 km²) contributes directly to surface runoff.

PERIOD OF RECORD.--June 1913 to September 1915 (gage heights and discharge measurements only), October 1930 to current year. Published as Frenchman River at Culbertson October 1965 to September 1972. Monthly discharge only for some periods, published in WSP 1310.

GAGE.--Water-stage recorder. Datum of gage is 2,583.44 ft (787.433 m) above mean sea level. See WSP 1919 for history of changes prior to Nov. 2, 1950.

AVERAGE DISCHARGE.--43 years, 113 ft³/s (3.200 m³/s), 81,870 acre-ft/yr (0.101 km³/yr).

EXTREMES.--Current year: Maximum discharge, 331 ft³/s (9.37 m³/s) Sept. 23, gage height, 4.26 ft (1.298 m); maximum gage height, 4.56 ft (1.390 m) Jan. 6, backwater from ice; minimum daily discharge, 9.0 ft³/s (0.25 m³/s) July 4, 5.
Period of record: Maximum discharge, 15,000 ft³/s (425 m³/s), estimated, May 31, 1935, gage height, 14.8 ft (4.51 m), from floodmarks, present site and datum; minimum daily, 7.0 ft³/s (0.20 m³/s) Aug. 13, 14, 26, 1936.

REMARKS.--Records good except those for winter period, which are poor. Natural flow affected by irrigation development above station and, since Oct. 23, 1950, by storage in Enders Reservoir. (See sta 06832000.) Principal diversion is by Culbertson Canal, 20,800 acres (84.2 km²). Records of chemical analyses for the water year 1973 are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1390: 1931, 1933, 1934(M), 1938(M). WSP 2119: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	78	87	95	84	119	97	127	100	32	16	34	35
2	78	91	98	84	118	100	133	78	32	21	39	19
3	75	92	97	96	115	104	131	58	31	14	38	15
4	76	88	83	80	119	106	122	61	32	9.0	26	14
5	74	95	70	60	126	109	110	61	29	9.0	23	12
6	68	99	57	45	123	113	108	61	28	12	25	15
7	76	96	44	45	105	110	112	61	28	18	25	16
8	78	92	42	43	95	100	114	62	27	15	21	16
9	79	91	42	43	92	101	113	60	28	16	20	13
10	80	95	45	47	90	104	110	58	28	21	19	12
11	74	90	48	50	105	103	110	51	28	18	17	180
12	74	93	52	55	115	102	113	48	31	14	16	208
13	75	101	54	65	123	107	119	49	29	10	23	166
14	82	96	55	80	107	112	122	50	28	12	37	130
15	81	96	57	90	98	109	116	50	27	18	22	113
16	80	103	60	100	98	104	108	50	25	16	17	105
17	76	105	63	115	106	103	102	48	25	11	17	100
18	79	107	66	125	110	104	95	45	25	14	16	95
19	79	107	70	119	110	107	74	46	23	19	17	90
20	76	102	75	123	107	106	73	47	23	61	21	73
21	81	105	82	114	101	103	67	42	23	83	18	65
22	82	105	90	110	102	103	79	38	22	70	15	60
23	81	102	100	99	104	104	78	34	22	72	15	60
24	79	100	115	102	105	108	60	32	22	55	15	65
25	74	98	117	105	104	108	56	32	23	48	17	93
26	77	96	118	115	102	108	68	33	20	38	26	98
27	79	103	119	121	96	108	100	35	17	28	14	128
28	83	102	116	90	94	112	126	37	15	24	12	233
29	80	99	127	75	------	114	111	39	16	22	11	285
30	82	95	125	88	------	117	106	41	24	26	19	251
31	83	------	110	100	------	126	------	36	------	25	40	------
TOTAL	2,419	2,931	2,492	2,668	2,989	3,312	3,063	1,543	763	835.0	675	2,765
MEAN	78.0	97.7	80.4	86.1	107	107	102	49.8	25.4	26.9	21.8	92.2
MAX	83	107	127	125	126	126	133	100	32	83	40	285
MIN	68	87	42	43	90	97	56	32	15	9.0	11	12
AC-FT	4,800	5,810	4,940	5,290	5,930	6,570	6,080	3,060	1,510	1,660	1,340	5,480

CAL YR 1972 TOTAL 26,161.0 MEAN 71.5 MAX 1,220 MIN 16 AC-FT 51,890
WTR YR 1973 TOTAL 26,455.0 MEAN 72.5 MAX 285 MIN 9.0 AC-FT 52,470

06836000 Blackwood Creek near Culbertson, Nebr.

LOCATION.--Lat 40°14'10", long 100°48'39", in SE1/4SW1/4 sec.10, T.3 N., R.31 W., Hitchcock County, on right bank 500 ft (152 m) upstream from bridge on U.S. Highways 6 and 34, 0.2 mi (0.3 km) north of Burlington Northern Inc. bridge, 1 mi (2 km) east of Culbertson, and 1.8 mi (2.9 km) upstream from mouth.

DRAINAGE AREA.--320 mi² (830 km²), approximately, of which about 270 mi² (700 km²) contributes directly to surface runoff.

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

GAGE.--Water-stage recorder. Datum of gage is 2,555.25 ft (778.840 m) above mean sea level. Prior to Oct. 1, 1967, at site 0.2 mi (0.3 km) downstream at present datum and Oct. 1, 1967, to Aug. 28, 1968, at site 0.8 mi (1.3 km) downstream at datum 8.96 ft (2.731 m) lower.

AVERAGE DISCHARGE.--27 years, 6.57 ft³/s (0.186 m³/s), 4,760 acre-ft/yr (5.87 hm³/yr); median of yearly mean discharges, 5.8 ft³/s (0.164 m³/s), 4,200 acre-ft/yr (5.18 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 468 ft³/s (13.3 m³/s) July 25, gage height, 5.72 ft (1.743 m); minimum daily, 1.3 ft³/s (0.037 m³/s) June 27.
Period of record: Maximum discharge, 1,650 ft³/s (46.7 m³/s) June 17, 1955, gage height, 14.64 ft (4.462 m), site then in use; no flow Jan. 4-6, 1950.
Flood of May 31, 1935, reached a stage of 24.0 ft (7.32 m), at site 0.2 mile downstream, at present datum, from floodmarks, discharge, about 5,300 ft³/s (150 m³/s), from information by Nebraska Department of Roads.

REMARKS.--Records fair. Natural flow affected by irrigation development above station, return flow from irrigated areas, and waste from Culbertson Canal.

REVISIONS.--WSP 2119: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.7	3.3	3.8	3.2	3.5	3.7	3.0	3.9	11	8.4	5.4	14
2	3.7	3.5	3.8	3.3	3.7	3.7	2.2	3.3	8.9	5.2	8.0	14
3	3.5	3.5	3.5	3.6	4.1	4.3	2.5	7.1	8.4	4.6	6.0	15
4	3.5	3.7	3.7	3.0	4.1	4.3	2.3	6.8	26	4.6	6.3	14
5	3.4	4.0	3.7	3.0	4.1	3.5	2.6	6.6	8.9	4.6	7.3	20
6	3.3	3.7	3.7	3.0	4.3	3.5	2.2	7.4	6.2	4.6	8.2	21
7	3.5	3.8	3.9	3.0	3.9	3.3	2.5	16	4.4	4.6	7.7	20
8	3.5	3.5	3.7	3.1	4.3	3.1	2.7	16	4.0	4.8	6.1	19
9	3.5	3.9	3.8	3.3	4.3	3.5	2.8	9.4	3.8	4.8	8.0	21
10	3.7	3.9	3.8	3.1	5.2	3.1	3.1	10	4.0	4.8	7.8	27
11	3.7	4.0	3.8	3.3	3.9	3.1	3.1	16	3.6	5.0	7.4	33
12	3.9	4.3	4.0	3.3	3.1	2.8	2.7	22	3.1	5.0	9.1	26
13	3.7	5.4	3.9	3.7	3.3	5.9	1.4	20	3.0	5.0	13	15
14	3.7	4.7	3.9	3.5	2.6	6.8	1.5	17	4.1	5.2	9.2	12
15	3.8	4.2	3.7	3.5	2.4	4.3	1.7	18	4.8	5.2	7.4	8.1
16	4.1	4.3	3.7	3.5	2.3	3.9	1.6	17	5.0	5.2	5.7	5.1
17	3.8	4.3	3.9	3.5	3.0	3.7	1.7	16	5.0	5.2	5.0	3.7
18	3.9	4.3	3.9	4.3	3.0	3.5	1.7	19	5.0	3.3	4.5	3.6
19	3.5	4.1	4.1	6.1	2.9	3.9	2.0	21	5.1	5.4	7.1	3.6
20	4.0	4.2	3.8	5.4	2.6	3.3	2.6	19	5.1	17	10	3.8
21	3.3	4.3	3.9	3.5	2.6	3.1	3.0	20	4.9	54	9.4	4.1
22	3.1	4.2	4.3	2.6	2.6	3.1	3.5	11	4.3	12	8.2	4.1
23	3.1	4.3	4.8	3.0	2.6	3.2	4.2	7.1	3.6	14	8.2	4.2
24	3.2	4.4	6.8	3.1	3.0	4.1	5.0	6.8	3.1	11	7.9	4.9
25	3.5	4.3	4.4	3.0	3.0	3.4	5.1	7.2	2.8	233	6.1	4.6
26	3.5	4.3	4.2	3.0	3.0	2.9	13	6.9	1.6	24	4.6	5.2
27	3.4	4.5	3.8	4.1	3.0	2.8	18	21	1.3	12	3.9	6.1
28	3.0	4.2	3.2	3.9	3.9	3.0	16	20	7.1	8.4	4.2	13
29	3.0	4.2	3.4	3.6	------	2.5	2.8	18	17	4.2	6.6	8.3
30	3.1	4.3	3.3	3.5	------	2.3	2.1	9.8	9.9	4.6	12	5.7
31	3.0	------	3.2	3.5	------	3.8	------	8.0	------	5.2	12	------
TOTAL	108.6	123.6	121.4	108.5	94.3	111.4	118.6	407.3	185.0	494.9	232.3	359.1
MEAN	3.50	4.12	3.92	3.50	3.37	3.59	3.95	13.1	6.17	16.0	7.49	12.0
MAX	4.1	5.4	6.8	6.1	5.2	6.8	18	22	26	233	13	33
MIN	3.0	3.3	3.2	2.6	2.3	2.3	1.4	3.3	1.3	3.3	3.9	3.6
AC-FT	215	245	241	215	187	221	235	808	367	982	461	712

CAL YR 1972 TOTAL 2,720.6 MEAN 7.43 MAX 308 MIN 1.0 AC-FT 5,400
WTR YR 1973 TOTAL 2,465.0 MEAN 6.75 MAX 233 MIN 1.3 AC-FT 4,890

PEAK DISCHARGE (BASE, 150 CFS).--July 25 (0530) 468 cfs (5.72 ft).

06836500 Driftwood Creek near McCook, Nebr.

LOCATION.--Lat 40°08'50", long 100°39'55", in SW1/4SW1/4 sec.12, T.2 N., R.30 W., Red Willow County, on right bank 50 ft (15 m) downstream from privately owned bridge, 600 ft (183 m) downstream from siphon and wasteway on Meeker-Driftwood Canal, 4.5 mi (7.2 km) southwest of McCook, and 4.5 mi (7.2 km) upstream from mouth.

DRAINAGE AREA.--360 mi² (930 km²), approximately, of which about 350 mi² (910 km²) contributes directly to surface runoff.

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

GAGE.--Water-stage recorder. Datum of gage is 2,493.78 ft (760.104 m) above mean sea level. Prior to Oct. 12, 1962, at site 0.2 mi (0.3 km) downstream in old channel at present datum, and Oct. 12, 1962, to Apr. 11, 1963, at site 0.5 mi (0.8 km) downstream at datum 3.75 ft (1.143 m) lower.

AVERAGE DISCHARGE.--27 years, 10.7 ft³/s (0.303 m³/s), 7,750 acre-ft/yr (9.56 hm³/yr); median of yearly mean discharges, 8.1 ft³/s (0.229 m³/s), 5,900 acre-ft/yr (7.27 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 374 ft³/s (10.6 m³/s) July 21, gage height, 13.49 ft (4.112 m); minimum daily, 1.6 ft³/s (0.045 m³/s) Apr. 19.
Period of record: Maximum discharge, 4,740 ft³/s (134 m³/s) Aug. 7, 1950, gage height, 25.43 ft (7.751 m), at site then in use, from floodmark, from rating curve extended above 3,000 ft³/s (85.0 m³/s); no flow at times in 1946-50, 1952-56.

REMARKS.--Records fair. Natural flow affected by waste from Meeker-Driftwood Canal and by irrigation development above station.

REVISIONS (WATER YEARS).--WSP 1210: 1950.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.4	6.5	5.2	5.2	5.5	5.9	8.6	4.6	7.1	14	14	80
2	8.6	6.3	5.2	4.9	5.0	5.9	5.9	5.5	6.3	10	13	21
3	12	4.7	5.5	5.4	4.9	6.4	4.6	5.0	7.0	12	16	12
4	11	4.4	5.5	4.7	4.9	7.4	3.6	4.6	116	13	12	8.2
5	11	5.7	5.5	4.6	5.2	7.0	2.5	3.5	15	13	10	6.7
6	11	6.7	5.5	7.8	5.2	6.0	4.2	3.3	17	8.7	28	6.7
7	8.8	6.3	5.9	7.8	5.1	5.5	5.5	5.9	15	9.2	49	5.9
8	9.0	7.1	5.9	4.3	5.1	5.5	4.6	16	11	8.9	17	6.8
9	8.7	7.4	6.3	3.9	4.9	5.5	3.6	15	11	11	9.8	7.0
10	7.0	7.4	5.9	3.6	4.9	5.5	3.8	7.8	10	6.7	9.3	6.3
11	4.8	7.8	5.9	3.6	5.2	5.5	4.2	6.1	8.3	6.8	14	14
12	5.9	7.9	5.5	3.7	5.2	5.3	4.3	5.2	7.8	8.0	11	159
13	5.7	8.0	5.5	4.3	5.0	5.4	4.0	5.2	16	12	17	104
14	5.9	6.5	5.2	5.2	4.2	6.2	4.0	5.5	16	89	15	41
15	5.7	5.9	5.2	5.4	3.9	5.7	3.8	5.4	16	73	10	18
16	5.5	6.3	5.2	5.4	3.7	4.9	3.1	5.5	13	24	11	12
17	5.4	6.6	4.9	5.1	4.1	4.6	3.3	4.9	31	11	13	9.1
18	5.2	7.2	4.9	5.2	4.6	4.6	2.2	4.7	22	12	12	8.2
19	5.4	5.9	4.9	5.4	4.9	4.6	1.6	4.2	4.6	34	12	7.8
20	5.8	5.2	4.9	9.9	5.0	4.3	2.4	3.0	4.4	41	13	6.9
21	5.5	5.5	4.9	8.6	4.7	3.9	3.0	5.5	4.8	174	12	6.7
22	5.2	5.2	5.5	5.0	4.7	4.5	2.7	5.4	11	104	14	6.7
23	5.3	5.2	6.3	3.1	5.2	5.9	2.7	5.4	11	46	13	6.2
24	5.1	5.2	6.3	3.0	5.2	9.7	3.1	5.6	9.8	33	12	6.4
25	4.9	5.2	6.5	3.3	5.2	10	4.9	5.4	8.2	74	17	7.1
26	5.4	5.2	6.3	3.6	5.2	8.2	13	5.2	6.9	50	14	7.1
27	5.2	5.2	7.1	3.4	5.4	7.5	7.5	5.2	5.2	18	16	10
28	5.4	5.2	7.1	3.0	5.5	6.1	4.9	5.8	7.1	10	15	41
29	6.2	5.2	7.1	3.1	------	6.7	4.9	6.0	49	12	13	205
30	6.3	5.2	6.7	4.5	------	4.6	5.7	5.6	37	10	13	92
31	5.2	------	5.5	6.3	------	8.6	------	5.9	------	18	18	------
TOTAL	208.5	182.1	177.8	152.3	137.6	187.4	132.2	181.9	504.5	966.3	463.1	928.8
MEAN	6.73	6.07	5.74	4.91	4.91	6.05	4.41	5.87	16.8	31.2	14.9	31.0
MAX	12	8.0	7.1	9.9	5.5	10	13	16	116	174	49	205
MIN	4.8	4.4	4.9	3.0	3.7	3.9	1.6	3.0	4.4	6.7	9.3	5.9
AC-FT	414	361	353	302	273	372	262	361	1,000	1,920	919	1,840

CAL YR 1972 TOTAL 4,760.13 MEAN 13.0 MAX 481 MIN .33 AC-FT 9,440
WTR YR 1973 TOTAL 4,222.50 MEAN 11.6 MAX 205 MIN 1.6 AC-FT 8,380

PEAK DISCHARGE (BASE, 300 CFS).--July 21 (1845) 374 cfs (13.49 ft); Sept. 12 (1600) 304 cfs (13.03 ft).

06837000 Republican River at McCook, Nebr.

LOCATION.--Lat 40°11'15", long 100°37'05", in SW1/4NE1/4 sec.32, T.3 N., R.29 W., Red Willow County, on left bank 25 ft (8 m) downstream from bridge on U.S. Highway 83 at south edge of McCook, 2.5 mi (4.0 km) downstream from Driftwood Creek, and 10.5 mi (16.9 km) upstream from Red Willow Creek.

DRAINAGE AREA.--12,310 mi² (31,900 km²), approximately, of which about 6,260 mi² (16,200 km²) contributes directly to surface runoff.

PERIOD OF RECORD.--October 1930 to June 1932, October 1954 to current year. Monthly discharge only for some periods, published in WSP 1310.

GAGE.--Water-stage recorder. Datum of gage is 2,456.37 ft (748.702 m) above mean sea level. October 1930 to June 1932 nonrecording gage on former highway bridge 325 ft (99.1 m) upstream at different datum and October 1954 to Mar. 13, 1959, on highway bridge 25 ft (7.6 m) upstream at present datum.

AVERAGE DISCHARGE.--20 years, 210 ft³/s (5.947 m³/s), 152,100 acre-ft/yr (0.188 km³/yr).

EXTREMES.--Current year: Maximum discharge, 822 ft³/s (23.3 m³/s) July 25, gage height, 5.37 ft (1.637 m); maximum gage height, 5.97 ft (1.820 m) Jan. 29 (backwater from ice); minimum daily discharge, 39 ft³/s (1.10 m³/s) June 27.
Period of record: Maximum discharge, 5,890 ft³/s (167 m³/s) Mar. 21, 1960, gage height, 9.14 ft (2.786 m); no flow for several days in July and August 1931.
Maximum flood since at least 1826 occurred May 31, 1935, discharge, about 245,000 ft³/s (6,940 m³/s).

REMARKS.--Records good except those for winter period, which are poor. Natural flow affected by irrigation development above station and by storage in Bonny Reservoir, Enders Reservoir (see sta 06832000), and Swanson Lake (see sta 06829000). Records of water temperatures for the water year 1973 are published in Part 2 of this report.

REVISIONS.--WSP 2119: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	105	128	113	140	154	159	179	411	212	113	113	225
2	103	125	114	135	151	159	187	419	211	129	112	138
3	103	118	114	120	145	160	185	411	210	139	118	109
4	99	120	111	105	147	170	172	413	429	143	106	102
5	90	123	70	90	149	168	212	406	234	155	96	92
6	85	127	52	74	150	165	242	406	203	144	106	89
7	89	122	52	60	151	158	252	401	197	145	123	89
8	95	120	54	54	144	154	259	399	185	153	103	96
9	100	119	56	58	134	151	262	408	179	158	87	101
10	101	116	56	62	119	153	275	391	176	178	125	107
11	98	115	60	70	133	155	294	386	178	171	150	153
12	103	115	62	85	152	153	304	382	194	163	155	442
13	104	138	64	95	144	161	332	384	160	158	171	416
14	96	130	66	110	134	174	360	378	154	197	168	237
15	94	128	66	120	127	161	354	377	137	280	161	167
16	99	122	70	130	116	163	340	374	140	166	152	141
17	100	135	76	130	133	159	336	374	98	146	136	131
18	98	134	82	135	136	156	332	370	84	147	132	137
19	94	134	88	140	136	151	336	369	54	231	125	137
20	96	133	94	140	133	150	308	364	51	208	135	132
21	103	132	96	136	135	145	294	406	51	303	140	128
22	106	130	102	136	143	147	298	390	52	380	133	119
23	106	125	105	134	144	148	301	361	50	188	130	110
24	107	121	110	132	145	181	308	353	49	162	129	123
25	108	121	120	132	144	174	304	349	46	481	123	121
26	110	117	130	130	144	161	402	228	51	289	119	137
27	107	118	140	130	148	165	361	238	39	152	118	181
28	110	121	150	130	155	181	367	241	59	115	104	399
29	112	117	160	125	------	198	341	233	83	99	103	587
30	114	114	150	134	------	219	329	225	146	106	111	510
31	113	------	140	146	------	194	------	218	------	108	120	------
TOTAL	3,148	3,718	2,923	3,518	3,946	5,093	8,826	11,065	4,112	5,707	3,904	5,656
MEAN	102	124	94.3	113	141	164	294	357	137	184	126	189
MAX	114	138	160	146	155	219	402	419	429	481	171	587
MIN	85	114	52	54	116	145	172	218	39	99	87	89
AC-FT	6,240	7,370	5,800	6,980	7,830	10,100	17,510	21,950	8,160	11,320	7,740	11,220

CAL YR 1972 TOTAL 44,817 MEAN 122 MAX 1,360 MIN 47 AC-FT 88,890
WTR YR 1973 TOTAL 61,616 MEAN 169 MAX 587 MIN 39 AC-FT 122,200

06837300 Red Willow Creek above Hugh Butler Lake, Nebr.

LOCATION.--Lat 40°24'05", long 100°46'45", in NE1/4SE1/4 sec.13, T.5 N., R.31 W., Hayes County, on right bank 1,000 ft (305 m) above county road bridge, 7.2 mi (11.6 km) upstream from Red Willow Dam, and 12 mi (19 km) northeast of Culbertson.

DRAINAGE AREA.--600 mi² (1,550 km²), approximately, of which about 200 mi² (520 km²) contributes directly to surface runoff.

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

GAGE.--Water-stage recorder. Artificial control since March 1961. Datum of gage is 2,594.80 ft (790.895 m) above mean sea level. Prior to Mar. 23, 1961, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--13 years, 29.8 ft³/s (0.844 m³/s), 21,590 acre-ft/yr (26.6 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,860 ft³/s (52.7 m³/s) July 24, gage height, 8.48 ft (2.585 m); minimum daily, 6.8 ft³/s (0.19 m³/s) July 17.
Period of record: Maximum discharge, 4,020 ft³/s (114 m³/s) June 16, 1972, gage height, 13.27 ft (4.045 m), from rating curve extended above 1,000 ft³/s (28.3 m³/s) on basis of slope-conveyance study; minimum daily, 4.0 ft³/s (0.11 m³/s) July 4, 5, 1963.

REMARKS.--Records fair except those for winter period, which are poor. Natural flow affected by pump irrigation development above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	26	29	20	30	41	55	43	45	13	22	11
2	14	27	27	20	33	41	62	38	38	13	27	12
3	14	28	23	20	36	41	59	36	36	13	23	13
4	14	31	18	18	42	42	47	36	34	13	31	13
5	14	34	15	16	46	43	41	34	31	11	25	13
6	12	36	12	16	45	46	38	34	30	11	27	13
7	13	36	13	16	44	47	37	35	28	10	21	14
8	14	36	13	16	40	47	38	35	26	9.4	19	14
9	14	33	14	15	36	45	38	34	25	11	19	14
10	14	31	15	14	38	41	38	32	23	10	26	16
11	15	29	15	15	40	35	33	30	22	11	21	18
12	15	27	15	18	39	37	49	28	22	10	18	31
13	16	29	16	20	36	44	56	27	25	11	29	36
14	16	27	16	24	30	41	53	26	24	10	24	52
15	16	30	16	28	25	44	44	25	27	9.9	25	63
16	20	32	17	34	20	48	40	24	24	9.6	25	46
17	20	30	17	36	23	44	37	24	22	6.8	23	39
18	20	31	17	36	28	39	35	24	19	13	23	33
19	21	33	18	34	31	37	35	24	17	13	20	29
20	21	34	20	30	33	35	36	23	16	130	17	27
21	21	34	22	28	35	34	36	23	16	59	16	25
22	22	34	23	28	36	33	37	23	16	64	15	24
23	22	34	25	26	37	33	36	23	16	112	14	23
24	22	30	25	26	38	35	35	22	15	158	14	22
25	22	31	27	30	39	43	35	54	15	200	14	22
26	22	30	29	28	39	48	42	257	15	34	16	22
27	22	29	34	22	40	49	55	49	15	27	17	34
28	22	29	30	18	41	47	66	62	15	24	15	62
29	22	27	25	20	------	46	54	80	14	23	9.6	91
30	23	27	22	24	------	45	46	82	14	22	9.2	88
31	23	------	20	26	------	50	------	64	------	20	9.5	------
TOTAL	560	925	628	722	1,000	1,301	1,313	1,351	685	1,081.7	614.3	920
MEAN	18.1	30.8	20.3	23.3	35.7	42.0	43.8	43.6	22.8	34.9	19.8	30.7
MAX	23	36	34	36	46	50	66	257	45	200	31	91
MIN	12	26	12	14	20	33	33	22	14	6.8	9.2	11
AC-FT	1,110	1,830	1,250	1,430	1,980	2,580	2,600	2,680	1,360	2,150	1,220	1,820

CAL YR 1972 TOTAL 10,566.0 MEAN 28.9 MAX 383 MIN 10 AC-FT 20,960
WTR YR 1973 TOTAL 11,101.0 MEAN 30.4 MAX 257 MIN 6.8 AC-FT 22,020

PEAK DISCHARGE (BASE, 150 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
5-26	0515	5.08	732	7-23	0900	2.49	165
7-20	1100	3.77	405	7-24	2400	8.48	1,860

06837390 Hugh Butler Lake near McCook, Nebr.

LOCATION.--Lat 40°21'35", long 100°39'55", in SW1/4NW1/4 sec.31, T.5 N., R.29 W., Frontier County, in gate-control house at outlet tube of Red Willow Dam on Red Willow Creek, 12 mi (19 km) north of McCook.

DRAINAGE AREA.--730 mi² (1,890 km²), approximately, of which about 310 mi² (800 km²) contributes directly to surface runoff.

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

GAGE.--Water-stage recorder. Gage is referred to mean sea level. Prior to July 10, 1962, nonrecording gages at present datum.

EXTREMES.--Current year: Maximum contents, 39,790 acre-ft (49.1 hm³) June 1, elevation, 2,583.02 ft (787.304 m); minimum, 27,200 acre-ft (33.5 hm³) Sept. 10, 11 elevation, 2,574.53 ft (784.717 m).
Period of record: Maximum contents, 41,680 acre-ft (51.4 hm³) July 15, 16, 1967, elevation, 2,584.14 ft (787.646 m); minimum since operation of reservoir began, 21,620 acre-ft (26.7 hm³) Nov. 8, 9, 1962, elevation, 2,569.84 ft (783.287 m).

REMARKS.--Reservoir is formed by earthfill dam; storage began Sept. 5, 1961. Capacity, 31,470 acre-ft (38.8 hm³) between elevations 2,522.0 ft (768.71 m), sill of outlet works, and 2,581.8 ft (786.93 m), top of irrigation pool. Top of flood-control pool and crest of mean spillway at elevation 2,604.9 ft (793.97 m), capacity, 86,360 acre-ft (0.106 km³). Top of superstorage flood-control pool at evevation 2,627.8 ft (800.95 m), capacity, 162,600 acre-ft (0.200 km³). Dead storage, 6,310 acre-ft (7.78 hm³). Figures given herein represent total contents. Water used for irrigation in Frenchman-Cambridge irrigation project.

COOPERATION.--Capacity table furnished by Bureau of Reclamation.

REVISIONS.--WSP 2119: Drainage area.

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

2,570	21,800	2,580	34,910
2,575	27,800	2,585	43,170

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28,550	29,410	31,110	32,420	34,140	35,580	37,780	38,450	39,700	35,490	32,680	27,600
2	28,540	29,450	31,140	32,460	34,190	35,660	37,860	38,380	39,620	35,130	32,580	27,480
3	28,530	29,490	31,190	32,490	34,260	35,740	37,940	38,350	39,490	34,890	32,420	27,350
4	28,530	29,530	31,190	32,490	34,290	35,780	37,950	38,270	39,390	34,630	32,300	27,310
5	28,510	29,610	31,240	32,510	34,370	35,880	37,990	38,250	39,190	34,370	32,260	27,280
6	28,590	29,660	31,240	32,520	34,430	35,930	37,990	38,180	39,080	34,060	32,200	27,250
7	28,610	29,700	31,300	32,550	34,530	35,990	38,050	38,150	38,900	33,840	32,030	27,250
8	28,630	29,790	31,330	32,570	34,530	36,070	38,050	38,070	38,710	33,530	31,840	27,220
9	28,640	29,840	31,340	32,610	34,590	36,100	38,050	37,990	38,530	33,350	31,610	27,210
10	28,670	29,880	31,350	32,670	34,630	36,210	38,020	37,940	38,350	33,080	31,370	27,200
11	28,680	29,920	31,400	32,730	34,710	36,230	38,020	37,890	38,200	32,860	31,200	27,420
12	28,700	30,030	31,480	32,760	34,790	36,260	38,020	37,870	38,200	32,600	30,980	27,480
13	28,740	30,210	31,510	32,790	34,830	36,460	38,070	37,860	38,080	32,360	30,840	27,520
14	28,760	30,210	31,550	32,850	34,830	36,590	38,100	37,860	37,970	32,080	30,670	27,580
15	28,780	30,260	31,550	32,860	34,850	36,590	38,130	37,860	37,950	31,860	30,550	27,650
16	28,790	30,320	31,580	32,950	34,850	36,630	38,130	37,860	37,840	31,620	30,440	27,700
17	28,830	30,340	31,620	33,020	34,930	36,690	38,120	37,870	37,710	31,410	30,320	27,740
18	28,830	30,410	31,650	33,080	35,000	36,720	38,120	37,870	37,550	31,230	30,220	27,770
19	28,830	30,470	31,680	33,160	35,070	36,760	38,170	37,890	37,470	31,240	30,140	27,850
20	28,880	30,520	31,720	33,260	35,080	36,790	38,130	37,950	37,390	31,620	29,990	27,890
21	28,910	30,580	31,750	33,340	35,100	36,790	38,120	37,950	37,290	31,690	29,810	27,960
22	28,940	30,640	31,790	33,400	35,180	36,890	38,080	37,950	37,210	31,790	29,580	27,960
23	28,950	30,680	31,860	33,460	35,220	36,970	38,080	37,990	37,130	31,970	29,380	28,000
24	28,970	30,770	31,930	33,520	35,270	37,140	38,170	37,990	37,030	32,140	29,120	28,100
25	29,000	30,850	32,000	33,560	35,350	37,190	38,250	38,270	36,890	32,880	28,880	28,140
26	29,040	30,880	32,060	33,670	35,390	37,230	38,320	39,340	36,760	32,880	28,720	28,250
27	29,070	30,910	32,150	33,870	35,470	37,320	38,320	39,470	36,540	32,860	28,510	28,390
28	29,110	30,960	32,210	33,900	35,530	37,420	38,430	39,470	36,230	32,860	28,280	28,570
29	29,230	31,000	32,310	33,940	------	37,450	38,430	39,550	35,990	32,790	28,100	28,790
30	29,270	31,070	32,390	34,000	------	37,550	38,480	39,670	35,750	32,740	27,850	28,940
31	29,280	------	32,390	34,060	------	37,710	------	39,750	------	32,730	27,680	------
MAX	29,280	31,070	32,390	34,060	35,530	37,710	38,480	39,750	39,700	35,490	32,680	28,940
MIN	28,510	29,410	31,110	32,420	34,140	35,580	37,780	37,860	35,750	31,230	27,680	27,200
(†)	+720	+1,790	+1,320	+1,670	+1,470	+2,180	+770	+1,270	-4,000	-3,020	-5,050	+1,260
(‡)	2,576.12	2,577.41	2,578.33	2,579.45	2,580.40	2,581.76	2,582.23	2,583.00	2,580.54	2,578.56	2,574.91	2,575.86

CAL YR 1972 MAX 39,510 MIN 20,560 † +970
WTR YR 1973 MAX 39,750 MIN 27,200 † +380

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

06837500 Red Willow Creek near McCook, Nebr.

LOCATION.--Lat 40°20'50", long 100°38'35", in SW1/4NW1/4 sec.6, T.4 N., R.29 W., Red Willow County, on left bank at downstream side of bridge on U.S. Highway 83, 3 mi (5 km) downstream from Red Willow Dam and 10 mi (16 km) north of McCook.

DRAINAGE AREA.--740 mi² (1,920 km²), approximately, of which about 320 mi² (830 km²) contributes directly to surface runoff.

PERIOD OF RECORD.--October 1940 to September 1947. Annual maximums, water years 1958-60. October 1960 to current year. Monthly discharge only for some periods, published in WSP 1310.

GAGE.--Water-stage recorder, concrete control since Dec. 23, 1965. Datum of gage is 2,485.97 ft (757.724 m) above mean sea level. October 1940 to September 1947 water-stage recorder at present site at datum 9.55 ft (2.911 m) higher. Nov. 22, 1957, to Sept. 30, 1960, crest-stage gage and Oct. 1, 1960, to Apr. 5, 1961, nonrecording gage, at present site and datum.

AVERAGE DISCHARGE.--20 years, 25.1 ft³/s (0.711 m³/s), 18,180 acre-ft/yr (22.4 hm³/yr), unadjusted.

EXTREMES.--Current year: Maximum discharge, 166 ft³/s (4.70 m³/s) July 9, gage height, 10.43 ft (3.179 m); minimum daily, 3.3 ft³/s (0.093 m³/s) May 23.
Period of record: Maximum discharge, 30,000 ft³/s (850 m³/s) June 22, 1947, gage height, 31.95 ft (9.738 m), present datum, from rating curve extended above 2,500 ft³/s (70.8 m³/s) on basis of contracted-opening measurement of peak flow; minimum daily, 0.60 ft³/s (0.017 m³/s) Sept. 22, 1961.
Flood of June 1, 1935, reached a stage of 33.45 ft (10.196 m), from floodmarks, discharge, 45,000 ft³/s (1,270 m³/s).

REMARKS.--Records good. Natural flow affected by irrigation development above station and, since Sept. 5, 1961, by storage in Hugh Butler Lake. (See preceding page.)

REVISIONS.--WSP 2119: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.2	5.5	4.7	5.5	5.3	6.4	5.1	51	45	147	54	64
2	6.0	5.5	4.7	5.5	5.5	6.4	6.0	54	100	157	68	52
3	5.2	5.5	4.7	5.5	5.5	5.5	5.8	55	101	159	88	46
4	5.2	5.5	4.7	4.4	5.5	5.8	5.8	56	102	161	86	37
5	5.2	5.5	4.7	4.4	5.5	5.8	15	56	102	155	83	31
6	5.2	5.5	4.7	4.4	5.5	5.8	26	56	102	147	83	28
7	5.2	5.2	4.7	4.4	5.5	5.8	26	53	102	146	88	28
8	5.2	5.1	4.7	4.4	5.4	5.8	25	54	103	145	92	28
9	5.2	4.9	4.7	4.7	5.5	6.0	26	54	102	148	121	28
10	5.3	4.7	4.7	4.7	5.5	5.8	26	55	102	140	129	23
11	5.2	4.7	4.7	4.7	5.5	5.6	23	44	80	129	121	19
12	5.2	4.7	4.9	4.8	5.7	5.5	12	19	55	122	108	16
13	5.2	4.7	4.9	5.1	5.5	5.7	24	16	51	121	112	14
14	5.4	4.7	4.9	5.2	5.5	5.8	24	10	51	122	104	13
15	5.5	4.8	4.9	5.2	5.9	5.8	22	5.2	51	123	88	13
16	5.5	4.8	4.9	5.2	6.0	5.8	23	4.5	49	123	79	12
17	5.2	4.8	4.9	5.2	6.0	5.6	23	4.3	46	125	72	10
18	5.1	4.9	4.9	5.2	6.0	5.5	23	3.9	46	128	57	4.9
19	4.4	4.9	5.3	5.2	6.0	5.2	23	3.9	46	60	56	4.9
20	4.4	4.9	5.2	5.2	6.3	5.2	23	4.2	46	6.5	66	4.7
21	4.4	4.5	5.2	5.2	6.6	5.2	23	5.3	47	5.6	99	4.9
22	4.8	4.2	5.2	5.2	6.8	5.2	23	4.0	48	20	110	4.7
23	4.7	4.0	5.2	5.2	6.6	5.2	23	3.3	49	65	115	4.6
24	5.2	4.0	5.2	5.0	6.8	4.9	24	3.6	57	65	110	4.6
25	5.5	4.0	5.2	5.1	6.5	5.2	24	6.6	74	58	111	4.4
26	4.9	4.1	5.5	4.8	6.0	5.2	24	5.8	77	43	110	4.8
27	4.7	4.2	5.5	6.8	6.0	5.0	24	5.2	106	35	108	5.4
28	4.7	4.4	5.5	5.0	6.3	4.9	25	4.9	134	32	108	6.1
29	4.7	4.4	5.5	5.2	------	4.7	25	4.3	144	38	106	5.5
30	5.2	4.6	5.5	5.1	------	4.7	33	4.0	145	44	98	5.3
31	5.5	------	5.5	5.2	------	4.9	------	4.1	------	48	81	------
TOTAL	159.3	143.2	155.5	156.7	164.7	169.9	634.7	710.1	2,363	3,018.1	2,911	526.8
MEAN	5.14	4.77	5.02	5.05	5.88	5.48	21.2	22.9	78.8	97.4	93.9	17.6
MAX	6.2	5.5	5.5	6.8	6.8	6.4	33	56	145	161	129	64
MIN	4.4	4.0	4.7	4.4	5.3	4.7	5.1	3.3	45	5.6	54	4.4
AC-FT	316	284	308	311	327	337	1,260	1,410	4,690	5,990	5,770	1,040

CAL YR 1972 TOTAL 8,959.6 MEAN 24.5 MAX 140 MIN 3.3 AC-FT 17,770
WTR YR 1973 TOTAL 11,113.0 MEAN 30.4 MAX 161 MIN 3.3 AC-FT 22,040

06838000 Red Willow Creek near Red Willow, Nebr.

LOCATION.--Lat 40°14'10", long 100°30'00", in NE1/4NE1/4 sec.17, T.3 N., R.28 W., Red Willow County, on left bank at downstream side of bridge on U.S. Highways 6 and 34, 0.8 mi (1.3 km) north of Red Willow and 2.5 mi (4.0 km) upstream from mouth.

DRAINAGE AREA.--830 mi² (2,150 km²), approximately, of which about 410 mi² (1,060 km²) contributes directly to surface runoff.

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

GAGE.--Water-stage recorder. Datum of gage is 2,398.64 ft (731.105 m) above mean sea level. Prior to May 26, 1945, nonrecording gage at bridge 1.2 mi (1.9 km) upstream at datum 11.16 ft (3.402 m) higher.

AVERAGE DISCHARGE.--34 years, 33.1 ft³/s (0.937 m³/s), 23,980 acre-ft/yr (29.6 hm³/yr), unadjusted.

EXTREMES.--Current year: Maximum discharge, 535 ft³/s (15.2 m³/s) May 26, gage height, 9.56 ft (2.914 m); minimum daily, 7.5 ft³/s (0.21 m³/s) Sept. 16.
Period of record: Maximum discharge, 30,000 ft³/s (850 m³/s) June 22, 1947, gage height, 18.36 ft (5.596 m), from rating curve extended above 6,800 ft³/s (193 m³/s) on basis of slope-area measurement of peak flow; minimum daily, 0.33 ft³/s (0.009 m³/s) Sept. 8, 1971.

REMARKS.--Records good except those for winter period, which are poor. Natural flow affected by irrigation development above station, since Sept. 5, 1961, by storage in Hugh Butler Lake (see sta 06837390), and since June 1963 by Red Willow Canal which diverts 4.5 mi (7.2 km) above station for irrigation of about 4,150 acres (16.8 km²).

REVISIONS (WATER YEARS).--WSP 1510: 1945(M). WSP 2119: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.8	11	11	14	12	11	12	47	14	47	16	54
2	14	12	11	14	11	11	12	53	84	49	23	23
3	9.5	11	11	14	11	11	11	54	95	52	21	24
4	9.1	10	10	12	11	12	12	54	161	54	21	22
5	9.1	10	10	10	11	12	11	55	106	51	16	18
6	9.5	10	10	9.5	11	12	28	55	102	42	24	16
7	9.7	10	9.5	9.0	10	11	32	55	102	37	20	17
8	9.8	10	9.5	9.0	10	11	32	55	87	36	13	18
9	9.5	10	9.5	9.5	10	11	32	54	97	41	28	19
10	9.8	10	9.5	9.5	11	12	32	54	100	39	48	18
11	9.5	10	10	10	11	12	32	53	100	26	50	42
12	9.5	10	10	12	11	11	23	36	51	18	32	21
13	9.5	9.5	10	14	11	13	28	25	39	17	54	9.6
14	9.6	10	10	16	10	13	31	23	34	19	65	9.5
15	10	11	10	14	9.6	13	31	16	32	17	55	7.9
16	10	12	10	12	9.6	13	32	14	31	15	41	7.5
17	10	12	10	12	11	13	31	13	30	13	41	9.1
18	9.8	12	11	12	11	13	31	12	36	13	32	10
19	9.3	12	12	12	11	13	32	11	33	58	30	8.5
20	10	11	13	11	11	13	32	11	33	20	24	8.2
21	10	11	11	11	11	13	31	13	33	14	28	8.1
22	9.7	11	10	11	11	13	31	12	31	13	27	7.7
23	10	11	10	10	11	12	31	11	30	32	32	7.7
24	9.9	10	10	11	11	13	31	11	29	37	29	8.2
25	9.8	11	10	11	11	13	32	11	37	39	30	7.9
26	9.6	11	12	11	11	12	35	211	30	31	28	8.6
27	9.2	11	16	10	11	12	32	36	30	25	29	9.6
28	9.1	11	16	9.5	11	12	32	31	55	20	27	13
29	9.4	10	15	10	------	11	32	18	56	19	26	11
30	10	11	15	12	------	11	31	15	50	22	23	9.8
31	10	------	14	14	------	13	------	15	------	18	26	------
TOTAL	302.7	321.5	346.0	356.0	302.2	376	835	1,134	1,748	934	959	453.9
MEAN	9.76	10.7	11.2	11.5	10.8	12.1	27.8	36.6	58.3	30.1	30.9	15.1
MAX	14	12	16	16	12	13	35	211	161	58	65	54
MIN	8.8	9.5	9.5	9.0	9.6	11	11	11	14	13	13	7.5
AC-FT	600	638	686	706	599	746	1,660	2,250	3,470	1,850	1,900	900

CAL YR 1972 TOTAL 5,541.3 MEAN 15.1 MAX 94 MIN 2.0 AC-FT 10,990
WTR YR 1973 TOTAL 8,068.3 MEAN 22.1 MAX 211 MIN 7.5 AC-FT 16,000

06841000 Medicine Creek above Harry Strunk Lake, Nebr.

LOCATION.--Lat 40°30'10", long 100°19'20", in SW1/4 sec.7, T.6 N., R.26 W., Frontier County, on right bank 0.3 mi (0.5 km) downstream from top of Harry Strunk Lake flood-control pool, 2.5 mi (4.0 km) upstream from top of irrigation pool, 3.8 mi (6.1 km) southeast of Stockville, and 13.5 mi (21.7 km) upstream from Medicine Creek Dam.

DRAINAGE AREA.--770 mi² (1,990 km²), approximately, of which about 530 mi² (1,370 km²) contributes directly to surface runoff.

PERIOD OF RECORD.--January 1950 to current year. Prior to October 1950, published as "above Medicine Creek Reservoir."

GAGE.--Water-stage recorder. Concrete control since November 1950. Datum of gage is 2,380.94 ft (725.711 m) above mean sea level (Bureau of Reclamation bench mark).

AVERAGE DISCHARGE.--23 years, 70.5 ft³/s (1.997 m³/s), 51,080 acre-ft/yr (63.0 hm³/yr); median of yearly mean discharges, 60 ft³/s (1.699 m³/s), 43,500 acre-ft/yr (53.6 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,210 ft³/s (62.6 m³/s) May 26, gage height, 12.58 ft (3.834 m); minimum daily, 21 ft³/s (0.59 m³/s) July 14.
Period of record: Maximum discharge, 11,600 ft³/s (329 m³/s) June 21, 1967, gage height, 20.05 ft (6.111 m); minimum daily, 14 ft³/s (0.40 m³/s) Aug. 4, 5, 1955, Aug. 21, 1959, Aug. 8, 10, 1964.
Maximum stage since at least 1874, 24.4 ft (7.44 m) June 22, 1947, from floodmark (discharge not determined).

REMARKS.--Records good except those for winter period, which are poor. Natural flow affected by irrigation development above station.

REVISIONS.--WSP 2119: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42	60	54	43	89	69	87	71	68	34	45	29
2	42	61	55	40	88	70	87	72	65	31	47	28
3	41	63	48	37	84	69	82	70	67	37	46	30
4	40	64	40	34	81	72	73	67	104	39	45	31
5	40	62	35	30	80	75	67	66	67	37	51	30
6	40	59	34	30	81	74	65	66	59	36	58	30
7	40	58	34	30	80	73	64	65	57	33	62	31
8	41	58	33	30	70	70	63	68	55	25	44	36
9	43	58	33	30	66	68	64	71	54	28	41	37
10	45	57	32	33	70	68	64	65	53	30	40	39
11	45	57	32	38	70	61	66	61	51	28	40	44
12	46	57	31	45	64	63	70	59	52	25	58	60
13	47	54	30	55	65	67	69	57	53	22	69	74
14	47	51	30	60	66	84	67	56	57	21	56	65
15	47	55	30	65	62	92	65	56	55	22	55	55
16	47	58	30	70	60	76	63	56	51	22	48	49
17	48	60	33	75	60	68	62	56	49	22	42	47
18	48	60	39	80	62	65	61	56	45	28	38	46
19	47	61	45	85	62	64	64	55	44	252	38	45
20	51	61	50	87	63	63	65	56	43	185	38	45
21	50	60	53	88	63	63	67	80	43	88	37	45
22	50	59	54	88	63	62	65	56	43	76	34	44
23	51	59	60	86	64	60	61	54	44	173	32	43
24	50	58	62	80	64	70	62	54	43	70	32	42
25	50	58	65	73	65	73	63	96	42	67	34	46
26	50	57	67	64	65	73	88	698	40	69	36	50
27	52	58	70	63	65	73	100	199	39	65	35	53
28	52	58	66	60	67	71	87	152	37	61	32	77
29	52	55	60	65	------	71	78	112	36	56	29	102
30	56	53	55	71	------	73	80	89	34	51	27	94
31	57	------	50	80	------	77	------	76	------	46	28	------
TOTAL	1,457	1,749	1,410	1,815	1,939	2,177	2,119	2,915	1,550	1,779	1,317	1,447
MEAN	47.0	58.3	45.5	58.5	69.3	70.2	70.6	94.0	51.7	57.4	42.5	48.2
MAX	57	64	70	88	89	92	100	698	104	252	69	102
MIN	40	51	30	30	60	60	61	54	34	21	27	28
AC-FT	2,890	3,470	2,800	3,600	3,850	4,320	4,200	5,780	3,070	3,530	2,610	2,870

CAL YR 1972 TOTAL 19,601 MEAN 53.6 MAX 290 MIN 20 AC-FT 38,880
WTR YR 1973 TOTAL 21,674 MEAN 59.4 MAX 698 MIN 21 AC-FT 42,990

PEAK DISCHARGE (BASE, 1,200 CFS).--May 26 (0445) 2,210 cfs (12.58 ft).

06841500 Mitchell Creek above Harry Strunk Lake, Nebr.

LOCATION.--Lat 40°28'20", long 100°15'25", in NW1/4SE1/4 sec.22, T.6 N., R.26 W., Frontier County, on left bank at top of Harry Strunk Lake flood-control pool, 2.2 mi (3.5 km) southwest of Orafino, 9.5 mi (15.3 km) upstream from Medicine Creek Dam, and 14 mi (23 km) northwest of Cambridge.

DRAINAGE AREA.--52 mi² (130 km²), approximately.

PERIOD OF RECORD.--May 1950 to current year. Prior to October 1950, published as "above Medicine Creek Reservoir."

GAGE.--Water-stage recorder. Concrete control since February 1953. Datum of gage is 2,376.95 ft (724.494 m) above mean sea level (Bureau of Reclamation bench mark).

AVERAGE DISCHARGE.--23 years, 2.40 ft³/s (0.0679 m³/s), 1,740 acre-ft/yr (2.15 hm³/yr); median of yearly mean discharges, 1.2 ft³/s (0.0339 m³/s), 870 acre-ft/yr (1.07 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 454 ft³/s (12.9 m³/s) May 26, gage height, 6.98 ft (2.128 m); no flow most of year.
Period of record: Maximum discharge, 5,230 ft³/s (148 m³/s) May 20, 1951, gage height, 17.35 ft (5.288 m); maximum gage height, 19.94 ft (6.078 m) June 16, 1962; no flow for most of time in each year.
Flood of June 21, 1948, reached a stage of about 28 ft (8.5 m), from floodmarks (discharge not determined).

REMARKS.--Records poor.

REVISIONS.--WSP 2119: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1			0	0	8.8		0	0	0	0	0	.45
2			0	0	5.0		0	0	0	0	0	0
3			0	0	4.2		0	0	1.8	0	0	0
4			0	0	2.0		0	0	38	0	0	0
5			0	0	4.1		0	0	9.4	0	0	0
6			0	0	2.1		0	0	.58	0	0	0
7			0	0	1.1		0	0	.05	0	0	0
8			0	0	.85		0	0	0	0	0	0
9			0	0	.01		0	0	0	0	0	0
10			0	0	0		0	0	0	0	0	0
11			0	0	0		0	0	0	0	0	0
12			0	0	0		0	0	0	0	0	0
13			0	0	0		0	0	0	0	.42	0
14			0	0	0		0	0	0	0	2.1	0
15			0	7.0	0		0	0	0	0	.17	0
16			0	25	0		0	0	0	0	0	0
17			0	10	0		0	0	0	0	0	0
18			0	9.6	0		0	0	0	0	0	0
19			0	16	0		0	0	0	49	0	0
20			0	6.7	0		0	0	0	83	0	0
21			0	2.0	0		0	0	0	7.4	0	0
22			0	.14	0		0	0	0	.55	0	0
23			0	.06	0		0	0	0	47	0	0
24			0	.03	0		0	0	0	8.8	0	0
25			.02	0	0		.57	0	0	.74	0	0
26			1.5	.28	0		.02	76	0	.01	0	0
27			1.1	70	0		.09	24	0	0	0	0
28			.61	4.1	0		0	19	0	0	0	0
29			.27	.55	------		0	.99	0	0	0	.13
30			.05	1.6	------		0	.07	0	0	0	.18
31		------	.01	1.9	------		------	0	------	0	.04	------
TOTAL	0	0	3.56	154.96	28.16	0	.68	120.06	49.83	196.50	2.73	.76
MEAN	0	0	.11	5.00	1.01	0	.023	3.87	1.66	6.34	.088	.025
MAX	0	0	1.5	70	8.8	0	.57	76	38	83	2.1	.45
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	7.1	307	56	0	1.3	238	99	390	5.4	1.5

CAL YR 1972 TOTAL 85.49 MEAN .23 MAX 63 MIN 0 AC-FT 170
WTR YR 1973 TOTAL 557.24 MEAN 1.53 MAX 83 MIN 0 AC-FT 1,110

PEAK DISCHARGE (BASE, 300 CFS).--May 26 (0400) 454 cfs (6.98 ft).

06842000 Harry Strunk Lake near Cambridge, Nebr.

LOCATION.--Lat 40°22'40", long 100°13'00", in NE1/4 sec.25, T.5 N., R.26 W., Frontier County, near right bank in control house at outlet tube of Medicine Creek Dam on Medicine Creek, 7 mi (11 km) northwest of Cambridge.

DRAINAGE AREA.--880 mi² (2,280 km²), approximately, of which about 640 mi² (1,660 km²) contributes directly to surface runoff.

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

GAGE.--Water-stage recorder. Datum of gage is at mean sea level. Prior to Aug. 18, 1960, nonrecording gage at present datum.

EXTREMES.--Current year: Maximum contents, 39,900 acre-ft (49.2 hm³) May 27, elevation, 2,367.55 ft (721.629 m); minimum, 16,310 acre-ft (20.1 hm³) Sept. 4-6, elevation, 2,351.09 ft (716.612 m).
Period of record: Maximum contents observed, 55,750 acre-ft (68.7 hm³) Mar. 23, 1960, elevation, 2,374.10 ft (723.626 m); minimum observed since operation of reservoir began, 14,400 acre-ft (17.8 hm³) Sept. 20, 21, 1955, elevation, 2,347.45 ft (715.503 m).

REMARKS.--Reservoir is formed by earthfill dam; storage began Aug. 8, 1949. Capacity, 32,230 acre-ft (39.7 hm³) between elevation 2,335.0 ft (711.71 m), sill of outlet gates, and 2,366.1 ft (721.19 m), top of storage pool and crest of slot in spillway. Top of flood-control pool and crest of main spillway at elevation 2,386.2 ft (727.31 m), capacity, 89,310 acre-ft (0.110 km³). Top of superstorage flood-control pool at elevation 2,400.0 ft (731.52 m), capacity, 147,400 acre-ft (0.182 km³). Maximum water-surface elevation, 2,408.9 ft (734.23 m), 196,000 acre-ft (0.242 km³). Dead storage, 4,910 acre-ft (6.05 hm³). Figures given herein represent total contents. Water used for irrigation in Frenchman-Cambridge irrigation project.

COOPERATION.--Capacity table furnished by Bureau of Reclamation.

REVISIONS.--WSP 2119: Drainage area.

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

2,350	15,250	2,365	35,140
2,355	20,550	2,370	44,890
2,360	27,100		

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19,650	22,180	25,560	28,450	33,320	36,540	38,170	37,720	39,350	34,740	26,130	16,570
2	19,750	22,320	25,690	28,750	33,500	36,720	38,230	37,590	39,200	33,960	25,950	16,520
3	19,810	22,440	25,750	28,870	33,680	36,900	38,230	37,420	39,160	33,300	25,840	16,360
4	19,830	22,520	25,810	28,930	33,820	37,010	38,170	37,290	39,060	32,570	25,770	16,320
5	19,920	22,670	25,860	29,010	33,990	37,180	38,150	37,080	39,000	31,910	25,690	16,310
6	19,920	22,750	25,920	29,070	34,130	37,330	38,150	36,900	38,720	31,250	25,580	16,320
7	20,000	22,840	25,980	29,180	34,250	37,380	38,210	36,950	38,530	30,800	25,310	16,330
8	20,060	22,950	26,060	29,210	34,340	37,480	38,210	36,990	38,270	29,890	24,930	16,380
9	20,120	23,040	26,120	29,300	34,410	37,550	38,130	37,160	38,080	29,290	24,460	16,430
10	20,240	23,130	26,190	29,400	34,530	37,630	38,060	37,230	37,890	28,610	24,010	16,520
11	20,310	23,220	26,280	29,490	34,690	37,650	38,060	37,310	37,810	27,930	23,500	16,650
12	20,360	23,440	26,400	29,580	34,790	37,550	38,000	37,400	37,720	27,400	23,070	16,780
13	20,480	23,660	26,460	29,630	34,910	37,610	37,980	37,500	37,500	26,670	22,790	16,920
14	20,530	23,710	26,550	29,740	34,980	37,780	37,930	37,530	37,230	25,980	22,520	17,070
15	20,610	23,800	26,600	29,870	35,070	37,800	37,890	37,630	37,180	25,270	22,390	17,160
16	20,710	23,920	26,690	30,170	35,160	37,800	37,870	37,650	37,100	24,570	22,240	17,230
17	20,790	24,010	26,820	30,400	35,250	37,780	37,830	37,800	37,030	23,870	22,010	17,330
18	20,830	24,210	26,930	30,620	35,410	37,780	37,810	37,800	36,990	23,210	21,790	17,420
19	20,890	24,380	27,010	30,830	35,520	37,780	37,780	37,760	36,950	23,740	21,570	17,550
20	20,970	24,490	27,100	31,060	35,610	37,780	37,680	37,630	36,950	24,210	21,230	17,630
21	21,080	24,530	27,190	31,230	35,690	37,650	37,650	37,850	37,180	24,410	20,810	17,750
22	21,190	24,590	27,280	31,350	35,830	37,700	37,680	37,970	37,160	24,670	20,340	17,830
23	21,250	24,850	27,400	31,440	35,980	37,810	37,630	37,980	37,120	25,040	19,800	17,910
24	21,330	24,990	27,530	31,550	36,050	37,930	37,760	37,980	37,100	25,290	19,270	18,000
25	21,430	25,070	27,650	31,700	36,160	37,930	37,830	38,230	37,060	25,420	18,870	18,120
26	21,500	25,200	27,780	31,910	36,250	37,930	37,980	39,370	36,860	25,560	18,460	18,180
27	21,590	25,290	27,900	32,520	36,360	37,930	38,170	39,860	36,520	25,650	17,990	18,430
28	21,650	25,350	28,030	32,720	36,430	37,970	38,190	39,780	36,070	25,770	17,560	18,610
29	21,800	25,460	28,210	32,840	------	37,980	38,150	39,820	35,600	25,920	17,110	18,860
30	21,930	25,490	28,300	32,990	------	38,020	38,100	39,680	35,180	25,980	16,670	19,060
31	22,030	------	28,360	33,150	------	38,170	------	39,490	------	26,080	16,500	------
MAX	22,030	25,490	28,360	33,150	36,430	38,170	38,230	39,860	39,350	34,740	26,130	19,060
MIN	19,650	22,180	25,560	28,450	33,320	36,540	37,630	36,900	35,180	23,210	16,500	16,310
(†)	+2,460	+3,460	+2,870	+4,790	+3,280	+1,740	-70	+1,390	-4,310	-9,100	-9,580	+2,560
(‡)	2,356.22	2,358.86	2,360.85	2,363.85	2,365.71	2,366.65	2,366.61	2,367.34	2,365.02	2,359.28	2,351.27	2,353.70

CAL YR 1972 MAX 39,120 MIN 17,660 † -1,210
WTR YR 1973 MAX 39,860 MIN 16,310 † -510

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

06842500 Medicine Creek below Harry Strunk Lake, Nebr.

LOCATION.--Lat 40°22'20", long 100°13'20", at center of sec.25, T.5 N., R.26 W., Frontier County, on right bank 0.5 mi (0.8 km) downstream from Medicine Creek Dam and 6.5 mi (10.5 km) northwest of Cambridge.

DRAINAGE AREA.--880 mi² (2,280 km²), approximately, of which about 640 mi² (1,660 km²) contributes directly to surface runoff.

PERIOD OF RECORD.--October 1949 to current year. Prior to October 1950, published as "below Medicine Creek Dam." Monthly discharge only for some periods, published in WSP 1730.

GAGE.--Water-stage recorder. Concrete control since August 1950. Datum of gage is 2,295.26 ft (699.595 m) above mean sea level (Bureau of Reclamation bench mark). Prior to Apr. 24, 1950, nonrecording gage at site 0.5 mi (0.8 km) upstream at different datum.

AVERAGE DISCHARGE.--24 years, 66.7 ft³/s (1.889 m³/s), 48,320 acre-ft/yr (59.6 hm³/yr), unadjusted.

EXTREMES.--Current year: Maximum discharge, 596 ft³/s (16.9 m³/s) May 30, gage height, 3.39 ft (1.033 m); minimum daily, 0.20 ft³/s (0.006 m³/s) Sept. 24, 25.
Period of record: Maximum discharge, 1,300 ft³/s (36.8 m³/s) Mar. 23, 1960, gage height, 5.97 ft (1.820 m); minimum daily, 0.10 ft³/s (0.003 m³/s) Nov. 13, 1952, Sept. 19, 1963, Sept. 27-29, 1964.

REMARKS.--Records good. Flow regulated by Harry Strunk Lake. (See preceding page.) Records of chemical analyses for the water year 1973 are published in Part 2 of this report.

REVISIONS.--WSP 2119: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.6	1.6	1.2	1.1	2.4	2.2	68	156	159	277	46	51
2	1.5	1.4	1.2	1.1	2.4	2.2	69	152	153	326	88	57
3	1.5	1.4	1.2	1.1	2.4	2.1	70	148	148	324	83	97
4	1.6	1.5	1.2	1.1	2.4	2.0	71	149	152	336	82	53
5	1.7	1.5	1.2	1.1	2.4	2.1	70	147	149	345	82	24
6	1.8	1.4	1.2	1.1	2.5	2.1	71	147	143	344	127	14
7	1.9	1.4	1.2	1.1	2.5	2.5	73	56	138	360	195	15
8	1.7	1.5	1.2	1.2	2.4	3.2	72	35	133	375	226	16
9	1.8	1.5	1.2	1.4	2.5	28	87	1.8	126	390	255	17
10	1.8	1.4	1.2	1.4	2.5	50	102	3.4	122	389	279	11
11	1.6	1.4	1.2	1.4	2.6	55	65	7.5	120	388	283	1.4
12	1.4	1.6	1.2	1.4	2.6	55	89	7.8	120	386	288	1.8
13	1.4	1.7	1.1	1.4	2.5	55	77	8.2	115	400	252	1.3
14	1.3	1.4	1.4	1.4	2.5	57	97	8.8	113	405	188	1.4
15	1.4	1.5	1.5	1.3	2.1	57	98	9.6	80	404	116	1.6
16	1.5	1.5	1.5	1.5	1.1	57	76	10	61	409	115	2.2
17	1.6	1.5	1.5	1.5	1.1	57	64	11	60	406	129	.60
18	1.5	1.5	1.5	1.5	1.1	57	67	12	57	404	132	.44
19	1.5	1.5	1.6	1.5	1.1	57	82	12	55	161	144	.54
20	1.5	1.5	1.4	1.5	1.1	57	95	13	22	1.2	159	.45
21	1.6	1.5	1.4	1.5	1.1	57	95	17	1.3	1.1	236	.40
22	1.6	1.5	1.5	1.5	1.1	57	92	18	1.4	1.2	269	.35
23	1.5	1.5	1.5	1.6	1.1	57	36	18	1.6	1.4	291	.30
24	1.5	1.5	1.4	2.8	1.1	61	5.0	20	17	1.3	274	.20
25	1.5	1.3	1.4	2.6	1.2	62	7.4	20	62	1.3	253	.20
26	1.9	1.2	1.4	2.8	1.7	59	12	48	119	1.3	241	.22
27	1.4	1.2	1.4	2.6	1.7	61	15	71	164	1.2	241	.22
28	1.4	1.2	1.5	2.6	1.7	63	75	74	228	1.3	245	.23
29	1.4	1.2	1.4	2.6	------	62	161	82	278	1.9	258	.23
30	1.6	1.2	1.4	2.6	------	64	157	156	271	1.6	237	.24
31	1.4	------	1.1	2.5	------	68	------	166	------	2.9	162	------
TOTAL	48.4	43.0	41.3	51.8	52.9	1,331.4	2,218.4	1,785.1	3,369.3	6,846.7	5,976	369.32
MEAN	1.56	1.43	1.33	1.67	1.89	42.9	73.9	57.6	112	221	193	12.3
MAX	1.9	1.7	1.6	2.8	2.6	68	161	166	278	409	291	97
MIN	1.3	1.2	1.1	1.1	1.1	2.0	5.0	1.8	1.3	1.1	46	.20
AC-FT	96	85	82	103	105	2,640	4,400	3,540	6,680	13,580	11,850	733

CAL YR 1972 TOTAL 17,905.80 MEAN 48.9 MAX 332 MIN 1.1 AC-FT 35,520
WTR YR 1973 TOTAL 22,133.62 MEAN 60.6 MAX 409 MIN .20 AC-FT 43,900

06843500 Republican River at Cambridge, Nebr.

LOCATION.--Lat 40°17'05", long 100°08'35", in NW1/4SE1/4 sec.28, T.4 N., R.25 W., Furnas County, on left bank 400 ft (122 m) south of U.S. Highways 6 and 34, 0.5 mi (0.8 km) downstream from Medicine Creek, 1 mi (2 km) east of Cambridge, and 1.3 mi (2.1 km) upstream from Cambridge diversion dam.

DRAINAGE AREA.--14,520 mi² (37,600 km²), approximately, of which about 7,810 mi² (20,200 km²) contributes directly to surface runoff.

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

GAGE.--Water-stage recorder. Datum of gage is 2,239.07 ft (682.469 m) above mean sea level. Prior to July 13, 1948, nonrecording gage at site 150 ft (46 m) upstream at same datum and July 13, 1948, to Sept. 25, 1950, at present site and datum.

AVERAGE DISCHARGE.--28 years, 347 ft³/s (9.827 m³/s), 251,400 acre-ft/yr (0.310 km³/yr).

EXTREMES.--Current year: Maximum discharge, 1,110 ft³/s (31.4 m³/s) June 5, gage height, 5.83 ft (1.777 m); maximum gage height, 7.48 ft (2.280 m) Feb. 9 (backwater from ice); minimum daily discharge , 55 ft³/s (1.56 m³/s) Dec. 6,7.

Period of record: Maximum discharge, 160,000 ft³/s (4,530 m³/s) June 22, 1947, gage height, 16.7 ft (5.09 m), from floodmarks, from rating curve extended above 12,000 ft³/s (340 m³/s) on basis of slope-area measurement of peak flow; minimum daily, 6.4 ft³/s (0.18 m³/s) Aug. 14, 1949.

Maximum stage since at least 1826, 17.6 ft (5.36 m) May 31 to June 1, 1935, from information by local resident, discharge, about 280,000 ft³/s (7,930 m³/s).

REMARKS.--Records good except those for winter period, which are poor. Natural flow affected by irrigation development above station and since 1949 by regulation from upstream reservoirs.

REVISIONS.--WSP 2119: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	106	147	163	165	220	172	366	569	427	349	133	432
2	95	158	161	150	240	169	341	653	440	362	194	235
3	93	149	166	140	260	176	324	621	490	362	206	244
4	82	144	115	130	285	195	308	613	618	367	192	184
5	82	143	70	110	300	206	292	605	829	372	180	141
6	81	138	55	85	255	203	331	598	525	367	193	110
7	89	139	55	70	200	193	381	562	484	358	269	121
8	91	139	60	60	140	193	388	461	451	372	273	136
9	97	135	60	65	110	192	386	441	412	385	267	136
10	101	132	60	75	125	239	417	440	409	415	289	135
11	99	134	65	85	200	251	444	429	399	406	309	158
12	96	140	70	100	225	240	439	429	481	380	364	292
13	104	178	70	110	210	236	430	401	333	370	346	460
14	108	177	75	120	190	248	479	397	307	380	331	363
15	106	165	75	130	170	245	488	402	275	402	280	269
16	108	172	80	135	170	233	462	400	230	445	232	222
17	103	168	85	145	200	232	434	401	228	366	237	197
18	99	168	95	160	250	229	426	393	203	339	224	182
19	103	166	110	180	350	225	471	394	191	775	219	172
20	108	168	120	200	184	223	461	398	164	470	209	161
21	113	166	130	225	183	222	445	422	118	267	246	154
22	114	164	140	225	182	225	433	450	104	403	297	149
23	118	165	155	215	182	226	422	426	93	336	295	145
24	112	160	170	210	178	262	358	384	84	243	317	145
25	114	163	185	210	172	288	415	380	115	251	301	156
26	114	157	200	210	163	280	502	465	183	534	291	163
27	115	164	210	200	160	270	519	554	227	308	281	203
28	114	161	225	190	168	276	480	430	254	210	281	306
29	121	157	250	190	------	283	613	398	332	170	286	456
30	133	158	220	200	------	282	570	413	328	169	280	616
31	135	------	180	205	------	336	------	455	------	140	241	------
TOTAL	3,254	4,675	3,875	4,695	5,672	7,250	12,825	14,384	9,734	11,073	8,063	6,843
MEAN	105	156	125	151	203	234	428	464	324	357	260	228
MAX	135	178	250	225	350	336	613	653	829	775	364	616
MIN	81	132	55	60	110	169	292	380	84	140	133	110
AC-FT	6,450	9,270	7,690	9,310	11,250	14,380	25,440	28,530	19,310	21,960	15,990	13,570

CAL YR 1972 TOTAL 67,196 MEAN 184 MAX 1,660 MIN 55 AC-FT 133,300
WTR YR 1973 TOTAL 92,343 MEAN 253 MAX 829 MIN 55 AC-FT 183,200

06844500 Republican River near Orleans, Nebr.

LOCATION.--Lat 40°07'53", long 99°30'08", in NE1/4NE1/4 sec.19, T.2 N., R.19 W., Harlan County, on right bank 18 ft (5 m) downstream from bridge on State Highway 89, 200 ft (61 m) downstream from Burlington Northern Inc. bridge, 2 mi (3 km) west of Orleans, 2.8 mi (4.5 km) upstream from Sappa Creek, and 23 mi (37 km) upstream from Harlan County Dam.

DRAINAGE AREA.--15,640 mi² (40,500 km²), approximately, of which about 8,910 mi² (23,100 km²) contributes directly to surface runoff.

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

GAGE.--Water-stage recorder. Datum of gage is 1,972.57 ft (601.239 m) above mean sea level. Prior to June 2, 1948, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--26 years, 341 ft³/s (9.657 m³/s), 247,100 acre-ft/yr (0.305 km³/yr).

EXTREMES.--Current year: Maximum discharge, 2,360 ft³/s (66.8 m³/s) July 19, gage height, 7.73 ft (2.356 m); minimum daily, 15 ft³/s (0.42 m³/s) July 11, Aug. 30.
Period of record: Maximum discharge, 40,600 ft³/s (1,150 m³/s) June 22, 1948, gage height, 11.25 ft (3.429 m), from rating curve extended above 29,000 ft³/s (821 m³/s); maximum gage height, 12.60 ft (3.840 m) Mar. 22, 1960, backwater from ice; no flow at times in 1952-57, 1963.
Maximum flood since at least 1826 occurred June 1, 1935. Flood of June 23, 1947, reached a stage of 14.00 ft (4.267 m), from floodmark (discharge not determined).

REMARKS.--Records good except those for winter period, which are poor. Natural flow affected by irrigation development above station and regulation by upstream reservoirs. Records of chemical analyses for the water year 1973 are published in Part 2 of this report.

REVISIONS.--WSP 2119: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	103	172	205	230	270	242	404	560	473	52	216	32
2	102	178	205	190	290	240	432	575	454	54	157	157
3	101	179	199	170	310	243	418	680	432	67	125	330
4	107	177	150	150	320	254	391	660	490	58	124	176
5	105	172	105	135	330	266	371	640	575	51	121	141
6	103	167	70	110	350	276	355	620	736	38	109	95
7	100	161	55	80	250	273	356	600	595	29	101	70
8	100	163	55	65	180	267	415	570	528	20	93	64
9	100	170	65	60	130	262	436	512	491	21	102	68
10	101	170	70	60	120	260	439	513	458	19	90	75
11	105	173	75	75	150	286	460	487	444	15	77	74
12	105	176	80	90	180	302	485	467	453	17	77	93
13	110	200	90	115	200	316	477	465	518	22	85	147
14	110	210	90	130	150	325	482	451	520	86	152	289
15	115	215	95	145	150	328	483	444	424	43	163	350
16	115	209	100	160	155	321	505	442	354	23	131	280
17	120	206	110	180	220	306	503	439	296	25	107	236
18	120	211	120	200	325	299	475	439	250	83	68	206
19	120	208	130	230	422	295	461	434	225	1,180	59	191
20	120	208	140	250	471	292	466	431	200	1,790	54	180
21	125	207	150	270	385	290	467	444	155	983	45	174
22	125	207	165	290	340	293	469	449	128	590	31	167
23	130	209	180	300	297	291	471	472	106	483	26	157
24	135	207	200	300	273	314	461	474	87	507	34	150
25	138	208	215	290	264	319	419	442	72	319	28	147
26	142	206	230	270	256	342	445	492	64	292	36	145
27	140	206	245	250	250	347	490	618	59	399	36	178
28	139	204	260	230	246	340	559	906	61	379	24	251
29	142	206	270	220	------	336	510	627	57	258	19	351
30	153	207	280	220	------	340	630	541	50	352	15	503
31	161	------	280	240	------	375	------	447	------	364	17	------
TOTAL	3,692	5,792	4,684	5,705	7,284	9,240	13,735	16,341	9,755	8,619	2,522	5,477
MEAN	119	193	151	184	260	298	458	527	325	278	81.4	183
MAX	161	215	280	300	471	375	630	906	736	1,790	216	503
MIN	100	161	55	60	120	240	355	431	50	15	15	32
AC-FT	7,320	11,490	9,290	11,320	14,450	18,330	27,240	32,410	19,350	17,100	5,000	10,860

CAL YR 1972 TOTAL 63,746 MEAN 174 MAX 1,350 MIN 19 AC-FT 126,400
WTR YR 1973 TOTAL 92,846 MEAN 254 MAX 1,790 MIN 15 AC-FT 184,200

06846500 Beaver Creek at Cedar Bluffs, Kans.

LOCATION.--Lat 39°59'06", long 100°33'35", in NW1/4NE1/4 sec.10, T.1 S., R.29 W., Decatur County, on right bank at downstream side of bridge on U.S. Highway 83, 0.2 mi (0.3 km) north of Cedar Bluffs, 1.0 mi (1.6 km) south of Kansas-Nebraska State line, and at mi 107.4 (172.8 km).

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

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

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

AVERAGE DISCHARGE.--28 years, 22.7 ft³/s (0.643 m³/s), 16,450 acre-ft/yr (20.3 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 540 ft³/s (15.3 m³/s) July 15, gage height, 7.95 ft (2.423 m); no flow at times.
Period of record: Maximum discharge, 7,940 ft³/s (225 m³/s) June 11, 1960, gage height, 18.71 ft (5.703 m); no flow at times in most years.
Flood in July 1944 reached a stage of 18.16 ft (5.535 m), from floodmark.

REMARKS.--Records good. Records of suspended sediment loads for the water year 1973 are published in Part 2 of WRD Kans.

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	0	0		0	0	4.8	0	0	.34	0
2		0	0	0		0	0	4.6	0	0	.01	0
3		0	0	0		0	0	4.0	2.9	0	.63	0
4		0	0	0		0	0	6.0	6.1	0	.42	0
5		0	0	0		0	0	4.8	4.8	0	0	0
6		0	0	0		0	0	2.4	2.6	0	.02	0
7		0	0	0		0	.01	1.7	.88	0	.07	0
8		0	0	0		0	0	3.8	1.0	0	4.8	0
9		0	0	0		0	0	3.6	1.8	0	.96	0
10		0	0	0		0	0	2.7	.48	0	.22	0
11		0	0	0		0	0	2.2	.06	0	.08	.51
12		0	0	0		0	0	3.6	.04	0	3.6	.90
13		0	0	0		0	0	3.0	0	.04	.27	17
14		0	0	.10		0	0	2.0	1.7	158	0	18
15		0	0	.30		0	0	.70	4.4	355	0	4.0
16		0	0	.10		0	0	7.1	1.2	34	0	.41
17		0	0	0		0	0	9.4	.16	6.8	0	7.6
18		0	.10	0		0	0	7.8	0	2.9	0	2.8
19		0	.20	0		0	0	6.4	0	53	0	.48
20		0	.10	0		0	0	5.4	0	162	0	.04
21		0	.10	0		0	0	4.2	0	122	0	0
22		0	.50	0		0	0	3.4	0	115	0	0
23		.10	3.0	0		0	0	2.8	0	142	0	0
24		.20	.12	0		.10	0	2.6	0	51	0	0
25		0	.06	0		0	0	3.4	0	19	0	0
26		0	.07	0		0	1.9	1.9	0	9.1	0	0
27		0	.03	0		.03	.11	.70	0	4.8	0	.07
28		0	.04	0		.13	4.5	.57	0	2.0	0	.51
29		0	.02	0	------	0	6.4	.51	0	2.5	0	47
30		0	0	0	------	.14	5.4	.08	0	5.1	0	46
31		------	0	0	------	.03	------	.01	------	1.3	0	------
TOTAL	0	.30	4.34	.50	0	.43	18.32	106.17	28.12	1,245.54	11.42	145.32
MEAN	0	.010	.14	.016	0	.014	.61	3.42	.94	40.2	.37	4.84
MAX	0	.20	3.0	.30	0	.14	6.4	9.4	6.1	355	4.8	47
MIN	0	0	0	0	0	0	0	.01	0	0	0	0
AC-FT	0	.6	8.6	1.0	0	.9	36	211	56	2,470	23	288

CAL YR 1972 TOTAL 2,055.57 MEAN 5.62 MAX 311 MIN 0 AC-FT 4,080
WTR YR 1973 TOTAL 1,560.46 MEAN 4.28 MAX 355 MIN 0 AC-FT 3,100

PEAK DISCHARGE (BASE, 300 CFS).--July 15 (0600) 540 cfs (7.95 ft).

06847000 Beaver Creek near Beaver City, Nebr.

LOCATION.--Lat 40°07'12", long 99°53'35", in SW1/4SW1/4 sec.23, T.2 N., R.23 W., Furnas County, on left bank 400 ft (122 m) downstream from bridge on U.S. Highway 283, 3.5 mi (5.6 km) west of Beaver City, and at mi 24.7 (39.7 km).

DRAINAGE AREA.--1,950 mi² (5,050 km²), approximately, of which about 1,650 mi² (4,270 km²) contributes directly to surface runoff.

PERIOD OF RECORD.--October 1936 to current year. Monthly discharge only for some periods, published in WSP 1310.

GAGE.--Water-stage recorder. Datum of gage is 2,162.96 ft (659.270 m) above mean sea level. Prior to Aug. 13, 1947, nonrecording gages and Aug. 13, 1947, to Nov. 14, 1957, water-stage recorder, at site 400 ft (120 m) upstream at datum 2.0 ft (0.61 m) higher. Nov. 15, 1957, to Sept. 22, 1958, at site 3.6 mi (5.8 km) upstream at different datum.

AVERAGE DISCHARGE.--37 years, 29.1 ft³/s (0.824 m³/s), 21,080 acre-ft/yr (26.0 hm³/yr); median of yearly mean discharges, 21 ft³/s (0.595 m³/s), 15,200 acre-ft/yr (18.7 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 75 ft³/s (2.12 m³/s) July 27, gage height, 3.74 ft (1.140 m); no flow Oct. 2-7, Aug. 28,29.
Period of record: Maximum discharge, 3,800 ft³/s (108 m³/s) July 19, 1944, gage height, 13.8 ft (4.21 m), from floodmark, site and datum then in use; no flow at times in 1937-40, 1946, 1953-57, 1959, 1969-73.

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

REVISIONS (WATER YEARS).--WSP 1340: 1937-38(M), 1939, 1940-41(M), 1943(M). WSP 2119: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.06	.60	.48	.90	1.2	1.1	1.3	1.0	.72	.32	6.1	.33
2	0	.57	.52	.85	1.4	1.2	1.1	1.1	.63	.32	4.6	.11
3	0	.45	.49	.75	1.6	1.1	.98	.89	.61	.38	2.9	.15
4	0	.38	.40	.65	1.4	1.1	1.1	.86	.87	.33	1.9	.06
5	0	.42	.30	.55	1.4	.99	1.1	.87	.86	.39	1.2	.04
6	0	.39	.25	.45	1.2	1.0	1.1	.87	.67	.26	1.1	.03
7	0	.37	.21	.30	1.0	.95	1.3	.87	.83	.16	.84	.16
8	.06	.36	.18	.20	.80	.88	1.4	.78	31	.15	.75	.18
9	.12	.38	.16	.20	.80	1.0	1.3	.78	12	.16	.66	.12
10	.13	.41	.14	.25	.90	1.0	1.2	.73	4.4	.12	.61	.05
11	.09	.41	.10	.30	1.0	1.1	1.2	.69	2.3	.06	.50	.05
12	.18	.51	.10	.40	1.1	.98	1.2	.66	1.4	.01	.40	.51
13	.14	1.0	.10	.50	1.1	1.2	1.2	.65	.95	.25	.51	.13
14	.12	.72	.12	.60	1.0	1.2	1.2	.76	.70	.26	.43	.08
15	.14	.50	.15	.72	.90	.96	1.1	.77	.65	.13	.30	.11
16	.19	.54	.18	.85	.95	.84	1.1	.73	.57	.09	.21	.21
17	.18	.54	.24	.95	1.1	.84	1.0	.76	.50	.06	.13	.20
18	.24	.57	.36	1.1	1.3	.86	1.1	.74	.45	1.0	.12	.23
19	.22	.54	.40	1.3	.96	.83	1.2	.66	.45	40	.11	.20
20	.30	.60	.48	1.5	.99	.83	1.0	.61	.46	23	.38	.22
21	.22	.58	.55	1.5	.98	.87	.96	.52	.50	9.5	.10	.24
22	.27	.54	.65	1.6	1.1	.90	.96	.62	.50	4.1	.04	.04
23	.30	.54	.70	1.6	1.1	.89	1.0	.66	.50	2.5	.26	.01
24	.24	.54	.80	1.7	1.1	1.2	.94	.55	.43	27	.23	.14
25	.23	.55	1.0	1.8	1.1	1.1	1.0	.62	.39	44	.28	.15
26	.29	.51	1.2	1.5	.99	.92	1.6	.59	.40	48	.18	.23
27	.30	.52	1.5	1.0	.99	.96	1.2	.94	.33	65	.08	.73
28	.33	.43	1.5	.50	1.0	.98	.99	.92	.34	35	0	.69
29	.33	.44	1.3	.65	------	.97	1.1	.91	.32	20	0	1.3
30	.47	.47	1.0	.85	------	1.0	.95	.79	.31	12	.07	.69
31	.48	------	.95	.95	------	2.1	------	.68	------	5.6	.19	------
TOTAL	5.63	15.38	16.51	26.97	30.46	31.85	33.88	23.58	65.04	340.15	25.18	7.39
MEAN	.18	.51	.53	.87	1.09	1.03	1.13	.76	2.17	11.0	.81	.25
MAX	.48	1.0	1.5	1.8	1.6	2.1	1.6	1.1	31	65	6.1	1.3
MIN	0	.36	.10	.20	.80	.83	.94	.52	.31	.01	0	.01
AC-FT	11	31	33	53	60	63	67	47	129	675	50	15

CAL YR 1972 TOTAL 902.24 MEAN 2.47 MAX 78 MIN 0 AC-FT 1,790
WTR YR 1973 TOTAL 622.02 MEAN 1.70 MAX 65 MIN 0 AC-FT 1,230

PEAK DISCHARGE (BASE, 400 CFS).--No peak above base.

06847500 Sappa Creek near Stamford, Nebr.

LOCATION.--Lat 40°07'53", long 99°33'15", in NW1/4NW1/4 sec.23, T.2 N., R.20 W., Harlan County, on left bank 40 ft (12 m) south of Burlington Northern Inc. track, 500 ft (152 m) downstream from bridge on county highway, 2 mi (3 km) east of Stamford, and 5.5 mi (8.8 km) upstream from mouth.

DRAINAGE AREA.--3,740 mi² (9,690 km²), approximately, of which about 3,280 mi² (8,500 km²) contributes directly to surface runoff.

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

GAGE.--Water-stage recorder. Datum of gage is 1,981.31 ft (603.903 m) above mean sea level.

AVERAGE DISCHARGE.--28 years, 74.2 ft³/s (2.101 m³/s), 53,760 acre-ft/yr (66.3 hm³/yr); median of yearly mean discharges, 52 ft³/s (1.473 m³/s), 37,700 acre-ft/yr (46.5 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 726 ft³/s (20.6 m³/s) July 19, gage height, 10.28 ft (3.133 m); no flow for many days.
Period of record: Maximum discharge, 43,400 ft³/s (1,230 m³/s) June 24, 1966, gage height, 22.13 ft (6.745 m), from floodmark, from contracted opening and flow-over-road measurement of peak flow; no flow at times in many years.

REMARKS.--Records fair except those for winter period, which are poor. Natural flow affected by irrigation development above station.

REVISIONS (WATER YEARS).--WSP 1919: 1960. WSP 2119: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	3.1	1.8	3.3	10	24	16	8.4	0	11	0
2		.01	2.9	1.8	4.0	12	24	17	8.1	0	6.4	.01
3		.05	2.4	1.8	5.0	15	27	18	7.1	0	13	0
4		0	1.5	1.7	6.0	20	23	17	7.8	0	13	0
5		0	.90	1.6	7.0	25	22	20	8.2	0	3.5	0
6		0	.45	1.5	8.0	25	18	17	7.9	0	1.5	0
7		0	.35	1.3	7.0	22	18	19	9.5	0	1.2	0
8		0	.35	1.0	5.5	15	18	18	8.9	0	.62	0
9		.05	.36	.90	5.5	13	17	16	7.3	0	1.0	0
10		.71	.40	.90	6.0	13	16	13	23	0	1.2	0
11		.18	.45	1.4	6.5	14	18	11	18	0	.55	0
12		.10	.45	3.5	7.0	14	19	9.8	19	0	.92	0
13		3.4	.50	6.0	6.0	18	18	8.8	19	.01	1.5	0
14		2.1	.50	7.8	5.4	17	17	8.9	15	.01	1.4	0
15		1.9	.55	9.6	5.0	12	16	8.9	9.6	.01	1.2	0
16		2.3	.55	10	5.0	10	15	9.5	7.0	.66	1.1	0
17		4.3	.60	11	5.3	10	14	10	5.8	0	.71	0
18		3.9	.60	12	5.7	9.4	14	9.4	7.9	82	.54	0
19		2.9	.60	12	6.1	8.1	14	7.8	7.2	471	.57	0
20		2.9	.60	11	6.5	6.9	13	6.8	6.4	382	.29	0
21		2.9	.63	10	7.0	6.5	12	8.8	4.8	144	.21	0
22		2.6	.63	9.7	7.5	6.7	12	9.8	1.6	185	.17	0
23		2.3	.65	9.0	8.0	7.1	12	9.0	1.6	188	.08	0
24		2.7	.66	8.5	8.6	12	12	8.4	.21	98	.05	0
25		3.7	.72	8.0	9.1	13	12	7.5	.16	52	.02	0
26		3.2	.78	7.0	8.8	12	14	7.3	.02	45	.06	0
27		2.4	.96	5.0	9.4	13	19	10	0	43	.01	.18
28		2.2	2.4	2.0	9.6	14	18	9.8	0	43	0	1.7
29		2.9	2.1	1.5	------	13	22	9.7	0	49	0	5.1
30		2.9	2.0	1.7	------	14	18	8.6	0	33	0	11
31		------	2.0	2.5	------	24	------	8.9	------	20	0	------
TOTAL	0	52.60	31.64	163.50	183.8	424.7	516	359.7	219.49	1,835.69	61.80	17.99
MEAN	0	1.75	1.02	5.27	6.56	13.7	17.2	11.6	7.32	59.2	1.99	.60
MAX	0	4.3	3.1	12	9.6	25	27	20	23	471	13	11
MIN	0	0	.35	.90	3.3	6.5	12	6.8	0	0	0	0
AC-FT	0	104	63	324	365	842	1,020	713	435	3,640	123	36

CAL YR 1972 TOTAL 3,931.21 MEAN 10.7 MAX 290 MIN 0 AC-FT 7,800
WTR YR 1973 TOTAL 3,866.91 MEAN 10.6 MAX 471 MIN 0 AC-FT 7,670

PEAK DISCHARGE (BASE, 1,000 CFS).--No peak above base.

06848500 Prairie Dog Creek near Woodruff, Kans.

LOCATION.--Lat 39°59'09", long 99°28'39", in NW1/4NW1/4 sec.9, T.1 S., R.19 W., Phillips County, on left bank at downstream side of bridge on U.S. Highway 383, 1 mi (2 km) south of Kansas-Nebraska State line, 2.5 mi (4.0 km) west of Woodruff, and at mi 26.5 (42.6 km).

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

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

GAGE.--Water-stage recorder. Datum of gage is 2,016.20 ft (614.538 m) above mean sea level. See WSP 1919 for history of changes prior to Oct. 7, 1955.

AVERAGE DISCHARGE.--33 years, 43.2 ft³/s (1.223 m³/s), 31,300 acre-ft/yr (38.6 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 488 ft³/s (13.8 m³/s) July 19, gage height, 8.88 ft (2.707 m); minimum, 0.04 ft³/s (0.001 m³/s) July 2.
Period of record: Maximum discharge, 15,000 ft³/s (425 m³/s) June 23, 1947, gage height, 21.04 ft (6.413 m), site and datum then in use, from rating curve extended above 6,500 ft³/s (184 m³/s) on basis of contracted-opening measurement of 11,300 ft³/s (320 m³/s); no flow at times in 1945, 1948, 1950, 1954-61, 1963-66, 1971-72.

REMARKS.--Records good except those for winter period, which are poor. Flow regulated to some extent since 1964 by Norton Reservoir 48.4 mi (77.9 km) upstream (see sta 06847950) and by irrigation development above station. Records of chemical analyses for the water year 1973 are published in Part 2 of WRD Kans.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.70	1.6	2.6	4.0	5.8	17	14	4.6	3.5	.05	8.2	.54
2	.60	1.6	2.6	3.8	7.0	14	36	4.7	3.3	.04	8.5	1.3
3	.60	1.8	2.0	3.5	7.0	12	33	4.7	3.3	.05	6.2	.98
4	.60	2.0	1.8	3.0	6.5	10	15	4.7	4.5	1.5	4.6	.80
5	.50	2.0	1.6	2.7	6.2	8.3	9.2	4.5	6.3	1.1	2.1	.64
6	.50	2.5	1.5	2.5	6.0	7.8	7.8	4.4	8.1	2.0	3.1	.36
7	.50	2.6	1.4	2.5	5.5	7.3	7.4	4.2	5.1	4.0	3.8	.43
8	.50	2.2	1.3	2.4	4.5	7.4	7.5	4.0	3.8	5.7	5.7	.75
9	.40	2.5	1.2	2.2	3.5	7.3	7.5	4.0	3.3	4.7	5.4	4.2
10	.40	3.3	1.1	2.4	3.5	6.6	7.5	3.9	3.0	4.6	3.9	2.6
11	.40	3.0	1.1	2.5	3.5	7.0	8.1	3.9	2.6	6.1	3.9	1.9
12	.40	3.1	1.1	2.8	3.7	6.7	9.1	3.7	10	4.0	3.9	2.3
13	.40	3.9	1.2	3.1	3.9	7.1	9.1	3.4	5.7	4.4	4.9	2.3
14	.40	3.8	1.3	3.4	4.0	8.0	8.5	3.3	4.0	6.5	3.2	2.3
15	.50	3.9	1.4	3.7	4.0	12	10	3.2	3.3	9.9	3.6	2.3
16	.50	3.8	1.5	3.9	4.0	7.7	8.5	3.2	3.1	11	2.6	2.3
17	.50	4.6	1.6	4.2	4.5	6.6	7.5	3.3	2.8	11	4.7	2.2
18	.50	4.5	1.7	4.6	5.5	7.0	7.3	3.5	2.6	4.9	3.2	2.0
19	.60	3.8	1.7	5.0	7.0	6.3	7.1	3.5	2.6	315	2.7	2.0
20	.60	3.2	1.7	5.5	9.0	5.6	6.7	3.6	2.2	231	4.0	2.8
21	.60	2.9	1.7	5.5	12	5.2	5.3	3.3	2.4	171	3.1	4.0
22	.70	2.8	1.8	5.5	18	5.3	4.5	3.4	2.2	32	3.5	5.0
23	.70	2.5	2.1	5.5	17	5.5	4.3	3.4	2.2	9.1	3.1	5.8
24	.80	2.4	2.5	5.5	17	6.4	4.1	3.4	2.5	5.8	1.9	6.4
25	.90	2.6	3.0	5.5	18	7.4	4.3	3.5	2.0	4.8	1.2	6.4
26	.90	2.6	3.5	5.5	18	7.8	5.1	3.1	.84	4.3	1.2	7.2
27	.90	2.6	4.0	5.5	17	8.9	5.3	3.1	.17	4.7	2.0	12
28	1.0	2.2	4.0	5.0	18	10	5.3	3.2	.13	6.1	2.6	16
29	1.0	2.4	4.3	4.5	------	9.2	5.9	3.4	.12	9.2	2.2	64
30	1.1	2.5	4.0	5.0	------	8.3	5.3	3.8	.07	8.7	1.1	50
31	1.2	------	4.0	5.5	------	11	------	3.9	------	6.1	.68	------
TOTAL	19.90	85.2	66.3	126.2	239.6	256.7	276.2	115.8	95.73	889.34	110.78	211.80
MEAN	.64	2.84	2.14	4.07	8.56	8.28	9.21	3.74	3.19	28.7	3.57	7.06
MAX	1.2	4.6	4.3	5.5	18	17	36	4.7	10	315	8.5	64
MIN	.40	1.6	1.1	2.2	3.5	5.2	4.1	3.1	.07	.04	.68	.36
AC-FT	39	169	132	250	475	509	548	230	190	1,760	220	420

CAL YR 1972 TOTAL 1,688.98 MEAN 4.61 MAX 112 MIN .05 AC-FT 3,350
WTR YR 1973 TOTAL 2,493.55 MEAN 6.83 MAX 315 MIN .04 AC-FT 4,950

PEAK DISCHARGE (REGULATED) ABOVE 400 CFS.--July 19 (1100) 488 cfs (8.88 ft).

06849000 Harlan County Lake near Republican City, Nebr.

LOCATION.--Lat 40°04'10", long 99°12'30", in sec.11, T.1 N., R.17 W., Harlan County, at left end of spillway on upstream side of Harlan County Dam on Republican River, 2 mi (3 km) southeast of Republican City and 8 mi (13 km) southeast of Alma.

DRAINAGE AREA.--20,750 mi² (53,700 km²), approximately, of which about 13,530 mi² (35,000 km²) contributes directly to surface runoff.

PERIOD OF RECORD.--November 1952 to current year. Prior to October 1965 published as Harlan County Reservoir near Republican City.

GAGE.--Water-stage recorder. Gage is referred to mean sea level.

EXTREMES.--Current year: Maximum contents, 354,100 acre-ft (0.437 km³) May 8, elevation, 1,946.86 ft (593.403 m); minimum, 251,900 acre-ft (0.311 km³) Oct. 6-8, elevation, 1,938.31 ft (590.797 m).
Period of record: Maximum contents, 497,700 acre-ft (0.614 km³) Apr. 6, 1960, elevation, 1,955.67 ft (596.088 m); minimum since operation of reservoir began, 110,300 acre-ft (0.136 km³) Oct. 22 to Nov. 6, 1953, elevation, 1,922.00 ft (585.826 m).

REMARKS.--Reservoir is formed by earthfill dam with gravity-type concrete spillway section; storage began Nov. 14, 1952. Capacity, 342,600 acre-ft (0.422 km³) between elevations 1,885.0 ft (574.55 m), sill of outlet gates, and 1,946.0 ft (593.14 m), top of storage pool. Top of flood-control pool at elevation 1,973.5 ft (601.52 m), capacity, 840,600 acre-ft (1.04 km³). Top of superstorage flood-control pool at elevation 1,975.5 ft (602.13 m), capacity, 887,400 acre-ft (1.09 km³). Dead storage, 929 acre-ft (1.15 hm³). Figures given herein represent total contents. Water used for irrigation in the Bostwick irrigation project.

COOPERATION.--Capacity table furnished by Corps of Engineers.

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

1,935	217,600	1,945	329,600
1,940	270,200	1,950	398,900

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	252,000	255,700	266,900	274,000	285,800	300,100	322,700	350,000	346,800	335,400	320,900	284,200
2	252,100	255,800	266,900	274,500	286,300	300,600	323,400	350,600	347,500	333,600	319,400	284,500
3	252,200	256,000	267,000	275,000	286,900	301,200	324,100	351,000	347,500	331,600	318,000	284,100
4	252,100	256,200	267,000	275,200	287,600	302,100	324,600	351,400	349,000	329,800	316,300	283,700
5	252,000	256,700	267,200	275,400	288,300	303,000	325,100	352,200	349,000	328,000	314,500	283,400
6	251,900	257,200	267,300	275,800	288,800	303,400	325,900	353,200	349,500	325,900	312,800	283,500
7	251,900	257,200	267,300	275,900	289,400	303,700	327,200	353,800	350,000	324,100	311,300	283,800
8	251,900	257,500	267,400	276,100	289,700	304,200	327,900	354,100	350,400	322,100	309,800	284,000
9	252,000	258,400	267,700	276,200	290,200	304,900	328,800	353,800	350,600	320,200	308,400	284,100
10	252,200	258,500	267,800	276,400	290,700	306,500	329,100	353,800	350,600	318,100	306,700	284,200
11	252,200	258,600	268,100	276,600	291,100	306,700	330,000	353,300	350,700	315,800	305,500	284,200
12	252,300	259,300	268,500	276,800	292,100	307,200	330,900	352,900	350,800	312,900	304,300	285,700
13	252,400	261,000	268,600	276,900	292,500	308,600	331,400	352,600	351,000	315,000	304,100	285,900
14	252,400	261,100	269,000	277,000	293,000	309,500	332,800	351,900	351,100	314,000	303,100	286,000
15	252,500	261,300	269,000	277,300	293,200	309,600	334,100	351,300	351,300	313,100	302,900	286,600
16	252,500	261,600	269,200	277,600	293,600	310,200	334,700	350,700	351,300	312,200	302,200	287,100
17	252,600	262,000	269,300	277,900	293,900	310,700	335,800	349,900	350,700	311,000	301,600	287,100
18	252,700	262,600	269,400	278,100	294,400	311,200	336,700	349,400	350,600	310,100	300,600	287,200
19	252,700	263,100	269,600	278,700	294,700	311,700	338,000	348,600	349,800	312,700	300,400	287,500
20	252,700	263,300	269,700	279,300	295,300	312,200	338,800	347,800	349,200	316,900	299,500	287,800
21	252,800	263,700	270,100	280,100	296,200	312,700	339,800	347,200	348,700	318,700	298,500	288,300
22	253,300	264,100	270,200	280,300	296,700	313,200	340,600	346,700	348,000	319,500	297,700	288,300
23	253,200	264,400	270,700	280,800	297,200	314,500	341,300	346,000	347,500	320,700	296,400	288,400
24	253,200	265,000	270,900	281,100	297,700	315,900	341,900	345,600	346,600	322,000	294,700	288,900
25	253,400	265,300	271,100	281,500	298,200	316,500	343,000	344,800	345,400	322,400	293,500	290,100
26	253,500	265,600	271,400	282,200	298,600	317,000	344,200	345,400	344,300	322,600	291,800	290,300
27	253,700	265,700	271,900	283,300	299,100	317,700	344,800	346,000	342,700	322,600	290,300	293,300
28	253,800	266,000	272,300	283,500	299,500	318,600	346,400	346,700	340,900	322,600	288,800	294,600
29	254,000	266,300	273,000	283,800	------	319,000	347,200	346,700	339,300	322,700	287,600	296,700
30	254,800	266,700	273,500	284,800	------	320,400	348,300	346,800	337,300	322,400	286,500	297,700
31	254,800	------	273,600	285,400	------	322,000	------	346,800	------	321,700	285,300	------
MAX	254,800	266,700	273,600	285,400	299,500	322,000	348,300	354,100	351,300	335,400	320,900	297,700
MIN	251,900	255,700	266,900	274,000	285,800	300,100	322,700	344,800	337,300	310,100	285,300	283,400
(†)	+2,800	+11,900	+6,900	+11,800	+14,100	+22,500	+26,300	-1,500	-9,500	-15,600	-36,400	+12,400
(‡)	1,938.58	1,939.68	1,940.31	1,941.35	1,942.55	1,944.40	1,946.43	1,946.32	1,945.60	1,944.38	1,941.34	1,942.40

CAL YR 1972 MAX 314,300 MIN 243,700 †+30,300
WTR YR 1973 MAX 354,100 MIN 251,900 †+45,700

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

06849500 Republican River below Harlan County Dam, Nebr.

LOCATION.--Lat 40°04'45", long 99°10'05", in SW1/4 sec.6, T.1 N., R.16 W., Franklin County, on left bank 1.4 mi (2.3 km) west of Naponee, 1.4 mi (2.3 km) upstream from Turkey Creek, and 2.8 mi (4.5 km) downstream from Harlan County Dam.

DRAINAGE AREA.--20,760 mi² (53,800 km²), approximately, of which about 13,550 mi² (35,100 km²) contributes directly to surface runoff.

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

GAGE.--Water-stage recorder. Datum of gage is 1,863.38 ft (567.958 m) above mean sea level (Corps of Engineers bench mark).

AVERAGE DISCHARGE.--20 years (1953-73), 316 ft³/s (8.949 m³/s), 228,900 acre-ft/yr (0.282 km³/yr), unadjusted.

EXTREMES.--Current year: Maximum discharge, 2,540 ft³/s (71.9 m³/s) July 13, gage height, 6.00 ft (1.829 m), from floodmark; minimum daily, 5.6 ft³/s (0.16 m³/s) Dec. 4,5.
Period of record: Maximum discharge, 4,320 ft³/s (122 m³/s) June 25, 1957, gage height, 8.65 ft (2.637 m); minimum daily, 1.5 ft³/s (0.042 m³/s) Apr. 28, 29, 1957.
Maximum flood since at least 1826 occurred June 1, 1935, discharge, about 260,000 ft³/s (7,360 m³/s), from slope-area measurement near Bloomington.

REMARKS.--Records fair. Flow completely regulated by Harlan County Lake (see preceding page) and partially regulated by six upstream reservoirs. Records of chemical analyses for the water year 1973 are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.6	15	6.8	7.0	12	11	27	204	320	612	369	242
2	7.4	11	6.8	7.0	12	12	17	199	322	610	425	227
3	7.6	10	6.2	6.8	10	13	15	239	320	608	475	224
4	7.9	9.8	5.6	6.6	11	13	15	336	326	604	498	200
5	6.8	9.1	5.6	6.4	10	12	15	337	318	618	510	112
6	6.2	9.1	5.8	6.4	11	12	15	341	311	639	519	28
7	6.1	7.3	6.0	6.4	9.6	11	19	338	309	639	534	25
8	6.6	6.8	6.0	6.6	9.8	11	21	482	309	638	536	26
9	7.6	7.0	6.0	6.6	10	11	17	645	311	659	511	22
10	8.9	7.3	6.2	6.6	11	12	15	653	312	683	478	19
11	8.9	6.8	6.4	6.8	12	17	13	651	315	738	383	15
12	8.9	6.4	6.4	7.2	12	15	13	653	317	798	366	35
13	9.5	9.5	6.8	7.6	12	15	14	648	317	1,000	321	15
14	9.2	8.6	6.8	8.0	11	12	13	645	315	50	227	13
15	8.2	8.4	6.8	9.0	12	11	16	641	317	10	194	13
16	8.7	7.3	6.8	10	12	12	18	640	318	280	176	14
17	11	6.9	7.0	10	13	12	17	637	316	400	156	13
18	12	6.8	7.4	9.4	11	12	15	635	318	400	155	13
19	10	6.8	7.4	9.0	11	11	16	638	318	350	154	13
20	10	6.8	8.0	9.0	10	12	16	642	316	250	150	13
21	10	6.8	8.5	8.5	10	12	16	641	316	150	188	14
22	14	6.8	9.0	8.5	11	11	17	649	261	150	255	13
23	12	7.3	9.0	8.5	11	12	15	654	250	60	307	13
24	11	7.3	9.0	9.0	12	18	13	652	313	10	327	13
25	10	7.3	8.6	10	12	17	20	554	338	10	307	14
26	10	6.8	8.6	9.4	11	14	24	318	429	10	289	22
27	10	6.8	8.0	9.0	12	13	19	316	521	100	290	66
28	11	6.8	7.5	7.5	12	14	16	313	565	220	291	156
29	10	6.8	7.5	7.0	------	15	12	312	604	250	289	84
30	12	6.8	7.2	7.8	------	17	65	317	608	329	289	50
31	11	------	7.2	8.8	------	24	------	320	------	352	273	------
TOTAL	289.1	236.2	220.9	246.4	313.4	414	544	15,250	10,530	12,227	10,242	1,727
MEAN	9.33	7.87	7.13	7.95	11.2	13.4	18.1	492	351	394	330	57.6
MAX	14	15	9.0	10	13	24	65	654	608	1,000	536	242
MIN	6.1	6.4	5.6	6.4	9.6	11	12	199	250	10	150	13
AC-FT	573	469	438	489	622	821	1,080	30,250	20,890	24,250	20,320	3,430

CAL YR 1972 TOTAL 30,995.8 MEAN 84.7 MAX 716 MIN 5.6 AC-FT 61,480
WTR YR 1973 TOTAL 52,240.0 MEAN 143 MAX 1,000 MIN 5.6 AC-FT 103,600

06851000 Center Creek at Franklin, Nebr.

LOCATION.--Lat 40°06'12", long 98°58'45", in NW1/4NE1/4 sec.35, T.2 N.,R.15 W., Franklin County, on right bank at downstream side of bridge on State Highway 136, 1 mi (2 km) northwest of Franklin and 3 mi (5 km) upstream from mouth.

DRAINAGE AREA.--74 mi² (190 km²), approximately, of which about 56 mi² (150 km²) contributes directly to surface runoff.

PERIOD OF RECORD.--April 1948 to September 1956. Annual maximums and occasional low-flow measurements, water years 1961-68. October 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,858.34 ft (566.422 m) above mean sea level (Bureau of Reclamation bench mark). Prior to Dec. 19, 1952, nonrecording gage at site 1.5 mi (2.4 km) downstream at datum 30.27 ft (9.226 m) lower and Dec. 19, 1952, to Sept. 30, 1956, at present site at datum 0.84 ft (0.256 m) higher. Sept. 7, 1961, to Sept. 30, 1968, crest-stage gage at present site and datum.

AVERAGE DISCHARGE.--13 years (1948-56, 1968-73), 6.83 ft³/s (0.193 m³/s), 4,950 acre-ft/yr (6.10 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 190 ft³/s (5.38 m³/s) Sept. 28, gage height, 3.64 ft (1.109 m); minimum daily, 3.9 ft³/s (0.11 m³/s) June 23, 27.
Period of record: Maximum discharge, 3,150 ft³/s (89.2 m³/s) Sept. 20, 1950, gage height, 6.8 ft (2.07 m), from floodmark, site and datum then in use, from rating curve extended above 420 ft³/s (11.9 m³/s) on basis of slope-area measurement of peak flow; no flow at times during 1948-50.

REMARKS.--Records good except those for winter period, which are poor. Two small diversions above station for irrigation.

REVISIONS (WATER YEARS).--WSP 2119: 1963(M), 1965(M), drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.4	6.5	6.1	6.8	7.8	6.6	8.8	7.6	6.3	4.4	5.6	5.3
2	5.4	6.6	6.1	6.8	7.8	6.7	8.8	7.5	6.3	4.5	5.1	5.6
3	5.2	6.5	6.3	6.5	7.8	7.0	8.8	7.1	6.3	4.7	5.3	6.1
4	5.2	6.5	6.5	6.0	7.4	7.2	8.8	7.1	6.8	4.5	4.2	5.3
5	5.2	6.6	6.0	5.5	7.1	7.2	8.7	6.8	6.5	4.7	4.9	6.3
6	5.5	6.3	5.5	5.5	7.4	7.2	8.6	6.7	6.2	4.4	4.5	5.8
7	5.4	6.2	5.5	5.0	7.8	7.1	8.4	7.1	6.3	4.4	4.7	5.8
8	5.5	6.5	5.3	5.2	7.5	6.7	8.8	7.0	6.2	4.7	4.5	6.9
9	5.6	6.6	5.1	6.0	7.0	6.7	8.6	6.8	6.2	5.1	4.2	6.9
10	5.7	6.6	5.1	6.0	7.4	7.0	8.6	6.8	6.2	5.1	4.5	6.3
11	5.7	6.7	5.2	6.0	7.5	7.0	8.4	6.5	6.0	5.1	4.7	6.3
12	5.8	6.8	5.4	6.2	7.4	6.7	8.4	6.5	5.8	4.7	4.9	20
13	6.1	7.2	5.4	6.5	7.4	6.8	8.0	6.6	5.7	21	6.3	10
14	6.1	7.4	5.6	6.7	7.0	6.7	8.0	6.5	5.7	21	4.7	6.3
15	6.1	7.0	5.6	7.0	6.5	6.8	8.1	6.5	5.5	5.4	5.3	6.3
16	6.2	6.7	5.8	7.0	6.8	7.2	8.4	6.1	5.2	5.4	5.3	6.6
17	6.2	6.6	6.1	7.0	8.2	7.2	8.2	6.1	5.2	5.1	4.9	6.9
18	6.5	6.3	6.4	7.0	7.8	7.2	8.2	6.0	5.0	5.4	5.1	6.3
19	6.1	5.8	6.7	7.0	8.0	7.1	8.1	6.1	5.0	6.1	4.9	6.1
20	6.3	6.1	6.3	7.5	7.2	6.6	8.1	6.1	4.9	5.8	4.7	6.1
21	6.6	6.1	6.6	7.5	7.0	7.0	8.0	6.2	5.0	5.8	4.5	5.6
22	6.7	6.0	6.7	7.3	7.1	7.5	8.0	6.3	4.5	5.8	4.5	5.4
23	6.8	6.1	6.7	7.1	7.4	8.0	7.6	6.3	3.9	5.6	4.5	5.6
24	6.8	6.2	7.2	7.1	7.2	8.4	7.5	6.5	4.1	6.1	5.3	14
25	6.7	6.1	6.7	6.8	6.7	8.1	7.5	6.3	4.1	6.3	4.7	14
26	6.5	6.2	6.7	7.0	6.6	8.6	7.8	6.6	4.2	6.6	4.4	18
27	6.2	6.2	6.7	7.8	7.1	8.7	7.5	6.6	3.9	6.1	4.2	37
28	6.2	6.2	6.8	7.5	6.7	8.7	7.2	6.6	4.5	5.4	4.9	148
29	6.1	6.3	6.8	7.5	------	8.8	7.2	6.3	4.5	6.1	4.7	54
30	6.3	6.3	7.0	8.4	------	9.3	7.4	6.3	4.7	5.8	5.1	18
31	6.2	------	7.0	8.0	------	9.4	------	6.3	------	6.1	4.5	------
TOTAL	186.3	193.2	190.9	209.2	204.6	231.2	244.5	203.8	160.7	197.2	149.6	460.8
MEAN	6.01	6.44	6.16	6.75	7.31	7.46	8.15	6.57	5.36	6.36	4.83	15.4
MAX	6.8	7.4	7.2	8.4	8.2	9.4	8.8	7.6	6.8	21	6.3	148
MIN	5.2	5.8	5.1	5.0	6.5	6.6	7.2	6.0	3.9	4.4	4.2	5.3
AC-FT	370	383	379	415	406	459	485	404	319	391	297	914

CAL YR 1972 TOTAL 2,198.8 MEAN 6.01 MAX 11 MIN 4.4 AC-FT 4,360
WTR YR 1973 TOTAL 2,632.0 MEAN 7.21 MAX 148 MIN 3.9 AC-FT 5,220

PEAK DISCHARGE (BASE, 35 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
7-13	2000	3.61	182	9-12	0600	3.34	118
7-14	0330	3.06	68	9-28	1000	3.64	190

06851500 Thompson Creek at Riverton, Nebr.

LOCATION.--Lat 40°05'21", long 98°45'38", in NW1/4NW1/4 sec.2, T.1 N., R.13 W., Franklin County, on left bank 8 ft (2 m) downstream from bridge on State Highway 136 at west edge of Riverton, 240 ft (73 m) upstream from Burlington Northern Inc. bridge, and 0.5 mi (0.8 km) upstream from mouth.

DRAINAGE AREA.--279 mi² (723 km²), of which about 190 mi² (492 km²) contributes directly to surface runoff.

PERIOD OF RECORD.--April 1948 to September 1956. Annual maximums, water years 1962-68 and occasional low-flow measurements, water years 1961-68. October 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,753.38 ft (534.430 m) above mean sea level. Apr. 1 to Oct. 1, 1948, nonrecording gage 240 ft (73 m) downstream at datum 2.32 ft (0.707 m) higher. Oct. 1, 1948, to July 11, 1950, water-stage recorder at present site at datum 1.32 ft (0.402 m) higher and July 12, 1950, to Sept. 30, 1956, at present site and datum. Sept. 7, 1961, to Sept. 30, 1968, crest-stage gage at present site and datum.

AVERAGE DISCHARGE.--13 years (1948-56, 1968-73), 29.9 ft³/s (0.847 m³/s), 21,660 acre-ft/yr (26.7 hm³/yr); median of yearly mean discharges, 26 ft³/s (0.736 m³/s), 18,800 acre-ft/yr (23.2 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,200 ft³/s (34.0 m³/s) Sept. 28, gage height, 6.21 ft (1.893 m); minimum daily, 15 ft³/s (0.42 m³/s) July 12.
Period of record: Maximum discharge, 12,200 ft³/s (346 m³/s) July 9, 1950, gage height, 13.22 ft (4.029 m), present datum, by slope-area measurement; minimum daily, 8.1 ft³/s (0.23 m³/s) Dec. 19, 1951.

REMARKS.--Records fair. Natural flow affected by irrigation development above station.

REVISIONS.--WRD Nebr. 1972: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	23	22	22	24	23	37	30	21	20	18	17
2	19	22	22	23	23	23	33	28	23	20	20	17
3	19	21	21	23	24	24	26	27	23	19	18	20
4	19	21	20	20	24	26	25	26	27	18	19	18
5	20	21	19	19	24	26	24	25	25	18	19	24
6	20	21	18	18	24	26	24	25	23	18	19	38
7	20	22	18	20	24	25	23	24	23	17	19	23
8	20	22	19	24	24	25	24	24	23	18	21	21
9	21	22	19	28	24	24	23	23	22	17	19	20
10	21	22	19	27	23	26	22	23	22	17	18	19
11	20	22	20	26	23	33	23	23	21	16	24	19
12	21	23	22	24	23	27	22	23	22	15	38	35
13	21	25	22	23	23	29	22	22	22	26	45	23
14	21	26	22	24	23	29	23	22	22	94	29	21
15	20	25	23	23	21	27	27	22	21	72	21	21
16	21	23	23	23	20	26	25	22	20	39	20	21
17	21	23	22	23	21	26	24	22	20	18	19	21
18	21	23	22	24	21	26	24	22	20	24	20	20
19	21	23	23	25	21	25	25	21	19	36	25	20
20	21	23	23	26	21	25	24	21	19	40	23	20
21	21	23	24	26	21	24	24	21	19	34	16	20
22	21	22	25	25	21	25	24	22	19	32	16	19
23	21	22	26	24	22	29	24	21	19	32	17	19
24	21	21	25	22	22	38	25	21	19	29	18	20
25	21	21	23	21	21	36	25	22	19	30	17	27
26	21	21	22	21	22	30	27	24	19	27	16	25
27	21	21	22	21	22	28	26	23	19	27	16	38
28	21	21	23	20	23	27	26	22	20	22	17	514
29	20	21	23	21	------	25	27	22	25	16	17	152
30	22	21	21	22	------	28	26	21	29	16	17	54
31	22	------	21	22	------	49	------	21	------	17	18	------
TOTAL	638	667	674	710	629	860	754	715	645	844	639	1,326
MEAN	20.6	22.2	21.7	22.9	22.5	27.7	25.1	23.1	21.5	27.2	20.6	44.2
MAX	22	26	26	28	24	49	37	30	29	94	45	514
MIN	19	21	18	18	20	23	22	21	19	15	16	17
AC-FT	1,270	1,320	1,340	1,410	1,250	1,710	1,500	1,420	1,280	1,670	1,270	2,630

CAL YR 1972 TOTAL 7,943 MEAN 21.7 MAX 54 MIN 17 AC-FT 15,750
WTR YR 1973 TOTAL 9,101 MEAN 24.9 MAX 514 MIN 15 AC-FT 18,050

PEAK DISCHARGE (BASE, 280 CFS).--Sept. 28 (1645) 1,200 cfs (6.21 ft).

06852500 Courtland Canal at Nebraska-Kansas State line

LOCATION.--Lat 40°00'15", long 98°07'55", in SW1/4SE1/4 sec.32, T.1 N., R.7 W., Nuckolls County, Nebr., on left bank 0.2 mi (0.3 km) upstream from Nebraska-Kansas State line and 3.5 mi (5.6 km) southwest of Superior, Nebr.

PERIOD OF RECORD.--October 1954 to current year.

GAGE.--Water-stage recorder and concrete Parshall flume. Datum of gage is 1,612.46 ft (491.478 m) above mean sea level.

AVERAGE DISCHARGE.--19 years, 71.7 ft³/s (2.031 m³/s), 51,950 acre-ft/yr (64.1 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 781 ft³/s (22.1 m³/s) Sept. 2, gage height, 5.05 ft (1.539 m); no flow for many days.
Period of record: Maximum discharge, 781 ft³/s (22.1 m³/s) Sept. 2, 1973, gage height, 5.05 ft (1.539 m); no flow for many days in each year.

REMARKS.--Records good. Canal diverts from Republican River at Courtland diversion dam in sec.7, T.1 N., R.9 W. Water is used for irrigation in Nebraska and Kansas; figures published herein represent that portion which flows into Kansas.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1								0	34	364	229	161
2								0	35	368	222	178
3								0	49	368	217	188
4								0	38	364	249	45
5								95	35	364	280	27
6								120	41	358	303	22
7								108	69	372	317	20
8								39	69	380	352	18
9								33	52	376	374	16
10								40	37	370	378	14
11								39	40	396	346	11
12								38	40	412	319	9.2
13								37	40	466	321	7.8
14								38	40	526	319	31
15								38	40	554	265	16
16								36	40	462	171	6.3
17								37	40	294	121	5.5
18								36	69	286	118	5.1
19								36	88	334	119	4.8
20								34	88	340	119	4.0
21								35	109	334	119	3.4
22								30	125	326	102	2.6
23								22	125	292	110	1.7
24								18	124	206	152	1.9
25								36	136	167	204	2.6
26								40	164	115	206	4.4
27								40	188	85	193	9.2
28								37	233	85	179	25
29					------			37	280	84	195	18
30					------			34	336	145	200	12
31		------			------		------	35	------	201	204	------
TOTAL	0	0	0	0	0	0	0	1,168	2,804	9,794	7,003	870.5
MEAN	0	0	0	0	0	0	0	37.7	93.5	316	226	29.0
MAX	0	0	0	0	0	0	0	120	336	554	378	188
MIN	0	0	0	0	0	0	0	0	34	84	102	1.7
AC-FT	0	0	0	0	0	0	0	2,320	5,560	19,430	13,890	1,730

CAL YR 1972 TOTAL 23,492.10 MEAN 64.2 MAX 540 MIN 0 AC-FT 46,600
WTR YR 1973 TOTAL 21,639.50 MEAN 59.3 MAX 554 MIN 0 AC-FT 42,920

06853000 Republican River near Guide Rock, Nebr.

LOCATION.--Lat 40°04'05", long 98°22'25", in SW1/4NE1/4 sec.7, T.1 N., R.9 W., Webster County, on left bank 300 ft (91 m) upstream from Willow Creek, 0.2 mi (0.3 km) downstream from Courtland diversion dam, and 2 mi (3 km) southwest of Guide Rock.

DRAINAGE AREA.--22,040 mi² (57,100 km²), approximately, of which about 14,550 mi² (37,700 km²) contributes directly to surface runoff.

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

GAGE.--Water-stage recorder. Datum of gage is 1,624.13 ft (495.035 m) above mean sea level. Prior to Oct. 1, 1959, at datum 5.00 ft (1.524 m) higher.

AVERAGE DISCHARGE.--23 years, 403 ft³/s (11.41 m³/s), 292,000 acre-ft/yr (0.360 km³/yr), unadjusted.

EXTREMES.--Current year: Maximum discharge, 5,260 ft³/s (149 m³/s) Sept. 28, gage height, 14.78 ft (4.505 m); minimum daily, 27 ft³/s (0.76 m³/s) July 8.
Period of record: Maximum discharge, 29,200 ft³/s (827 m³/s) June 16, 1957, gage height, 20.73 ft (6.319 m), present datum; minimum daily, 0.1 ft³/s (0.003 m³/s) May 26, 1964.
Maximum flood since at least 1826 occurred June 1 or 2, 1935, discharge, about 250,000 ft³/s (7,080 m³/s), from slope-area measurements near Bloomington and Hardy.

REMARKS.--Records fair except those for winter period, which are poor. Natural flow affected by irrigation development above station, by regulation of upstream reservoirs, and since Nov. 14, 1952, by storage in Harlan County Lake. (See sta 06849000.) Records of chemical analyses for the water year 1973 are published in Part 2 of this report.

REVISIONS.--WSP 2119: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	87	127	140	145	168	158	487	206	380	54	54	150
2	85	135	140	140	159	160	351	265	386	40	59	264
3	81	131	120	125	161	156	272	232	536	38	59	1,430
4	80	117	90	100	156	166	241	151	454	30	72	554
5	79	115	75	70	158	175	231	200	459	36	58	372
6	83	114	60	55	149	183	225	264	392	37	65	282
7	82	108	60	55	145	176	210	411	360	32	61	220
8	85	106	62	60	118	167	208	438	349	27	103	172
9	88	109	62	64	120	159	186	409	360	39	116	156
10	92	124	64	66	125	158	204	617	358	55	143	142
11	95	116	64	70	140	183	230	639	349	61	156	128
12	92	110	64	78	165	195	206	637	347	43	116	386
13	92	134	66	90	156	190	195	635	347	128	170	536
14	95	150	66	110	130	195	212	634	345	521	224	275
15	96	141	66	130	120	175	253	638	337	811	146	188
16	98	135	70	180	100	157	298	671	322	108	172	161
17	97	133	75	200	131	150	259	658	307	47	163	155
18	98	130	80	180	155	142	232	643	254	176	124	149
19	98	132	100	170	172	146	224	629	213	191	107	147
20	102	134	110	170	155	148	212	610	213	289	111	146
21	103	138	130	165	146	150	204	643	184	233	79	149
22	107	136	150	165	143	155	202	684	168	104	56	150
23	114	129	150	160	143	170	198	644	155	92	64	177
24	112	128	140	170	138	244	198	625	80	163	78	161
25	108	130	140	186	139	321	183	612	60	125	88	161
26	110	128	140	192	139	302	206	620	47	133	102	1,460
27	108	128	140	189	148	253	177	462	50	94	69	1,870
28	106	125	158	138	156	239	194	433	78	59	62	4,640
29	104	127	166	135	------	232	197	407	73	74	55	2,770
30	109	133	155	140	------	225	185	404	79	126	52	841
31	115	------	150	159	------	337	------	383	------	72	72	------
TOTAL	3,001	3,803	3,253	4,057	4,035	5,967	6,880	15,504	8,042	4,038	3,056	18,392
MEAN	96.8	127	105	131	144	192	229	500	268	130	98.6	613
MAX	115	150	166	200	172	337	487	684	536	811	224	4,640
MIN	79	106	60	55	100	142	177	151	47	27	52	128
AC-FT	5,950	7,540	6,450	8,050	8,000	11,840	13,650	30,750	15,950	8,010	6,060	36,480

CAL YR 1972 TOTAL 37,250.7 MEAN 102 MAX 1,740 MIN 1.8 AC-FT 73,890
WTR YR 1973 TOTAL 80,028.0 MEAN 219 MAX 4,640 MIN 27 AC-FT 158,700

06853500 Republican River near Hardy, Nebr.

LOCATION.--Lat 40°00'01", long 97°54'55", in NE1/4NE1/4 sec.6, T.1 S., R.5 W., in Kansas, Republic County, at downstream side of highway bridge, 1.2 mi (1.9 km) southwest of Hardy and at mi 141.2 (227.2 km).

DRAINAGE AREA.--22,401 mi² (58,019 km²), of which about 7,500 mi² (19,425 km²) does not contribute directly to surface runoff.

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

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

AVERAGE DISCHARGE.--42 years (1913-14, 1932-73), 638 ft³/s (18.07 m³/s), 462,200 acre-ft/yr (0.570 km³/yr).

EXTREMES.--Current year: Maximum discharge, 8,740 ft³/s (248 m³/s) Sept. 4, gage height, 12.57 ft (3.831 m); minimum, 68 ft³/s (1.93 m³/s) July 8.
Period of record: Maximum discharge, about 225,000 ft³/s (6,370 m³/s) June 2, 1935, gage height, 19.4 ft (5.91 m), based on records for stations upstream; no flow Aug. 9-19, 1934.
Maximum stages since at least 1895, that of June 2, 1935, and 17.00 ft (5.182 m) June 24, 1947, discharge, 100,000 ft³/s (2,830 m³/s), based on records for upstream stations.

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

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	113	160	171	190	237	162	1,100	283	436	130	152	134
2	113	163	173	180	243	165	746	300	435	119	127	190
3	111	163	171	160	231	168	521	336	1,530	115	125	5,240
4	106	157	156	150	234	183	420	354	910	99	134	6,160
5	101	151	135	135	237	198	364	265	687	92	143	1,400
6	97	148	120	120	231	213	334	283	590	78	156	893
7	99	145	120	115	213	210	318	725	493	75	142	677
8	101	144	110	110	198	201	317	1,030	421	71	139	564
9	102	161	110	100	186	192	309	647	389	74	265	515
10	107	222	110	105	178	192	289	536	382	79	321	421
11	106	192	110	110	195	222	298	673	382	89	255	351
12	106	170	110	120	222	246	314	692	373	108	247	433
13	108	228	110	130	228	264	292	687	370	96	221	2,030
14	109	256	110	160	201	309	294	690	374	529	233	1,020
15	109	226	110	200	172	318	391	695	368	774	320	562
16	109	211	110	300	170	276	1,170	712	357	715	292	418
17	107	196	120	400	170	252	555	735	342	253	252	364
18	107	194	125	450	180	237	402	741	330	172	239	328
19	106	194	135	420	215	228	354	731	299	360	209	308
20	110	191	155	400	234	216	324	717	256	850	182	292
21	113	185	175	380	198	210	294	698	248	538	164	277
22	115	183	195	350	183	209	285	724	231	337	143	260
23	119	178	210	310	175	228	279	751	214	218	114	270
24	119	177	220	300	170	414	279	731	203	170	106	329
25	119	180	230	288	165	1,080	275	731	162	214	123	384
26	121	181	240	282	160	909	274	740	129	211	141	2,080
27	121	183	240	279	158	555	292	768	119	178	134	2,980
28	120	179	246	249	155	440	276	614	100	164	126	5,690
29	119	175	240	213	------	387	275	517	113	138	116	6,290
30	126	172	225	210	------	356	280	481	133	129	115	2,790
31	141	------	205	228	------	431	------	449	------	173	117	------
TOTAL	3,460	5,465	4,997	7,144	5,539	9,671	11,921	19,036	11,376	7,348	5,553	43,650
MEAN	112	182	161	230	198	312	397	614	379	237	179	1,455
MAX	141	256	246	450	243	1,080	1,170	1,030	1,530	850	321	6,290
MIN	97	144	110	100	155	162	274	265	100	71	106	134
AC-FT	6,860	10,840	9,910	14,170	10,990	19,180	23,650	37,760	22,560	14,570	11,010	86,580

CAL YR 1972 TOTAL 54,822 MEAN 150 MAX 1,310 MIN 45 AC-FT 108,700
WTR YR 1973 TOTAL 135,160 MEAN 370 MAX 6,290 MIN 71 AC-FT 268,100

PEAK DISCHARGE (REGULATED) ABOVE 2,500 CFS

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
6-03	1300	7.59	2,530	9-13	1000	7.58	2,520
9- 4	0500	12.57	8,740	9-29	0100	11.42	6,890

KANSAS RIVER BASIN

06879900 Big Blue River at Surprise, Nebr.

LOCATION.--Lat 41°06'05", long 97°18'35", in NW1/4NW1/4 sec.15, T.13 N., R.1 E., Butler County, on left bank 50 ft (15 m) downstream from bridge on county road at south edge of Surprise.

DRAINAGE AREA.--345 mi² (894 km²).

PERIOD OF RECORD.--April 1964 to current year. Prior to October 1965, published as North Branch Big Blue River at Surprise.

GAGE.--Water-stage recorder and concrete broad-crested weir control. Altitude of gage is 1,520 ft (463 m), from topographic map.

AVERAGE DISCHARGE.--9 years, 31.9 ft³/s (0.903 m³/s), 23,110 acre-ft/yr (28.5 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,700 ft³/s (48.1 m³/s) May 28, gage height, 8.12 ft (2.475 m); no flow Dec. 29.
Period of record: Maximum discharge, 10,700 ft³/s (303 m³/s) July 19, 1965, gage height, 11.52 ft (3.511 m); no flow for many days in most years.

REMARKS.--Records good above 5 ft³/s (0.14 m³/s) and poor below.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.44	.73	.32	15	38	24	76	22	34	.58	.73	1.6
2	.32	.32	.44	14	34	17	105	44	25	1.4	.58	.44
3	.44	.32	.44	13	26	15	69	25	20	1.6	1.2	8.9
4	.58	.32	.32	10	25	15	70	18	15	29	1.2	5.7
5	.89	.22	.32	8.5	47	12	44	9.7	12	126	.73	3.9
6	2.4	.22	.32	7.8	37	11	27	7.1	10	56	.73	4.6
7	3.0	.58	.22	7.1	31	10	20	8.5	7.5	30	.73	5.9
8	1.8	.73	.22	6.8	26	8.5	19	6.5	6.2	9.3	1.2	3.4
9	.73	.89	.22	6.8	15	8.2	13	4.9	5.4	3.2	2.4	2.4
10	.32	1.2	.22	7.1	9.3	6.8	7.1	4.6	3.9	2.0	1.6	2.2
11	.15	1.4	.06	7.4	6.8	7.8	8.5	3.9	3.4	1.1	1.2	1.2
12	.10	.73	.10	6.2	6.2	7.1	7.8	3.0	3.2	.73	1.2	1.4
13	.31	2.6	.10	5.9	4.9	12	6.8	2.6	3.0	1.1	1.1	1.2
14	.32	3.7	.10	6.5	3.9	46	5.9	2.8	2.8	2.6	.89	.73
15	.22	2.2	.10	17	3.2	90	6.5	2.6	2.2	3.9	1.6	.44
16	.32	3.7	.15	47	3.2	42	7.1	1.6	1.8	3.9	1.6	.73
17	.44	4.4	.15	180	3.0	23	4.6	1.4	1.6	4.4	1.2	1.2
18	.44	3.0	.22	494	3.0	18	3.4	1.2	1.6	4.6	.73	1.1
19	.44	2.2	.22	328	3.0	18	3.7	1.1	1.2	3.4	.32	.89
20	.15	1.2	.22	195	10	8.5	3.0	1.1	1.2	23	.22	.73
21	.15	.73	.32	243	23	4.9	2.2	1.1	1.1	17	.15	.73
22	.10	.58	.32	237	40	3.2	2.0	.58	1.1	5.7	.22	.58
23	.15	.58	.73	119	58	3.0	1.8	.58	.73	3.0	.73	.58
24	.06	.44	.58	86	59	17	2.0	.73	.89	2.6	.58	.58
25	.06	.58	.44	163	45	55	2.2	.73	.73	2.4	.44	.44
26	.15	.44	.44	227	28	153	2.0	13	.89	2.0	.44	5.9
27	.22	.44	.32	388	19	122	1.8	570	.89	1.6	.58	3.9
28	.22	.44	.32	159	20	74	1.8	1,400	.58	1.8	.44	41
29	.32	.32	0	69	------	52	2.0	376	.44	4.6	1.1	58
30	.58	.44	8.5	58	------	32	2.2	77	.44	5.2	1.2	54
31	1.1	------	17	48	------	49	------	52	------	1.4	1.2	------
TOTAL	16.92	35.65	33.43	3,180.1	627.5	965.0	527.4	2,663.32	168.79	355.11	28.24	214.37
MEAN	.55	1.19	1.08	103	22.4	31.1	17.6	85.9	5.63	11.5	.91	7.15
MAX	3.0	4.4	17	494	59	153	105	1,400	34	126	2.4	58
MIN	.06	.22	0	5.9	3.0	3.0	1.8	.58	.44	.58	.15	.44
AC-FT	34	71	66	6,310	1,240	1,910	1,050	5,280	335	704	56	425

CAL YR 1972 TOTAL 7,986.75 MEAN 21.8 MAX 2,180 MIN 0 AC-FT 15,840
WTR YR 1973 TOTAL 8,815.83 MEAN 24.2 MAX 1,400 MIN 0 AC-FT 17,490

PEAK DISCHARGE (BASE, 250 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
1-18	Unknown	4.59	587	5-28	0230	8.12	1,700
1-27	0415	4.13	449				

06880000 Lincoln Creek near Seward, Nebr.

LOCATION.--Lat 40°54'57", long 97°08'43", in NW1/4NE1/4 sec.24, T.11 N., R.2 E., Seward County, on left bank 20 ft (6 m) downstream from county road bridge, 2 mi (3 km) west of Seward, and 2.5 mi (4.0 km) upstream from mouth.

DRAINAGE AREA.--446 mi² (1,155 km²).

PERIOD OF RECORD.--October 1953 to September 1973 (discontinued). Monthly discharge only for some periods, published in WSP 1730.

GAGE.--Water-stage recorder. Datum of gage is 1,429.27 ft (435.641 m) above mean sea level.

AVERAGE DISCHARGE.--20 years, 45.9 ft³/s (1.300 m³/s), 33,250 acre-ft/yr (41.0 hm³/yr);

EXTREMES.--Current year: Maximum discharge, about 600 ft³/s (17.0 m³/s) Jan. 18, gage height, 13.30 ft (4.054 m), backwater from ice; minimum daily, 4.1 ft³/s (0.12 m³/s) Oct. 18.
Period of record: Maximum discharge, 10,100 ft³/s (286 m³/s) June 17, 1957, gage height, 20.53 ft (6.258 m); minimum daily, 1.3 ft³/s (0.037 m³/s) July 31, 1955.

REMARKS.--Records good except those for winter period, which are poor. Small diversions for irrigation above station.

REVISIONS.--WSP 2119: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.3	8.9	7.6	41	78	29	334	21	86	9.7	12	10
2	8.5	8.1	7.2	37	58	31	223	22	58	11	12	13
3	8.0	7.6	6.8	30	45	31	169	20	45	11	11	185
4	7.7	6.8	6.4	26	56	30	115	19	42	11	10	163
5	7.3	6.3	6.0	22	100	30	81	19	32	16	9.6	99
6	6.5	6.8	5.8	19	140	28	67	20	28	20	9.2	47
7	6.7	7.0	5.6	17	98	25	53	65	26	13	9.0	31
8	6.5	6.8	5.6	15	70	24	43	81	26	13	9.6	26
9	6.4	7.0	5.8	14	50	23	37	31	30	11	11	26
10	6.2	8.6	6.2	13	40	23	32	24	25	10	12	26
11	6.5	7.7	6.4	12	32	43	30	22	21	9.9	12	23
12	6.5	7.1	6.4	12	27	35	28	20	19	9.7	13	20
13	6.2	9.9	6.2	13	22	34	26	20	18	10	13	20
14	6.1	14	6.0	14	19	54	25	20	18	13	14	17
15	6.2	11	5.6	16	17	89	25	19	17	13	15	14
16	6.4	8.2	5.4	78	16	68	35	18	17	14	15	13
17	6.2	7.9	5.4	350	16	55	27	17	16	15	14	12
18	4.1	7.7	5.8	560	18	41	23	17	15	15	14	11
19	4.3	7.8	6.4	500	22	32	23	17	15	13	13	10
20	6.2	11	7.4	320	31	27	24	16	14	20	13	10
21	7.4	12	8.4	360	54	26	22	15	14	36	13	9.7
22	7.2	11	9.0	330	74	24	20	15	14	27	12	9.2
23	7.8	10	9.0	240	104	24	20	15	14	25	12	8.6
24	6.8	9.6	8.4	160	110	86	20	14	13	21	12	8.9
25	6.3	9.3	8.0	150	84	169	19	14	13	19	11	9.5
26	7.0	8.8	7.8	230	50	185	19	16	12	16	12	130
27	6.5	9.0	8.0	420	40	165	19	37	12	18	12	72
28	6.2	9.7	9.0	430	28	131	18	52	12	18	9.1	110
29	6.0	9.3	12	190	------	92	18	280	11	15	8.8	155
30	6.9	9.2	48	130	------	67	18	392	11	13	7.4	133
31	9.1	------	56	100	------	194	------	212	------	12	7.3	------
TOTAL	209.0	264.1	307.6	4,849	1,499	1,915	1,613	1,570	694	478.3	358.0	1,421.9
MEAN	6.74	8.80	9.92	156	53.5	61.8	53.8	50.6	23.1	15.4	11.5	47.4
MAX	9.3	14	56	560	140	194	334	392	86	36	15	185
MIN	4.1	6.3	5.4	12	16	23	18	14	11	9.7	7.3	8.6
AC-FT	415	524	610	9,620	2,970	3,800	3,200	3,110	1,380	949	710	2,820

CAL YR 1972 TOTAL 6,206.3 MEAN 17.0 MAX 407 MIN 3.0 AC-FT 12,310
WTR YR 1973 TOTAL 15,178.9 MEAN 41.6 MAX 560 MIN 4.1 AC-FT 30,110

PEAK DISCHARGE (BASE, 350 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
1-18	-	-	a600	4- 1	0300	10.48	408
1-21	-	-	a380	5-30	0400	10.59	419
1-27	-	-	a500				

a About

06880500 Big Blue River at Seward, Nebr.

LOCATION.--Lat 40°54'05", long 97°05'55", in NW1/4NW1/4 sec.28, T.11 N., R.3 E., Seward County, at downstream end of left abutment of bridge on State Highway 15 at south edge of Seward, 0.5 mi (0.8 km) upstream from Plum Creek and 1.4 mi (2.3 km) downstream from Lincoln Creek.

DRAINAGE AREA.--1,101 mi² (2,852 km²).

PERIOD OF RECORD.--October 1953 to current year. Monthly discharge only for some periods, published in WSP 1730.

GAGE.--Water-stage recorder. Datum of gage is 1,415.16 ft (431.341 m) above mean sea level. Prior to Dec. 19, 1969, at site 1.2 mi (1.9 km) upstream at datum 6.33 ft (1.929 m) higher.

AVERAGE DISCHARGE.--20 years, 113 ft³/s (3.200 m³/s), 81,870 acre-ft/yr (0.101 km³/yr).

EXTREMES.--Current year: Maximum discharge, 2,410 ft³/s (68.3 m³/s) May 30, gage height, 17.19 ft (5.240 m); minimum daily, 8.8 ft³/s (0.25 m³/s) Oct. 19.
Period of record: Maximum discharge, 15,300 ft³/s (433 m³/s) June 18, 1957; maximum gage height, 22.83 ft (6.959 m) June 16, 1967, site and datum then in use; no flow July 30, 31, 1955, result of irrigation pumping.

REMARKS.--Records fair except those for winter period, which are poor. Natural flow of stream affected by ground-water withdrawals and diversions for irrigation and return flow from irrigated areas.

REVISIONS.--WSP 1919: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	23	28	130	210	170	1,160	57	370	131	31	22
2	17	21	26	100	160	254	680	63	225	97	32	23
3	16	20	22	84	130	287	505	82	168	186	30	194
4	16	19	18	70	110	219	344	107	177	169	23	317
5	15	18	14	56	150	172	218	93	146	459	19	147
6	14	19	13	48	220	158	177	71	113	964	16	89
7	14	19	12	41	200	158	132	199	104	540	18	66
8	13	18	12	37	170	156	103	389	93	278	18	58
9	13	21	12	32	140	141	87	204	84	149	18	49
10	13	24	13	28	110	117	76	174	74	86	19	49
11	12	24	13	24	90	166	72	124	62	56	20	46
12	12	22	13	20	78	145	62	94	56	38	23	55
13	12	57	12	20	70	157	60	74	49	63	28	51
14	9.9	52	12	22	62	219	58	64	46	72	27	41
15	9.6	40	11	25	50	257	56	56	45	41	31	36
16	9.8	36	11	80	47	274	76	50	44	30	26	34
17	9.8	40	12	500	42	236	79	49	43	29	24	33
18	9.2	45	12	1,060	38	161	78	46	40	27	29	32
19	8.8	39	13	1,120	34	115	65	42	40	22	31	30
20	9.6	43	13	1,060	50	95	66	40	37	52	27	29
21	11	43	14	1,200	110	89	67	38	34	121	23	28
22	12	39	14	1,000	180	76	65	36	33	176	20	25
23	12	36	14	600	296	83	54	34	31	139	21	23
24	12	36	13	450	545	320	48	33	29	101	21	20
25	11	34	13	330	646	574	43	32	26	84	21	20
26	12	33	14	400	574	560	45	48	24	85	20	407
27	12	35	15	600	304	390	44	201	22	85	19	295
28	12	36	16	700	177	300	48	635	21	64	17	406
29	13	40	50	600	------	250	47	1,360	20	48	17	859
30	18	32	100	400	------	210	45	2,230	16	39	16	459
31	21	------	120	290	------	637	------	1,130	------	33	16	------
TOTAL	399.7	964	675	11,127	4,993	7,146	4,660	7,855	2,272	4,464	701	3,943
MEAN	12.9	32.1	21.8	359	178	231	155	253	75.7	144	22.6	131
MAX	21	57	120	1,200	646	637	1,160	2,230	370	964	32	859
MIN	8.8	18	11	20	34	76	43	32	16	22	16	20
AC-FT	793	1,910	1,340	22,070	9,900	14,170	9,240	15,580	4,510	8,850	1,390	7,820

CAL YR 1972 TOTAL 22,195.6 MEAN 60.6 MAX 1,590 MIN 8.2 AC-FT 44,020
WTR YR 1973 TOTAL 49,199.7 MEAN 135 MAX 2,230 MIN 8.8 AC-FT 97,590

PEAK DISCHARGE (BASE, 900 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
1-21	-	-	a1,300	5-30	1400	17.19	2,410
1-28	-	-	a1,000	7- 6	0600	11.53	1,110
4- 1	0900	12.67	1,330	9-29	1100	10.86	972

a About

06880800 West Fork Big Blue River near Dorchester, Nebr.

LOCATION.--Lat 40°43'52", long 97°10'38", in SW1/4SW1/4 sec.23, T.9 N., R.2 E., Seward County, on right bank 60 ft (18 m) downstream from bridge on county road, 6.2 mi (10.0 km) northwest of Dorchester, and 19 mi (31 km) upstream from mouth.

DRAINAGE AREA.--1,206 mi² (3,124 km²).

PERIOD OF RECORD.--August 1958 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,403.48 ft (427.781 m) above mean sea level. Prior to Apr. 14, 1970, at site 60 ft (18 m) upstream at same datum.

AVERAGE DISCHARGE.--15 years, 179 ft³/s (5.069 m³/s), 129,700 acre-ft/yr (0.160 km³/yr).

EXTREMES.--Current year: Maximum discharge, about 1,350 ft³/s (38.2 m³/s) Jan. 21, gage height, 11.75 ft (3.581 m) observed, backwater from ice; minimum daily, 45 ft³/s (1.27 m³/s) Oct. 14.
Period of record: Maximum discharge, 11,400 ft³/s (323 m³/s) Mar. 20, 1969, gage height, 20.34 ft (6.200 m); minimum daily, 20 ft³/s (0.57 m³/s) July 7, 1970.
Flood of July 10, 1950, reached a stage of 24.8 ft (7.56 m), present datum, from floodmarks, discharge, 49,400 ft³/s (1,400 m³/s), from contracted-opening and flow-over-road measurement of peak flow.

REMARKS.--Records fair except those for winter period, which are poor. Some diversion by pumping for irrigation above station. Natural flow of stream affected by ground-water withdrawals for irrigation and return flow from irrigated areas. Records of chemical analysis and water temperatures for the water year 1973 are published in part 2 of this report.

REVISIONS.--WSP 1919: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	66	73	76	120	190	112	1,240	106	642	79	85	87
2	61	73	75	140	160	109	1,240	110	359	75	78	94
3	58	72	74	110	145	106	1,220	111	235	71	76	726
4	57	66	70	88	135	116	1,080	107	258	76	81	930
5	54	61	66	80	130	116	713	105	198	101	76	741
6	51	61	60	72	125	114	432	110	171	86	80	860
7	49	63	66	68	122	112	316	303	183	81	78	902
8	49	58	72	64	120	108	254	626	173	90	79	779
9	47	60	70	60	122	104	224	300	153	84	84	507
10	48	88	62	62	125	112	199	283	129	79	90	384
11	46	71	64	66	130	256	183	215	119	68	91	262
12	46	68	74	72	120	254	169	162	115	65	91	195
13	47	112	68	80	110	219	157	137	106	64	89	192
14	45	103	70	90	100	316	151	121	99	73	89	184
15	46	93	62	110	92	446	154	115	96	73	93	182
16	46	88	60	150	80	369	240	109	93	78	96	223
17	46	85	60	260	80	330	208	105	90	84	97	259
18	47	95	62	700	90	242	203	102	86	83	92	297
19	48	94	64	900	94	191	200	101	85	85	91	269
20	50	92	68	1,100	110	159	191	98	85	107	92	194
21	52	93	68	1,300	168	132	159	94	84	152	102	154
22	53	88	66	1,100	157	120	136	91	82	217	94	131
23	53	82	64	700	159	129	126	91	82	208	83	118
24	54	78	62	760	167	397	119	90	83	178	83	110
25	56	79	62	800	152	704	118	88	81	170	82	108
26	54	83	64	540	133	962	122	97	81	155	78	637
27	57	78	66	440	118	1,180	117	138	79	141	77	641
28	58	74	64	480	112	1,180	111	183	74	116	75	880
29	59	73	68	440	------	933	106	298	68	104	73	1,180
30	62	75	90	400	------	505	105	582	68	96	74	1,180
31	76	------	110	340	------	754	------	741	------	87	78	------
TOTAL	1,641	2,379	2,127	11,692	3,546	10,887	9,993	5,919	4,257	3,226	2,627	13,406
MEAN	52.9	79.3	68.6	377	127	351	333	191	142	104	84.7	447
MAX	76	112	110	1,300	190	1,180	1,240	741	642	217	102	1,180
MIN	45	58	60	60	80	104	105	88	68	64	73	87
AC-FT	3,250	4,720	4,220	23,190	7,030	21,590	19,820	11,740	8,440	6,400	5,210	26,590

CAL YR 1972 TOTAL 45,198 MEAN 123 MAX 3,610 MIN 32 AC-FT 89,650
WTR YR 1973 TOTAL 71,700 MEAN 196 MAX 1,300 MIN 45 AC-FT 142,200

PEAK DISCHARGE (BASE, 1,500 CFS).--No peak above base.

06881000 Big Blue River near Crete, Nebr.

LOCATION.--Lat 40°35'47", long 96°57'36", in SW1/4SE1/4 sec.3, T.7 N., R.4 E., Saline County, on downstream side of right pier of highway bridge, 1.8 mi (2.9 km) south of Missouri Pacific Railroad station in Crete, 3.3 mi (5.3 km) downstream from Walnut Creek, and 3.6 mi (5.8 km) upstream from Squaw Creek.

DRAINAGE AREA.--2,716 mi² (7,034 km²).

PERIOD OF RECORD.--March 1945 to current year. Prior to Oct. 1, 1953, discharge published only for stages above 12.0 ft because of variable backwater from dam downstream until 1952 and diurnal fluctuation from powerplant upstream in 1952-53.

GAGE.--Water-stage recorder. Datum of gage is 1,311.7 ft (399.81 m) above mean sea level. Prior to Jan. 20, 1954, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--20 years (1953-73), 351 ft³/s (9.940 m³/s), 254,300 acre-ft/yr (0.314 km³/yr).

EXTREMES.--Current year: Maximum discharge, 3,410 ft³/s (96.6 m³/s) Apr. 1, gage height, 16.56 ft (5.047 m); minimum daily, 79 ft³/s (2.24 m³/s) Oct. 17-19.
Period of record: Maximum discharge, 27,600 ft³/s (782 m³/s) July 10, 1950, gage height, 28.74 ft (8.760 m); maximum gage height, 29.80 ft (9.083 m) June 16, 1967; minimum daily discharge, 13 ft³/s (0.37 m³/s) Oct. 28, 1956.

REMARKS.--Records good except those for winter period, which are poor. Natural flow of stream affected by ground-water and surface-water withdrawals for irrigation and return flow from irrigated areas. Records of water temperatures and fluvial sediments for the water year 1973 are published in Part 2 of this report.

REVISIONS.--WSP 1919: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	134	130	142	274	800	398	3,380	204	2,130	179	166	96
2	119	127	142	260	640	384	2,930	211	980	211	153	111
3	110	123	135	270	500	436	2,470	219	660	244	141	730
4	103	120	120	350	410	489	1,860	222	779	324	132	1,980
5	90	114	102	460	360	475	1,480	237	1,040	363	125	1,570
6	95	114	98	390	400	416	983	239	526	665	120	1,250
7	93	121	96	320	390	375	723	428	391	986	117	1,150
8	91	119	98	260	350	353	600	1,540	364	756	109	1,120
9	89	113	100	200	290	348	495	1,240	328	436	105	953
10	93	142	102	160	300	332	441	683	299	275	99	654
11	89	163	104	135	280	511	398	553	272	203	102	519
12	86	140	100	120	230	669	370	414	245	157	106	406
13	83	203	98	110	190	608	344	341	231	131	113	360
14	84	275	96	110	180	592	325	300	221	126	120	320
15	82	232	94	120	170	740	324	275	211	163	124	304
16	81	194	94	185	160	829	333	258	204	133	133	291
17	79	172	96	800	170	743	391	242	194	120	138	309
18	79	166	98	2,000	180	640	385	232	189	118	131	335
19	79	178	100	2,050	201	489	370	226	182	140	130	363
20	83	177	101	1,950	215	380	355	218	176	547	133	356
21	85	171	105	2,450	422	318	325	212	172	383	135	307
22	92	171	113	2,350	522	277	298	211	167	334	133	274
23	94	166	119	1,850	555	310	262	197	163	421	132	245
24	90	157	118	1,300	634	1,130	246	193	158	398	114	222
25	91	155	116	1,050	746	1,910	227	191	153	332	105	203
26	91	161	117	1,000	756	1,890	223	229	147	301	103	1,880
27	90	162	118	1,250	753	1,730	220	544	142	282	101	2,480
28	90	156	122	1,500	511	1,500	213	579	131	251	100	2,420
29	92	147	160	1,350	------	1,350	206	886	119	226	99	2,600
30	97	142	219	1,200	------	1,180	204	1,580	117	205	95	2,450
31	110	------	314	1,000	------	2,170	------	2,520	------	184	89	------
TOTAL	2,864	4,711	3,737	26,824	11,315	23,972	21,381	15,624	11,091	9,594	3,703	26,258
MEAN	92.4	157	121	865	404	773	713	504	370	309	119	875
MAX	134	275	314	2,450	800	2,170	3,380	2,520	2,130	986	166	2,600
MIN	79	113	94	110	160	277	204	191	117	118	89	96
AC-FT	5,680	9,340	7,410	53,210	22,440	47,550	42,410	30,990	22,000	19,030	7,340	52,080

CAL YR 1972 TOTAL 76,546 MEAN 209 MAX 3,450 MIN 52 AC-FT 151,800
WTR YR 1973 TOTAL 161,074 MEAN 441 MAX 3,380 MIN 79 AC-FT 319,500

PEAK DISCHARGE (BASE, 3,000 CFS).--Apr. 1 (0300) 3,410 cfs (16.56 ft).

06881200 Turkey Creek near Wilber, Nebr.

LOCATION.--Lat 40°28'48", long 97°00'43", in NE1/4NE1/4 sec.19, T.6 N., R.4 E., Saline County, on left bank near downstream side of bridge on State Highway 41, 2.8 mi (4.5 km) west of Wilber.

DRAINAGE AREA.--460 mi² (1,191 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 1,322.00 ft (402.946 m) above mean sea level (Nebraska Department of Highways bench mark). Prior to July 10, 1970, at site 0.2 mi (0.3 km) downstream at same datum.

AVERAGE DISCHARGE.--14 years, 81.2 ft³/s (2.300 m³/s), 58,830 acre-ft/yr (72.5 hm³/yr); median of yearly mean discharges, 56 ft³/s (1.586 m³/s), 40,600 acre-ft/yr (50.1 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,750 ft³/s (49.6 m³/s) Sept. 26, gage height, 13.70 ft (4.176 m); minimum daily, 3.2 ft³/s (0.091 m³/s) Oct. 8.
Period of record: Maximum discharge, 7,300 ft³/s (207 m³/s) Mar. 28, 1960, gage height, 14.92 ft (4.548 m); minimum daily, 0.10 ft³/s (0.003 m³/s) July 13-16, 1966.

REMARKS.--Records fair except those for winter period, which are poor. Many diversions above station for irrigation. Records of chemical analyses and water temperatures for the water year 1973 are published in Part 2 of this report.

REVISIONS.--WSP 1919: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.6	7.6	22	47	78	48	1,230	38	700	18	17	9.7
2	3.8	9.9	21	50	64	50	1,110	37	500	26	14	12
3	3.6	9.8	19	30	70	47	1,130	36	400	26	12	125
4	3.8	8.4	12	17	68	46	582	34	780	35	10	964
5	3.8	7.7	13	14	64	53	210	33	670	32	11	1,080
6	3.5	7.1	12	13	60	56	130	33	352	32	9.7	790
7	3.3	7.3	13	15	52	56	98	154	194	34	9.7	305
8	3.2	7.3	12	12	48	58	88	627	196	32	9.1	139
9	3.3	8.0	10	9.2	45	53	80	716	115	29	10	91
10	3.6	12	8.0	9.2	56	56	75	437	64	25	15	65
11	4.3	23	8.0	9.8	64	287	68	222	44	23	21	49
12	4.2	28	6.0	11	60	203	63	111	34	21	22	42
13	4.0	39	4.6	13	56	193	57	73	28	27	21	49
14	4.1	75	4.2	16	50	250	54	56	24	31	21	83
15	3.9	78	4.0	25	45	312	57	46	22	19	17	92
16	3.5	63	4.6	100	25	419	68	41	22	49	17	123
17	3.5	50	5.4	200	25	212	81	37	20	51	15	102
18	3.6	32	7.2	720	26	116	153	34	19	84	14	74
19	3.6	26	11	820	28	84	193	33	18	53	14	53
20	3.6	26	10	900	30	65	123	31	18	60	12	43
21	4.6	23	10	500	46	51	83	30	17	45	12	36
22	3.7	21	10	250	139	40	64	28	17	43	8.2	31
23	5.7	19	11	160	133	95	53	28	17	86	8.0	29
24	6.2	17	10	170	107	1,010	51	27	18	115	11	25
25	5.3	17	10	180	91	1,170	43	26	19	70	11	24
26	5.4	18	11	160	74	1,180	40	28	21	39	10	1,290
27	5.9	20	9.6	130	75	1,140	41	34	21	28	14	1,520
28	5.6	19	10	130	50	902	41	58	20	28	14	1,510
29	4.7	20	15	130	------	348	39	96	18	40	13	1,420
30	5.5	22	40	140	------	177	37	250	18	28	11	1,140
31	6.4	------	80	130	------	641	------	760	------	21	8.8	------
TOTAL	132.8	721.1	423.6	5,111.2	1,729	9,418	6,142	4,194	4,406	1,250	412.5	11,315.7
MEAN	4.28	24.0	13.7	165	61.8	304	205	135	147	40.3	13.3	377
MAX	6.4	78	80	900	139	1,180	1,230	760	780	115	22	1,520
MIN	3.2	7.1	4.0	9.2	25	40	37	26	17	18	8.0	9.7
AC-FT	263	1,430	840	10,140	3,430	18,680	12,180	8,320	8,740	2,480	818	22,440

CAL YR 1972 TOTAL 12,868.4 MEAN 35.2 MAX 1,050 MIN 1.1 AC-FT 25,520
WTR YR 1973 TOTAL 45,255.9 MEAN 124 MAX 1,520 MIN 3.2 AC-FT 89,770

PEAK DISCHARGE (BASE, 1,000 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
3-25	2300	12.37	1,220	9- 5	0530	12.01	1,100
4- 1	0100	12.63	1,290	9-26	1200	13.70	1,750

KANSAS RIVER BASIN

06882000 Big Blue River at Barneston, Nebr.

LOCATION.--Lat 40°03'11", long 96°35'16", in SE1/4NW1/4 sec.13, T.1 N., R.7 E., Gage County, near left bank in tailrace of powerplant, 0.8 mi (1.3 km) northwest of Barneston, 2 mi (3 km) upstream from Plum Creek, and 5 mi (8 km) upstream from Nebraska-Kansas State line.

DRAINAGE AREA.--4,444 mi² (11,510 km²).

PERIOD OF RECORD.--May 1932 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,164.2 ft (354.85 m) above mean sea level. Prior to June 9, 1941, water-stage recorder at site 1 mi (2 km) downstream at datum 0.44 ft (0.134 m) lower. June 9 to Nov. 17, 1941, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--41 years, 768 ft³/s (21.75 m³/s), 556,400 acre-ft/yr (0.686 km³/yr).

EXTREMES.--Current year: Maximum discharge, 31,100 ft³/s (881 m³/s) Sept. 27, gage height, 29.2 ft (8.90 m) from floodmark; minimum daily, 42 ft³/s (1.19 m³/s) Dec. 16.
Period of record: Maximum discharge, 57,700 ft³/s (1,630 m³/s) June 9, 1941, gage height, 34.3 ft (10.45 m); minimum daily, 1 ft³/s (0.028 m³/s) Nov. 30, 1945.

REMARKS.--Records fair, except those for winter period, which are poor. Low flow regulated by powerplant at Barneston, which has pondage of about 1,500 acre-ft (1.85 hm³). No large tributaries between station and Nebraska-Kansas State line. Some pump diversions for irrigation above station. Natural flow of stream affected by ground-water withdrawals for irrigation and return flow from irrigated areas.

REVISIONS (WATER YEARS).--WSP 896: 1932, 1935. WSP 1919: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	326	538	323	803	2,180	809	19,200	366	2,570	80	492	130
2	90	501	280	669	1,930	784	11,600	540	2,330	302	297	143
3	373	308	166	637	1,230	591	7,110	731	1,710	2,060	210	329
4	81	241	217	270	1,510	823	4,960	826	1,350	1,340	341	145
5	90	265	56	300	1,510	1,300	3,600	229	1,220	901	118	2,410
6	385	270	59	270	1,420	1,390	3,150	736	2,690	809	376	2,510
7	78	76	253	260	851	1,360	3,680	1,920	1,710	700	132	2,270
8	78	77	164	260	889	891	2,040	2,670	1,110	1,020	357	1,600
9	78	250	180	260	828	1,170	1,840	3,620	874	1,030	116	1,490
10	79	276	65	280	796	2,350	825	3,020	775	875	380	1,130
11	267	82	303	270	614	9,450	1,390	2,040	680	677	118	925
12	63	272	55	260	858	5,220	1,050	1,440	965	349	229	815
13	233	912	320	270	1,040	2,700	1,080	1,090	970	343	138	638
14	78	1,940	44	272	890	2,730	1,020	883	491	298	417	605
15	78	901	309	355	668	2,140	1,450	795	493	682	132	662
16	86	813	42	452	628	1,870	3,110	680	439	508	140	574
17	79	579	209	3,040	571	1,890	2,020	893	283	367	488	559
18	273	310	64	4,180	523	1,630	1,640	174	409	271	130	450
19	77	468	352	3,720	518	1,020	1,120	287	360	440	150	520
20	77	442	271	3,600	531	1,050	1,700	469	347	3,990	436	465
21	77	278	213	3,600	533	992	1,380	489	296	5,370	119	467
22	77	548	196	3,470	561	923	1,160	448	290	2,300	121	445
23	162	209	209	3,420	971	856	991	60	333	998	432	736
24	91	322	196	3,080	894	2,870	701	430	81	1,060	99	1,490
25	302	362	205	2,590	902	9,280	512	453	458	1,380	123	935
26	76	572	269	2,180	961	11,000	1,250	322	255	1,970	298	18,500
27	78	722	263	2,260	1,040	6,180	716	446	264	1,000	113	25,100
28	81	480	194	2,260	1,040	3,970	668	826	216	747	138	14,100
29	297	436	577	2,130	------	3,630	659	1,280	102	657	140	13,100
30	76	297	1,760	2,150	------	3,230	645	1,270	318	572	396	8,350
31	320	------	1,650	1,920	------	9,980	------	2,010	------	455	110	------
TOTAL	4,606	13,747	9,464	49,488	26,887	94,079	82,267	31,443	24,389	33,551	7,286	101,593
MEAN	149	458	305	1,596	960	3,035	2,742	1,014	813	1,082	235	3,386
MAX	385	1,940	1,760	4,180	2,180	11,000	19,200	3,620	2,690	5,370	492	25,100
MIN	63	76	42	260	518	591	512	60	81	80	99	130
AC-FT	9,140	27,270	18,770	98,160	53,330	186,600	163,200	62,370	48,380	66,550	14,450	201,500

CAL YR 1972 TOTAL 134,799 MEAN 368 MAX 3,510 MIN 28 AC-FT 267,400
WTR YR 1973 TOTAL 478,800 MEAN 1,312 MAX 25,100 MIN 42 AC-FT 949,700

PEAK DISCHARGE (BASE, 10,000 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
3-11	1200	15.64	10,600	4- 1	0500	23.45	21,900
3-26	0200	17.95	13,400	9-27	0200	29.2	31,100

06884000 Little Blue River near Fairbury, Nebr.

LOCATION.--Lat 40°06'54", long 97°10'13", in NW1/4NE1/4 sec.26, T.2 N., R.2 E., Jefferson County, on right bank 20 ft (6 m) downstream from bridge on State Highway 15, 0.8 mi (1.3 km) south of Fairbury, and 5.2 mi (8.4 km) upstream from Rose Creek.

DRAINAGE AREA.--2,350 mi² (6,087 km²).

PERIOD OF RECORD.--May 1908 to September 1915, October 1928 to September 1956 (published as "near Endicott"), October 1956 to current year. Monthly discharge only for some periods, published in WSP 1310.

GAGE.--Water-stage recorder. Datum of gage is 1,282.19 ft (390.812 m) above mean sea level. May 23, 1908, to Sept. 30, 1915, nonrecording gage at present site at different datum. Apr. 26, 1929, to Sept. 24, 1957, nonrecording gage or water-stage recorder at site 3.5 mi (5.6 km) downstream at various datums.

AVERAGE DISCHARGE.--52 years, 365 ft³/s (10.34 m³/s), 264,400 acre-ft/yr (0.326 km³/yr); median of yearly mean discharges, 340 ft³/s (9.629 m³/s), 246,000 acre-ft/yr (0.303 km³/yr).

EXTREMES.--Current year: Maximum discharge, 10,300 ft³/s (292 m³/s) Sept. 26, gage height 11.90 ft (3.627 m); Minimum daily, 85 ft³/s (2.41 m³/s) Dec. 5.
Period of record: Maximum discharge, 36,800 ft³/s (1,040 m³/s) June 27, 1951, site and datum then in use, from rating curve extended above 26,000 ft³/s (736 m³/s); maximum gage height, 16.82 ft (5.127 m) June 27, 1951; minimum daily discharge, 14 ft³/s (0.40 m³/s) Nov. 22, 1929, discharge measurement.

REMARKS.--Records good except those for winter period, which are fair. Some regulation at low stage by powerplants above station. Natural flow of stream affected by ground-water withdrawals for irrigation and return flow from irrigated areas.

REVISIONS (WATER YEARS).--WSP 1086: 1941(M). WSP 1390: 1908(M), 1912, 1915, 1935, 1939, 1945(M). WSP 1510: 1947 (calendar year figures only). WSP 1919: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	99	148	147	104	350	185	3,040	288	266	137	173	113
2	90	142	147	141	278	185	2,840	296	258	227	175	111
3	93	134	139	173	249	186	1,750	266	2,200	220	167	328
4	93	130	102	143	252	208	1,210	266	4,370	181	165	3,550
5	90	126	85	119	264	221	894	262	3,540	151	163	5,070
6	92	122	89	137	266	217	647	256	2,320	139	171	2,330
7	92	120	100	129	266	213	494	463	1,250	128	175	1,130
8	93	119	110	134	169	206	439	1,970	700	118	188	801
9	95	122	113	137	132	209	390	1,860	451	104	173	624
10	101	126	113	134	161	238	352	899	351	112	172	517
11	103	143	111	134	248	423	332	506	291	111	224	431
12	103	159	109	129	276	293	298	366	278	111	235	467
13	102	213	107	128	236	319	280	301	251	134	190	1,250
14	103	404	109	130	145	540	280	270	229	207	180	2,700
15	101	366	111	148	102	581	362	254	218	429	184	1,740
16	116	255	109	233	106	454	1,430	237	206	520	169	1,130
17	104	199	109	1,630	128	360	2,150	229	196	492	190	822
18	104	177	110	2,620	191	319	896	222	188	383	238	619
19	103	169	112	2,450	212	289	570	215	182	320	181	504
20	94	162	112	1,780	225	261	439	209	185	2,680	158	427
21	102	156	118	1,460	232	240	352	207	175	1,430	147	374
22	108	149	124	1,220	207	233	317	201	162	816	136	327
23	110	146	132	865	198	372	299	199	174	522	128	303
24	120	142	135	568	191	2,430	293	198	168	388	127	282
25	109	143	136	494	197	3,550	282	194	163	219	130	280
26	112	150	139	433	196	3,560	290	202	161	166	130	6,150
27	100	153	143	456	182	2,290	278	236	155	162	121	8,040
28	106	155	149	350	184	1,410	276	291	151	164	110	7,550
29	107	149	178	257	------	1,050	271	422	145	161	103	8,450
30	127	146	250	258	------	848	265	425	138	165	103	9,240
31	141	------	120	314	------	1,910	------	307	------	173	108	------
TOTAL	3,213	5,025	3,868	18,408	5,843	23,800	22,016	12,517	19,522	11,270	5,014	65,660
MEAN	104	168	125	594	209	768	734	404	651	364	162	2,189
MAX	141	404	250	3,620	350	3,560	3,040	1,970	4,370	2,680	238	9,240
MIN	90	119	85	104	102	185	265	194	138	104	103	111
AC-FT	6,370	9,970	7,670	36,510	11,590	47,210	43,670	24,830	38,720	22,350	9,950	130,200

CAL YR 1972 TOTAL 75,718 MEAN 207 MAX 4,180 MIN 42 AC-FT 150,200
WTR YR 1973 TOTAL 196,156 MEAN 537 MAX 9,240 MIN 85 AC-FT 389,100

PEAK DISCHARGE (BASE, 3,000 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
1-18	0800	7.10	4,000	7-20	1230	7.95	4,450
3-25	1530	7.08	3,980	9- 5	2130	9.33	6,060
3-31	1830	6.38	3,300	9-14	0830	6.60	3,100
6- 4	0400	8.25	5,180	9-26	2230	11.90	10,300

As the number of streams on which streamflow information is likely to be desired far exceeds the number of stream-gaging stations feasible to operate at one time, the Geological Survey collects limited streamflow data at sites other than stream-gaging stations. When limited streamflow data are collected on a systematic basis over a period of years for use in hydrologic analyses, the site at which the data are collected is called a partial-record station. Data collected at these partial-record stations are usable in low-flow or 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 the stream. The column headed "Period of record" shows the water years in which measurements were made at the same, or practically the same, site.

Discharge measurements made at low-flow partial-record stations during water year 1973

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
		Niobrara River basin				
06460800	Minnechaduza Creek near S. Dak.-Nebr. State line.	Lat 43°01'14", long 100°57'49", in SW¼SW¼ sec.10, T.35 N., R.31 W., Todd County, S. Dak., 2 miles upstream from S. Dak.-Nebr. State line and 6 miles north of Kilgore, Nebr.	-	1958a, 1959-73	4-25-73 5-14-73 6-25-73 7-16-73 8-27-73	4.7 1.8 .59 .32 .07
06462450	Plum Creek at Johnstown, Nebr. b/	Lat 42°34'08", long 100°06'22", in SW¼ sec.14, T.30 N., R.24 W., Brown County, at bridge on U.S. Highway 20, 2 miles west of Johnstown.	-	1969-73	4-24-73	33
06462470	Plum Creek near Johnstown, Nebr. b/	Lat 42°40'01", long 100°03'26", in SE¼ sec.7, T.31 N., R.23 W., Brown County, at county road bridge 0.2 mile upstream from Sand Draw and 6.5 miles north of Johnstown.	-	1969-73	4-24-73	87
06463090	Bone Creek at Ainsworth, Nebr. b/	Lat 42°32'51", long 99°52'33", in NE¼ sec.27, T.30 N., R.22 W., Brown County, at bridge on U.S. Highway 20, 0.6 mile west of junction of Highways 7 and 20 in Ainsworth.	-	1969-73	4-24-73	5.2
06463350	Bone Creek near Long Pine, Nebr. b/	Lat 42°40'16", long 99°46'06", in SW¼ sec.10, T.31 N., R.21 W., Brown County, at bridge on U.S. Highway 183, 8.4 miles north from junction of Highways 20 and 183 and 2.8 miles west of Long Pine.	-	1969-73	4-24-73	34
06465050	Eagle Creek near Midway, Nebr.	Lat 42°38'01", long 98°46'21", in SW¼NW¼ sec.30, T.31 N., R.12 W., Holt County, at county road bridge 4.3 miles south and 6 miles west of Midway.	-	1969-73	11-30-72 5- 3-73	19 25
06465100	East Branch Eagle Creek near Midway, Nebr.	Lat 42°37'35", long 98°45'49", in SW¼SE¼ sec.30, T.31 N., R.12 W., Holt County, at county road bridge 5 miles south and 5.4 miles west of Midway.	-	1969-73	11-30-72 5- 3-73	8.9 10
06465202	Honey Creek near Midway, Nebr.	Lat 42°37'22", long 98°41'26", in NE¼NW¼ sec.35, T.31 N., R.12 W., Holt County, at county road bridge 5 miles south and 1.6 miles west of Midway.	-	1969-73	11-30-72 5- 3-73	.04 .27
06465305	Camp Creek at Meek, Nebr.	Lat 42°41'44", long 98°37'00", in NE¼NE¼ sec.5, T.31 N., R.11 W., Holt County, at county road bridge 0.4 mile east of Meek.	-	1969-73	11-30-72 5- 3-73	.21 .54

See footnotes at end of table.

Discharge measurements made at low-flow partial-record stations during water year 1973--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
		Niobrara River basin--Continued				
06465398	Redbird Creek near Meek, Nebr.	Lat 42°39'33", long 98°33'31", in NE¼SE¼ sec.14, T.31 N., R.11 W., Holt County, at site 3.2 miles east and 2.7 miles south of Meek.	-	1969-73	11-30-72	16
					5- 3-73	22
06465420	Blackbird Creek near Meek, Nebr.	Lat 42°39'46", long 98°34'24", in SW¼NW¼ sec.14, T.31 N., R.11 W., Holt County, at county road bridge 2.4 miles east and 2.3 miles south of Meek.		1969-73	11-30-72	6.9
					5- 3-73	11
		Platte River basin				
06772500	Wood River near Chapman, Nebr. b/	Lat 40°57'56", long 98°12'22", at center of west line of sec.35, T.12 N., R.8 W., Merrick County, at timber bridge 3.2 miles southwest of Chapman.	-	1957-60a, 1961-73	10-19-72	3.3
					11- 3-72	21
					11-16-72	15
					11-30-72	12
					12-11-72	12
					12-29-72	16
					1- 8-73	23
					1-25-73	62
					2- 5-73	30
					2-21-73	26
					3- 2-73	40
					3-15-73	72
					3-26-73	119
					4-11-73	96
					4-26-73	70
					5- 8-73	48
					5-31-73	58
					6-21-73	27
					7- 5-73	19
					7-19-73	11
					8- 2-73	26
					8-15-73	96
					8-28-73	16
					9-10-73	6.1
					9-24-73	8.4
		Kansas River basin				
06824200	Horse Creek near Parks, Nebr.	Lat 40°02'23", long 101°41'09", in SE¼NE¼ sec.23, T.1 N., R.39 W., Dundy County, at county road bridge 0.5 mile upstream from mouth and 2 miles east of Parks.	-	1949, 1951-60a, 1961-73	3- 7-73	2.0
					4-13-73	1.8
					5-15-73	1.8
					6-12-73	1.6
					7-12-73	1.2
					8-20-73	.27
06828200	Indian Creek near Max, Nebr.	Lat 40°07'48", long 101°21'44", on line between secs.22 and 23, T.2 N., R.36 W., Dundy County, at county road bridge 0.2 mile north of U.S. Highway 34 and 2.5 miles east of Max.	-	1949, 1951-60a, 1961-73	3- 7-73	5.6
					4-13-73	7.3
					5-15-73	4.1
					6-12-73	2.3
					7-12-73	.05
					8-20-73	2.1
06844150	East Branch Turkey Creek near Smithfield, Nebr.	Lat 40°28'59", long 99°44'52", in SE corner SW¼ sec.18, T.6 N., R.21 W., Gosper County, at county road bridge 6 miles south of Smithfield.	-	1968-73	11- 6-72	1.2
06844160	Unnamed tributary to East Branch Turkey Creek near Smithfield, Nebr.	Lat 40°28'59", long 99°44'52", in SE corner SW¼ sec.18, T.6 N., R.21 W., Gosper County, downstream from culvert on county road, 6 miles south of Smithfield.	-	1968-73	11- 6-72	.06
06844170	East Branch Turkey Creek near Bertrand, Nebr.	Lat 40°26'22", long 99°45'55", in SE corner SW¼ sec.36, T.6 N., R.22 W., Gosper County, at county road bridge 9 miles southwest of Bertrand.	-	1968-73	11- 6-72	1.9
06844180	West Branch Turkey Creek near Bertrand, Nebr.	Lat 40°26'09", long 99°46'29", in NE¼NE¼ sec.2, T.5 N., R.22 W., Gosper County, upstream from county road bridge 10 miles southwest of Bertrand.	-	1968-73	11- 6-72	.05

Discharge measurements made at low-flow partial-record stations during water year 1973--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
		Kansas River basin--Continued				
06844200	Turkey Creek near Edison, Nebr.	Lat 40°18'18", long 99°44'19", in NW¼ sec.19, T.4 N., R.21 W., Furnas County, at bridge on U.S. Highways 6 and 34, 2.7 miles northeast of Edison.	-	1968-73	11- 6-72	4.5
06847550	Flag Creek at Orleans, Nebr.	Lat 40°08'04", long 99°27'49", in SE¼SE¼ sec.16, T.2 N., R.19 W., Harlan County, at bridge on U.S. Highway 136 at west edge of Orleans.	-	1949, 1951-60a, 1961-73	10- 4-72 11- 3-72 3- 1-73 4- 4-73 5-10-73 6- 7-73 7- 5-73 8-29-73	.75 1.2 1.9 2.2 2.0 1.4 1.9 5.9
06847560	Rope Creek near Orleans, Nebr.	Lat 40°07'51", long 99°24'44", on line between secs.13 and 24, T.2 N., R.19 W., Harlan County, at bridge on U.S. Highway 136, 2.5 miles east of Orleans and 3.5 miles northwest of Alma.	-	1949, 1951-60a, 1961-73	10- 4-72 11- 3-72 3- 1-73 4- 4-73 5-10-73 6- 7-73 7- 5-73 8- 3-73 8-29-73	.20 .50 1.4 1.8 1.3 .97 .79 1.0 .15
06849400	Eureka Creek near Naponee, Nebr.	Lat 40°04'37", long 99°11'25", in SE¼SW¼ sec.1, T.1 N., R.17 W., Franklin County, at county road bridge 0.3 mile upstream from mouth and 2.5 miles west of Naponee.	-	1949, 1951-60a, 1961-73	10- 4-72 11- 3-72 3- 1-73 4- 4-73 5-10-73 6- 7-73 7- 5-73 8- 3-73 8-30-73	.89 .78 .64 .77 .79 .76 .98 1.2 1.5
*06850000	Turkey Creek at Naponee, Nebr.	Lat 40°04'34", long 99°08'17", in SW¼SW¼ sec.4, T.1 N., R.16 W., Franklin County, at county road bridge at east side of Naponee, 0.8 mile upstream from mouth.	138	1948-53‡, 1954-60a, 1961-73	10-30-72 4-16-73 5-31-73 6-25-73 8- 7-73 9-17-73	11 16 13 9.1 4.8 11
*06850200	Cottonwood Creek near Bloomington, Nebr.	Lat 40°05'08", long 99°03'56", in SE¼NE¼ sec.1, T.1 N., R.16 W., Franklin County, at county road bridge 1 mile upstream from mouth and 1.5 miles west of Bloomington.	15.6	1948-56‡, 1957, 60a, 1961-73	10-30-72 4- 1-73 5-31-73 6-25-73 8- 7-73 9-17-73	5.3 5.0 4.2 3.8 3.8 4.1
06850400	Little Cottonwood Creek near Bloomington, Nebr.	Lat 40°05'14", long 99°03'31", in NE¼NW¼ sec.6, T.1 N., R.15 W., Franklin County, at county road bridge 1.2 miles southwest of Bloomington and 1.5 miles upstream from mouth.	-	1949, 1951-60a, 1961-73	10- 4-72 11- 3-72 3- 1-73 4- 4-73 5-10-73 6- 7-73 7- 5-73 8- 3-73 8-30-73	2.4 2.4 2.4 2.7 2.3 2.2 1.6 2.0 1.5
06851020	Walnut Run near Franklin, Nebr.	Lat 40°05'51", long 98°55'00", in SE¼NE¼ sec.32, T.2 N., R.14 W., Franklin County, at bridge on U.S. Highway 136, 1.2 miles upstream from mouth and 1.8 miles east of Franklin.	-	1949, 1951-60a, 1961-73	10- 4-72 11- 3-72 3- 1-73 4- 4-73 5-10-73 6- 7-73 7- 5-73 8- 3-73 8-30-73	.82 1.3 .96 1.2 .99 .74 .79 .69 .88
06851600	Farmers Creek near Inavale, Nebr.	Lat 40°05'24", long 98°41'43", in SW¼SE¼ sec.32, T.2 N., R.12 W., Webster County, at bridge on U.S. Highway 136, 0.6 mile upstream from mouth and 2.5 miles west of Inavale.	-	1949, 1951-60a, 1961-73	10- 4-72 11- 3-72 3- 1-73 4- 4-73 5-11-73 6- 7-73 7- 5-73 8- 3-73 8-30-73	1.7 3.6 4.3 7.2 4.8 3.5 1.5 2.6 .83

Discharge measurements made at low-flow partial-record stations during water year 1973--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
		Kansas River basin--Continued				
06851700	Indian Creek near Red Cloud, Nebr.	Lat 40°05'25", long 98°34'06", in SE¼SW¼ sec.33, T.2 N., R.11 W., Webster County, at bridge on U.S. Highway 136, 2.5 miles upstream from mouth and 2.8 miles west of Red Cloud.	-	1949, 1951-60a, 1961-73	10- 4-72	0.99
					11- 3-72	2.0
					3- 1-73	2.6
					4- 4-73	5.6
					5-11-73	3.7
					6- 7-73	2.9
					7- 5-73	2.0
					8- 3-73	1.7
					8-30-73	4.2
06851800	Crooked Creek near Red Cloud, Nebr.	Lat 40°05'25", long 98°30'42", in SE¼SW¼ sec.36, T.2 N., R.11 W., Webster County, at bridge on U.S. Highway 136 at east edge of Red Cloud.	-	1949, 1951-60a, 1961-73	10- 4-72	.82
					11- 3-72	1.1
					3- 1-73	2.4
					4- 4-73	3.7
					5-11-73	3.1
					6- 7-73	2.1
					7- 5-73	1.2
					8- 3-73	1.0
					8-30-73	.66
*06852000	Elm Creek at Amboy, Nebr.	Lat 40°05'20", long 98°26'07", in NE¼NW¼ sec.3, T.1 N., R.10 W., Webster County, at bridge on U.S. Highway 136 at east edge of Amboy, 2.5 miles upstream from mouth.	39.2	1948-53‡, 1954-60a, 1961-73	10-30-72	16
					4-16-73	24
					5-31-73	17
					6-25-73	14
					8- 7-73	14
					9-17-73	18
06852200	Willow Creek near Guide Rock, Nebr.	Lat 40°05'26", long 98°23'45", in SW¼SE¼ sec.36, T.2 N., R.10 W., Webster County, at bridge on U.S. Highway 136, 2 miles upstream from mouth and 3.8 miles northwest of Guide Rock.	-	1949, 1951-60a, 1961-73	10- 4-72	.60
					11- 3-72	.81
					3- 1-73	2.1
					4- 4-73	1.5
					5-11-73	2.1
					6- 7-73	2.2
					7- 5-73	1.3
					8- 3-73	2.1
					8-30-73	3.0

* Also a crest-stage gage.
‡ Operated as a continuous-record gaging station.
a Published as a miscellaneous site.
b Also published with additional data in Part 2 of this report.

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 during water year 1973

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (cfs)
		Cheyenne River basin					
06396490	Warbonnet Creek near Harrison, Nebr.	Lat 42°50'43", long 103°54'41", in SW¼ sec.10, T.33 N., R.56 W., Sioux County, at culvert on all weather road, 11.5 miles north of Harrison.	24.5	1969-73	8-30-73	12.63	52
		White River basin					
06443300	Deep Creek near Glen, Nebr.	Lat 42°36'37", long 103°33'22", in SE¼SE¼ sec.32, T.31 N., R.53 W., Sioux County, at bridge 1.4 miles east of Glen.	10.9	1953-73	3-22-73	6.41	1.2
06443700	Soldiers Creek near Crawford, Nebr.	Lat 42°41'18", long 103°32'09", in NE¼SW¼ sec.3, T.31 N., R.53 W., Sioux County, on right bank 6 miles west of Crawford.	52.6	1955-73	3-22-73	11.12	30
06445530	Chadron Creek tributary at Chadron State Park near Chadron, Nebr.	Lat 42°41'49", long 103°00'09", in NE¼NW¼ sec.6, T.31 N., R.48 W., Dawes County, on left downstream side of concrete box culvert on U.S. Highway 385, 9 miles south of Chadron.	2.59	1953-73	1973	-	0
06445560	Chadron Creek at Chadron State Park near Chadron, Nebr.	Lat 42°42'27", long 103°00'33", in SE¼NE¼ sec.36, T.32 N., R.49 W., Dawes County, on left downstream wingwall of concrete culvert, 8 miles south of Chadron.	15.4	1953-73	9-12-73	(a)	b10
		Niobrara River basin					
06454400	Niobrara River tributary near Belmont, Nebr.	Lat 42°36'16", long 103°22'31", in SE¼SW¼ sec.25, T.30 N., R.52 W., Dawes County, on tree upstream from a concrete box culvert under State Highway 2, 1.2 miles southwest of Belmont, 7.5 miles northwest of Marsland, and 10 miles south of Crawford.	2.59	1971-73	9-23-73	11.47	(†)
06456200	Pebble Creek near Esther, Nebr.	Lat 42°35'38", long 103°03'55", in NW¼NW¼ sec.10, T.30 N., R.49 W., Dawes County, on post in creek channel, 300 ft below bridge on county road 5 miles west of Esther (former post office) and U.S. Highway 385.	3.07	1953-73	1973	-	0
06456400	Cottonwood Creek near Dunlap, Nebr.	Lat 42°29'29", long 102°58'08", in SW¼NW¼ sec.16, T.29 N., R.48 W., Dawes County, on downstream side of bridge on U.S. Highway 385, 2 miles northwest of Dunlap and 3 miles north of Niobrara River bridge.	82.2	1948, 1951-73	5-27-73	11.32	2.5
06457100	Point of Rocks Creek near Marsland, Nebr.	Lat 42°16'57", long 103°18'23", in SE¼SE¼ sec.30, T.27 N., R.51 W., Box Butte County, at upstream end of box culvert under graveled secondary road 10.8 miles south of Marsland and 2.8 miles south of consolidated school at the intersection of State Highways 2 and 71.	7.10	1970-73	1973	-	0

See footnotes at end of table.

Annual maximum discharge at crest-stage partial-record stations during water year 1973--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (cfs)
		Niobrara River basin--Continued					
06457200	Berea Creek near Alliance, Nebr.	Lat 42°08'20", long 102°52'41", in NE¼SE¼ sec.14, T.25 N., R.48 W., Box Butte County, at upstream side of county road, 2.9 miles north of the junction of Emerson and Third Street in Alliance.	32.3	1953-70c, 1971-73	5- 6-73	9.93	6
06457800	Antelope Creek tributary near Gordon, Nebr.	Lat 42°49'57", long 102°12'09", in SW¼SW¼ sec.18, T.33 N., R.41 W., Sheridan County, at bridge on State Highway 27, 2 miles north of Gordon and 2.5 miles north of U.S. Highway 20.	26.6	1953-73	1-18-73	10.50	13
06461300	Big Beaver Creek near Valentine, Nebr.	Lat 42°56'24", long 100°27'25", in SE¼SE¼ sec.2, T.34 N., R.27 W., Cherry County, at box culvert under State Highway 12, 7.6 miles northeast of Valentine and 10.2 miles west of Sparks.	24.9	1971-73	7-28-73	11.33	(†)
06463300	Sand Draw tributary near Ainsworth, Nebr.	Lat 42°36'03", long 99°56'59", in SW¼NW¼ sec.6, T.30 N., R.22 W., Brown County, on north-south abandoned road right-of-way, 5.5 miles northwest of Ainsworth.	1.07	1956-73	8-30-73	13.41	475
06465300	Camp Creek near O'Neill, Nebr.	Lat 42°39'08", long 98°39'26", in NW¼SW¼ sec.19, T.31 N., R.11 W., Holt County, on U.S. Highway 281, 13 miles north of O'Neill.	1.65	1958-73	5-27-73	(a)	b10
06465850	Bingham Creek near Niobrara, Nebr.	Lat 42°42'12", long 98°02'54", in NW¼SW¼ sec.32, T.32 N., R.6 W., Knox County, at culvert on State Highway 14, 4.7 miles south of Niobrara.	d6.5	1968-73	7-24-73	12.47	(†)
		Weigand Creek basin					
06466950	Weigand Creek near Crofton, Nebr.	Lat 42°43'36", long 97°37'55" in NW¼NE¼ sec.26, T.32 N., R.3 W., Knox County, at culvert on State Highway 12, 5.5 miles east of Lindy and 6.5 miles west of Crofton.	d3.5	1968-73	6-18-73	11.20	230
		Bow Creek basin					
06478520	West Bow Creek near Fordyce, Nebr.	Lat 42°41'40", long 97°25'06", in NE¼NW¼ sec.3, T.31 N., R.1 W., Cedar County, at bridge on U.S. Highway 81, 1.2 miles southeast of Constance and 2.9 miles west of Fordyce.	52.7	1964-65, 1967e, 1967-73	6-18-73	11.01	230
		Omaha Creek basin					
06600800	South Omaha Creek tributary No. 2 near Walthill, Nebr.	Lat 42°08'18", long 96°28'37", in NE¼SW¼ sec.13, T.25 N., R.8 E., Thurston County, at culvert on U.S. Highway 77, 0.6 mile south of State Highway 94 and 0.8 mile southeast of Walthill.	1.65	1950-73	3-23-73	10.68	160
06600900	South Omaha Creek at Walthill, Nebr.	Lat 42°08'54", long 96°28'58", in SE¼SE¼ sec.11, T.25 N., R.8 E., Thurston County, at bridge on State Highway 94 at east edge of Walthill.	51.2	1951-73	3-23-73	12.70	1,250
		Tekamah Creek basin					
06607800	South Branch Tekamah Creek tributary near Tekamah, Nebr.	Lat 41°45'15", long 96°17'11", in NW¼NW¼ sec.34, T.21 N., R.10 E., Burt County, at bridge on east-west county road, 4 miles southwest of Tekamah.	4.08	1950-73	3-25-73	f9.0	160

Annual maximum discharge at crest-stage partial-record stations during water year 1973--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (cfs)
		New York Creek basin					
06608700	New York Creek tributary near Spiker, Nebr.	Lat 41°38'24", long 96°18'27", in SW¼SW¼ sec.4, T.19 N., R.10 E., Washington County, at box culvert on east-west county road, 300 ft east of north-south county road and 2.2 miles north of Spiker.	1.55	1951-73	5-27-73	25.58	60
06608800	New York Creek north of Spiker, Nebr.	Lat 41°37'32", long 96°18'34", in SE¼SE¼ sec.8, T.19 N., R.10 E., Washington County, at bridge 100 ft west of present crossing of north-south county road and 1.1 miles north of Spiker.	6.50	1951-73	5-27-73	14.93	830
06608900	New York Creek east of Spiker, Nebr.	Lat 41°36'53", long 96°16'14", in SE¼SE¼ sec.15, T.19 N., R.10 E., Washington County, on north-south dirt road, 200 ft south of county road and 2.6 miles east of Spiker.	13.9	1950-73	5-27-73	13.72	800
		Papillion Creek basin					
06610700	Big Papillion Creek near Orum, Nebr.	Lat 41°32'44", long 96°13'10", in NW¼SE¼ sec.7, T.18 N., R.11 E., Washington County, at bridge on State Highway 91, 2.7 miles east of Orum and 4.3 miles west of Blair.	8.52	1968-73	5-27-73	12.45	(†)
		Platte River basin					
06678750	Dry Spottedtail Creek tributary near Mitchell, Nebr.	Lat 42°07'00", long 103°49'22", in NW¼NE¼ sec.26, T.25 N., R.56 W., Sioux County, at upstream end of box culvert under State Highway 29, 3.6 miles north of Interstate Canal and 12 miles north of Mitchell.	15.0	1971-73	7- 8-73	19.07	1,660
06684900	Hackberry Creek near Redington, Nebr.	Lat 41°35'00", long 103°25'17", in NW¼NW¼ sec.34, T.19 N., R.53 W., Banner County, at upstream side of box culvert under State Highway 88, 8 miles west of Redington.	16.6	1970-73	2-24-73	11.45	(†)
06687600	Ash Hollow near Oshkosh, Nebr.	Lat 41°15'05", long 102°20'28", in SE¼SE¼ sec.22, T.15 N., R.44 W., Garden County, at upstream side of box culvert under State Highway 27, 11 miles south of Oshkosh.	54.9	1968e, 1968, 1970-73	7- 2-71 9- 1-72 2-23-73	11.49 11.47 h14.37	g85 g80 140
06762650	Lodgepole Creek tributary near Kimball, Nebr.	Lat 41°17'57", long 103°36'32", in SE¼SE¼ sec.30, T.16 N., R.55 W., Kimball County, at upstream side of box culvert under State Highway 71, 6.5 miles north of Kimball.	8.68	1970-73	9- 8-73	11.95	(†)
06763200	Lodgepole Creek tributary near Sunol, Nebr.	Lat 41°10'00", long 102°43'25", in SE¼SE¼ sec.20, T.14 N., R.47 W., Cheyenne County, at upstream side of box culvert under graveled county road, 2 miles east and 0.6 mile north of Sunol.	15.6	1968e, 1968-73	1973	-	0
06767200	North Fork Plum Creek tributary near Farnam, Nebr.	Lat 40°42'18", long 100°14'24", in NW¼SW¼ sec.36, T.9 N., R.26 W., Lincoln County, at box culvert on State Highway 23, 0.1 mile east of north-south dirt road and 1.3 miles west of main street in Farnam.	1.83	1952-73	5-26-73	10.89	59
06767410	Plum Creek near Farnam, Nebr.	Lat 40°41'13", long 100°08'42", in NE¼NW¼ sec.10, T.8 N., R.25 W., Frontier County, on east-west road 0.4 mile west of State Highway 23 and 4 miles southeast of Farnam.	80.4	1947, 1951-73	7-19-73	11.04	120

Annual maximum discharge at crest-stage partial-record stations during water year 1973--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (cfs)
		Platte River basin--Continued					
06768050	Buffalo Creek tributary No. 1 near Buffalo, Nebr.	Lat 41°00'44", long 99°48'48", in SW¼NE¼ sec.15, T.12 N., R.22 W., Dawson County, at bridge east of Lutheran Church and School, 2 miles northeast of Buffalo.	2.08	1965-73	5-27-73	10.48	2
06768100	East Buffalo Creek near Buffalo, Nebr.	Lat 41°00'17", long 99°50'14", in SE¼SW¼ sec.16, T.12 N., R.22 W., Dawson County, on bridge 100 ft south of fork in road and 1.2 miles north of road intersection at Buffalo.	5.21	1951-73	1973	-	0
06768400	West Buffalo Creek near Buffalo, Nebr.	Lat 40°59'22", long 99°52'21", in NW¼NE¼ sec.30, T.12 N., R.22 W., Dawson County, on bridge on dirt road, 2.0 miles west of crossroads at Buffalo.	17.1	1951-73	5-27-73	10.41	3
06769100	Elm Creek tributary near Overton, Nebr.	Lat 40°53'14", long 99°33'48", in SW¼SE¼ sec.26, T.11 N., R.20 W., Dawson County, at bridge on dirt road, 1.3 miles west and 10 miles north of Overton.	.58	1951-73	7-20-73	13.38	81
06769200	Elm Creek near Sumner, Nebr.	Lat 40°51'24", long 99°32'21", in NW¼NW¼ sec.7, T.10 N., R.19 W., Dawson County, at concrete culvert on gravel road, 1.4 miles west and 6 miles south of Sumner.	14.9	1951-73	5-27-73	11.65	37
06769300	Elm Creek tributary No. 2 near Overton, Nebr.	Lat 40°51'02", long 99°32'21", in NW¼SW¼ sec.7, T.10 N., R.19 W., Dawson County, at culvert on gravel road, 7.5 miles north of Overton.	5.62	1951-73	5-27-73	11.87	178
06770600	Wood River tributary near Lodi, Nebr.	Lat 41°11'58", long 99°50'21", in SE¼NE¼ sec.9, T.14 N., R.22 W., Custer County, at culvert on State Highway 40, 1.3 miles southeast of Lodi and 6.1 miles northwest of Oconto.	2.02	1952-73	7-20-73	10.98	14
06770700	Wood River near Lodi, Nebr.	Lat 41°10'15", long 99°48'17", in SW¼NE¼ sec.23, T.14 N., R.22 W., Custer County, at culvert on State Highway 40, 2.9 miles northwest of Oconto, 4 miles southeast of Lodi, and 10 miles southeast of Callaway.	12.9	1952-73	5-27-73	10.88	3
06770800	Wood River near Oconto, Nebr.	Lat 41°09'46", long 99°47'38", in SW¼SW¼ sec.24, T.14 N., R.22 W., Custer County, on State Highway 40, 2.6 miles northwest of Oconto.	26.4	1950, 1952-73	7-20-73	12.57	115
06770900	Wood River at Oconto, Nebr.	Lat 41°08'50", long 99°45'26", in NW corner sec.32, T.14 N., R.21 W., Custer County, at bridge on State Highway 21 just north of Oconto, 0.8 mile north of junction with State Highway 40.	44.8	1950, 1952-73	7-20-73	(a)	b5
06770910	Wood River near Lomax, Nebr.	Lat 41°03'40", long 99°40'50", in SW¼SW¼ sec.25, T.13 N., R.21 W., Custer County, at bridge No. 7091 on State Highway 40, 50 ft downstream from Union Pacific Railroad bridge and 0.5 mile southeast of crossroads at Lomax.	79.6	1952-73	7-20-73	(a)	b15
06775700	North Fork Dismal River near Mullen, Nebr.	Lat 41°51'08", long 101°02'14", in SE¼NE¼ sec.29, T.22 N., R.32 W., Hooker County, at upstream end of culvert under State Highway 97, 13 miles south of Mullen.	670	1971-73	9-28-73	15.81	110

Annual maximum discharge at crest-stage partial-record stations during water year 1973--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (cfs)
		Platte River basin--Continued					
06777600	Lillian Creek tributary near Broken Bow, Nebr.	Lat 41°30'12", long 99°39'31", in SE¼NE¼ sec.30, T.18 N., R.20 W., Custer County, at bridge on north-south gravel road, 7.5 miles north of State Highway 2 in Broken Bow.	2.02	1952-73	5-27-73	11.87	13
06777700	Lillian Creek near Broken Bow, Nebr.	Lat 41°30'36", long 99°39'26", in NE¼NE¼ sec.30, T.18 N., R.20 W., Custer County, at bridge on north-south gravel road, 8 miles north of State Highway 2 in Broken Bow.	4.77	1947, 1951-73	5-27-73	11.16	712
06777800	Lillian Creek tributary near Walworth, Nebr.	Lat 41°37'33", long 99°34'13", in SE¼SW¼ sec.12, T.19 N., R.20 W., Custer County, on east-west dirt road, 2 miles south of Walworth.	2.04	1951-73	5-27-73	-	b.25
06782600	South Branch Mud Creek tributary near Broken Bow, Nebr.	Lat 41°25'57", long 99°42'09", in SW¼NE¼ sec.23, T.17 N., R.21 W., Custer County, at box culvert on State Highway 2, 4 miles northwest of Broken Bow.	g.40	1951-73	7-10-73	13.10	174
06782700	South Branch Mud Creek at Broken Bow, Nebr.	Lat 41°24'07", long 99°38'51", in SE¼NW¼ sec.32, T.17 N., R.20 W., Custer County, at bridge on State Highway 2, 0.2 mile upstream from confluence with North Branch of Mud Creek and 0.3 mile west of Arrow Hotel at town square in Broken Bow.	86	1945, 1951-73	7- 3-73	11.23	37
06782900	Mud Creek tributary near Broken Bow, Nebr.	Lat 41°22'32", long 99°38'17", in NE¼NW¼ sec.8, T.16 N., R.20 W., Custer County, at double concrete box culvert on State Highway 21, 1.8 miles south of State Highway 2 in Broken Bow.	g5.90	1945, 1951-73	7-20-73	fh14.19	b5
06784700	Turkey Creek near Farwell, Nebr.	Lat 41°13'14", long 98°40'45", in NW¼NE¼ sec.3, T.14 N., R.12 W., Howard County, at bridge on State Highway 92, 0.2 mile west of School No. 78 and 2.7 miles west of Farwell.	27.2	1950, 1953-73	8-13-73	14.57	117
06789400	Davis Creek southwest of North Loup, Nebr.	Lat 41°24'32", long 98°48'32", in NE¼NE¼ sec.33, T.17 N., R.13 W., Valley County, at timber bridge 6.5 miles southwest of North Loup.	31.2	1951-73	8-15-73	f20.99	254
06790600	East Branch Spring Creek tributary near Wolbach, Nebr.	Lat 41°27'28", long 98°25'45", in NE¼SE¼ sec.11, T.17 N., R.10 W., Greeley County, at box culvert on county road, 0.6 mile south of east-west dirt road, 1.1 miles north of gravel road to Brayton, and 4.5 miles northwest of Wolbach.	1.52	1952-73	9-28-73	11.66	39
06790700	West Branch Spring Creek at Brayton, Nebr.	Lat 41°27'27", long 98°28'38", in NE¼SW¼ sec.9, T.17 N., R.10 W., Greeley County, at steel truss bridge on north-south dirt road, 200 ft north of T in road and 0.4 mile south of Brayton.	19.5	1945, 1952-73	7-29-73	10.30	42
06791100	Spring Creek near Cushing, Nebr.	Lat 41°17'08", long 98°22'42", in SW¼NW¼ sec.8, T.15 N., R.9 W., Howard County, at bridge 0.9 mile southwest of Cushing and 1.9 miles upstream from Loup River.	184	1948j, 1949-53‡j, 1953-73	9-28-73	11.62	220
06793995	Skeedee Creek tributary near Genoa, Nebr.	Lat 41°29'46", long 97°52'23", in NE¼NE¼ sec.34, T.18 N., R.5 W., Nance County, at bridge on county road, 5 miles south of St. Edward and 7.5 miles northwest of Genoa.	.59	1964e, 1964, 1968-73	5-26-73	13.52	170

Annual maximum discharge at crest-stage partial-record stations during water year 1973--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (cfs)
		Platte River basin--Continued					
06794710	Bone Creek near David City, Nebr.	Lat 41°16'42", long 97°02'51", in SW¼SE¼ sec.11, T.15 N., R.3 E., Butler County, at bridge on State Highway Spur 12B, 1 mile north and 4.3 miles east of David City.	8.75	1963e, 1963, 1968-73	9-20-72 7-21-73	15.21 12.67	g970 305
06799190	South Fork Union Creek tributary near Cornlea, Nebr.	Lat 41°42'00", long 97°34'22", in SE¼SW¼ sec.17, T.20 N., R.2 W., Platte County, at culvert on State Highway 91, 0.5 mile west and 1.2 miles north of Cornlea.	6.54	1967-73	5-26-73	14.25	1,310
06799423	North Logan Creek near Laurel, Nebr.	Lat 42°28'00", long 97°02'55", in NW¼NW¼ sec.26, T.29 N., R.3 E., Cedar County, at bridge on U.S. Highway 20, 2.2 miles east and 3 miles north of Laurel.	d25.3	1965e, 1965, 1967e, 1967-73	3-14-73	14.77	1,700
06799850	Pond Creek near Schuyler, Nebr.	Lat 41°31'15", long 97°03'33", in SE¼NE¼ sec.22, T.18 N., R.3 E., Colfax County, at culvert on State Highway 15, 4.7 miles north of Schuyler.	.54	1968-73	3-24-73	10.53	178
06800350	Elkhorn River tributary near Nickerson, Nebr.	Lat 41°30'34", long 96°33'06", in NE¼NW¼ sec.29, T.18 N., R.8 E., Dodge County, at bridge on county road, 4.5 miles southwest of Nickerson.	6.53	1968-73	3-24-73	13.72	(†)
06803200	Antelope Creek at 48th Street, Lincoln, Nebr.	Lat 40°47'16", long 96°39'13", in SE¼SW¼ sec.32, T.10 N., R.7 E., Lancaster County, on left downstream wingwall of culvert at 48th Street in Lincoln.	7.14	1951, 1958-73	9-26-73	12.05	1,050
06803300	Antelope Creek at 27th Street, Lincoln, Nebr.	Lat 40°48'10", long 96°40'56", in NE¼SE¼ sec.25, T.10 N., R.6 E., Lancaster County, on downstream side of bridge at 27th and Alpha Streets in Lincoln.	10.6	1957-73	9-26-73	8.74	1,350
06803400	Antelope Creek at 17th Street, Lincoln, Nebr.	Lat 40°49'26", long 96°41'47", in SW¼NW¼ sec.24, T.10 N., R.6 E., Lancaster County, on right bank 40 ft downstream from 17th Street bridge in Lincoln and 3,600 ft upstream from mouth.	12.1	1958-62‡, 1963-73	9-26-73	7.68	1,850
06803540	Dee Creek near Alvo, Nebr.	Lat 40°54'52", long 96°25'04", in SE¼SE¼ sec.17, T.11 N., R.9 E., Cass County, at bridge on county road, 2 miles west and 3 miles north of Alvo.	7.88	1961e, 1962-73	9-26-73	16.79	1,920
06803570	Dunlap Creek tributary near Weston, Nebr.	Lat 41°12'25", long 96°48'46", in SE¼SE¼ sec.2, T.14 N., R.5 E., Saunders County, on tree just upstream from box culvert on State Highway 79, 200 ft north of U.S. Highway 30A and State Highway 92 and 3.5 miles northwest of Weston.	.43	1950-73	6- 5-73	14.55	290
06803600	North Fork Wahoo Creek near Prague, Nebr.	Lat 41°15'37", long 96°48'47", in NW¼NW¼ sec.24, T.15 N., R.5 E., Saunders County, at bridge on State Highway 79, 0.2 mile south of road intersection and 3.5 miles south of Prague.	15.4	1951-73	9-26-73	f7.50	140
06803900	North Fork Wahoo Creek at Weston, Nebr.	Lat 41°12'19", long 96°43'40", in NE¼NW¼ sec.10, T.14 N., R.6 E., Saunders County, at bridge on State Highway 92, 1 mile northeast of Weston.	43.3	1951-73	5-27-73	12.07	730

Annual maximum discharge at crest-stage partial-record stations during water year 1973--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (cfs)
		Platte River basin--Continued					
06804100	Silver Creek near Cedar Bluffs, Nebr.	Lat 41°22'48", long 96°35'15", in NW¼NE¼ sec.11, T.16 N., R.7 E., Saunders County, at bridge on county road, 0.8 mile east of State Highway 109 and 1.5 miles southeast of Cedar Bluffs.	7.00	1950-73	7-10-73	12.06	825
06804200	Silver Creek near Colon, Nebr.	Lat 41°18'26", long 96°33'47", in NW¼NW¼ sec.6, T.15 N., R.8 E., Saunders County, at bridge on county road, 2.1 miles east of State Highway 109 and 2.5 miles east of Colon.	30.3	1950-73	7-10-73	10.34	230
06804300	Silver Creek tributary near Colon, Nebr.	Lat 41°21'03", long 96°38'45", in NW¼NE¼ sec.20, T.16 N., R.7 E., Saunders County, at culvert on county road, 2.3 miles west of State Highway 109 and 4 miles northwest of Colon.	10.3	1951-73	5-27-73	11.50	25
06804400	Silver Creek tributary at Colon, Nebr.	Lat 41°17'55", long 96°36'18", in NW¼SW¼ sec.2, T.15 N., R.7 E., Saunders County, at culvert on State Highway 109, 0.2 mile east of Colon.	17.6	1951-73	7-10-73	12.40	56
06804500	Silver Creek at Ithaca, Nebr.	Lat 41°09'44", long 96°31'38", in NW¼NE¼ sec.28, T.14 N., R.8 E., Saunders County, at bridge on county road, 0.5 mile east of Ithaca.	80.0	1950-58‡, 1959-73	3-24-73	f7.08	310
06805510	Buffalo Creek near Gretna, Nebr.	Lat 41°06'12", long 96°13'30", in NE¼NW¼ sec.18, T.13 N., R.11 E., Sarpy County, at bridge on county road, 1,100 ft downstream from junction of Buffalo Creek and left-bank tributary, 1,700 ft downstream from Interstate Highway 80, and 1 mile east and 2.5 miles south of Gretna.	4.29	1968-73	9-26-73	11.31	(†)
		Weeping Water Creek basin					
06806440	Stove Creek at Elmwood, Nebr.	Lat 40°50'32", long 96°17'37", in SW¼NW¼ sec.15, T.10 N., R.10 E., Cass County, at bridge on State Highway 1 at south side of Elmwood.	10.3	1950-73	3-31-73	16.94	1,350
06806460	Weeping Water Creek at Weeping Water, Nebr.	Lat 40°51'18", long 96°07'10", in NW¼NW¼ sec.7, T.10 N., R.12 E., Cass County, at bridge of Missouri Pacific Railroad just south of north-south road, 1 mile southeast of Weeping Water.	80.1	1947, 1950-72, 1973e	5- 8-73	f9.4	1,400
06806470	Weeping Water Creek tributary near Weeping Water, Nebr.	Lat 40°51'46", long 96°06'43", in NE¼SW¼ sec.6, T.10 N., R.12 E., Cass County, at culvert of Missouri Pacific Railroad, 1,400 ft west of north-south road and 1.5 miles southeast of Weeping Water.	.73	1950-73	9-26-73	14.43	490
		Honey Creek basin					
06810060	Honey Creek near Peru, Nebr.	Lat 40°26'38", long 95°45'12", in SW¼NE¼ sec.32, T.6 N., R.15 E., Nemaha County, at bridge on county road, 1 mile west and 2 miles south of Peru.	3.43	1968-73	7- 3-73	19.22	3,200
		Little Nemaha River basin					
06810100	Hooper Creek tributary near Palmyra, Nebr.	Lat 40°46'10", long 96°25'23", in NW¼NW¼ sec.9, T.9 N., R.9 E., Otoe County, at bridge on east-west portion of State Highway 43, 300 ft east of turn in highway and 4.5 miles north of Palmyra.	8.00	1950-73	5- 7-73	12.56	450

Annual maximum discharge at crest-stage partial-record stations during water year 1973--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (cfs)
		Little Nemaha River basin--Continued					
06810400	Little Nemaha River tributary near Syracuse, Nebr.	Lat 40°40'05", long 96°11'54", in SE¼SE¼ sec.8, T.8 N., R.11 E., Otoe County, at multiple box culvert on county road, 50 ft west of crossroad, about 1.0 mile south of State Highway 2, and 1.5 miles northwest of Syracuse.	0.71	1950-73	5- 7-73	10.36	135
		Big Nemaha River basin					
06815510	Temple Creek near Falls City, Nebr.	Lat 40°08'36", long 95°36'27", in NE¼NW¼ sec.15, T.2 N., R.16 E., Richardson County, at culvert on U.S. Highway 73, 6 miles north of Falls City.	2.99	1968-73	8-12-73	12.83	1,050
		Kansas River basin					
06828100	North Branch Indian Creek near Max, Nebr.	Lat 40°09'52", long 100°23'51", in SW¼SW¼ sec.4, T.2 N., R.36 W., Dundy County, at bridge on county road, 1.8 miles above the mouth and 3.5 miles north of Max.	d4.76	1962e, 1962, 1970-73	7-20-73	13.03	520
06829700	Thompson Canyon near Trenton, Nebr.	Lat 40°09'44", long 100°57'31", in SE¼SW¼ sec.5, T.2 N., R.32 W., Hitchcock County, on downstream side of bridge on county road, 0.5 mile south and 2.8 miles east of Trenton.	9.06	1966e, 1968e, 1966-73	5-22-73	5.87	64
06834100	Spring Creek tributary near Grant, Nebr.	Lat 40°49'52", long 101°48'57", in SW¼SW¼ sec.18, T.10 N., R.29 W., Perkins County, on downstream side of Burlington Northern Inc. railroad bridge, 57 ft upstream from culvert under State Highway 23 and 5.2 miles southwest of Grant.	17.9	1970-73	1973	-	0
06835100	Bobtail Creek near Palisade, Nebr.	Lat 40°18'17", long 101°06'40", in SE¼NW¼ sec.13, T.4 N., R.34 W., Hitchcock County, on downstream side of bridge on county road, 2.2 miles south of Palisade and 3.5 miles upstream from Frenchman Creek.	d30.2	1966-67e, 1966-73	9-28-73	3.00	90
06837100	Ash Creek near Red Willow, Nebr.	Lat 40°11'28", long 100°29'19", in SE¼SW¼ sec.28, T.3 N., R.28 W., Red Willow County, 4 ft downstream from bridge on county road, 3 miles south and 1 mile east of Red Willow school, and 1.8 miles upstream from Republican River.	22.0	1966e, 1966-73	1973	-	0
06838200	Coon Creek at Indianola, Nebr.	Lat 40°14'03", long 100°25'37", in NW¼NE¼ sec.13, T.3 N., R.28 W., Red Willow County, at bridge on U.S. Highways 6 and 34, 0.5 mile west of Indianola.	d69	1961-73	7-20-73	-	b20
06838550	Dry Creek at Bartley, Nebr.	Lat 40°15'02", long 100°19'02", in SW¼SE¼ sec.1, T.3 N., R.27 W., Red Willow County, at bridge on U.S. Highways 6 and 34, 0.5 mile west of Bartley.	d42	1961-73	7-20-73	-	b10
06839000	Medicine Creek at Maywood, Nebr.	Lat 40°39'23", long 100°36'41", in NE¼NE¼ sec.21, T.8 N., R.29 W., Frontier County, 150 ft downstream from bridge on county road and 0.2 mile east of Maywood.	dg231	1951-58¼, 1960-73	7-19-73	f2.5	85
06839200	Elkhorn Canyon near Maywood, Nebr.	Lat 40°36'10", long 100°42'02", in NE¼SW¼ sec.2, T.7 N., R.30 W., Frontier County, on tree on left bank, 10 ft downstream from bridge, 4.5 miles upstream from Brushy Creek, and 6 miles southwest of Maywood.	6.74	1952-73	7-19-73	f9.5	29

Annual maximum discharge at crest-stage partial-record stations during water year 1973--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (cfs)
		Kansas River basin--Continued					
06839500	Brushy Creek near Maywood, Nebr.	Lat 40°37'51", long 100°37'47", in SE¼SE¼ sec.29, T.8 N., R.29 W., Frontier County, on right bank 420 ft downstream from bridge on U.S. Highway 83 and 2 miles south of Maywood.	d95	1935, 1947, 1951-58‡, 1960-73	7-19-73	f3.7	30
06839700	Frazier Creek tributary near Maywood, Nebr.	Lat 40°35'32", long 100°37'46", in SE¼NE¼ sec.8, T.7 N., R.29 W., Frontier County, at box culvert on U.S. Highway 83, 4.5 miles south of Maywood.	.72	1952-73	1973	-	0
06839900	Fox Creek upstream from Cut Canyon near Curtis, Nebr.	Lat 40°44'40", long 100°31'52", in SE¼SE¼ sec.17, T.9 N., R.28 W., Lincoln County, at timber bridge 8.0 miles north of Curtis.	31.8	1951-73	7-19-73	-	b10
06839950	Cut Canyon near Curtis, Nebr.	Lat 40°43'39", long 100°32'10", in NE¼NW¼ sec.29, T.9 N., R.28 W., Lincoln County, at timber bridge 6.5 miles north of Curtis.	25.6	1951-73	7-19-73	12.25	160
06849600	Turkey Creek near Holdrege, Nebr.	Lat 40°19'33", long 99°22'04", in NW¼SW¼ sec.9, T.4 N., R.18 W., Harlan County, at bridge on U.S. Highway 183, 7.8 miles south of Holdrege.	22.9	1941, 1960, 1967e, 1967-73	7-13-73	12.22	175
*06850000	Turkey Creek at Naponee, Nebr.	Lat 40°04'34", long 99°08'17", in SW¼SW¼ sec.4, T.1 N., R.16 W., Franklin County, on downstream side of county bridge at east side of Naponee.	129	1948-53‡, 1954-61e, 1962-73	7-13-73	10.46	1,850
*06850200	Cottonwood Creek near Bloomington, Nebr.	Lat 40°05'09", long 99°04'05", in SE¼NE¼ sec.1, T.1 N., R.16 W., Franklin County, on downstream side of county bridge, 1 mile upstream from mouth and 1.5 miles west of Bloomington.	15.6	1948-56‡, 1957-61e, 1962-73	4- 1-73	8.27	550
06850500	Republican River near Bloomington, Nebr.	Lat 40°03'58", long 99°02'14", in NW¼SE¼ sec.8, T.1 N., R.15 W., Franklin County, 2 miles south of Bloomington.	21,000	1929-57, 1960-67e, 1970-73k	7-12-73	3.78	k822
06851090	Republican River at Riverton, Nebr.	Lat 40°05'26", long 98°46'03", in SE¼SE¼ sec.34, T.2 N., R.13 W., Franklin County, at bridge on county road 0.5 mile west of Riverton.	21,300	1963-67e, 1970-73k	7-12-73	4.63	k756
06851300	West Branch Thompson Creek tributary near Hildreth, Nebr.	Lat 40°19'10", long 99°00'33", in NW¼NW¼ sec.15, T.4 N., R.15 W., Franklin County, on north-south county road, 2 miles southeast of Hildreth and 3 miles west of State Highway 10.	11.5	1953-73	7-13-73	11.60	47
06851400	West Branch Thompson Creek near Upland, Nebr.	Lat 40°17'32", long 98°56'10", in NE¼NE¼ sec.30, T.4 N., R.14 W., Franklin County, on State Highway 4, 3 miles southwest of Upland.	128	1953-73	4- 1-73	10.63	215
*06852000	Elm Creek at Amboy, Nebr.	Lat 40°05'20", long 98°26'07", in NE¼NW¼ sec.3, T.1 N., R.10 W., Webster County, on downstream side of bridge on U.S. Highway 136 at east edge of Amboy.	39.2	1948-53‡, 1954-60e, 1959, 1961-73	9-28-73	14.04	1,400
06853100	Beaver Creek near Rosemont, Nebr.	Lat 40°15'47", long 98°22'31", in NW¼NE¼ sec.6, T.3 N., R.9 W., Webster County, at county road bridge, 1.8 miles southwest of Rosemont.	.752	1938-70‡, 1971-73	9- 3-73	4.19	543

Annual maximum discharge at crest-stage partial-record stations during water year 1973--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (cfs)
		Kansas River basin--Continued					
06853400	Republican River at Superior, Nebr.	Lat 40°01'22", long 98°06'17", in NE corner SE¼ sec.28, T.1 N., R.7 W., Nuckolls County, on downstream guardrail of railroad bridge at cement plant, 2.0 miles west of Superior.	22,300	1961-65e, 1967e, 1971-73	7-15-73	7.71	k1,180
06879850	Big Blue River tributary (site 2) near Hordville, Nebr.	Lat 41°02'47", long 97°56'15", in NW¼NW¼ sec.6, T.12 N., R.5 W., Hamilton County, at bridge on east-west county road, 2.2 miles south and 2.8 miles west of Hordville.	5.03	1968-71m 1972-73	3-24-73	13.48	240
06880508	Plum Creek near Seward, Nebr.	Lat 40°55'49", long 97°04'32", in NE¼NW¼ sec.15, T.11 N., R.3 E., Seward County, at bridge on county road, 0.6 mile north and 1.3 miles east of Seward.	85.5	1963e, 1963, 1968-73	9- 3-73	13.80	570
06880590	North Branch West Fork Big Blue River tributary at Giltner, Nebr.	Lat 40°47'04", long 98°08'57", in NE¼NE¼ sec.6, T.9 N., R.7 W., Hamilton County, at culvert on State Highway Spur 502, 0.7 mile north of Giltner.	7.52	1968-73	3-25-73	10.37	(†)
06880720	School Creek near Harvard, Nebr.	Lat 40°35'49", long 98°03'04", in NW¼NW¼ sec.7, T.7 N., R.6 W., Clay County, at bridge on black-top county road, 0.9 mile north of junction of U.S. Highway 6 and State Highway 14 and 3 miles southeast of Harvard.	51.5	1953-73	5-27-73	14.72	195
06880730	School Creek tributary No. 2 near Harvard, Nebr.	Lat 40°36'42", long 98°02'36", in SE¼SW¼ sec.31, T.8 N., R.6 W., Clay County, at culvert on east-west portion of black-top county road, 100 ft north of Burlington Northern Inc. underpass and 3 miles east of Harvard.	16.4	1953-73	5-27-73	14.08	275
06880775	Beaver Creek tributary near Henderson, Nebr.	Lat 40°48'52", long 97°48'43", in NW¼NE¼ sec.30, T.10 N., R.4 W., York County, at culvert on east-west county road, 0.3 mile west and 2 miles north of Henderson.	1.16	1968-73	3-24-73	10.34	14
06881250	South Fork Swan Creek tributary near Western, Nebr.	Lat 40°18'18", long 97°10'46", in NE¼NE¼ sec.22, T.4 N., R.2 E., Jefferson County, at culvert on State Highway 15, 6.2 miles southeast of Western and 1.1 miles south and 6.3 miles east of Dakin.	.07	1968-73	5-27-73	10.25	(†)
06881450	Indian Creek at Beatrice, Nebr.	Lat 40°17'08", long 96°44'47", in SE¼NE¼ sec.28, T.4 N., R.6 E., Gage County, at bridge on U.S. Highway 77 at north edge of Beatrice.	74.7	1960-73	9-26-73	15.15	3,800
06881500	Big Blue River at Beatrice, Nebr.	Lat 40°15'22", long 96°44'47", in SW¼NW¼ sec.3, T.3 N., R.6 E., Gage County, at upstream side of 6th Street bridge which is U.S. Highway 77 in Beatrice.	3,900	1910-15‡, 1954e, 1960-65e, 1967e, 1968-69n, 1969, 1971-73	3- 1-73 3-25-73 4- 2-73 7-24-73 8-21-73 9-25-73 9-26-73 9-27-73 9-27-73	5.06 15.44 15.03 5.52 3.60 4.98 19.88 15.38 15.43	k756 k7,970 k7,860 k884 k210 k730 13,400 k8,520 k8,040
06881530	Big Blue River tributary near Beatrice, Nebr.	Lat 40°15'46", long 96°39'09", in SW¼SE¼ sec.32, T.4 N., R.7 E., Gage County, at upstream end of box culvert of U.S. Highway 136, 4.6 miles east of highway intersection in Beatrice.	1.86	1971-73	3-31-73	12.67	170

Annual maximum discharge at crest-stage partial-record stations during water year 1973--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (cfs)
		Kansas River basin--Continued					
06883540	Spring Creek tributary near Ruskin, Nebr.	Lat 40°06'50", long 97°49'13", in SE¼NE¼ sec.25, T.2 N., R.5 W., Nuckolls County, at culvert on north-south county road, 2.3 miles south and 2.5 miles east of Ruskin.	2.11	1967-73	6- 3-73	14.00	185
06883700	South Fork Big Sandy Creek near Davenport, Nebr.	Lat 40°18'27", long 97°52'39", in SW¼SW¼ sec.15, T.4 N., R.5 W., Nuckolls County, at wood bridge on dirt road, 50 ft north of State Highway 4 and 3.5 miles west of Davenport.	28.1	1950, 1952-73	6- 3-73	15.05	640
06883955	Little Sandy Creek near Ohiowa, Nebr.	Lat 40°25'37", long 95°23'38", in SE¼SE¼ sec.16, T.5 N., R.1 W., Fillmore County, at bridge on east-west county road 1 mile south and 1.5 miles east of Ohiowa.	11.6	1968-73	9-16-68	10.65	p24
					5-22-69	14.83	p443
					7-13-70	12.51	p193
					5- 9-71	13.48	p297
					4-30-72	12.77	p220
					5- 8-73	13.03	250
06884005	Dry Branch tributary near Fairbury, Nebr.	Lat 40°02'43", long 97°10'14", in SW¼SE¼ sec.14, T.1 N., R.2 E., Jefferson County, at bridge on State Highway 15, 3 miles north of Nebraska-Kansas State line and 6.4 miles south of Fairbury.	4.51	1968-73	8-18-68	13.70	p347
					7-17-69	14.12	p422
					5-23-70	12.09	p164
					5-18-71	10.81	p72
					4-27-72	11.80	p140
					7-20-73	16.09	1,270

* Also a low-flow partial-record station.
† Discharge not determined.
‡ Operated as a continuous-record gaging station.
a Stage below bottom of gage, which is 10.0 ft.
b Estimate.
c At site 1.2 miles downstream, drainage area 34.0 sq mi.
d Approximate.
e Discharge measurements published in table for miscellaneous sites.
f Outside flood mark.
g Revised.
h Affected by backwater.
j At site 1 mile north, record considered equivalent.
k Discharge measurement only.
m At site 1.08 miles upstream, drainage area 4.07 sq mi.
n Discharge measurements published in low-flow partial-record table.
p Not previously published.

Discharge measurements at miscellaneous sites

Measurements of streamflow at points other than gaging stations or partial-record stations are given in the following table. Those that are measurements of peak flow are designated by a dagger (†).

Discharge measurements made at miscellaneous sites during water year 1973

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
White River basin						
White River (06445000)	Missouri River	Lat 42°48'42", long 103°09'59", in SE¼NE¼NE¼ sec.26, T.33 N., R.50 W., Dawes County, at bridge on county road 1.7 miles north and 4.5 miles east of Whitney, Nebr.	676	1948-61‡, 1969-72	10- 3-72	1.4
					11-11-72	0
Niobrara River basin						
Niobrara River (06455900)a/	.....do.....	Lat 42°27'45", long 102°55'25", on river and two diversion canals in SE¼NW¼ sec.26, T.29 N., R.48 W., Dawes County, at diversion dam 1,000 ft upstream from Cottonwood Creek and 2.5 miles east of Dunlap, Nebr.	b1,580	1931-42‡, 1961-71‡, 1972	10-16-72	11
					11- 8-72	11
					11-20-72	10
					12- 7-72	10
					12-20-72	14
					1-24-73	18
					2-23-73	13
					3-23-73	15
					4-24-73	15
					5-16-73	14
					6-22-73	12
					7-25-73	16
					8-30-73	100
					9-17-73	15
Niobrara River (06457000)a/	.....do.....	Lat 42°32'38", long 102°29'58", in NW¼SE¼SE¼ sec.29, T.30 N., R.44 W., Sheridan County, at bridge 1 mile west of Mill School, 2 miles upstream from Pine Creek, and 2.2 miles southwest of bridge on State Highway 250 near Colclesser, Nebr.	-	1947-48‡, 1963-64, 1969-72	10-16-72	39
					11- 3-72	57
					11-22-72	54
					12- 8-72	32
					12-21-72	45
					1-24-73	47
					2-23-73	71
					3-23-73	75
					4-24-73	65
					5-16-73	64
					6-22-73	43
					7-11-73	20
					7-25-73	49
					8-15-73	22
					8-30-73	28
					9-17-73	69
					9-28-73	63
Platte River basin						
North Platte River (06680100)a/	Platte River	Lat 41°51'45", long 103°43'23", in NW¼SE¼ sec.20, T.22 N., R.55 W., Scotts Bluff County, at bridge on State Highway 29, 3.0 miles west of intersection of Highway 29 and Broadway Avenue, Scottsbluff, Nebr.	-	1972	10-18-72	932
					11-20-72	778
					12-18-72	745
					1-25-73	624
					2-20-73	641
					3-21-73	619
North Platte River (06683100)a/	.....do.....	Lat 41°42'09", long 103°14'44", in SE¼SW¼ sec.18, T.20 N., R.51 W., Morrill County, at Belmont diversion dam 0.6 mile upstream from Red Willow Creek and 5.7 miles southeast of Bayard, Nebr.	-	1972	10-18-72	1,220
					11-20-72	1,040
					1-25-73	926
					2-20-73	796
					3-21-73	811
Cedar Creek (06685650)a/	North Platte River	Lat 41°33'08", long 102°48'44", in NW¼NE¼ sec.11, T.18 N., R.48 W., Morrill County, at bridge on county road 3.7 miles southeast of Broadwater, Nebr.	-	1972	11- 6-72	9.2
Lodgepole Creek (06762550)a/	South Platte River	Lat 41°14'50", long 103°38'32", in SW¼NW¼ sec.28, T.15 N., R.55 W., Kimball County, at county road bridge 0.8 mile north of U.S. Highway 30 at east edge of Kimball, Nebr.	-	-	3-21-73	10
					4-12-73	7.9
					4-25-73	11
					5-24-73	4.2
					6-27-73	2.0
					7-25-73	7.7
					8-22-73	1.1
					9-19-73	4.6

See footnotes at end of table.

Discharge measurements made at miscellaneous sites during water year 1973--Continued

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
		Platte River basin--Continued				
Applegate drain (06765150)a/	South Platte River	Lat 41°08'21", long 101°08'23", in NE¼SE¼ sec.31, T.14 N., R.33 W., Lincoln County, on county road 0.7 mile north of Sutherland Reservoir and 1.5 miles southwest of Sutherland, Nebr.	-	1972	11- 7-72	55
Fremont Slough (06765710)a/	.....do.....	Lat 41°06'02", long 100°45'55", in SW¼NW¼ sec.16, T.13 N., R.30 W., Lincoln County, at bridge on U.S. Highway 83, 3.0 miles south of North Platte, Nebr.	-	1972	11- 7-72	29
Flock drain (06765720)a/	Platte River	Lat 41°06'41", long 100°40'23", in NW¼SW¼ sec.8, T.13 N., R.29 W., Lincoln County, near Tri-County diversion dam 5 miles southeast of North Platte, Nebr.	-	1972	11- 7-72	6.2
Stenger ditch (06765730)a/	.....do.....	Lat 41°04'32", long 100°37'14", in NE¼NE¼ sec.27, T.13 N., R.29 W., Lincoln County, at bridge on county road 1 mile northwest of Bignell and 5 miles west of Maxwell, Nebr.	-	1972	11- 8-72	3.6
Sheldon drain (06766050)a/	.....do.....	Lat 40°55'44", long 100°14'42", in NE¼NE¼ sec.14, T.11 N., R.26 W., Lincoln County, at bridge on county road 4 miles west of Gothenburg, Nebr.	-	1972	11- 8-72	7.6
Rowe ditch (06766550)a/	.....do.....	Lat 40°48'34", long 99°53'17", in SE¼NW¼ sec.27, T.10 N., R.23 W., Dawson County, at bridge on county road 3 miles west of Darr, Nebr.	-	1972	11- 8-72	17
Nisley-Lauby ditch (06766850)a/	.....do.....	Lat 40°44'55", long 99°46'23", in NE¼SW¼ sec.15, T.9 N., R.22 W., Dawson County, at bridge on county road 4 miles southwest of Lexington, Nebr.	-	1972	11- 8-72	7.8
Spring Creek (06768005)a/	.....do.....	Lat 40°41'51", long 99°32'28", in NE¼NW¼ sec.1, T.8 N., R.20 W., Dawson County, at bridge on county road 2.7 miles south of Overton, Nebr.	-	1972	11- 8-72	.8
Dry Creek (06770360)a/	.....do.....	Lat 40°40'41", long 98°43'21", in SW¼NW¼ sec.7, T.8 N., R.12 W., Adams County, at culvert on county-line road 1.3 miles south of Denman, Nebr.	-	1972	10-26-72	0
Spring Creek (06768010)a/	.....do.....	Lat 40°46'12", long 99°41'28", in NW¼NW¼ sec.11, T.6 N., R.21 W., Dawson County, 2 miles east of Lexington, Nebr.	-	-	3-20-73 4-18-73 5-22-73	5.4 6.6 4.0
Spring Creek (06768015)a/	.....do.....	Lat 40°45'10", long 99°40'24", in NW¼NW¼ sec.13, T.6 N., R.21 W., Dawson County, 3 miles southeast of Lexington, Nebr.	-	-	6-21-73 7-13-73 8-15-73 9-11-73	6.6 9.8 39 28
North Channel (06770205)a/	.....do.....	Lat 40°40'30", long 99°00'27", in NW¼SE¼ sec.10, T.8 N., R.15 W., Buffalo County, 4 miles east of Kearney, Nebr.	-	-	3-19-73 4-18-73 5-22-73 6-21-73 7-13-73 8-15-73 9-11-73	30 27 95 80 81 92 278
Wood River (06772200)a/	.....do.....	Lat 40°56'05", long 98°16'56", in SW¼NW¼SW¼ sec.7, T.11 N., R.8 W., Merrick County, at bridge on county road 1.0 mile south of U.S. Highway 30 and 3.0 miles east of Grand Island, Nebr.	-	-	4-11-73 5- 8-73 6- 6-73 7-11-73 8-15-73 9-10-73	80 19 62 42 43 11

Discharge measurements made at miscellaneous sites during water year 1973--Continued

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
Platte River basin--Continued						
Middle Loup River (06777000)a/	Loup River	Lat 41°49'02", long 99°58'15", in NE¼SW¼ sec.3, T.21 N., R.23 W., Blaine County, on right bank at upstream side of Laughran bridge 9 miles upstream from Rifle Creek and 15 miles northwest of Milburn, Nebr.	-	1952-56‡, 1958‡, 1960-64‡, 1969-72	10- 2-72	773
					10-12-72	777
					10-17-72	768
					11- 3-72	749
					11- 9-72	857
					11-15-72	809
					11-29-72	821
					12-22-72	861
					1-17-73	940
					2- 5-73	762
					3-19-73	951
					4-10-73	796
					5- 2-73	879
					6-11-73	660
					7- 2-73	831
					7-17-73	728
					7-24-73	704
					7-30-73	898
					8- 7-73	775
					8-13-73	830
					8-23-73	763
					8-29-73	720
					9- 4-73	756
					9-10-73	765
					9-20-73	782
					9-25-73	903
Middle Loup River (06778500)a/	.....do.....	Lat 41°28'49", long 99°12'43", in NW¼ sec.6, T.17 N., R.16 W., Custer County, at bridge on county-line highway 0.8 mile below part of river known as "Narrows" and 5.5 miles southeast of Comstock, Nebr.	-	1937‡, 1969-71	10- 3-72	418
					10-12-72	405
					10-17-72	426
					11- 3-72	794
					11- 9-72	1,000
					11-17-72	1,110
					11-29-72	866
					12-22-72	1,170
					1-18-73	1,180
					2- 6-73	1,200
					2-23-73	1,220
					3- 7-73	893
					3-22-73	916
					4-11-73	832
					4-30-73	415
					6-12-73	260
					7- 6-73	141
					7-17-73	31
					7-24-73	260
					7-30-73	108
					8- 9-73	22
					8-14-73	298
					8-23-73	70
					8-29-73	90
					9- 7-73	153
					9-10-73	257
					9-20-73	389
					9-27-73	468
Mud Creek (06783000)a/	South Loup River	Lat 41°22'30", long 99°35'10", in NW¼SW¼NW¼ sec.11, T.16 N., R.20 W., Custer County, at bridge on State Highway 2 about 3 miles southeast of Broken Bow, Nebr.	-	-	4-10-73	1.9
					5-22-73	1.3
					6-12-73	7.7
					7- 6-73	3.9
					8- 7-73	1.9
					9-26-73	3.2
Mud Creek (06783300)a/	.....do.....	Lat 41°08'48", long 99°09'08", in NW¼NE¼ sec.33, T.14 N., R.16 W., Sherman County, at bridge on State Highway 2, 1.1 miles southeast of Litchfield, Nebr.	-	-	10-25-72	11
Clear Creek (06783400)a/	Mud Creek	Lat 41°08'48", long 99°06'15", in NW¼NW¼ sec.36, T.14 N., R,16 W., Sherman County, at bridge on county road 2.5 miles southeast of Litchfield, Nebr.	-	1972	10-25-72	.10

Discharge measurements made at miscellaneous sites during water year 1973--Continued

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
Platte River basin--Continued						
Oak Creek (06784300)a/	Middle Loup River	Lat 41°17'36", long 98°52'04", in NW¼NE¼ sec.12, T.15 N., R.14 W., Sherman County, at bridge on county road 1.5 miles downstream from Sherman Dam and 5.1 miles northeast of Loup City, Nebr.	41.9	1952-60‡, 1961-64‡, 1972	10-25-72	6.1
Oak Creek (06784510)a/	.....do.....	Lat 41°06'35", long 98°33'01", in NW¼SW¼ sec.11, T.13 N., R.11 W., Howard County, at bridge on State Highway 11, 0.8 mile southwest of Dannebrog, Nebr.	-	1972	10-26-72	15
Turkey Creek (06784800)a/	.....do.....	Lat 41°09'24", long 98°33'22", in SW¼NW¼ sec.26, T.14 N., R.11 W., Howard County, on left bank 25 ft downstream from bridge on State Highway 11, 2.8 miles north of Dannebrog, Nebr.	66.2	1966-70‡, 1972	10-26-72	3.0
Dane Creek	North Loup River	Lat 41°36'31", long 98°56'36", in NE¼NE¼ sec.20, T.19 N., R.14 W., Valley County, at bridge on State Highway 11, 0.4 mile north of State Highway 70 at west edge of Ord, Nebr.	-	1958, 1962	8-15-73	189
Mira Creek	.....do.....	Lat 41°29'54", long 98°46'47", in SE¼SW¼ sec.26, T.18 N., R.13 W., Valley County, at bridge on State Highway 11 at west edge of North Loup, Nebr.	-	-	8-15-73	639
Timber Creek (06791900)a/	Cedar River	Lat 41°24'51", long 98°05'13", in NW¼SE¼ sec.26, T.17 N., R.7 W., Nance County, at bridge on county road 4.1 miles south of Belgrade, Nebr.	-	1972	10-27-72	3.2
Beaver Creek (06793600)a/	Loup River	Lat 41°41'00", long 95°58'25", in NW¼NW¼NE¼ sec.26, T.20 N., R.6 W., Boone County, at county road bridge 1.3 miles southeast of junction of State Highways 14, 39, and 19 at east edge of Albion, Nebr.	-	-	4-12-73 5-23-73 6-26-73 7-26-73 8-29-73 9-20-73	94 50 50 55 20 52
Scott Ditch (06796100)a/	Platte River	Lat 41°31'03", long 96°46'49", in center of sec.19, T.18 N., R.6 E., Dodge County, at bridge on State Highway 79, 3.9 miles north of intersection with U.S. Highway 30 in North Bend, Nebr.	-	-	10-31-72	8.7
Salt Creek (06801330)a/	.....do.....	Lat 40°38'41", long 96°41'11", in NW¼SW¼ sec.19, T.8 N., R.7 E., Lancaster County, at bridge on county road 1 mile south and 1.3 miles west of Roca, Nebr.	97.7	1971-72	12-21-72 6-13-73 9-11-73	16 18 6.1
Salt Creek (06803080)a/	.....do.....	Lat 40°46'13", long 96°43'05", in SW¼SW¼ sec.2, T.9 N., R.6 E., Lancaster County, at bridge on county road 0.9 mile west of U.S. Highway 77 and at northeast corner of State Penitentiary, Lincoln, Nebr.	221	1971-72	10-18-72 11-15-72 12-21-72 1-16-73 2-15-73 3-27-73 4-17-73 5- 9-73 6-19-73 7-11-73 8-14-73 9-11-73	4.2 80.4 20 138 101 447 354 491 22 14 11 12

Discharge measurements made at miscellaneous sites during water year 1973--Continued

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
		Platte River basin--Continued				
Salt Creek (06803190)a/	Platte River	Lat 40°50'03", long 96°42'03", in NE¼SE¼ sec.14, T.10 N., R.6 E., Lancaster County, at bridge at 14th Street at Lincoln, Nebr., 0.3 mile upstream from confluence with Oak Creek and 2.1 miles downstream from Middle Creek.	411	1971-72	12-22-72	40
					3-29-73	593
					6-19-73	62
					9-11-73	35
Antelope Creek (06803405)a/	Salt Creek	Lat 40°49'44", long 96°41'58", in SW¼SW¼ sec.13, T.10 N., R.6 E., Lancaster County, at bridge on Court Street 0.1 mile upstream from confluence with Salt Creek at Lincoln, Nebr.	12.4	1971-72	12-21-72	2.3
					3-29-73	13
					6-19-73	2.3
					9-11-73	2.0
Oak Creek (06803493)a/	.....do.....	Lat 40°50'10", long 96°42'03", in SE¼NE¼ sec.14, T.10 N., R.6 E., Lancaster County, at bridge on 14th Street 0.2 mile upstream from confluence with Salt Creek, Lincoln, Nebr.	258	1971-72	12-22-72	21
					3-29-73	176
					6-19-73	64
					9-11-73	28
Salt Creek (06803525)a/	Platte River	Lat 40°54'18", long 96°35'09", in NW¼SW¼ sec.24, T.11 N., R.7 E., Lancaster County, at bridge 0.5 mile north of Interstate Highway 80 and 3 miles southwest of Waverly, Nebr.	815	1971-72	10-18-72	60
					11-20-72	144
					12-22-72	111
					1-16-73	876
					2-15-73	199
					3-25-73	1,150
					4-17-73	970
					5- 9-73	1,300
					6-20-73	173
					7-11-73	145
					8-14-73	102
					9-12-73	106
Salt Creek (06803565)a/	.....do.....	Lat 41°01'34", long 96°24'22", in NW¼NW¼ sec.10, T.12 N., R.9 E., Saunders County, at bridge on county road 2 miles southwest of Ashland, Nebr.	1,118	1971-72	10-18-72	88
					11-20-72	242
					12-22-72	167
					1-16-73	1,560
					3-27-73	1,190
					5- 9-73	1,650
					6-20-73	237
					7-11-73	208
					8-14-73	159
					9-12-73	152
Salt Creek (06805000)a/	.....do.....	Lat 41°02'50", long 96°20'30", in SW¼ sec.31, T.13 N., R.10 E., Saunders County, at bridge on U.S. Highway 6, 1 mile east of Ashland, Nebr., and 2.5 miles upstream from mouth.	1,617	1947-67‡, 1971-72	4-17-73	1,350
Mill Creek (06805499)a/	.....do.....	Lat 41°00'13", long 96°09'35", in NE¼SE¼SE¼ sec.15, T.12 N., R.11 E., Cass County, at railroad bridge at north edge of Louisville, Nebr.	-	-	6-14-73	3.2
					7-20-73	175
					9-26-73	43
Cedar Creek (06805525)a/	.....do.....	Lat 41°00'05", long 96°07'15", in SE¼SE¼SE¼ sec.13, T.12 N., R.11 E., Cass County, at bridge on State Highway 66, 2.0 miles east of Louisville, Nebr.	-	-	6-14-73	12
					7-20-73	442
					9-26-73	132
		Weeping Water Creek basin				
*Weeping Water Creek (06806460)a/	Missouri River	Lat 40°51'18", long 96°07'10", in NW¼NW¼ sec.7, T.10 N., R.12 E., Cass County, at bridge of Missouri Pacific Railroad just south of north-south road, 1 mile southeast of Weeping Water, Nebr.	-	1947, 1950-72	4-16-73	227
					6-14-73	28
					9-26-73	1,110

Discharge measurements made at miscellaneous sites during water year 1973--Continued

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
		Weeping Water Creek basin--Continued				
South Branch Weeping Water Creek (06806495)a/	Weeping Water Creek	Lat 40°48'45", long 95°56'43", in SW¼SE¼SW¼ sec.22, T.10 N., R.13 E., Cass County, at bridge on U.S. Highway 34, 1.1 miles west of Union, Nebr.	-	-	3-30-73 6-14-73 9-26-73	66 22 1,510
		Kansas River basin				
Big Blue River (06880520)a/	Kansas River	Lat 40°52'15", long 97°04'28", in NE¼NE¼NW¼ sec.3, T.10 N., R.3 E., Seward County, at county road bridge 2.5 miles southeast of Seward, Nebr.	-	-	2-26-73 4-25-73 5-23-73 6-26-73 7-26-73 8-22-73 8-29-73 9-20-73	650 79 41 29 114 26 18 34
Big Blue River (06880530)	.....do.....	Lat 40°46'30", long 97°02'35", in NW¼SW¼ sec.1, T.9 N., R.3 E., Seward County, at bridge on U.S. Highway 6, at north edge of Milford, Nebr.	-	1967, 1969	8-24-73	22
Big Blue River (06880550)	.....do.....	Lat 40°42'36", long 96°59'46", in NW¼NE¼ sec.32, T.9 N., R.4 E., Seward County, at bridge on county road 5.2 miles southeast of Milford, Nebr.	-	1969	8-21-73 8-27-73	32 21
West Fork Big Blue River (06880556)a/	Big Blue River	Lat 40°36'28", long 98°20'06", in NW¼NW¼ sec.3, T.7 N., R.9 W., Adams County, at county road bridge 2 miles northeast of Hastings, Nebr.	-	1973	3-19-73 4-18-73 5-22-73 6-21-73 7-13-73 8-15-73 9-11-73	5.4 16.3 11.8 7.6 20.9 35.9 15.6
Beaver Creek (06880770)	West Fork Big Blue River	Lat 40°51'33", long 97°49'26", in SW¼SW¼ sec.6, T.10 N., R.4 W., York County, at bridge on county-line road 4 miles southeast of Hampton, Nebr.	-	1969-70c, 1972	7- 9-73 8- 6-73	1.8 6.0
Big Blue River (06881102)	Kansas River	Lat 40°23'29", long 96°54'13", in NE¼NE¼NW¼ sec.19, T.5 N., R.5 E., Gage County, at Dewitt Dam 0.5 mile east of Dewitt, Nebr.	-	-	8-20-73 8-24-73	152 122
Big Blue River (06881420)	.....do.....	Lat 40°21'42", long 96°51'48", in NW¼NE¼ sec.33, T.5 N., R.5 E., Gage County, at bridge on county road 4.2 miles southeast of Dewitt, Nebr.	-	1968-69	8-21-73	194
Big Blue River (06881502)a/	.....do.....	Lat 40°14'55", long 96°42'46", in SE¼SE¼ sec.2, T.3 N., R.6 E., Gage County, at pipeline bridge about 2.0 miles downstream from bridge on U.S. Highway 77 and 1.3 miles southeast of Beatrice, Nebr.	-	-	4-24-73 5-15-73 6-13-73 8- 9-73	500 503 400 191
Big Blue River (06881600)	.....do.....	Lat 40°11'50", long 96°39'45", in NE¼SW¼ sec.29, T.3 N., R.7 E., Gage County, at bridge on county road just upstream from Holmesville Dam at southwest edge of Holmesville, Nebr.	-	-	8-22-73	192
Big Blue River (06881700)	.....do.....	Lat 40°18'22", long 96°39'15", in NE¼SE¼ sec.17, T.2 N., R.7 E., Gage County, at bridge on county road just upstream from Blue Springs Dam at east edge of Blue Springs, Nebr.	-	-	8-20-73 8-23-73	333 295

Discharge measurements made at miscellaneous sites during water year 1973--Continued

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Measurements	
					Date	Discharge (cfs)
Kansas River basin--Continued						
Little Blue River (06884025)a/	Kansas River	Lat 39°58'49", long 97°00'12", in NE¼SW¼ sec.8, T.1 S., R.4 E., Washington County, Kansas at county road bridge 0.6 mile west of Hollenberg, Kans.	-	-	3- 7-73	372
					4-24-73	485
					5-15-73	400
					6- 5-73	3,390
					7-24-73	975
					8- 9-73	247
					9-25-73	343

* Also a crest-stage gage.
‡ Operated as a continuous-record gaging station.
a Also published with additional data in Part 2 of this report.
b Approximate.
c Published as a low-flow partial-record station.

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