

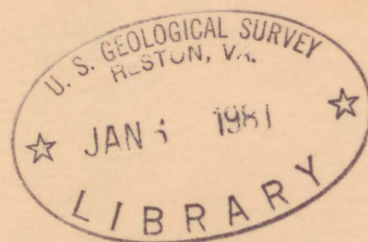
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1973

Water Resources Data for Missouri

Part 1. Surface Water Records

Part 2. Water Quality Records



**UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY**

Prepared in cooperation with Missouri Geological Survey and
Water Resources, the Missouri Clean Water Commission,
the Missouri State Highway Commission, 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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31						

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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23	24	25	26	27	28	29
30						

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Prepared in cooperation with
Missouri Geological Survey and Water Resources
Missouri Clean Water Commission
Missouri State Highway Commission
Corps of Engineers, U.S. Army
Environmental Protection Agency
Federal Power Commission

Copies of this report may be obtained from
District Chief, Water Resources Division
U.S. Geological Survey
103 West 10th Street
Rolla, Missouri 65401

1973

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(Letters after station name designate type of data: (c)
chemical, (t) water temperature, (s) sediment)

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WATER RESOURCES DATA FOR MISSOURI, 1973

- Part 1. Surface-Water Records
- Part 2. Water-Quality Records

INTRODUCTION

Water resources data for the 1973 water year for Missouri including records of streamflow or reservoir storage at gaging stations, partial-record stations, and miscellaneous sites, and records of water-quality data on the chemical and physical characteristics of surface water, are given in this report. In Part 1, records are included for 146 gaging stations of which 139 are streamflow discharge stations, and 7 are reservoir or lake stations; also are included records for 106 crest-stage partial-record stations. Locations of gaging stations are shown in figure 1. In Part 2, data on the quality of surface water (chemical, temperature, and sediment) were collected from designated sampling sites at predetermined intervals such as once daily, weekly, monthly, or less frequently, and at some sites data were recorded on punched paper tape at 30-, or 60-minute intervals. Records are given for 114 sampling stations of which 25 are partial-record stations, and 30 are miscellaneous sites. Locations of water-quality stations are shown in figure 2. A few pertinent stations (not included above) in bordering states are also included in this report. The records were collected and computed by the Water Resources Division of the U.S. Geological Survey under the direction of Anthony Homyk, 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 Missouri.

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. Water-quality records beginning with the 1964 water year have been similarly released either in separate reports or in conjunction with streamflow records. These reports are for limited distribution and are designed primarily for rapid release of data shortly after the end of the water year.

Records of discharge and stage of streams, and contents and stage of lakes and reservoirs are published in a series of U.S. Geological Survey water-supply papers entitled, "Surface Water Supply of the United States." Through September 30, 1960, these water-supply papers were in an annual series and since then are in a 5-year series. Records of chemical quality, water temperatures, and suspended sediment have been published since 1941 in an annual series of water-supply papers entitled, "Quality of Surface Waters of the United States." More information is given under the headings "Publications" on page 25.

COOPERATION

The U.S. Geological Survey and organizations of the State of Missouri have had cooperative agreements for the systematic collection of streamflow records since 1921 and for water-quality records since 1964. Organizations that assisted in collecting data through cooperative agreement with the Survey are:

Missouri Geological Survey and Water Resources, Dr.
Wallace B. Howe, state geologist and director.
Missouri Clean Water Commission, Jack K. Smith
executive secretary.
Missouri State Highway Commission, Robert N. Hunter,
chief engineer.
University of Missouri, Board of Curators.

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

Corps of Engineers, U.S. Army, in collecting records for 82 gaging stations and one water-quality station.
Environmental Protection Agency, in collecting records for 11 water-quality stations.
Assistance was also furnished by the National Weather Service of the Environmental Science Services Administration of the U.S. Department of Commerce.

The following organizations aided in collecting records:

City of Kansas City; Union Electric Company of Missouri; Little River Drainage District; Missouri Conservation Commission; Missouri Park Board; City of Springfield Utilities; and City of Springfield Sanitation Division.

DEFINITION OF TERMS

Terms related to streamflow, water-quality, and other hydrologic data, as used in this report, are defined below. See also table for converting English units to International System of units (SI) on page 30.

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

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

Biochemical oxygen demand (BOD) is the amount of oxygen required by bacteria while stabilizing decomposable organic matter under aerobic conditions.

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

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

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

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

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

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

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

Instantaneous discharge is the discharge at a particular instant 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 general term "stage," although gage height is more appropriate when used with a reading on a gage.

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

Hardness of water is a physical-chemical characteristic attributable to the presence of alkaline earths (principally calcium and magnesium) and is expressed as equivalent calcium carbonate (CaCO_3).

Methylene blue active substance (MBAS) is a measure of apparent detergents. This determination depends on the formation of a blue color when methylene blue dye reacts with synthetic detergent compounds.

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

Milligrams per liter (mg/l, MG/L) is a unit for expressing the concentration of chemical constituents in solution. Milligrams per liter represents the weight of solute per unit volume of water. Milligrams or micrograms per liter may be converted to milliequivalents (one thousandth of a gram-equivalent weight of a constituent) per liter by multiplying by the factors in table 1, page 6. Concentration of suspended sediment also is expressed in mg/l, and is based on the weight of sediment per liter of water-sediment mixture. Sediment concentrations may be converted to parts per million by using the factors in table 2, p.

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

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

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

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

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

Range of concentration in 1000 mg/l	Di- vide by	Range of concentration in 1000 mg/l	Di- vide by	Range of concentration in 1000 mg/l	Di- vide by	Range of concentration in 1000 mg/l	Di- vide by
0 - 8	1.00	201-217	1.13	411-424	1.26	619-634	1.39
8.05- 24	1.01	218-232	1.14	427-440	1.27	636-650	1.40
24.2 - 40	1.02	234-248	1.15	443-457	1.28	652-666	1.41
40.5 - 56	1.03	250-264	1.16	460-473	1.29	668-682	1.42
56.5 - 72	1.04	266-280	1.17	476-489	1.30	684-698	1.43
72.5 - 88	1.05	282-297	1.18	492-506	1.31	700-715	1.44
88.5 -104	1.06	299-313	1.19	508-522	1.32	717-730	1.45
105 -120	1.07	315-329	1.20	524-538	1.33	732-747	1.46
121 -136	1.08	331-345	1.21	540-554	1.34	749-762	1.47
137 -152	1.09	347-361	1.22	556-570	1.35	765-780	1.48
153 -169	1.10	363-378	1.23	572-585	1.36	782-796	1.49
170- -185	1.11	380-393	1.24	587-602	1.37	798-810	1.50
186 -200	1.12	395-409	1.25	604-617	1.38		

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

Particle size is the diameter, in millimeters (mm), of suspended sediment or bed material determined by either sieve or sedimentation methods. Sedimentation methods (pipet, bottom-withdrawal tube, visual-accumulation tube) determine fall diameter of particles in either distilled water (chemically dispersed) or in native water (the river water at the time and point of sampling) (Guy, 1969).

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

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

The particle-size distribution given in this report are not necessarily representative of all particles in transport in the stream. Most of the organic material is removed and the sample is subjected to mechanical and chemical dispersion before analysis in distilled water. Chemical dispersion is not used for native-water analysis (Guy, 1969).

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

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

Sediment is solid material that originates mostly from disintegrated rocks and is transported by, suspended, in or deposited from water; it includes chemical and biochemical precipitates and decomposed organic material such as humus. The quantity, characteristics, and cause of the occurrence of sediment in streams are influenced

by environmental factors. Some major factors are degree of slope, length of slope, soil characteristics, land usage, and quantity and intensity of precipitation.

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

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

Total sediment discharge or total sediment load is the sum of the suspended-sediment discharge and the bedload discharge. It is the total quantity of sediment, as measured by dry weight or volume, that is discharged during a given time (Colby and Hembree, 1955).

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

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

Sodium adsorption ratio (SAR) is the expression of relative activity of sodium ions in exchange reactions with soil and is an index of sodium or alkali hazard to the soil. This ratio should be known especially for water used for irrigating farmland.

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

Specific conductance is a measure of the ability of a water to conduct an electrical current and is expressed in micromhos per centimeter at 25°C. Because the specific conductance is related to the number and specific chemical types of ions in solution, it can be used for approximating the dissolved-solids content in the water. Commonly, the amount of dissolved solids (in milligrams per liter) is about 65 percent of the specific conductance (in micromhos). This relation is not constant from stream to stream or from well to well, and it may even vary in the same source with changes in the composition of the water.

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

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

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

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

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

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

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

Radioisotopes that are determined in this program are those of uranium in micrograms per liter, radium as radium-226 in picocuries per liter, gross beta radiation as strontium/yttrium-90 in picocuries per liter, and gross alpha radiation as micrograms of uranium equivalent per liter.

A picocurie (PC/L, pCi/l) is one millionth of the amount of radioactivity represented by a microcurie, which is the quantity of radiation represented by one millionth of a gram of radium-226. A picocurie of radium results in 2.22 disintegration per minute.

DOWNSTREAM ORDER AND STATION NUMBER

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

As an added means of identification, each gaging station, partial-record station, and water-quality station has been assigned a station number. These are in the same downstream order used in this report. In assigning station numbers, no distinction is made between partial-record stations and gaging stations; therefore, the station number for a partial-record station indicates downstream order position in a list made up of both types of stations. Water-quality stations located at or near gaging stations or partial-record stations have the same number as the gaging or partial-record station. Gaps are left in the series of numbers to allow for new stations that may be established; hence, the numbers are not consecutive. The complete 8-digit number for each station, such as 06909000, which appears just to the left of the station name includes the 2-digit part number "06" plus the 6-digit downstream order number "909000." In this report, the records are listed in downstream order by parts. The part number refers to an area whose boundaries coincide with certain natural drainage lines. Records in this report are in Part 5 (Upper Mississippi River basin), Part 6 (Missouri River basin), and Part 7 (Lower Mississippi River basin). All records for a drainage basin encompassing more than one State can be arranged in downstream order by assembling pages from the various State reports by station number to include all records in the basin.

PART 1. SURFACE WATER RECORDS

Collection and computation of data

The base data collected at gaging stations consist of records of stage and measurements of discharge of streams or canals, and stage, surface area, and contents of lakes or reservoirs. In addition, observations of factors affecting the stage-discharge relation or the stage-capacity relation, weather records, and other information are used to supplement base data in determining the daily flow or volume of water in storage. Records of stage are obtained from direct readings on a nonrecording gage or from a water-stage recorder that gives either a continuous graph

of the fluctuations or a tape punched at 15-, 30- or 60-minute intervals. Measurements of discharge are made with a current meter, using the general methods adopted by the Geological Survey on the basis of experience in stream gaging since 1888. These methods are described in standard textbooks, in Water-Supply Paper 888, and in U.S. Geological Survey Techniques of Water Resources Investigations, book 3, chapter A6. Surface areas of lakes or reservoirs are determined from instrument surveys using standard methods. The configuration of the reservoir bottom is determined by sounding at many points.

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

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

stations the stage-discharge relation is affected by changing stage; at these stations the rate of change in stage is used as a factor in computing discharge.

At some stream-gaging stations the stage-discharge relation is affected by ice in the winter, and it becomes impossible to compute the discharge in the usual manner. Discharge for periods of ice effect is computed on the basis of the gage-height record and occasional winter discharge measurements, consideration being given to the available information on temperature and precipitation, notes by gage observers and 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. The application of the stage to the capacity table gives the contents, from which the daily, monthly, or yearly change in contents is computed.

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

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

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

The description of the gaging stations gives the location, drainage area, period of record, type and history of gages, average discharge, extremes of discharge or contents, general remarks, and notations of revisions of previously published records. The location of the gaging station and the drainage area are obtained from the most accurate maps available. River mileage, given under "LOCATION" for some stations, is that determined and used by the Corps of Engineers or other agencies. Periods for which there are published records for the present station or for stations generally equivalent to the present one are given under "PERIOD OF RECORD." The type of gage currently in use, the datum of the present gage above mean sea level, and a condensed history of the types, locations, and datums of previous gages used during the period of record are given under "GAGE." In references to datum of gage, the phrase "mean sea level" denotes "Sea Level Datum of 1929" as used by the Topographic Division of the Geological Survey unless otherwise qualified. The average discharge for the number of years indicated is given under "AVERAGE DISCHARGE;" it is not given for stations having fewer than 5 complete years of record 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) and the maximum gage height, the minimum discharge if there is little or no regulation (or minimum contents) and the minimum gage height if it is significant are given under "EXTREMES." The minimum daily discharge is given if there is extensive regulation (also the minimum discharge and gage height if they are abnormally low). In the first paragraph headed "Current year," the data given are for the complete current water year unless otherwise specified. In the second paragraph under "EXTREMES" headed "Period of record:" the data given are for the period of record given in PERIOD OF RECORD paragraph. Reliable information concerning major floods that occurred outside the period of record is given in the third or last paragraph under "EXTREMES." Unless otherwise qualified, the maximum discharge (or contents) corresponds to the crest stage obtained by use of a water-stage recorder (graphic or digital), a crest-stage gage, or a nonrecording gage read at the time of the crest. If the maximum gage height did not occur at the same time as the maximum discharge (or contents), it is given separately. Information pertaining to the accuracy of the discharge records, to conditions that affect the natural flow at the gaging station, and availability of Water Quality records, is given under "REMARKS:" for reservoir stations information on the dam forming the reservoir, the capacity, outlet works and spillway, and purpose and use of the reservoir, is also given under "REMARKS."

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

report. In listing the water years only one number is given; for instance, 1965 stands for the water year October 1, 1964, to September 30, 1965. If no daily, monthly, or annual figures of discharge were revised, that fact is brought out by notations after the year dates as follows: "(M)" means that only the instantaneous maximum discharge was revised; "(m)" that only the instantaneous minimum was revised; and "(P)" that only peak discharges were revised. If the drainage area has been revised, the report in which the revised figure was first published is given. It should be noted that 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 rating tables are published for stream-gaging stations where they serve a useful purpose and the dates of applicability can be easily identified.

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

The daily table for stream-gaging stations gives the mean discharge for each day and is followed by monthly and yearly summaries. In the monthly summary below the daily table, the line headed "TOTAL" gives the sum of the daily figures. The line headed "MEAN" gives the average flow in cubic feet per second during the month. The lines headed "MAX" and "MIN" give the maximum and minimum daily discharges, respectively, for the month. Discharge for the month also 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 for cubic feet per second per square mile and runoff in inches are omitted if there is extensive regulation or

diversion, if the drainage area includes large non-contributing areas, or if the average annual rainfall over the drainage basin is usually less than 20 inches.

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

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

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

For most gaging stations on lakes and reservoirs the data presented comprise a description of the station and a monthly summary table of stage and contents. For some reservoirs a table showing daily contents or stage is

given. A skeleton table of capacity at given stages is published for all reservoirs for which records are published on a daily basis, but is not published for reservoirs for which only monthly data are given.

Data collected at partial-record stations and 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.

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 the daily discharges are within 5 percent; "good" within 10 percent; and "fair" within 15 percent. "Poor" means that daily discharges have less than "fair" accuracy.

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

Discharge at many stations, as indicated by the monthly mean, may not reflect natural runoff due to the effects of diversion, consumption, regulation by storage, increase or

decrease in evaporation due to artificial causes or to other factors. For such stations, figures of cubic feet per second per square mile and of runoff in inches are not published unless satisfactory adjustments can be made for diversions, for changes in contents of reservoirs, or for other changes incident to use and control. Evaporation from a reservoir is not included in the adjustments for changes in reservoir contents, unless it is so stated. Even at those stations where adjustments are made, large errors in computed runoff may occur if adjustments or losses are large in comparison with the observed discharge.

Publications

In each water-supply paper entitled, "Surface Water Supply of the United States" there is a list of numbers of preceding water-supply papers containing streamflow information for the area covered by that report. In addition, there is a list of numbers of water-supply papers containing detailed information on major floods in the area. Records for stations in Missouri for the period October 1960 to September 1965 are in Water-Supply Papers 1915, 1918, and 1919.

Two series of summary reports entitled, "Compilation of Records of Surface Waters of the United States" have been published; the first series covers the entire period of record through September 1950 and the second series covers the period October 1950 to September 1960. These reports contain summaries of monthly and annual discharge and monthend storage for all previously published records, as well as some records not contained in the annual series of water-supply papers. All records were reexamined and revised where warranted. Estimates of discharge were made to fill short gaps whenever practical. The yearly summary table for each gaging station lists the numbers of the water-supply papers in which daily records were published for that station. Records for stations in Missouri are compiled in Water-Supply Papers 1308, 1310, and 1311 through September 1950, and in 1728, 1730, and 1731 for October 1950 to September 1960.

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

Other data available

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

PART 2. WATER QUALITY RECORDS

Collection and examination of data

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

Descriptive statements are given for water-quality stations located at or near streamflow stations. Given location, drainage area, periods of record for the various water-quality data, extremes of pertinent data, and general remarks, in a format similar to that used for streamflow gaging stations.

Water-quality information is presented for chemical quality, biological, microbiological, water temperature, and fluvial sediment. Chemical quality includes concentrations of individual dissolved constituents and certain properties or characteristics such as hardness, sodium adsorption ratio, specific conductance, and pH. The biological information includes qualitative and quantitative analyses of plankton, bottom organisms, and

particulate inorganic and amorphous matter present. Microbiological information includes quantitative identification of certain bacteriological indicator organisms. Water-temperature data represent once-daily observations except for stations where a continuous temperature recorder furnished information from which daily minimums and maximums are obtained. Fluvial-sediment information is given for suspended-sediment discharges and concentrations and for particle-size distribution of suspended sediment and bed material.

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

In October 1968, the Geological Survey began reporting many of the chemical constituents as well as the minor elements in micrograms per liter instead of milligrams per liter. (See "Definition of Terms," p. 5 and table for converting English Units to SI Units, p. 30).

Solutes

The methods of collecting and analyzing water samples for determining the kinds and concentrations of solutes are described by Brown, Skougstad, and Fishman (1970). One sample can define adequately the water quality at a given time if the mixture of solutes throughout the stream cross section is homogeneous. However, the concentration

of solutes at different locations in the cross section may vary widely with different rates of water discharge, depending on the source of material and the turbulence and mixing of the stream. Some streams must be sampled at several verticles across the channel to determine accurately the solute load.

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

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

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

The daily chemical-quality data in this report generally represent equal-volume composites for 2- to 30-day periods; the composite periods are selected on the basis of specific conductance of the daily samples and fluctuation of water discharge.

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

Temperature

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

At stations where continuously recording thermographs are present, the records consist of maximum and minimum temperatures for each day and the monthly averages.

Sediment

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

During periods of rapidly changing flow or rapidly changing concentration, samples may have been collected more frequently (twice daily or, in some instances, hourly). The published sediment discharges for days

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

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

For the Mississippi River at St. Louis, depth-integrated samples were collected weekly at two or more verticals with the P-61 sampler. Periodically, samples were taken at 10 to 20 verticals in the cross section to define more accurately the average concentration of the cross section. Three times during the year, bed material samples were collected from 15 to 18 verticals.

For some periods, when no samples were collected, daily loads of suspended sediment were estimated on the basis of water discharge, turbidity, sediment concentrations observed immediately before and after the periods, and suspended-sediment loads for other periods of similar discharge.

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

Publications

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

Year	Part 5	Part 6	Part 7	Year	Part 5	Part 6	Part 7
1948	----	----	1133	1959	1643	1643	1644
1949	----	----	1163	1960	1743	1743	1744
1950	----	----	1188	1961	1883	1883	1884
1951	----	----	1199	1962	1943	1943	1944
1952	----	----	1252	1963	1949	1949	1950
1953	----	----	1292	1964	1956	1956	1957
1954	----	----	1352	1965	1963	1963	1964
1955	----	----	1402	1966	1993	1993	1994
1956	----	----	1452	1967	2013	2013	2014
1957	A1521	A1521	1522	1968	2094	2095	2096
1958	1572	1572	1573				

A Includes Missouri records for 1953-57

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_____ 1953, Accuracy of sediment size analyses made by the bottom-withdrawal-tube method: Rept. 10.

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_____ 1957, Some fundamentals of particle size analysis: Rept. 12.

_____ 1959, Federal Inter-agency sedimentation instruments and reports: Rept. AA.

_____ 1961, The single stage sampler for suspended sediment: Rept. 13.

_____ 1963, Determinations of fluvial sediment discharge: Rept. 14.



Figure 1.--Map of Missouri showing locations of surface-water stations, 1973 water year.

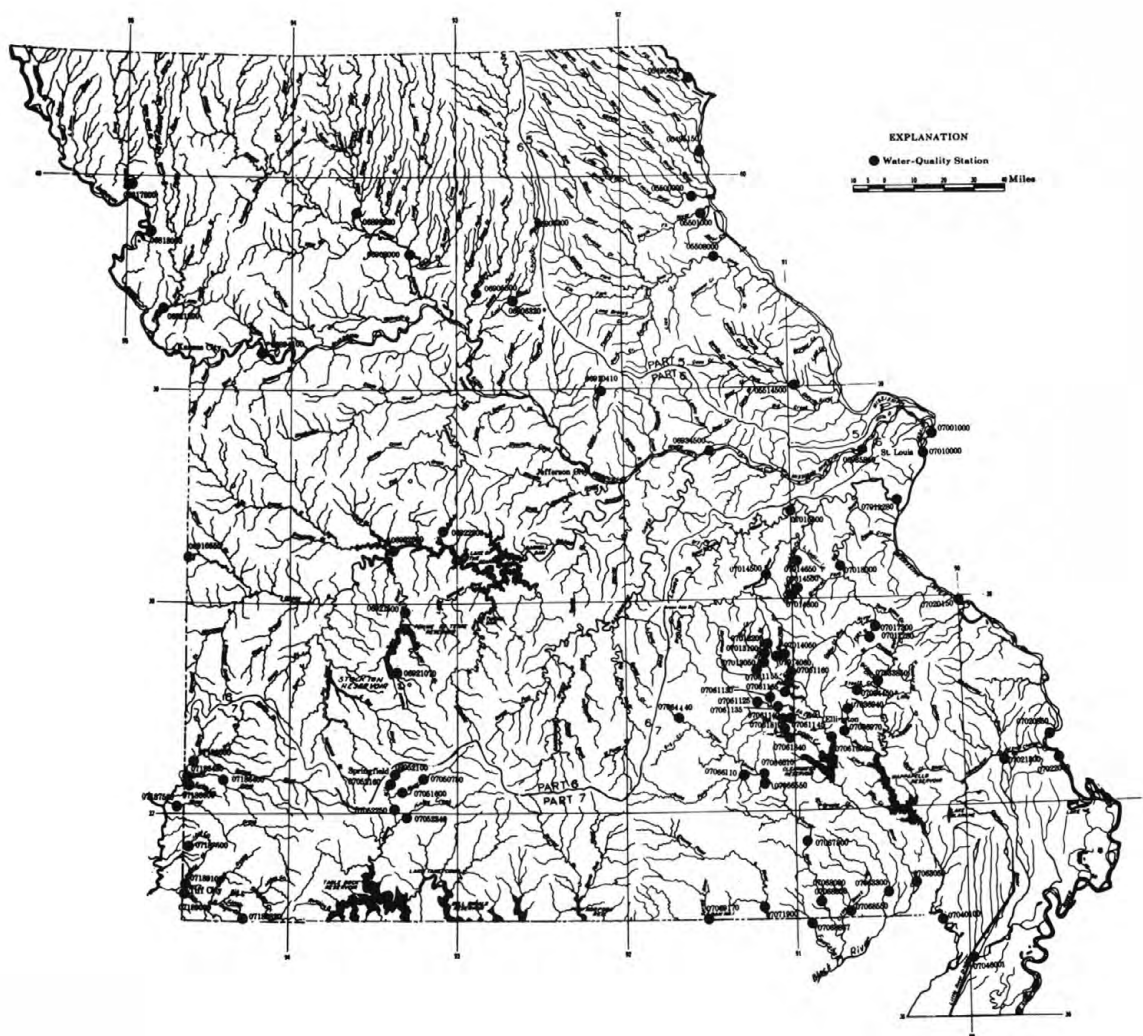


Figure 2.--Map of Missouri showing locations of water-quality stations, 1973 water year.

Table 4.--Factors for converting English units to International System (SI) units

The following factors may be used to convert the English units published herein to the International System of Units (SI). Subsequent reports will contain both the English and SI unit equivalents in the station manuscript descriptions until such time that all data will be published in SI units.

Multiply English units	By	To obtain SI units
Length		
inches (in)	25.4	millimetres (mm)
	.0254	metres (m)
feet (ft)	.3048	metres (m)
yards (yd)	.9144	metres (m)
miles (mi)	1.609	kilometres (km)
Area		
acres	4047	square metres (m ²)
square miles (mi ²)	2.590	square kilometres (km ²)
Volume		
gallons (gal)	3.785	litres (l)
	3.785x10 ³	cubic metres (m ³)
million gallons (10 ⁶ gal)	3785	cubic metres (m ³)
cubic feet (ft ³)	.02832	cubic metres (m ³)
cfs-day (ft ³ /s-day)	2447	cubic metres (m ³)
	2.447x10 ³	cubic hectometres (hm ³)
acre-feet (acre-ft)	1233	cubic metres (m ³)
	1.233x10 ³	cubic hectometres (hm ³)
	1.233x10 ⁶	cubic kilometres (km ³)
Flow		
cubic feet per second (ft ³ /s)	28.32	litres per second (l/s)
	.02832	cubic metres per second (m ³ /s)
gallons per minute (gpm)	.0639	litres per second (l/s)
	6.309x10 ⁵	cubic metres per second (m ³ /s)
million gallons per day (mgd)	.04381	cubic metres per second (m ³ /s)
Mass		
ton (short)	.9072	tonne (t)

PART 1. SURFACE WATER RECORDS

FOX RIVER BASIN

05495000 Fox River at Wayland, Mo.

LOCATION.--Lat 40°23'33", long 91°35'50", in NW¼ sec.31, T.65 N., R.6 W., Clark County, on left bank 90 ft (27 m) downstream from bridge on U.S. Highway 136, 0.8 mi (1.3 km) west of Wayland, and 5.0 mi (8.0 km) downstream from Brush Creek.

DRAINAGE AREA.--400 mi² (1,040 km²), approximately.

PERIOD OF RECORD.--February 1922 to current year.

GAGE.--Water-stage recorder. Datum of gage is 501.52 ft (152.863 m) above mean sea level. Prior to Oct. 1, 1929, nonrecording gage at bridge 2.8 mi (4.5 km) upstream at different datum. Oct. 1, 1929, to June 11, 1936, nonrecording gage, at bridge 90 ft (27 m) upstream at present datum.

AVERAGE DISCHARGE.--51 years, 230 ft³/s (6.51 m³/s), 7.81 in/yr (198 mm/yr), 166,000 acre-ft/yr (205 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 26,400 ft³/s (748 m³/s) April 22, (gage height, 21.71 ft or 6.617 m); minimum, 2.4 ft³/s (.068 m³/s) Oct. 19, 20 (gage height, 1.53 ft or 0.466 m).
Period of record: Maximum discharge, 26,400 ft³/s (748 m³/s) April 22, 1973 (gage height, 21.71 ft or 6.617 m); no flow at times in several years.

REMARKS.--Records fair.

COOPERATION.--Four discharge measurements furnished by Corps of Engineers.

REVISION (WATER YEARS).--WSP 785: 1934.

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	8.0	30	34	350	300	134	4,270	2,820	800	20	42	13		
2	5.8	76	30	250	1,500	219	5,430	5,800	500	50	20	13		
3	5.1	56	25	300	2,000	302	2,350	8,260	350	150	14	13		
4	5.2	27	21	1,000	1,150	302	674	3,870	230	300	21	33		
5	5.1	34	18	700	534	241	500	654	170	200	9.2	165		
6	9.5	29	15	500	419	256	393	492	154	120	7.6	90		
7	11	23	13	400	320	1,900	306	1,130	204	70	6.9	38		
8	7.2	17	12	350	220	1,680	249	2,790	130	45	6.6	41		
9	4.9	14	11	300	180	679	2,250	2,350	80	30	273	58		
10	4.4	12	10	250	160	718	2,530	705	56	25	152	32		
11	4.3	14	10	220	150	2,480	975	446	45	22	113	24		
12	3.7	13	10	200	150	1,950	1,130	334	35	21	495	20		
13	3.4	85	10	180	200	943	1,860	268	30	17	135	134		
14	2.9	191	9.0	160	300	2,910	1,890	223	25	13	224	1,150		
15	2.6	201	9.0	150	250	1,460	1,240	194	22	12	441	768		
16	2.8	194	9.0	150	200	640	1,490	176	20	11	281	281		
17	2.8	111	9.0	300	170	370	1,790	159	20	9.9	122	836		
18	2.5	71	9.0	1,200	140	269	1,080	146	80	9.2	68	912		
19	2.4	54	10	4,660	130	216	465	135	154	9.9	46	420		
20	2.7	46	12	4,460	120	192	841	125	429	16	35	216		
21	5.0	40	15	2,540	110	188	6,200	114	282	606	28	133		
22	70	34	15	1,790	110	179	19,900	112	136	1,600	27	94		
23	53	29	15	1,200	120	161	17,500	110	83	1,170	24	86		
24	33	26	20	750	150	146	4,340	116	70	268	21	86		
25	25	29	25	550	160	1,500	758	106	100	130	20	1,400		
26	19	35	25	450	160	2,690	528	259	200	52	21	2,690		
27	16	49	25	500	148	1,960	430	6,440	150	66	20	3,210		
28	13	49	30	700	131	686	367	6,850	60	281	17	4,060		
29	10	41	150	600	-----	566	331	6,920	30	377	15	2,810		
30	9.5	39	500	350	-----	422	426	4,300	20	401	13	1,680		
31	9.3	-----	700	250	-----	1,440	-----	1,500	-----	152	13	-----		
TOTAL	359.1	1,669	1,806.0	25,760	9,682	27,799	82,493	57,904	4,665	6,254.0	2,731.3	21,506		
MEAN	11.6	55.6	58.3	831	346	897	2,750	1,868	156	202	88.1	717		
MAX	70	201	700	4,660	2,000	2,910	19,900	8,260	800	1,600	495	4,060		
MIN	2.4	12	9.0	150	110	134	249	106	20	9.2	6.6	13		
CFSM	.03	.14	.15	2.08	.87	2.24	6.88	4.67	.39	.51	.22	1.79		
IN.	.03	.16	.17	2.40	.90	2.59	7.67	5.39	.43	.58	.25	2.00		
AC-FT	712	3,310	3,580	51,090	19,200	55,140	163,600	114,900	9,250	12,400	5,420	42,660		
CAL YR 1972	TOTAL	41,357.2	MEAN	113	MAX	2,140	MIN	2.4	CFSM	.28	IN	3.85	AC-FT	82,030
WTR YR 1973	TOTAL	242,628.4	MEAN	665	MAX	19,900	MIN	2.4	CFSM	1.66	IN	22.56	AC-FT	481,300

PEAK DISCHARGE (BASE, 4,000 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
1-19	1815	17.58	6,970	4-22	1730	21.71	26,400
4-2	1115	16.54	5,640	5-3	1200	18.32	9,000
4-10	0145	14.98	4,190	5-27	1545	17.98	7,570

05497000 North Fabius River at Monticello, Mo.

LOCATION.--Lat 40°06'30", long 91°42'51", in SW¼SE¼ sec.6, T.61 N., R.7 W., Lewis County, on right bank upstream from bridge on State Highway 16, 1.0 mi (1.6 km) south of Monticello, and 19.0 mi (30.6 km) upstream from Middle Fabius River.

DRAINAGE AREA.--452 mi² (1,171 km²).

PERIOD OF RECORD.--February 1922 to current year. Monthly discharge only for some periods, published in WSP 1308.

GAGE.--Water-stage recorder. Datum of gage is 540.73 ft (164.815 m) above mean sea level. Prior to Nov. 22, 1930, nonrecording gage at site 400 ft (122 m) downstream at datum 0.03 ft (0.009 m) lower. Nov. 22, 1930, to Nov. 28, 1967, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--51 years, 264 ft³/s (7.48 m³/s), 7.93 in/yr (201 mm/yr), 191,300 acre-ft/yr (236 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 20,700 ft³/s (586 m³/s) Apr. 22 (gage height, 33.03 ft or 10.068 m, from graph based on gage readings); minimum, 3.6 ft³/s (0.102 m³/s) Oct. 10, 11 (gage height, 4.91 ft or 1.497 m).

Period of record: Maximum discharge, 20,700 ft³/s (586 m³/s) Apr. 22, 1973 (gage height, 33.03 ft or 10.068 m, from graph based on gage readings); no flow at times in many years. Maximum stage since at least 1874, that of Apr. 22, 1973.

REMARKS.--Records fair.

COOPERATION.--Four discharge measurements furnished by Corps of Engineers.

REVISIONS (WATER YEARS).--WSP 925: 1937-39(M). WSP 1308: 1922(M), 1924-26(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	9.1	36	60	400	700	166	6,700	2,440	318	35	101	36
2	5.9	180	45	250	3,590	261	7,020	6,440	265	36	81	34
3	4.9	92	35	400	2,970	390	2,100	10,100	259	38	72	41
4	6.5	50	25	5,710	916	311	929	3,360	214	48	68	156
5	6.4	40	22	1,820	626	231	677	695	206	67	61	1,130
6	6.9	30	21	700	450	278	551	570	265	57	56	219
7	7.0	25	20	600	300	2,560	449	1,640	222	50	52	123
8	4.7	22	20	500	200	2,300	375	4,440	161	38	116	166
9	3.9	21	20	400	150	730	1,350	3,310	125	31	1,030	166
10	3.6	31	20	300	150	872	1,370	720	103	28	358	98
11	5.7	36	19	270	150	4,050	1,270	368	87	94	207	97
12	8.1	30	18	250	150	2,580	2,850	235	76	63	215	72
13	6.2	211	17	230	350	1,080	3,930	178	70	35	468	194
14	5.6	582	16	210	726	3,520	2,490	135	62	26	542	2,900
15	5.3	507	15	200	1,000	2,840	1,660	107	64	24	203	980
16	5.1	250	15	200	400	772	2,610	93	59	21	141	352
17	5.3	158	15	1,000	200	468	2,690	81	92	19	101	1,650
18	5.4	121	20	2,000	150	350	883	69	207	18	75	1,860
19	5.4	108	40	4,000	150	283	550	61	164	21	63	518
20	5.4	96	130	2,000	140	259	1,800	53	104	26	55	259
21	6.9	86	100	1,000	140	255	7,790	46	94	1,700	49	183
22	52	79	90	1,500	140	243	16,400	45	68	2,100	43	184
23	102	64	80	1,500	140	203	17,900	42	54	770	41	164
24	41	68	70	1,000	150	195	7,680	40	459	279	43	164
25	29	68	65	500	150	3,350	1,130	37	182	325	42	2,580
26	23	122	60	500	150	6,870	622	132	107	380	38	3,100
27	18	146	60	700	150	3,200	465	5,970	98	186	34	3,320
28	15	136	100	600	150	948	375	11,400	57	144	32	3,520
29	14	100	200	450	-----	1,080	279	11,100	43	159	32	2,740
30	12	80	1,200	350	-----	678	243	2,190	36	255	33	1,970
31	14	-----	1,300	250	-----	2,350	-----	515	-----	216	31	-----
TOTAL	443.3	3,575	3,918	29,790	14,638	43,673	95,138	66,612	4,321	7,289	4,483	28,976
MEAN	14.3	119	126	961	523	1,409	3,171	2,149	144	235	145	966
MAX	102	582	1,300	5,710	3,590	6,870	17,900	11,400	459	2,100	1,030	3,520
MIN	3.6	21	15	200	140	166	243	37	36	18	31	34
CFSM	.03	.26	.28	2.13	1.16	3.12	7.02	4.75	.32	.52	.32	2.14
IN.	.04	.29	.32	2.45	1.20	3.59	7.83	5.48	.36	.60	.37	2.38
AC-FT	879	7,090	7,770	59,090	29,030	86,630	188,700	132,100	8,570	14,460	8,890	57,470

CAL YR 1972 TOTAL 46,534.8 MEAN 127 MAX 2,340 MIN 3.6 CFSM .28 IN 3.83 AC-FT 92,300
WTR YR 1973 TOTAL 302,856.3 MEAN 830 MAX 17,900 MIN 3.6 CFSM 1.84 IN 24.93 AC-FT 600,700

PEAK DISCHARGE (BASE, 5,000 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
1-4	1500	23.25	8,350	4-22	2400	33.03	20,700
1-19	*	*	*	5-3	1300	25.78	11,100
3-26	1430	22.01	7,210	5-9	0145	20.14	5,800
4-2	0330	23.74	8,840	5-28	2245	28.19	14,100

*Unknown

FABIUS RIVER BASIN

05498000 Middle Fabius River near Monticello, Mo.

LOCATION.--Lat 40°05'37", long 91°44'08", in SE¼ sec.12, T.61 N., R.8 W., Lewis County, on left bank on downstream end of bridge pier on State Highway 16, 2.5 mi (4.0 km) southwest of Monticello, 8 mi (13 km) downstream from Radish Branch, and 17 miles (27.4 km) upstream from mouth.

DRAINAGE AREA.--393 mi² (1,018 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 540.46 ft (164.732 m) above mean sea level. Prior to Oct. 4, 1967, non-recording gage at present site and datum.

AVERAGE DISCHARGE.--28 years, 243 ft³/s (6.88 m³/s), 8.40 in/yr (213 mm/yr), 176,100 acre-ft/yr (217 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 17,700 ft³/s (501 m³/s) Apr. 23 (gage height, 27.14 ft or 8.272 m); minimum, 5.8 ft³/s (0.164 m³/s) Oct. 15, (gage height, 3.22 ft or 0.981 m).
Period of record: Maximum discharge, 17,700 ft³/s (501 m³/s) Apr. 23 (gage height, 27.14 ft or 8.272 m); no flow at times in 1953-56.
Maximum stage since 1930, that of Apr. 23, 1973. Flood of June 17, 1945, reached a stage of 23.3 ft (7.10 m), from floodmarks.

REMARKS.--Records fair.

COOPERATION.--Five discharge measurements furnished by Corps of Engineers.

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	9.5	80	50	660	300	214	4,180	232	370	27	546	11
2	9.2	219	42	200	1,750	298	4,340	1,970	248	42	170	10
3	8.0	106	35	450	2,300	277	4,930	2,990	186	26	100	12
4	7.2	59	29	1,000	1,690	238	1,940	4,920	150	47	70	20
5	7.8	37	25	1,400	545	226	623	1,720	145	45	50	19
6	7.8	26	22	700	362	310	432	502	172	60	40	13
7	7.6	18	19	450	278	1,650	315	1,520	215	107	30	42
8	7.2	13	15	300	200	1,960	247	3,070	180	66	150	114
9	7.2	12	13	225	140	1,120	1,040	2,800	111	40	900	202
10	6.8	38	11	200	120	902	1,140	1,190	79	28	834	266
11	6.6	39	9.2	180	110	2,250	1,030	485	65	20	750	230
12	7.2	38	10	170	100	2,480	1,770	312	55	320	1,340	208
13	6.8	335	10	160	200	2,060	2,280	228	51	139	2,030	256
14	6.6	588	10	150	450	3,230	2,430	180	44	64	264	810
15	6.2	260	12	140	300	2,300	1,980	150	46	39	84	1,830
16	6.4	228	15	140	200	1,130	1,910	132	44	26	80	1,510
17	6.6	141	50	300	150	440	2,100	119	123	18	61	960
18	6.6	94	100	1,200	130	285	1,170	108	237	14	44	1,960
19	6.8	73	186	5,000	120	224	500	101	233	15	35	1,890
20	8.2	64	186	4,000	110	194	761	93	67	17	30	417
21	9.0	62	136	1,130	100	174	6,580	87	124	807	27	226
22	57	57	84	1,100	100	167	12,200	85	86	1,770	23	274
23	202	48	60	975	100	150	15,100	82	52	2,210	22	238
24	66	40	50	600	100	165	8,970	79	247	3,180	21	190
25	34	40	45	429	100	3,070	2,190	79	174	1,190	20	2,070
26	20	62	40	500	110	4,080	484	145	123	258	19	2,300
27	12	120	40	700	117	4,110	329	5,480	120	192	18	2,790
28	10	74	100	800	129	3,980	242	6,040	66	325	17	3,630
29	8.9	62	400	800	-----	1,160	193	9,040	42	338	14	4,100
30	8.4	56	1,000	350	-----	639	156	7,230	32	1,120	14	3,000
31	11	-----	1,200	200	-----	2,750	-----	873	-----	891	12	-----
TOTAL	584.6	3,089	4,004.2	24,609	10,411	42,233	81,562	52,042	3,887	13,441	7,815	29,598
MEAN	18.9	103	129	794	372	1,362	2,719	1,679	130	434	252	987
MAX	202	588	1,200	5,000	2,300	4,110	15,100	9,040	370	3,180	2,030	4,100
MIN	6.2	12	9.2	140	100	150	156	79	32	14	12	10
CFSM	.05	.26	.33	2.02	.95	3.47	6.92	4.27	.33	1.10	.64	2.51
IN.	.06	.29	.38	2.33	.99	4.00	7.72	4.93	.37	1.27	.74	2.80
AC-FT	1,160	6,130	7,940	48,810	20,650	83,770	161,800	103,200	7,710	26,660	15,500	58,710

CAL YR 1972 TOTAL 41,264.5 MEAN 113 MAX 1,640 MIN 4.2 CFMS .29 IN 3.91 AC-FT 81,850
WTR YR 1973 TOTAL 273,275.8 MEAN 749 MAX 15,100 MIN 6.2 CFMS 1.91 IN 25.87 AC-FT 542,000

PEAK DISCHARGE (BASE, 3,500 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
1-19	1430	17.93	5,550	4-23	0030	27.14	17,700
3-14	0745	14.80	3,700	5-4	2015	17.80	5,460
3-28	1215	16.36	4,520	5-29	1715	21.84	9,040
4-3	1615	17.25	5,080	9-29	0200	15.83	4,220

05500000 South Fabius River near Taylor, Mo.

LOCATION.--Lat 39°53'49", long 91°34'49", in SW¼NW¼ sec.21, T.59 N., R.6 W., Marion County, on right bank at downstream side of highway bridge, 4.5 mi (7.2 km) southwest of Taylor, 5.0 mi (8.0 km) downstream from Grassy Creek, and 5.3 mi (8.5 km) upstream from confluence with North Fabius River.

DRAINAGE AREA.--620 mi² (1,606 km²).

PERIOD OF RECORD.--October 1934 to current year. Monthly discharge only prior to December 1934, published in WSP 1308.

GAGE.--Water-stage recorder. Datum of gage is 482.91 ft (147.191 m) above mean sea level (levels by Corps of Engineers). Prior to May 14, 1936, nonrecording gage at bridge 4.0 mi (6.4 km) downstream at datum 21.94 ft (6.687 m) lower. May 14, 1936, to Dec. 2, 1940, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--39 years, 387 ft³/s (10.96 m³/s), 8.48 in/yr (215 mm/yr), 280,400 acre-ft/yr (346 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 16,900 ft³/s (479 m³/s) Apr. 24 (gage height, 18.33 ft or 5.587 m); minimum, 5.8 ft³/s (0.164 m³/s) Oct. 14 (gage height, 1.40 ft or 0.427 m).
Period of record: Maximum discharge, 19,700 ft³/s (558 m³/s) June 8, 1947 (gage height, 19.5 ft or 5.94 m), from rating curve extended above 11,000 ft³/s (312 m³/s); no flow at times in several years.
Flood in 1928 reached a stage of 18.49 ft (5.636 m), from floodmark, at present site and datum.

REMARKS.--Records good.

COOPERATION.--Five discharge measurements furnished by Corps of Engineers.

REVISION (WATER YEARS).--WSP 825: 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	33	23	104	1,000	888	177	7,280	595	819	49	160	18
2	22	941	90	350	2,870	310	6,830	3,730	508	44	81	16
3	17	547	80	1,000	3,260	612	5,130	2,740	559	48	53	17
4	13	297	65	2,200	1,840	618	3,020	1,820	238	65	40	25
5	11	156	53	1,100	984	504	1,040	1,100	1,160	88	30	24
6	10	90	50	900	562	1,410	706	672	331	137	22	19
7	9.4	65	45	700	443	4,220	563	2,850	202	134	17	367
8	8.3	49	40	600	300	3,580	449	4,750	156	133	14	189
9	7.4	40	35	500	200	1,980	1,690	4,370	132	86	2,460	124
10	6.5	83	32	400	200	2,100	2,970	2,460	100	61	4,700	233
11	6.5	476	30	370	180	4,400	2,770	740	79	46	5,470	186
12	6.4	245	30	330	180	3,910	2,990	413	63	220	2,820	114
13	7.0	785	30	290	696	3,580	3,220	293	103	175	1,630	121
14	6.3	2,650	29	270	2,770	6,170	2,440	225	72	110	1,120	233
15	8.0	1,650	28	250	1,300	5,160	1,680	184	66	72	333	864
16	9.1	590	27	240	450	3,520	2,360	155	55	51	202	744
17	11	308	27	400	200	890	2,980	132	244	37	148	571
18	9.8	205	30	1,200	200	471	1,970	116	1,090	29	114	1,100
19	9.2	162	150	2,300	180	349	778	103	3,800	26	91	1,450
20	9.0	132	1,200	2,800	180	317	483	93	862	29	70	782
21	10	118	1,000	1,280	180	315	12,000	82	360	43	57	323
22	18	116	500	2,440	180	269	13,600	81	253	347	48	1,210
23	118	104	350	2,600	180	233	14,000	81	154	755	41	1,580
24	298	91	300	1,050	190	315	15,000	74	219	755	37	2,080
25	178	86	250	562	218	5,650	9,110	74	231	594	33	1,670
26	94	136	190	607	221	7,060	2,680	84	174	205	29	3,470
27	58	293	150	1,020	211	7,260	773	8,600	94	91	27	4,240
28	41	293	200	944	190	5,400	522	7,100	80	54	24	3,910
29	28	184	500	800	-----	4,570	361	6,440	86	186	22	4,350
30	19	130	1,200	450	-----	2,620	269	5,940	61	392	20	4,360
31	18	-----	1,500	300	-----	4,460	-----	3,790	-----	317	19	-----
TOTAL	1,099.9	11,045	8,315	29,253	19,453	82,430	119,664	59,887	12,351	5,379	19,932	34,390
MEAN	35.5	368	268	944	695	2,659	3,989	1,932	412	174	643	1,146
MAX	298	2,650	1,500	2,800	3,260	7,260	15,000	8,600	3,800	755	5,470	4,360
MIN	6.3	23	27	240	180	177	269	74	55	26	14	16
CFSM	.06	.59	.43	1.52	1.12	4.29	6.43	3.12	.66	.28	1.04	1.85
IN.	.07	.66	.50	1.76	1.17	4.95	7.18	3.59	.74	.32	1.20	2.06
AC-FT	2,180	21,910	16,490	58,020	38,590	163,500	237,400	118,800	24,500	10,670	39,540	68,210

CAL YR 1972 TOTAL 65,059.4 MEAN 178 MAX 2,650 MIN 3.8 CFSM .29 IN 3.90 AC-FT 129,000
WTR YR 1973 TOTAL 403,198.9 MEAN 1,105 MAX 15,000 MIN 6.3 CFSM 1.78 IN 24.19 AC-FT 799,700

PEAK DISCHARGE (BASE, 4,000 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-7	1600	8.80	4,410	4-24	0300	18.33	16,900	6-19	0545	9.71	5,060
3-14	2000	11.07	6,410	5-2	0330	9.03	4,450	8-11	1045	10.37	5,710
3-27	1145	12.09	7,490	5-8	0115	9.73	5,080	9-28	2030	8.79	4,640
4-1	1245	12.26	7,680	5-27	1730	15.50	11,700				

NORTH RIVER BASIN

05500500 North River at Bethel, Mo.

LOCATION.--Lat 39°52'29", long 92°01'26", in NE¼NW¼ sec.33, T.59 N., R.10 W., Shelby County, at left abutment on downstream side of bridge on State Highway 15 at Bethel, and 2.5 mi (4.0 km) upstream from Messner Branch.

DRAINAGE AREA.--58 mi² (150 km²), approximately.

PERIOD OF RECORD.--April 1930 to July 1936 (fragmentary), August 1936 to September 1973 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 683.37 ft (208.291 m) above mean sea level. Prior to Apr. 16, 1956, nonrecording gage on upstream side of bridge at present datum.

AVERAGE DISCHARGE.--37 years, 40.6 ft³/s (1.15 m³/s), 9.51 in/yr (242 mm/yr), 29,410 acre-ft/yr (36.3 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,820 ft³/s (137 m³/s) Apr. 21 (gage height, 19.53 ft or 5.953 m); minimum daily discharge, 0.18 ft³/s (0.005 m³/s) July 17, 18.

Period of record: Maximum discharge, 6,930 ft³/s (196 m³/s) Apr. 5, 1947; maximum gage height, 20.9 ft (6.37 m) Apr. 5, 1947, and Oct. 24, 1957; no flow at times in many years.

Maximum stage since at least 1875, that of Apr. 5, 1947, and Oct. 24, 1957.

REMARKS.--Records fair.

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	.73	83	7.8	100	150	31	1,380	40	13	2.6	11	.28
2	.60	419	6.6	45	500	196	509	598	8.4	3.0	4.3	.28
3	.48	136	5.6	100	250	152	73	199	8.2	1.7	1.8	.60
4	.42	31	4.8	450	70	78	42	50	17	10	.92	.92
5	.42	12	4.5	200	45	62	33	30	25	27	.54	.92
6	.42	7.0	3.3	60	35	128	26	57	38	22	.44	.54
7	.41	4.6	2.5	20	25	544	20	412	17	9.8	.28	.70
8	.39	3.3	2.0	9.0	15	372	16	664	7.8	4.4	2.0	2.2
9	.39	2.8	1.5	5.0	10	79	293	141	3.5	2.4	2,390	2.5
10	.36	181	1.2	4.0	8.0	230	298	49	2.2	1.6	1,500	3.6
11	.30	237	1.0	3.5	6.0	818	349	28	1.6	.81	111	5.5
12	.28	57	1.0	3.0	6.0	420	590	17	1.0	.60	16	3.5
13	.24	368	1.0	3.0	100	241	309	12	1.4	.44	8.6	7.8
14	.25	745	1.0	3.0	350	1,150	94	9.8	.92	.34	5.8	40
15	.23	297	1.0	3.5	100	728	67	8.6	.60	.28	3.8	30
16	.26	68	1.0	8.0	50	89	352	7.6	.54	.23	2.6	11
17	.28	24	1.0	100	15	52	368	6.8	1.0	.18	2.2	14
18	.28	14	1.3	300	9.0	38	44	6.0	23	.18	1.7	60
19	.29	10	25	400	7.0	32	25	5.0	460	.23	1.2	23
20	.30	8.8	200	250	6.0	58	207	4.3	200	.65	.92	11
21	.49	9.1	100	75	6.0	60	3,160	4.0	22	103	.70	28
22	63	9.3	25	450	6.0	43	1,700	5.0	10	118	.65	494
23	292	8.6	15	350	7.0	32	552	16	6.0	17	.60	441
24	56	7.4	10	125	9.0	266	93	23	8.2	7.2	.70	120
25	13	10	8.0	100	11	1,960	53	26	6.2	4.0	.70	498
26	6.0	120	7.0	200	13	1,580	35	12	9.8	2.3	.60	502
27	3.5	151	7.0	150	15	279	26	749	7.0	1.6	.54	131
28	2.3	48	10	100	17	125	22	1,520	4.3	1.1	.49	247
29	2.0	17	200	50	-----	363	20	214	2.8	.92	.44	593
30	1.9	9.8	400	20	-----	435	17	55	1.8	102	.39	544
31	2.2	-----	200	10	-----	538	-----	24	-----	44	.28	-----
TOTAL	449.72	3,098.7	1,255.1	3,697.0	1,841.0	11,179	10,773	4,993.1	908.26	489.56	4,071.19	3,816.34
MEAN	14.5	103	40.5	119	65.8	361	359	161	30.3	15.8	131	127
MAX	292	745	400	450	500	1,960	3,160	1,520	460	118	2,390	593
MIN	.23	2.8	1.0	3.0	6.0	31	16	4.0	.54	.18	.28	.28
CFSM	.25	1.78	.70	2.05	1.13	6.22	6.19	2.78	.52	.27	2.26	2.19
IN.	.29	1.99	.80	2.37	1.18	7.17	6.91	3.20	.58	.31	2.61	2.45
AC-FT	892	6,150	2,490	7,330	3,650	22,170	21,370	9,900	1,800	971	8,080	7,570

CAL YR 1972 TOTAL 11,708.09 MEAN 32.0 MAX 745 MIN .01 CFSM .55 IN 7.51 AC-FT 23,220
WTR YR 1973 TOTAL 46,571.97 MEAN 128 MAX 3,160 MIN .18 CFSM 2.21 IN 29.87 AC-FT 92,380

PEAK DISCHARGE (BASE, 800 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-14	1830	10.57	814	3-25	2000	16.77	3,000	5-28	0130	15.31	2,240
1-19	--	---	---	4-1	0830	13.74	1,620	8-9	1515	19.27	4,640
3-14	2100	13.33	1,500	4-21	0515	19.53	4,820	9-26	0315	10.84	868

05501000 North River at Palmyra, Mo.

LOCATION.--Lat 39°49'06", long 91°31'13", in SE&SW¼ sec.13, T.58 N., R.6 W., Marion County, on right bank 100 ft (30 m) upstream from City Waterworks dam, 1,000 ft (305 m) upstream from upstream bridge on dual U.S. Highways 24 and 61, 0.5 mi (0.8 km) north of Palmyra, and 7.0 mi (11.3 km) upstream from mouth.

DRAINAGE AREA.--373 mi² (966 km²).

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 464.81 ft (141.674 m) above mean sea level (levels by Corps of Engineers). Prior to Oct. 1, 1945, nonrecording gage at bridge 1,000 ft (305 m) downstream, Oct. 1, 1945, to June 22, 1951, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--38 years, 235 ft³/s (6.655 m³/s), 8.56 in/yr (217 mm/yr), 170,300 acre-ft/yr (210 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 57,500 ft³/s (1,630 m³/s) Apr. 21 (gage height, 29.70 ft or 9.053 m); minimum, 2.8 ft³/s (0.079 m³/s) Oct. 14, 15 (gage height, 9.69 ft or 2.954 m).
Period of record: Maximum discharge, 57,500 ft³/s (1,630 m³/s) Apr. 21, 1973 (gage height, 29.70 ft or 9.053 m); no flow on many days in 1936, 1941, 1956.
Maximum stage prior to 1934, about 28.0 ft (8.53 m), from floodmarks, date unknown, at site 1,000 ft (305 m) downstream, present datum.

REMARKS.--Records good. Water diverted from river above dam by City of Palmyra.

COOPERATION.--Three discharge measurements furnished by Corps of Engineers.

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	9.4	16	50	200	1,020	353	9,200	150	193	69	97	17
2	8.7	752	43	110	2,350	418	1,300	1,500	156	787	55	16
3	7.8	356	39	1,000	1,180	300	600	950	548	222	39	17
4	6.9	131	33	1,560	486	243	500	1,000	296	231	31	23
5	6.3	70	30	500	300	273	400	900	3,140	268	28	20
6	6.1	46	22	225	214	3,280	321	800	485	100	25	19
7	5.5	34	20	150	180	5,440	248	2,000	250	80	23	18
8	4.7	29	18	125	120	1,590	209	2,000	164	64	21	20
9	4.6	25	16	100	90	789	1,530	1,200	122	51	2,230	25
10	3.7	77	15	80	80	4,280	1,840	800	99	44	3,020	28
11	3.6	471	14	65	70	5,300	2,120	350	84	39	957	29
12	3.8	205	13	50	70	1,770	2,170	200	73	35	197	26
13	3.8	964	13	40	5,110	3,820	1,220	180	105	32	106	30
14	3.6	1,880	13	35	1,230	8,450	600	160	85	30	76	37
15	3.1	771	13	35	506	2,130	428	140	70	28	66	64
16	3.3	255	13	40	250	791	2,080	120	67	27	49	63
17	4.2	129	13	120	200	409	1,270	100	157	27	41	72
18	4.2	90	15	750	150	300	640	90	844	26	37	87
19	3.8	75	225	2,180	120	243	363	80	5,590	28	33	57
20	3.6	65	600	900	100	290	285	70	841	32	30	69
21	5.3	59	250	366	90	385	32,600	65	303	43	28	45
22	13	60	120	2,430	85	273	15,500	60	157	59	26	2,420
23	82	56	70	1,460	85	326	2,500	60	113	143	25	737
24	150	51	50	500	85	1,300	1,000	58	129	101	25	810
25	60	50	45	300	90	12,000	600	67	90	63	24	317
26	31	94	40	350	95	9,510	400	97	82	237	21	415
27	23	201	40	400	100	3,590	300	9,660	69	66	20	612
28	18	140	45	300	107	2,910	200	4,980	59	42	20	204
29	15	88	500	250	-----	4,510	170	2,260	53	35	19	737
30	12	61	800	200	-----	2,880	140	1,470	47	32	18	838
31	13	-----	500	150	-----	8,130	-----	548	-----	98	18	-----
TOTAL	523.0	7,301	3,678	14,971	14,563	86,283	80,734	32,115	14,471	3,139	7,405	7,872
MEAN	16.9	243	119	483	520	2,783	2,691	1,036	482	101	239	262
MAX	150	1,880	800	2,430	5,110	12,000	32,600	9,660	5,590	787	3,020	2,420
MIN	3.1	16	13	35	70	243	140	58	47	26	18	16
CFSM	.05	.65	.32	1.29	1.39	7.46	7.21	2.78	1.29	.27	.64	.70
IN.	.05	.73	.37	1.49	1.45	8.61	8.05	3.20	1.44	.31	.74	.79
AC-FT	1,040	14,480	7,300	29,690	28,890	171,100	160,100	63,700	28,700	6,230	14,690	15,610
CAL YR 1972	TOTAL 35,185.2	MEAN 96.1	MAX 1,880	MIN 2.7	CFSM .26	IN 3.51	AC-FT 69,790					
WTR YR 1973	TOTAL 273,055.0	MEAN 748	MAX 32,600	MIN 3.1	CFSM 2.01	IN 27.23	AC-FT 541,600					

PEAK DISCHARGE (BASE, 5,000 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-13	0745	17.60	7,600	3-25	1915	21.62	15,700	6-5	0930	16.57	6,100
3-7	0600	18.34	8,810	4-1	0045	20.77	13,500	6-19	0615	18.43	8,970
3-10	2400	19.21	10,400	4-21	1100	29.70	57,500				
3-14	0400	20.17	12,300	5-27	1545	21.14	14,400				

BEAR CREEK BASIN

05502000 Bear Creek at Hannibal, Mo.

LOCATION.--Lat 39°40'43", long 91°24'41", in SE¼NW¼ sec.1, T.56 N., R.5 W., Ralls County, on right bank 25 ft (8 m) upstream from upstream bridge on dual U.S. Highway 61 at Hannibal, 4.8 mi (7.7 km) upstream from mouth.

DRAINAGE AREA.--31.0 mi² (80.3 km²).

PERIOD OF RECORD.--October 1938 to September 1942, October 1947 to current year in reports of Geological Survey. Monthly discharge only for some periods, published in WSP 1308. October 1936 to November 1938 (gage heights and discharge measurements only) in reports of Missouri Geological Survey.

GAGE.--Water-stage recorder. Datum of gage is 508.91 ft (155.116 m) above mean sea level. Prior to Mar. 26, 1948, nonrecording gage, and Mar. 26, 1948, to Sept. 30, 1953, water-stage recorder, present site and at datum 2.00 ft (0.610 m) higher. Oct. 1, 1953, to Oct. 30, 1961, water-stage recorder at present site, Oct. 31, 1961, to Sept. 5, 1972, water-stage recorder 400 ft (122 m) downstream at present datum.

AVERAGE DISCHARGE.--30 years, 18.1 ft³/s (0.513 m³/s), 7.93 in/year (201 mm/yr), 13,110 acre-ft/yr (16.2 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,900 ft³/s (53.8 m³/s) Apr. 21 (gage height, 10.00 ft or 3.48 m); minimum daily discharge, 0.02 ft³/s (0.001 m³/s) Oct. 12, 13.
Period of record: Maximum discharge, 6,500 ft³/s (184 m³/s) Aug. 3, 1957 (gage height, 14.05 ft or 4.282 m, present datum); no flow at times in several years.

REMARKS.--Records poor. High flow regulated by Bear Creek reservoir, 1.0 mi (1.6 km) upstream, since Aug. 7, 1961.

REVISION.--WSP 1115: 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	2.0	2.8	9.0	60	12	38	61	15	4.5	3.0	1.5
2	.17	20	2.8	8.0	100	18	101	69	10	5.0	2.6	1.5
3	.11	30	2.6	93	33	16	238	86	30	4.8	2.2	1.5
4	.17	15	4.0	127	21	15	265	29	70	20	2.2	4.0
5	.14	6.0	2.5	25	15	23	695	22	30	7.6	2.2	4.0
6	.17	4.0	1.9	10	12	274	738	94	15	5.0	2.0	4.0
7	.17	2.5	1.7	6.0	10	560	313	170	10	4.2	2.0	2.0
8	.17	1.6	1.5	4.5	8.0	531	34	152	5.0	3.8	2.0	3.0
9	.17	1.4	1.5	4.0	6.6	80	335	50	5.0	3.5	90	7.0
10	.11	9.0	1.5	3.5	7.1	148	282	34	5.0	3.5	20	2.8
11	.05	6.6	1.5	3.4	9.0	132	94	26	5.0	3.2	40	2.6
12	.02	4.4	9.0	3.3	9.7	121	55	21	20	3.0	8.0	2.8
13	.02	48	7.0	3.1	100	169	39	19	10	2.8	4.5	3.0
14	.08	18	5.0	3.0	272	264	34	17	5.0	2.5	4.5	2.5
15	.14	7.6	4.0	3.0	25	300	34	16	5.0	2.5	4.0	2.1
16	.14	5.0	3.0	4.0	15	246	100	15	10	2.5	4.0	1.9
17	.14	4.0	2.5	11	10	116	40	14	40	2.3	3.0	18
18	.14	3.5	2.5	41	10	24	32	13	100	2.3	3.0	5.0
19	.20	3.8	80	66	10	22	29	12	30	3.6	3.0	3.2
20	.23	4.0	68	16	12	30	26	11	20	4.5	2.5	2.6
21	.48	4.0	20	15	15	24	389	11	15	5.2	2.5	2.5
22	17	3.8	11	98	13	20	288	26	10	3.8	2.5	61
23	25	3.0	8.0	26	13	18	276	49	8.0	3.2	2.5	12
24	12	3.2	7.0	13	13	51	254	15	20	4.5	3.0	8.3
25	6.0	4.0	7.0	10	13	134	246	23	10	4.0	3.0	13
26	3.0	5.5	9.0	9.0	12	13	236	50	6.9	4.8	2.5	6.9
27	2.0	5.0	15	8.0	12	9.7	224	200	6.9	3.0	2.5	4.8
28	1.5	4.0	25	8.0	11	15	204	150	5.5	2.6	2.5	5.5
29	1.3	2.8	139	7.5	-----	84	131	90	5.2	2.8	2.2	9.0
30	1.0	2.8	47	7.0	-----	214	20	50	4.8	23	2.2	11
31	1.0	-----	19	7.0	-----	193	-----	20	-----	6.0	1.5	-----
TOTAL	73.05	234.5	512.3	652.3	847.4	3,876.7	5,790	1,615	532.3	154.0	231.6	209.0
MEAN	2.36	7.82	16.5	21.0	30.3	125	193	52.1	17.7	4.97	7.47	6.97
MAX	25	48	139	127	272	560	738	200	100	23	90	61
MIN	.02	1.4	1.5	3.0	6.6	9.7	20	11	4.8	2.3	1.5	1.5
CFSM	.08	.25	.53	.68	.98	4.03	6.23	1.68	.57	.16	.24	.22
IN.	.09	.28	.61	.78	1.02	4.65	6.95	1.94	.64	.18	.28	.25
AC-FT	145	465	1,020	1,290	1,680	7,690	11,480	3,200	1,060	305	459	415
CAL YR 1972	TOTAL 2,838.79	MEAN 7.76	MAX 211	MIN 0	CFSM .25	IN 3.41	AC-FT 5,630					
WTR YR 1973	TOTAL 14,728.15	MEAN 40.4	MAX 738	MIN .02	CFSM 1.30	IN 17.67	AC-FT 29,210					

SALT RIVER BASIN

39

05503000 Oak Dale Branch near Emden, Mo.

LOCATION.--Lat 39°45'30", long 91°55'08", in NW¼NW¼ sec.9, T.57 N., R.9 W., Shelby County, on right bank about 25 ft (8 m) upstream from culvert on County Highway T, 4.0 mi (6.4 km) southwest of Emden, and at mile 1.5 (2.4 km).

DRAINAGE AREA.--2.64 mi² (6.84 km²).

PERIOD OF RECORD.--August 1955 to current year. Prior to October 1959 published as "Douglas Creek near Emden".

GAGE.--Water-stage recorder. Revised altitude is 699 ft (213.1 m) from topographic map.

AVERAGE DISCHARGE.--18 years, 2.53 ft³/s (0.07 m³/s), 13.01 in/yr (330 mm/yr), 1,830 acre-ft/yr (2.26 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,740 ft³/s (49.3 m³/s) Apr. 20 (gage height, 10.96 ft or 3.341 m); no flow on many days.

Period of record: Maximum discharge, 1,740 ft³/s (49.3 m³/s) Apr. 20, 1973 (gage height, 10.96 ft or 3.341 m); no flow at times each year.

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	14	.35	1.0	48	10	28	13	.11	.10	0	0
2	0	3.6	.20	.50	25	6.0	5.4	9.1	.18	.15	0	0
3	0	.25	.09	40	12	3.5	1.5	.42	.47	.08	0	.01
4	0	.15	.04	10	6.0	2.0	.42	.16	2.4	2.8	0	.28
5	0	.05	.03	3.0	1.5	15	.26	.11	75	.09	0	.13
6	0	.03	.03	1.5	.70	55	.15	19	1.7	.06	0	.05
7	0	.05	.03	.50	.50	25	.11	63	.39	.05	0	.01
8	0	.96	.02	.25	.35	3.9	.12	6.7	.19	.05	.02	.75
9	0	1.5	.02	.10	.25	2.1	15	.95	.15	.05	47	.23
10	0	19	.02	.05	.20	105	25	.80	.13	.06	.40	.07
11	0	.89	.02	.04	.15	23	28	.19	.11	.05	.11	.03
12	0	2.6	.02	.04	.10	2.1	7.9	.12	.11	.05	.08	0
13	0	61	.01	.04	60	88	2.1	.10	.11	.04	.06	.19
14	0	13	.01	.04	25	35	.84	.08	.68	.04	.08	.04
15	0	7.8	.10	.05	10	4.9	1.1	.08	.57	.05	.07	.01
16	0	6.1	.40	.20	4.0	1.8	31	.07	.25	.03	.10	.02
17	0	4.5	1.0	2.0	2.0	.84	1.5	.06	1.4	.02	.07	.51
18	0	3.2	10	35	1.5	.60	.30	.06	83	.02	.06	.03
19	0	2.9	20	11	1.0	.42	.21	.06	11	.06	.06	.01
20	0	2.8	10	4.0	.50	4.4	84	.06	.55	.11	.06	.01
21	0	3.3	2.0	5.0	.25	1.1	305	.06	.15	.10	.03	.01
22	9.9	2.3	.50	55	.15	.42	67	.08	.10	.07	.01	35
23	.24	2.0	.15	12	.15	.30	1.8	.06	.08	.14	.01	.82
24	.06	1.9	.08	6.0	.15	72	.42	.36	2.7	.08	.07	.15
25	.04	5.1	.06	5.0	.30	148	.23	.21	.09	.07	.07	2.0
26	.02	10	.06	5.0	.60	13	.15	6.2	.08	.07	.04	.10
27	.02	4.8	.50	3.0	1.0	3.9	.13	213	.08	.05	0	.06
28	.02	2.5	15	2.0	5.0	2.1	.11	3.0	.08	.03	0	8.0
29	.02	1.4	25	1.5	-----	42	.11	.60	.08	.02	0	.66
30	.04	.70	7.0	1.0	-----	5.9	.11	.26	.08	.03	0	3.2
31	.37	-----	2.0	1.0	-----	165	-----	.13	-----	.02	0	-----
TOTAL	10.73	178.38	94.74	205.81	206.35	842.28	607.97	338.08	182.02	4.64	48.40	52.38
MEAN	.35	5.95	3.06	6.64	7.37	27.2	20.3	10.9	6.07	.15	1.56	1.75
MAX	9.9	61	25	55	60	165	305	213	83	2.8	47	35
MIN	0	.03	.01	.04	.10	.30	.11	.06	.08	.02	0	0
CFSM	.13	2.25	1.16	2.52	2.79	10.3	7.69	4.13	2.30	.06	.59	.66
IN.	.15	2.51	1.33	2.90	2.91	11.87	8.57	4.76	2.56	.07	.68	.74
AC-FT	21	354	188	408	409	1,670	1,210	671	361	9.2	96	104

CAL YR 1972 TOTAL 547.18 MEAN 1.50 MAX 61 MIN 0 CFSM .57 IN 7.71 AC-FT 1,090
WTR YR 1973 TOTAL 2,771.78 MEAN 7.59 MAX 305 MIN 0 CFSM 2.88 IN 39.06 AC-FT 5,500

PEAK DISCHARGE (BASE, 350 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-13	1700	5.76	585	5-27	0115	8.02	1,020
3-25	0415	4.39	352	6-05	0300	6.02	635
3-31	0945	5.59	554	6-18	1945	6.23	675
4-20	2345	10.96	1,740	8-09	0245	4.78	414

LOCATION.--Lat 39°19'55", long 91°48'10", in SW¼NE¼ sec.33, T.53 N., R.8 W., Audrain County, on right bank 25 ft (8 m) downstream from bridge on county road, 100 ft (30 m) downstream from Littleby Creek, 2.8 mi (4.5 km) southeast of Santa Fe, at mile 102.5 (164.9 km).

PERIOD OF RECORD.--October 1939 to current year. Published as "at Santa Fe" prior to October 1968.

GAGE.--Water-stage recorder. Datum of gage is 639.09 ft (194.795 m) above mean sea level. Prior to Feb. 5, 1940, nonrecording gage, and Feb. 5, 1940, to Sept. 30, 1968, water-stage recorder 6.3 mi (10.1 km) downstream at datum 26.04 ft (7.937 m) lower.

EXTREMES.--Current year, Maximum discharge, 11,600 ft³/s (329 m³/s) Mar. 7 (gage height, 19.70 ft or 6.005 m); minimum, 0.43 ft³/s (0.012 m³/s) Oct. 11, 12 (gage height, 1.86 ft or 0.567 m).
Period of record: Maximum discharge, 28,800 ft³/s (816 m³/s) Oct. 13, 1969 (gage height, 28.24 ft or 8.608 m); no flow at times in several years.

REMARKS. - - Records good.

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	1.3	3.1	12	400	900	67	4,620	86	45	12	100	5.0
2	1.4	41	9.0	200	2,490	625	1,410	258	32	11	39	6.0
3	1.1	17	7.2	150	690	574	332	182	33	16	25	35
4	.90	8.5	6.2	1,500	277	446	220	112	108	49	19	100
5	.75	5.5	5.0	800	175	1,270	164	78	598	64	15	50
6	.70	3.8	4.0	400	100	4,950	126	93	347	38	13	40
7	.64	3.5	3.0	250	80	8,850	101	1,290	135	24	12	35
8	.62	2.9	2.5	100	65	4,120	86	1,860	69	16	11	30
9	.67	2.6	2.3	60	50	380	1,700	513	44	11	88	50
10	.59	2.9	2.1	25	40	3,170	1,810	244	30	90	45	250
11	.47	3.0	2.0	20	30	5,750	1,080	193	23	36	41	150
12	.46	4.9	2.0	15	30	2,400	438	133	18	14	24	82
13	.68	20	2.0	13	1,000	356	252	88	15	11	16	55
14	.78	180	2.0	12	2,090	1,630	175	64	33	9.1	13	47
15	.77	156	2.0	11	562	773	372	52	30	8.1	12	35
16	.65	69	2.0	15	175	246	1,490	44	18	7.6	162	30
17	.54	32	2.0	30	100	167	1,140	36	106	7.0	386	153
18	.50	18	3.0	400	70	128	312	32	325	6.6	90	167
19	.47	13	15	2,070	60	104	211	27	2,000	6.7	30	77
20	.49	10	1,000	673	60	187	178	24	1,000	61	12	47
21	.68	10	600	860	65	254	2,890	21	150	574	10	44
22	1.9	9.4	350	3,240	68	193	2,650	42	80	194	9.0	59
23	5.7	7.9	200	903	61	128	837	57	50	3,050	8.0	121
24	5.0	7.0	100	267	57	660	289	54	30	3,010	7.0	967
25	3.2	6.6	80	150	55	5,400	191	36	20	1,500	6.0	200
26	2.4	8.1	60	90	53	4,050	144	25	30	150	5.5	98
27	2.0	15	50	60	47	497	107	152	23	40	5.0	67
28	1.8	17	100	50	42	271	88	398	19	30	5.0	63
29	1.7	27	300	45	-----	1,410	77	135	15	25	5.0	244
30	1.6	18	900	40	-----	999	68	67	13	25	5.0	169
31	1.6	-----	700	40	-----	3,110	-----	45	-----	100	5.0	-----
TOTAL	42.06	722.7	4,525.3	12,889	9,492	53,165	23,558	6,441	5,439	9,196.1	1,223.5	3,476.0
MEAN	1.36	24.1	146	416	339	1,715	785	208	181	297	39.5	116
MAX	5.7	180	1,000	3,240	2,490	8,850	4,620	1,860	2,000	3,050	386	967
MIN	.46	2.6	2.0	11	30	67	68	21	13	6.6	5.0	5.0
CFSM	.005	.08	.49	1.41	1.15	5.81	2.66	.71	.61	1.01	.13	.39
IN.	.005	.09	.57	1.63	1.20	6.70	2.97	.81	.69	1.16	.15	.44
AC-FT	83	1,430	8,980	25,570	18,830	105,500	46,730	12,780	10,790	18,240	2,430	6,890
CAL YR 1972	TOTAL	28,789.18	MEAN	78.7	MAX	2,330	MIN	.46	CFSM	.27	IN	3.63
WTR YR 1973	TOTAL	130,169.66	MEAN	357	MAX	8,850	MIN	.46	CFSM	1.21	IN	16.41
										AC-FT	258,200	

PEAK DISCHARGE (BASE, 3,000 FT³/S)[illegible]

SALT RIVER BASIN

41

05506500 Middle Fork Salt River at Paris, Mo.

LOCATION.--Lat 39°29'05", long 91°59'50", in NE¼NW¼NW¼ sec.11, T.54 N., R.10 W., Monroe County, on right bank near upstream side of bridge on E. Madison Street in Paris, 600 ft (183 m) downstream from Wabash Railroad bridge, 12.5 mi (20.1 km) upstream from Elk Fork Salt River, and at mile 104.5 (168.1 km) above mouth of Salt River.

DRAINAGE AREA.--356 mi² (922 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 621.88 ft (189.549 m) above mean sea level, 1961 adjustment. Prior to Jan. 22, 1940, nonrecording gage, Jan. 22, 1940, to Sept. 30, 1968, water-stage recorder, 600 ft (183 m) upstream at present datum.

AVERAGE DISCHARGE.--34 years, 240 ft³/s (6.797 m³/s), 9.16 in/yr (233 mm/yr), 173,900 acre-ft/yr (214 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 45,000 ft³/s (1,270 m³/s) Apr. 21 (gage height, 33.5 ft or 10.21 m, from floodmark); minimum discharge, 3.2 ft³/s (0.091 m³/s) Oct. 11 (gage height, 2.75 ft or 0.838 m). Period of record: Maximum discharge, 45,000 ft³/s (1,270 m³/s) Apr. 21, 1973 (gage height, 33.5 ft or 10.21 m, from floodmark); no flow at times in several years.

REMARKS.--Records good. Water diverted from river upstream from gage by City of Paris.

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	37	69	596	487	293	4,180	144	288	111	40	11
2	9.0	1,000	59	254	1,790	1,430	3,970	1,530	153	45	30	11
3	7.3	1,510	53	610	1,640	866	3,390	1,500	135	88	23	13
4	6.4	596	45	1,800	937	462	1,200	800	178	128	18	31
5	5.6	170	35	995	340	371	306	500	1,240	109	14	144
6	5.1	90	25	550	233	1,010	220	400	1,340	111	12	155
7	4.7	63	22	300	160	2,220	180	2,000	520	80	11	57
8	4.2	46	20	160	100	1,830	158	3,480	278	58	9.8	54
9	4.1	37	18	100	75	1,120	1,180	2,620	153	34	261	40
10	3.5	72	16	80	65	1,650	1,700	2,140	113	38	815	83
11	3.3	420	15	80	60	3,420	1,750	1,540	80	25	847	239
12	3.8	372	15	65	60	3,250	1,900	830	61	16	1,280	91
13	3.9	810	15	50	700	3,060	1,700	158	94	14	532	57
14	4.1	2,010	15	40	2,020	3,300	1,300	101	109	14	96	195
15	4.2	1,750	15	40	1,350	2,550	592	81	103	14	51	790
16	4.0	890	15	45	500	1,640	1,440	65	88	13	39	274
17	3.5	238	15	150	175	538	1,880	54	76	15	29	156
18	4.2	130	20	600	150	215	1,430	48	64	15	23	350
19	5.6	99	100	2,000	130	164	472	44	1,570	17	20	500
20	5.3	82	790	2,000	110	291	345	42	1,140	36	17	194
21	5.4	79	600	1,470	115	546	22,700	42	776	480	16	85
22	10	109	300	2,700	120	361	24,800	44	274	704	14	65
23	574	110	150	2,180	119	221	10,600	50	128	1,280	13	989
24	542	90	100	1,210	122	980	5,190	58	115	1,160	12	1,530
25	180	81	80	394	120	4,790	1,390	88	109	1,190	11	1,950
26	62	214	70	350	120	6,410	295	228	111	200	10	1,900
27	32	416	60	300	120	6,460	211	3,340	504	85	11	1,170
28	20	247	60	250	108	3,180	168	4,430	270	47	11	1,660
29	14	144	150	200	-----	926	140	3,240	122	32	11	1,580
30	12	90	600	170	-----	823	133	2,560	48	41	11	1,480
31	12	-----	1,000	149	-----	2,560	-----	565	-----	49	13	-----
TOTAL	1,567.2	12,002	4,547	19,888	12,026	56,937	94,920	32,722	10,240	6,249	4,300.8	15,854
MEAN	50.6	400	147	642	430	1,837	3,164	1,056	341	202	139	528
MAX	574	2,010	1,000	2,700	2,020	6,460	24,800	4,430	1,570	1,280	1,280	1,950
MIN	3.3	37	15	40	60	164	133	42	48	13	9.8	11
CFSM	.14	1.12	.41	1.80	1.21	5.16	8.89	2.97	.96	.57	.39	1.48
IN.	.16	1.25	.48	2.08	1.26	5.95	9.92	3.42	1.07	.65	.45	1.66
AC-FT	3,110	23,810	9,020	39,450	23,850	112,900	188,300	64,900	20,310	12,390	8,530	31,450

CAL YR 1972 TOTAL 58,039.9 MEAN 159 MAX 2,010 MIN 3.3 CFSM .45 IN 6.06 AC-FT 115,100
WTR YR 1973 TOTAL 271,253.0 MEAN 743 MAX 24,800 MIN 3.3 CFSM 2.09 IN 28.34 AC-FT 538,000

PEAK DISCHARGE (BASE, 2,400 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
1-19	*	*	*	3-27	0115	16.50	7,250	5-7	2400	13.0	4,850
1-22	1145	9.83	2,910	4-1	0915	12.19	4,320	5-28	*	*	*
3-11	*	*	*	4-21	2200	33.5	45,000	6-19	1800	9.2	2,560

*Unknown

SALT RIVER BASIN

05506800 Elk Fork Salt River near Madison, Mo.

LOCATION.--Lat 39°26'05", long 92°10'04", in SW¼NE¼SW¼ sec.29, T.54 N., R.11 W., Monroe County, on left bank 25 ft (8 m) downstream from bridge on County Highway AA, 500 ft (152 m) downstream from Allen Creek, 3.5 mi (5.6 km) southeast of Madison, and at mile 29.8 (47.9 km).

DRAINAGE AREA.--200 mi² (518 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 690.16 ft (210.361 m) above mean sea level (Missouri State Highway Commission benchmark).

AVERAGE DISCHARGE.--5 years, 211 ft³/s (5.976 m³/s), 14.33 in/yr (364 mm/yr), 152,900 acre-ft/yr (189 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 42,300 ft³/s (1,200 m³/s) Apr. 21 (gage height, 33.4 ft or 10.18 m, from floodmarks); minimum, 0.70 ft³/s (0.020 m³/s) Oct. 11 (gage height, 3.35 ft or 1.021 m).

Period of record: Maximum discharge, 42,300 ft³/s (1,200 m³/s) Apr. 21, 1973 (gage height, 33.4 ft or 10.18 m, from floodmarks); minimum discharge, 0.21 ft³/s (0.006 m³/s) Sept. 14, Oct. 18, 19, 1971; minimum gage height, 3.35 ft (1.021 m) Oct. 11, 1972.

Flood of July 9, 1967, reached a stage of 31.25 ft (9.525 m), from floodmark (discharge, 31,200 ft³/s or 884 m³/s, revised by contracted-opening method). Flood in 1871 reached nearly the same stage, from information by local resident.

REVISIONS.--The maximum discharge for the 1970 water year has been revised to 20,500 ft³/s (581 m³/s) Oct. 13, 1969 (gage height, 29.19 ft or 8.879 m), superseding figure published in WRD Missouri, 1970, 1971, 1972, and WSP 2115.

REMARKS.--Records good.

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	29	9.9	75	400	557	4,590	67	48	12	42	2.7
2	1.4	312	7.5	50	1,520	1,760	1,140	585	36	33	17	3.2
3	1.2	141	5.9	500	412	448	245	224	63	45	11	24
4	1.1	40	5.0	1,000	163	228	146	104	170	42	7.9	62
5	.95	15	4.0	250	113	392	102	54	1,990	27	6.9	28
6	.91	6.9	3.0	175	85	1,570	77	282	511	18	6.0	11
7	1.1	4.0	2.5	125	60	2,940	60	2,720	121	11	5.2	5.8
8	1.0	2.8	2.0	75	40	660	70	2,730	66	9.3	4.5	4.8
9	.89	2.5	1.7	50	30	203	1,570	299	39	6.7	143	7.7
10	.83	31	1.5	25	22	1,710	1,030	173	26	501	122	6.4
11	.76	55	1.5	14	20	3,740	1,270	130	19	79	41	7.7
12	1.1	36	1.5	12	20	800	657	91	19	26	31	4.2
13	1.2	583	1.5	11	1,250	744	261	56	322	16	13	3.8
14	1.3	716	1.5	10	2,000	2,000	150	40	140	10	26	3.8
15	1.5	124	1.5	10	300	595	246	35	46	8.3	26	6.0
16	1.7	48	1.5	40	150	157	1,790	30	25	6.4	11	4.8
17	1.9	24	2.0	150	70	100	1,070	25	18	5.2	7.6	63
18	2.2	14	5.0	700	50	75	215	20	24	15	5.6	73
19	2.3	11	250	1,980	45	62	137	17	3,070	178	4.8	32
20	2.2	10	1,240	475	45	129	216	15	1,680	195	4.8	13
21	2.3	11	408	1,050	50	228	24,100	15	118	567	4.5	7.8
22	8.1	20	125	2,230	55	113	8,550	20	62	161	4.0	17
23	87	15	70	558	53	77	1,050	35	39	885	3.8	94
24	29	13	50	151	52	1,260	230	45	32	546	3.7	94
25	11	14	40	80	51	5,840	177	70	23	202	3.7	45
26	4.8	58	35	60	51	4,580	132	90	26	76	3.4	28
27	3.2	72	30	45	45	398	92	500	46	35	3.5	17
28	2.9	47	30	40	38	192	65	1,000	34	20	3.4	44
29	2.4	24	300	35	-----	1,060	44	500	19	16	3.2	31
30	1.9	14	600	30	-----	697	39	150	13	13	2.7	76
31	2.1	-----	300	30	-----	2,470	-----	85	-----	89	2.4	-----
TOTAL	181.94	2,493.2	3,537.0	10,036	7,190	35,785	49,521	10,207	8,845	3,853.9	574.6	820.7
MEAN	5.87	83.1	114	324	257	1,154	1,651	324	295	124	18.5	27.4
MAX	87	716	1,240	2,230	2,000	5,840	24,100	2,730	3,070	885	143	94
MIN	.76	2.5	1.5	10	20	62	39	15	13	5.2	2.4	2.7
CFSM	.03	.42	.57	1.62	1.29	5.77	8.26	1.65	1.48	.62	.09	.14
IN.	.03	.46	.66	1.87	1.34	6.66	9.21	1.90	1.65	.72	.11	.15
AC-FT	361	4,950	7,020	19,910	14,260	70,980	98,220	20,250	17,540	7,640	1,140	1,630

CAL YR 1972 TOTAL 25,048.21 MEAN 68.4 MAX 2,590 MIN .76 CFSM .34 IN 4.66 AC-FT 49,680
WTR YR 1973 TOTAL 133,045.34 MEAN 365 MAX 24,100 MIN .76 CFSM 1.83 IN 24.75 AC-FT 263,900

PEAK DISCHARGE (BASE, 2,500 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
1-22	0515	13.31	2,670	3-11	1445	16.27	4,140	4-21	1330	33.4	42,300
2-13	*	*	*	3-25	2245	21.05	7,240	5-7	2145	15.88	3,940
3-7	0245	14.38	3,190	4-1	1430	17.71	4,930	6-19	1200	16.97	4,480

*Unknown

05507500 Salt River near Monroe City, Mo.

LOCATION.--Lat 39°32'25", long 91°40'20", in NE¼NW¼ sec.22, T.55 N., R.7 W., Ralls County, on left bank on downstream side of old bridge pier, 135 ft (41 m) upstream from highway bridge at Joanna, 2,500 ft (762 m) downstream from Indian Creek, 2.0 mi (3.2 km) upstream from Lick Creek, 8.0 mi (12.9 km) south-east of Monroe City, and at mile 63.5 (102.2 km).

DRAINAGE AREA.--2,230 mi² (5,780 km²), approximately.

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

GAGE.--Water-stage recorder. Datum of gage is 520.04 ft (158.508 m) above mean sea level. Prior to Feb. 2, 1940, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--34 years, 1,492 ft³/s (42.25 m³/s), 9.09 in/yr (231 mm/yr), 1,081,000 acre-ft/yr (1.33 km³/yr).

EXTREMES.--Current year: Maximum discharge, 102,000 ft³/s (2,890 m³/s) Apr. 22 (gage height, 39.1 ft or 11.92 m, from floodmark); minimum, 17 ft³/s (0.48 m³/s) Oct. 20, 21 (gage height, 2.84 ft or 0.866 m).
Period of record: Maximum discharge, 102,000 ft³/s (2,890 m³/s) Apr. 22, 1973 (gage height, 39.1 ft or 11.92 m, from floodmark); no flow July 28-31, 1954.
Flood of June 1928 reached a stage of about 36 ft (11.0 m), from information by local residents.

REMARKS.--Records good.

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	95	118	340	3,960	2,760	694	31,500	1,440	3,930	353	187	70
2	80	1,020	270	2,700	12,500	6,090	30,300	4,710	1,410	595	301	65
3	63	4,490	223	2,000	11,500	6,470	16,700	7,560	1,240	608	213	78
4	52	2,800	197	7,000	7,080	3,440	9,860	6,620	1,320	871	173	86
5	45	1,000	176	6,000	2,790	3,810	2,930	2,500	5,560	961	151	82
6	41	533	140	4,000	1,610	13,300	2,070	2,150	7,120	826	133	608
7	43	335	130	3,000	1,210	30,000	1,720	10,900	4,260	736	118	698
8	45	236	120	2,250	958	23,700	1,460	21,700	1,960	521	109	408
9	39	180	110	1,500	750	8,850	6,300	14,500	1,170	357	511	1,060
10	35	206	100	1,100	600	10,300	11,900	9,040	881	288	5,160	4,630
11	33	897	100	850	450	28,400	11,400	4,110	732	711	6,610	2,130
12	33	1,700	100	600	450	24,500	10,200	2,050	655	359	7,850	725
13	30	2,700	100	400	4,830	13,400	8,610	1,390	1,080	239	6,240	451
14	29	5,000	100	310	16,800	18,200	7,120	1,030	1,120	189	1,280	337
15	29	7,200	100	270	10,100	15,200	5,090	852	903	168	612	2,450
16	27	3,850	100	250	4,000	9,660	8,400	723	672	151	457	3,140
17	24	1,520	100	350	2,000	3,900	12,000	620	704	136	905	1,460
18	23	778	120	2,000	1,250	1,780	7,770	524	777	124	613	1,860
19	21	547	400	11,900	950	1,300	3,530	449	8,990	120	335	3,960
20	19	414	3,640	11,600	804	1,650	2,590	374	14,500	274	241	2,050
21	21	330	3,880	7,180	734	2,750	35,500	324	5,970	1,110	191	826
22	35	310	2,680	16,200	695	2,290	94,000	358	2,140	2,280	158	1,010
23	167	330	1,910	13,900	685	1,530	67,000	364	1,040	4,150	137	4,030
24	1,920	325	869	6,240	695	3,040	42,000	528	851	11,100	123	6,850
25	1,070	295	750	2,950	700	26,600	25,000	497	842	5,150	115	5,900
26	519	364	603	2,360	732	37,700	8,000	1,050	661	2,450	106	4,930
27	290	1,060	491	2,850	745	34,500	3,000	9,330	2,260	858	97	6,430
28	197	1,080	715	2,600	682	20,200	2,000	15,900	1,170	537	90	7,020
29	140	701	2,390	2,300	-----	13,000	1,500	12,500	615	356	83	7,360
30	111	477	5,780	1,800	-----	8,910	1,240	13,300	388	267	79	6,880
31	95	-----	6,060	1,160	-----	14,500	-----	12,400	-----	211	75	-----
TOTAL	5,371	40,796	32,794	121,580	89,060	389,664	470,690	159,793	74,921	37,056	33,453	77,584
MEAN	173	1,360	1,058	3,922	3,181	12,570	15,690	5,155	2,497	1,195	1,079	2,586
MAX	1,920	7,200	6,060	16,200	16,800	37,700	94,000	21,700	14,500	11,100	7,850	7,360
MIN	19	118	100	250	450	694	1,240	324	388	120	75	65
CFSM	.08	.61	.47	1.76	1.43	5.64	7.04	2.31	1.12	.54	.48	1.16
IN.	.09	.68	.55	2.03	1.49	6.50	7.85	2.67	1.25	.62	.56	1.29
AC-FT	10,650	80,920	65,050	241,200	176,700	772,900	933,600	316,900	148,600	73,500	66,350	153,400
CAL YR 1972	TOTAL	283,910	MEAN	776	MAX	11,700	MIN	18	CFSM	.35	IN	4.74
WTR YR 1973	TOTAL	1,532,762	MEAN	4,199	MAX	94,000	MIN	19	CFSM	1.88	IN	25.57
AC-FT												

PEAK DISCHARGE (BASE, 16,000 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
1-22	2030	18.37	20,100	3-26	1700	26.65	39,000	5-28	0715	16.15	16,200
2-14	1215	17.10	17,800	4-1	2245	24.53	33,700	6-19	2330	16.61	17,000
3-7	1030	23.60	31,400	4-22	*	39.1	102,000	*Unknown			
3-11	1615	23.00	29,900	5-8	1115	19.68	22,800				

SALT RIVER BASIN

05508000 Salt River near New London, Mo.

LOCATION.--Lat 39°36'44", long 91°24'30", in NE¼NW¼ sec.36, T.56 N., R.5 W., Ralls County, on left bank 180 ft (55 m) upstream from upstream bridge on dual U.S. Highway 61, 2.0 mi (3.2 km) north of New London, 8.0 mi (12.9 km) upstream from Spencer Creek and at mile 35.5 (57.1 km).

DRAINAGE AREA.--2,480 mi² (6,420 km²), approximately.

PERIOD OF RECORD.--February 1922 to current year.

GAGE.--Water-stage recorder. Datum of gage is 477.03 ft (145.399 m) above mean sea level. Prior to Apr. 7, 1931, nonrecording gage at present site 0.03 ft (0.009 m) higher. Apr. 7, 1931, to Jan. 17, 1935, non-recording gage at site 180 ft (55 m) downstream at datum 0.04 ft (0.012 m) lower.

AVERAGE DISCHARGE.--51 years, 1,646 ft³/s (46.61 m³/s), 9.01 in/yr (229 mm/yr), 1,193,000 acre-ft/yr (1.47 km³/yr).

EXTREMES.--Current year: Maximum discharge, 107,000 ft³/s (3,030 m³/s) Apr. 22 (gage height, 31.8 ft or 9.69 m, from floodmark); minimum daily, 26 ft³/s (0.736 m³/s) Oct. 21.
Period of record: Maximum discharge, 107,000 ft³/s (3,030 m³/s) Apr. 22, 1973 (gage height, 31.8 ft or 9.69 m, from floodmark); no flow Aug. 3-14, 1934, Aug. 21 to Sept. 1, 1936.
Flood of July 14, 1958, reached a stage of 27.6 ft (8.41 m), present site and datum, based on comparison of June 1928 flood crest at stone marker 1.0 mi (1.6 km) downstream to gage.

REMARKS.--Records good above 2,000 ft³/s (56.6 m³/s) and fair below. Records of chemical analyses 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	162	130	518	5,240	1,650	742	26,800	1,960	8,030	397	252	87
2	143	800	450	2,990	9,870	3,680	32,800	5,370	1,760	565	233	80
3	126	2,000	350	2,340	13,500	7,440	26,400	7,770	1,210	760	308	80
4	115	4,500	300	7,250	9,630	4,640	13,900	8,420	1,190	742	243	83
5	104	2,500	250	7,410	4,620	3,840	4,970	4,580	3,260	1,330	198	97
6	87	1,000	200	4,570	2,170	9,880	2,510	2,780	8,660	976	171	94
7	65	492	170	3,300	1,590	26,800	1,890	7,710	5,710	730	151	605
8	61	346	150	2,500	1,270	30,400	1,540	20,500	2,970	600	126	680
9	56	265	130	2,000	900	17,500	5,580	19,000	1,340	474	460	595
10	58	246	120	1,500	650	10,200	13,000	12,300	850	474	2,440	2,560
11	56	278	110	1,000	600	25,300	13,200	8,210	625	370	6,120	3,800
12	47	1,540	110	800	600	21,800	11,700	3,380	518	630	7,380	1,190
13	42	1,790	110	650	2,150	15,000	9,600	2,140	826	350	8,210	690
14	39	5,590	110	500	15,700	17,200	8,070	1,610	838	272	2,960	475
15	37	7,690	110	400	13,600	16,500	6,080	1,330	874	220	1,030	706
16	35	5,340	110	350	5,690	9,390	7,050	1,150	580	183	640	3,580
17	33	2,600	120	350	2,600	3,040	12,500	1,030	482	160	620	2,110
18	31	1,240	150	1,600	1,800	1,680	9,900	912	3,920	146	1,030	1,160
19	29	768	255	9,500	1,400	1,580	4,920	813	16,200	132	644	2,960
20	27	600	1,790	12,800	1,000	2,910	2,720	708	10,200	123	410	3,400
21	26	500	5,680	9,090	886	2,600	40,000	634	3,490	204	305	1,450
22	50	400	3,230	12,100	808	1,720	98,200	718	1,420	1,660	256	856
23	200	350	1,830	17,200	784	1,500	91,000	834	874	3,100	217	2,010
24	1,000	350	1,220	8,780	772	9,940	58,700	571	808	10,000	195	5,340
25	2,200	350	943	4,230	778	27,400	39,700	731	700	8,090	177	7,210
26	1,000	350	796	2,800	796	36,200	20,200	625	625	4,160	165	5,400
27	600	1,000	668	2,810	820	35,400	4,000	8,060	1,480	1,440	151	5,560
28	350	1,300	809	3,100	808	21,300	2,600	16,100	1,940	742	132	6,750
29	250	1,090	2,230	2,700	-----	13,900	1,950	14,600	904	492	115	7,440
30	180	728	5,210	2,300	-----	9,540	1,730	13,600	514	428	107	7,620
31	130	-----	6,410	1,770	-----	15,200	-----	14,100	-----	305	94	-----
TOTAL	7,339	46,133	34,639	133,930	97,442	404,222	573,210	182,246	82,798	40,255	35,540	74,668
MEAN	237	1,538	1,117	4,320	3,480	13,040	19,110	5,879	2,760	1,299	1,146	2,489
MAX	2,200	7,690	6,410	17,200	15,700	36,200	98,200	20,500	16,200	10,000	8,210	7,620
MIN	26	130	110	350	600	742	1,540	571	482	123	94	80
CFSM	.10	.62	.45	1.74	1.40	5.26	7.71	2.37	1.11	.52	.46	1.00
IN.	.11	.69	.52	2.01	1.46	6.06	8.60	2.73	1.24	.60	.53	1.12
AC-FT	14,560	91,500	68,710	265,700	193,300	801,800	1,137M	361,500	164,200	79,850	70,490	148,100
CAL YR 1972	TOTAL	314,369	MEAN	859	MAX	11,900	MIN	26	CFSM	.35	IN	4.72
WTR YR 1973	TOTAL	1,712,422	MEAN	4,692	MAX	98,200	MIN	26	CFSM	1.89	IN	25.69
AC-FT										623,600		3,397,000

PEAK DISCHARGE (BASE, 16,000 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
1-23	0715	18.41	18,800	3-27	0300	24.50	38,500	5-28	1800	17.12	16,700
2-14	2015	17.59	17,400	4-2	1600	23.33	33,300	6-19	1115	17.36	17,000
3-8	0700	22.90	31,600	4-22	2300	31.8	107,000				
3-12	0100	22.22	28,900	5-8	2115	20.11	22,300				

05587500 Mississippi River at Alton, Ill.

LOCATION.--Lat 38°53'06", long 90°10'51", in NE¼ sec.14, T.5 N., R.10 W., Madison County, near left bank in downstream end of intermediate lock wall of lock and dam 26 at Alton, 300 ft (91 m) downstream from Missouri & Illinois Bridge & Belt Railroad bridge, 7.7 mi (12.4 m) upstream from Missouri River, and at mile 202.7 (326.1 km) upstream from Ohio River.

DRAINAGE AREA.--171,500 mi² (444,200 km²), approximately.

PERIOD OF RECORD.--Discharge: October 1927 to current year. Monthly discharge only for some periods, published in WSP 1308. Gage heights: At Grafton since 1879 and at Alton since January 1904 in reports of Mississippi River Commission, December 1890 to September 1893 and January 1917 to December 1939 in reports of National Weather Service.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Corps of Engineers). Prior to Mar. 20, 1933, nonrecording gage at Grafton 15.3 mi (24.6 km) upstream, at datum 403.79 ft (123.075 m) higher. Mar. 20, 1933, to Jan. 4, 1937, and Nov. 11, 1937, to Jan. 31, 1938, nonrecording gage 300 ft (91 m) upstream at datum 395.48 ft (120.542 m) higher. Since July 11, 1940, auxiliary water-stage recorder 5.9 mi (9.5 km) downstream; previously various combinations of gages were used.

AVERAGE DISCHARGE.--46 years, 97,090 ft³/s (2,750 m³/s), 70,340,000 acre-ft/yr (86.7 km³/yr).

EXTREMES.--Current year: Maximum discharge, 535,000 ft³/s (15,200 m³/s) Apr. 29, includes undetermined amount of overflow from Missouri River; maximum elevation, 432.15 ft (131.719 m) Apr. 28; minimum discharge, 38,500 ft³/s (1,090 m³/s) Sept. 22; minimum elevation, 400.30 ft (122.011 m) Sept. 3. Period of record: Maximum discharge, 535,000 ft³/s (15,200 m³/s) Apr. 29, 1973, includes undetermined amount of overflow from Missouri River; maximum elevation, 432.15 ft (131.719 m) Apr. 28, 1973; minimum discharge, 7,960 ft³/s (225 m³/s) Nov. 7, 1948, result of temporary storage in pool of lock and dam 26; minimum elevation, 390.50 ft (119.024 m) Jan. 27, 1954. Flood in June 1844 reached a stage of 432.10 ft (131.704 m), present datum.

REMARKS.--Records good. Natural flow of stream affected by many reservoirs and navigation dams in upper Mississippi River basin. Floodwater from Missouri River overtops or breaches the levees at extreme high stages. Overflow from Missouri River occurred during various floods as shown in the following table:

Period	Runoff for period acre-ft	hm ³	Maximum	
			Date	Discharge ft ³ /s m ³ /s
May 21 to June 4, 1943	1,075,000	1,330	May 24, 1943	90,000 2,550
Apr. 29 to May 13, 1944	891,000	1,100	Apr. 30, 1944	90,000 2,550
June 29 to July 19, 1947	687,000	847	July 2, 1947	65,000 1,840
July 5-31, 1951	2,534,000	3,120	July 20, 1951	110,000 3,120
Apr. 3-7,23-26, 1973	Unknown	--	Unknown	Unknown --

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	145,000	152,000	151,000	159,000	178,000	126,000	394,000	518,000	319,000	183,000	119,000	77,100
2	162,000	165,000	142,000	168,000	183,000	124,000	399,000	502,000	321,000	173,000	106,000	78,000
3	172,000	165,000	131,000	171,000	200,000	121,000	404,000	475,000	317,000	167,000	96,400	64,200
4	169,000	157,000	130,000	201,000	207,000	123,000	393,000	455,000	305,000	148,000	94,300	62,500
5	169,000	158,000	126,000	208,000	222,000	142,000	400,000	447,000	294,000	154,000	97,400	72,800
6	169,000	158,000	112,000	207,000	237,000	158,000	409,000	443,000	288,000	175,000	91,400	78,000
7	169,000	156,000	82,800	205,000	237,000	163,000	399,000	443,000	284,000	187,000	86,000	81,600
8	169,000	160,000	71,300	211,000	233,000	217,000	384,000	438,000	283,000	172,000	74,400	72,900
9	175,000	163,000	71,800	177,000	229,000	249,000	385,000	428,000	282,000	153,000	80,900	86,100
10	179,000	170,000	64,100	106,000	224,000	269,000	376,000	420,000	280,000	148,000	113,000	82,500
11	181,000	173,000	57,000	108,000	210,000	262,000	382,000	410,000	278,000	138,000	125,000	76,500
12	179,000	179,000	65,000	138,000	183,000	275,000	384,000	404,000	275,000	135,000	114,000	66,400
13	176,000	193,000	69,300	121,000	157,000	288,000	374,000	400,000	270,000	130,000	107,000	63,400
14	168,000	204,000	66,300	118,000	161,000	288,000	363,000	392,000	263,000	121,000	127,000	65,600
15	154,000	212,000	67,400	122,000	189,000	307,000	347,000	387,000	254,000	107,000	109,000	64,900
16	144,000	216,000	68,900	127,000	189,000	315,000	346,000	390,000	248,000	93,300	107,000	68,600
17	129,000	218,000	69,600	145,000	156,000	334,000	336,000	389,000	242,000	98,600	95,900	65,300
18	120,000	220,000	71,100	161,000	123,000	352,000	326,000	376,000	233,000	83,400	80,200	64,100
19	114,000	218,000	76,400	168,000	109,000	342,000	321,000	368,000	237,000	77,300	83,400	73,800
20	99,000	203,000	89,200	198,000	115,000	327,000	318,000	363,000	257,000	71,500	88,700	69,400
21	100,000	200,000	124,000	212,000	124,000	325,000	309,000	358,000	271,000	77,600	84,900	58,800
22	99,400	195,000	113,000	213,000	128,000	322,000	328,000	348,000	272,000	102,000	80,500	50,000
23	98,200	182,000	108,000	211,000	115,000	313,000	353,000	344,000	264,000	138,000	75,100	50,400
24	89,800	165,000	103,000	215,000	112,000	322,000	373,000	341,000	252,000	150,000	69,400	58,400
25	107,000	157,000	91,800	214,000	111,000	323,000	419,000	333,000	240,000	136,000	74,600	71,400
26	118,000	163,000	90,400	206,000	117,000	326,000	464,000	322,000	228,000	120,000	78,800	85,400
27	132,000	149,000	94,300	196,000	121,000	358,000	504,000	310,000	220,000	102,000	87,500	110,000
28	138,000	143,000	96,800	190,000	127,000	357,000	523,000	299,000	216,000	108,000	92,600	122,000
29	138,000	150,000	109,000	195,000	-----	373,000	527,000	299,000	208,000	114,000	90,200	148,000
30	144,000	148,000	143,000	195,000	-----	380,000	526,000	307,000	195,000	106,000	94,100	159,000
31	151,000	-----	157,000	185,000	-----	392,000	-----	314,000	-----	124,000	84,700	-----
TOTAL	4,457.4M	5,292.0M	3,012.5M	5,451.0M	4,697.0M	8,573.0M	11,766M	12,023M	7,896.0M	3,992.7M	2,908.4M	2,347.1M
MEAN	143,800	176,400	97,180	175,800	167,800	276,500	392,200	387,800	263,200	128,800	93,820	78,240
MAX	181,000	220,000	157,000	215,000	237,000	392,000	527,000	518,000	321,000	187,000	127,000	159,000
MIN	89,800	143,000	57,000	106,000	109,000	121,000	309,000	299,000	195,000	71,500	69,400	50,000
AC-FT	8,841M	10,500M	5,975M	10,810M	9,316M	17,000M	23,340M	23,850M	15,660M	7,920M	5,769M	4,655M

CAL YR 1972 TOTAL 47,014,900 MEAN 128,500 MAX 263,000 MIN 40,800 AC-FT 93,250,000
WTR YR 1973 TOTAL 72,416,100 MEAN 198,400 MAX 527,000 MIN 50,000 AC-FT 143,600,000

M Expressed in thousands.

MISSOURI RIVER BASIN BELOW SIOUX CITY, IOWA

TARKIO RIVER BASIN

06813000 Tarkio River at Fairfax, Mo.

LOCATION.--Lat 40°20'20", long 95°24'11", in SW¼SW¼ sec.22, T.64 N., R.40 W., Atchison County, in left bank on downstream side of bridge pier, 0.5 mi (0.8 km) west of Fairfax, and 2 mi (3.2 km) downstream from unnamed creek, and at mile 13.3 (21.4 km).

DRAINAGE AREA.--508 mi² (1,315 km²).

PERIOD OF RECORD.--March 1922 to current year.

GAGE.--Water-stage recorder. Datum of gage is 867.66 ft (264.463 m) above mean sea level. Prior to Oct. 1, 1931, nonrecording gage at site 50 ft (15 m) downstream at datum 2.0 ft (0.61 m) higher. Oct. 1, 1931, to Oct. 22, 1953, nonrecording gage at site 50 ft (15 m) downstream at same datum.

AVERAGE DISCHARGE.--51 years, 182 ft³/s (5.15 m³/s), 4.86 in/yr (123 mm/yr), 131,900 acre-ft/yr (163 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 8,600 ft³/s (243.6 m³/s) Feb. 1 (gage height, 19.95 ft or 6.081 m); minimum, 28 ft³/s (0.790 m³/s) Oct. 19, 20 (gage height, 5.12 ft or 1.561 m).
Period of record: Maximum discharge, 16,300 ft³/s (461.6 m³/s) June 20, 1942, from rating curve extended above 11,000 ft³/s (311.5 m³/s); maximum gage height, 22.33 ft (6.806 m), present datum, July 7, 1929, from floodmark; no flow on several days in July and August 1934.

REMARKS.--Records fair.

REVISIONS (WATER YEARS).--WSP 856: 1937.

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	45	440	232	500	5,220	392	3,030	2,090	470	325	159	89		
2	41	539	226	400	3,540	428	1,500	1,340	425	624	155	89		
3	40	380	216	400	1,240	404	1,140	788	440	1,390	148	86		
4	38	236	167	300	1,120	404	980	650	412	575	141	86		
5	37	188	150	250	1,420	502	840	590	388	500	132	80		
6	34	179	140	200	900	555	770	882	362	325	124	76		
7	33	575	150	200	720	630	682	5,350	338	275	145	76		
8	33	392	160	200	555	502	718	3,450	312	242	945	106		
9	33	274	150	200	528	622	805	1,460	290	222	455	401		
10	32	236	140	200	502	900	530	1,140	273	236	412	135		
11	39	220	150	200	490	1,940	1,100	980	260	232	622	97		
12	32	185	150	200	465	980	1,420	788	275	198	546	92		
13	33	242	150	200	720	946	910	700	350	179	268	200		
14	32	720	150	200	940	2,550	788	650	282	168	208	148		
15	31	478	150	200	440	1,240	1,090	605	280	171	192	110		
16	31	369	150	500	415	842	5,460	590	298	162	171	300		
17	30	323	150	3,000	392	720	2,020	530	268	152	160	232		
18	33	312	140	929	430	675	1,460	530	236	248	169	166		
19	28	289	150	515	460	645	1,100	530	230	322	146	130		
20	34	268	160	346	515	630	980	470	224	822	135	114		
21	44	251	160	346	755	600	827	455	208	910	130	104		
22	56	242	170	334	452	555	752	440	202	440	122	106		
23	226	236	170	300	540	555	682	412	194	300	116	113		
24	263	228	170	323	515	630	635	400	188	262	114	125		
25	121	249	160	300	515	2,620	605	388	182	266	116	224		
26	94	369	150	289	392	1,920	575	388	177	455	108	526		
27	81	358	150	415	369	1,100	545	590	173	300	99	1,720		
28	72	289	200	645	358	945	515	1,160	168	228	90	2,020		
29	64	251	1,000	630	-----	980	500	665	160	202	86	822		
30	75	236	4,280	555	-----	822	485	650	1,100	186	84	485		
31	646	-----	1,320	515	-----	4,410	-----	530	-----	212	85	-----		
TOTAL	2,431	9,554	11,161	13,792	24,908	31,644	33,444	30,191	9,165	11,129	6,583	9,058		
MEAN	78.4	318	360	445	890	1,021	1,115	974	306	359	212	302		
MAX	646	720	4,280	3,000	5,220	4,410	5,460	5,350	1,100	1,390	945	2,020		
MIN	28	179	140	200	358	392	485	388	160	152	84	76		
CFSM	.15	.63	.71	.88	1.75	2.01	2.19	1.92	.60	.71	.42	.59		
IN.	.18	.70	.82	1.01	1.82	2.32	2.45	2.21	.67	.81	.48	.66		
AC-FT	4,820	18,950	22,140	27,360	49,410	62,770	66,340	59,880	18,180	22,070	13,060	17,970		
CAL YR 1972	TOTAL	43,900.5	MEAN	120	MAX	4,280	MIN	7.0	CFSM	.24	IN	3.21	AC-FT	87,080
WTR YR 1973	TOTAL	193,060.0	MEAN	529	MAX	5,460	MIN	28	CFSM	1.04	IN	14.14	AC-FT	382,900

PEAK DISCHARGE (BASE, 4,800 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-30	1020	17.10	5,890	3-31	1945	19.00	7,600
1-17	0400	18.60*	4,500	4-16	1030	18.55	7,240
2-1	1700	19.95	8,600	5-7	1400	18.01	6,700

*Ice jam

06813500 Missouri River at Rulo, Nebr.

LOCATION.--Lat 40°03'14", long 95°25'12", in NW¼NW¼ 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 mile 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 (24 m) 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 (255.19 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 (34,400 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 120,000 ft³/s (3,400 m³/s) Apr. 1 (gage height, 19.69 ft or 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 or 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 9,427,700 MEAN 25,760 MAX 91,300 MIN 10,600 AC-FT 18,700,000
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.

MILL CREEK BASIN

06816000 Mill Creek at Oregon, Mo.

LOCATION.--Lat 39°58'55", long 95°07'37", in NE¼NE¼ sec.35, T.60 N., R.38 W., Holt County, on left bank at downstream side of bridge on U.S. Highway 275, 0.5 mi (0.8 km) upstream from Rock Creek, 1 mi (1.6 km) southeast of Oregon, and 7 mi (11.2 km) upstream from mouth.

DRAINAGE AREA.--4.90 mi² (12.69 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 921.26 ft (280.800 m) above mean sea level.

AVERAGE DISCHARGE.--23 years, 1.90 ft³/s (0.054 m³/s), 5.27 in/yr (134 mm/yr), 1,380 acre-ft/yr (1.70 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,200 ft³/s (34.0 m³/s) Aug. 7 (gage height, 5.22 ft or 1.591 m); minimum, 0.3 ft³/s (0.008 m³/s) Oct. 9 (gage height, 0.76 ft or 0.022 m).

Period of record: Maximum discharge, 4,200 ft³/s (118.9 m³/s) June 12, 1967 (gage height, 8.58 ft or 2.615 m); no flow at times most years.

REMARKS.--Records poor.

REVISIONS (WATER YEARS).--WSP 2119: 1960(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	.50	1.3	1.4	4.6	7.9	3.6	9.7	15	4.6	4.2	2.0	2.6
2	.40	1.0	1.5	5.0	6.4	3.4	8.7	6.9	4.6	5.0	2.0	2.7
3	.60	.70	2.1	8.2	5.7	3.2	8.2	6.6	5.3	4.3	2.0	2.7
4	.40	.60	1.4	6.1	5.3	4.8	7.9	6.4	11	18	2.0	2.7
5	.40	.60	1.4	4.0	5.0	3.8	7.4	6.4	5.3	4.2	2.0	2.6
6	.40	3.4	1.5	3.0	4.6	3.4	7.1	13	4.4	3.8	2.0	2.4
7	.40	1.4	1.5	3.0	4.4	4.0	6.9	24	4.2	3.6	121	2.2
8	.40	.90	1.5	2.0	4.8	3.4	8.2	8.2	3.8	3.3	29	3.4
9	.30	1.6	1.5	2.0	4.4	4.4	7.7	7.4	3.6	3.0	3.8	5.5
10	.60	1.1	1.5	2.0	4.4	3.8	7.4	6.9	3.6	2.8	3.2	2.7
11	.40	.80	1.5	2.0	4.6	5.0	7.1	6.4	3.4	2.5	10	2.6
12	.40	.80	1.5	2.0	6.6	4.6	6.6	6.4	3.6	2.0	25	3.2
13	.40	6.4	1.5	2.0	4.2	5.0	6.4	6.1	3.8	2.0	4.2	3.2
14	.50	1.7	1.5	2.0	4.0	5.5	7.7	5.9	3.6	2.0	4.0	2.7
15	.40	1.2	1.5	5.0	3.8	4.4	13	5.9	3.6	2.0	3.4	2.6
16	.50	1.3	1.5	7.0	4.0	4.2	16	5.7	3.6	2.0	3.2	7.6
17	.40	1.2	1.5	5.7	4.0	4.0	8.7	5.5	3.2	2.0	3.2	3.0
18	.40	1.2	1.5	3.2	4.0	3.6	7.9	5.5	3.0	2.0	3.0	2.7
19	.40	1.3	1.5	2.8	4.0	4.0	7.7	5.5	2.8	2.0	2.8	2.6
20	.50	1.0	1.5	2.2	4.0	5.3	7.1	5.3	3.2	30	2.8	2.4
21	1.0	1.1	1.5	4.0	4.0	4.6	19	5.3	4.0	5.0	2.7	2.4
22	3.7	1.1	1.5	3.2	4.0	4.4	8.4	5.3	4.2	4.0	2.8	2.2
23	1.4	1.1	2.0	2.6	3.8	4.8	7.9	4.8	4.2	3.0	2.8	7.6
24	.70	1.2	2.0	2.6	3.6	6.6	7.4	4.6	4.0	2.5	2.8	15
25	.70	1.8	2.7	2.6	3.6	10	7.1	4.6	3.8	2.0	3.0	5.0
26	.80	1.3	2.7	2.7	3.6	6.4	6.9	4.8	3.8	2.0	2.8	17
27	.70	1.2	7.2	3.2	3.4	5.7	6.6	5.5	3.6	2.0	2.6	5.3
28	.60	1.1	8.7	4.0	3.4	5.9	6.6	4.8	3.6	2.0	2.6	14
29	.60	1.1	42	4.0	-----	5.7	6.9	5.9	3.6	2.0	2.6	5.0
30	.70	1.4	17	2.8	-----	5.7	6.9	5.0	4.8	2.0	2.4	6.6
31	.70	-----	5.9	23	-----	26	-----	4.6	-----	2.0	2.6	-----
TOTAL	20.30	41.90	123.5	128.5	125.5	169.2	251.1	214.2	123.8	167.9	260.3	142.2
MEAN	.65	1.40	3.98	4.15	4.48	5.46	8.37	6.91	4.13	5.42	8.40	4.74
MAX	3.7	6.4	42	23	7.9	26	19	24	11	43	121	17
MIN	.30	.60	1.4	2.0	3.4	3.2	6.4	4.6	2.8	2.0	2.0	2.2
CFSM	.13	.29	.81	.85	.91	1.11	1.71	1.41	.84	1.11	1.71	.97
IN.	.15	.32	.94	.98	.95	1.28	1.91	1.63	.94	1.27	1.98	1.08
AC-FT	40	83	245	255	249	336	498	425	246	333	516	282

CAL YR 1972 TOTAL 404.20 MEAN 1.10 MAX 42 MIN .10 CFSM .22 IN 3.07 AC-FT 802
WTR YR 1973 TOTAL 1,768.40 MEAN 4.84 MAX 121 MIN .30 CFSM .99 IN 13.43 AC-FT 3,510

PEAK DISCHARGE (BASE, 150 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-29	2330	2.99	184	8-7	2300	5.22	1,200
7-3	1000	3.83	429	8-12	0200	3.03	184
7-20	*	3.15	211				

*Time unknown

NODAWAY RIVER BASIN

06817500 Nodaway River near Burlington Junction, Mo.

49

LOCATION.--Lat 40°26'42", long 95°05'19", in SW¼NE¼ sec.17, T.65 N., R.37 W., Nodaway County, near left bank on downstream end of bridge pier on U.S. Highway 136, 0.5 mi (0.8 km) upstream from Mill Creek, 0.5 mi (0.8 km) downstream from Norfolk & Western Railroad Co. bridge, 1.5 mi (2.4 km) west of Burlington Junction.

DRAINAGE AREA.--1,240 mi² (3,210 km²), approximately.

PERIOD OF RECORD.--March 1922 to current year.

GAGE.--Water-stage recorder. Datum of gage is 895.17 ft (272.848 m) above mean sea level. Prior to October 1, 1970 at datum 1.00 ft (0.305 m) higher. Prior to June 29, 1939, nonrecording gage. Prior to Oct. 26, 1928, at former bridge at same site and approximately same as previous datum; Oct. 26, 1928, to June 9, 1929, at site 0.5 mi (0.8 km) upstream set to read same as former gage at low water; June 10, 1929 to June 28, 1939, at present site and at previous datum.

AVERAGE DISCHARGE.--51 years, 524 ft³/s (14.84 m³/s), 5.74 in/yr (146 mm/yr), 379,600 acre-ft/yr (468.05 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 24,400 ft³/s (691 m³/s) Apr. 16 (gage height, 18.10 ft or 5.517 m); minimum discharge, 213 ft³/s (6.03 m³/s) Sept. 7 (gage height, 1.36 or 0.415 m).

Period of record: Maximum discharge, 32,000 ft³/s (906 m³/s) June 14, 1947 (gage height, 20.0 ft or 6.10 m, present datum); maximum gage height observed, 20.69 ft (6.306 m), present datum, Mar. 5, 1949 (ice jam); minimum discharge, 1.1 ft³/s (0.031 m³/s) Aug. 7, 1934.

REMARKS.--Records fair.

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	917	4,460	1,190	2,600	12,000	1,400	13,400	5,380	1,120	300	570	264
2	782	6,890	1,130	1,510	19,400	1,990	6,040	5,900	1,080	3,600	428	276
3	693	4,160	1,280	1,670	6,180	1,950	4,370	4,260	1,020	4,590	388	279
4	629	2,330	1,060	1,500	5,300	1,830	3,500	2,510	960	2,600	368	276
5	618	1,570	1,000	1,100	5,780	2,240	3,000	1,870	930	4,040	336	252
6	574	1,350	1,000	1,200	4,150	3,000	2,420	1,750	930	1,950	297	234
7	529	6,000	1,000	1,100	2,800	3,400	2,070	7,600	870	1,050	294	219
8	501	3,650	900	1,000	1,910	2,800	1,910	14,100	765	815	666	225
9	482	2,180	1,000	1,000	1,470	2,800	2,150	6,180	690	690	1,740	1,610
10	455	1,670	900	1,000	1,400	4,040	1,830	3,710	640	930	2,130	640
11	417	1,740	900	1,000	1,400	8,350	2,230	3,930	555	665	1,850	384
12	396	1,390	900	1,000	1,320	4,590	5,420	2,510	512	512	3,390	279
13	383	1,620	900	1,000	2,330	4,270	4,820	1,950	610	484	4,260	296
14	362	4,340	900	1,000	2,800	9,920	3,820	1,630	550	444	1,550	356
15	342	3,350	1,000	1,000	2,000	5,420	8,960	1,430	565	464	1,180	356
16	325	2,670	900	1,100	1,050	3,400	22,900	1,290	536	420	900	436
17	308	2,280	900	6,000	990	2,600	13,000	1,150	480	384	740	922
18	304	2,140	900	8,500	960	2,240	5,420	1,020	436	364	815	900
19	279	1,970	900	3,930	1,180	2,420	3,820	930	452	360	740	630
20	268	1,780	900	1,990	1,670	1,830	3,200	870	765	1,320	580	480
21	283	1,590	900	1,590	3,600	1,630	2,600	790	520	3,820	492	402
22	367	1,430	800	1,220	3,000	1,400	2,150	765	428	2,420	440	384
23	1,360	1,350	800	1,020	2,800	1,360	1,910	715	388	1,150	416	352
24	2,870	1,250	800	930	3,600	1,430	1,670	690	368	815	412	352
25	1,400	1,520	800	1,120	3,200	5,800	1,510	640	344	740	416	1,790
26	903	2,870	800	1,260	2,240	5,900	1,400	620	324	870	384	4,880
27	774	2,640	700	2,420	1,510	3,600	1,320	740	304	690	356	6,040
28	679	1,960	700	3,820	1,400	2,800	1,220	2,600	294	550	328	4,700
29	598	1,500	2,000	2,330	-----	2,600	1,120	2,330	276	476	291	3,600
30	535	1,250	13,200	1,590	-----	2,420	1,080	1,990	294	480	273	2,800
31	4,370	-----	6,320	1,510	-----	10,800	-----	1,550	-----	1,150	261	-----
TOTAL	23,703	74,900	47,380	59,010	97,440	110,230	130,260	83,400	18,006	39,143	27,291	34,614
MEAN	765	2,497	1,528	1,904	3,480	3,556	4,342	2,690	600	1,263	880	1,154
MAX	4,370	6,890	13,200	8,500	19,400	10,800	22,900	14,100	1,120	4,590	4,260	6,040
MIN	268	1,250	700	930	960	1,360	1,080	620	276	300	261	219
CFSM	.62	2.01	1.23	1.54	2.81	2.87	3.50	2.17	.48	1.02	.71	.93
IN.	.71	2.25	1.42	1.77	2.92	3.31	3.91	2.50	.54	1.17	.82	1.04
AC-FT	47,010	148,600	93,980	117,000	193,300	218,600	258,400	165,400	35,710	77,640	54,130	68,660
CAL YR 1972	TOTAL 345,256	MEAN 943	MAX 24,100	MIN 25	CFSM .76	IN 10.36	AC-FT 684,800					
WTR YR 1973	TOTAL 745,377	MEAN 2,042	MAX 22,900	MIN 219	CFSM 1.65	IN 22.36	AC-FT 1,478,000					

PEAK DISCHARGE (BASE, 8,500 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-30	0930	13.81	15,300	3-11	0830	10.55	9,760	3-31	2315	14.87	17,500
1-18	0100	11.12	10,200	3-14	0730	11.80	11,400	4-16	0930	18.10	24,400
2-1	1645	16.90	21,800	3-25	1730	10.95	10,000	5-8	0415	14.79	17,300

MISSOURI RIVER MAIN STEM

06818000 Missouri River at St. Joseph, Mo.

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

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

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

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

AVERAGE DISCHARGE.--45 years, 38,340 ft³/s (1,085.8 m³/s), 27,780,000 acre-ft/yr (34,250 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 161,000 ft³/s (4,560 m³/s) Apr. 1; maximum gage height, 22.41 ft (6.831 m) Dec. 29; minimum daily discharge, 16,900 ft³/s (479 m³/s) Jan. 10; minimum gage height, 6.66 ft (2.030 m) Feb. 18.

Period of record: Maximum discharge, 397,000 ft³/s (11,240 m³/s) Apr. 22, 23, 1952 (gage height, 26.82 ft or 8.175 m); minimum, 2,300 ft³/s (65.1 m³/s) Jan. 9, 1937; minimum gage height, 0.00 ft (0.000 m) Dec. 18, 19, 1940.

Maximum stage known, 27.2 ft (8.29 m), present datum, Apr. 29, 1881 (discharge, about 370,000 ft³/s or 10,500 m³/s, computed by Corps of Engineers).

Flood of June 1844 reached a stage of 24.5 ft or 7.47 m (discharge, about 350,000 ft³/s or 9,910 m³/s, computed by Corps of Engineers).

REMARKS.--Records good. Discharge measurements made 3 or more times a month during winter and 6 or more times monthly during rest of year. Flow partly regulated by many upstream reservoirs. Records of chemical analyses 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	58,700	67,800	50,800	62,400	72,200	48,200	152,000	63,800	74,500	59,800	53,900	39,200
2	58,400	71,400	49,700	42,700	122,000	63,000	138,000	70,500	71,000	54,600	48,000	39,700
3	58,000	74,000	48,700	37,900	89,000	77,700	90,700	65,600	69,000	83,700	46,500	39,800
4	56,500	72,200	47,700	37,000	62,700	84,200	76,200	62,200	73,200	106,000	45,400	40,300
5	56,800	64,600	45,100	35,000	55,400	90,600	66,700	57,000	73,000	91,200	44,500	40,700
6	57,600	67,800	39,900	33,000	54,400	89,300	60,200	57,800	78,600	70,900	43,800	40,800
7	57,600	70,000	36,700	31,000	52,100	89,000	56,800	78,800	75,300	57,900	43,800	40,700
8	57,200	74,500	34,200	25,000	49,200	85,100	54,800	110,000	71,600	52,300	63,800	41,300
9	56,500	72,200	33,400	20,000	46,100	82,500	55,200	113,000	68,000	49,200	51,400	42,600
10	55,800	71,300	31,000	16,900	44,200	84,800	54,700	89,000	65,300	46,700	48,300	44,700
11	56,800	71,800	30,000	18,000	43,200	106,000	53,500	75,900	64,100	52,600	47,900	43,700
12	57,600	71,800	25,000	20,000	44,000	109,000	52,900	67,700	63,500	55,800	88,500	42,800
13	58,200	73,200	20,000	20,000	48,900	90,000	56,500	59,200	63,400	48,400	100,000	42,200
14	59,000	82,700	19,000	20,000	55,600	103,000	55,800	55,900	62,400	44,900	60,000	42,200
15	57,000	79,200	19,000	25,000	48,000	101,000	57,500	56,300	63,700	44,000	45,900	42,500
16	57,600	75,000	25,000	45,000	41,800	96,200	104,000	57,400	62,600	43,000	44,300	44,000
17	57,900	74,300	27,000	90,000	39,000	89,400	120,000	58,100	59,300	41,900	43,600	47,100
18	58,200	72,300	28,000	115,000	38,000	81,100	96,200	57,700	57,300	42,500	43,300	46,700
19	57,200	71,600	30,000	83,700	38,400	73,800	74,100	55,800	56,400	48,000	43,200	45,200
20	57,600	69,900	30,000	67,400	39,000	70,200	62,900	55,800	61,000	62,600	42,500	44,500
21	57,600	68,500	31,000	57,900	40,800	65,700	60,900	59,900	65,800	81,700	41,800	43,900
22	58,600	67,700	32,000	55,800	45,000	59,800	59,500	60,700	60,500	65,800	41,800	43,300
23	62,200	65,500	33,000	51,700	42,800	56,200	56,800	60,600	56,200	57,200	41,600	44,100
24	64,600	61,800	34,000	48,000	47,200	56,800	55,300	59,500	53,500	55,100	41,100	50,100
25	65,800	58,200	35,000	46,000	62,200	80,000	53,800	58,600	52,800	56,700	40,900	55,100
26	63,000	57,100	38,000	47,400	64,600	116,000	53,300	59,300	53,600	59,000	40,600	68,200
27	61,000	56,200	40,000	50,000	56,500	95,400	54,900	61,400	53,200	55,400	42,900	140,000
28	59,800	54,500	45,000	58,300	50,000	77,100	54,000	75,300	52,900	51,600	42,700	138,000
29	60,600	53,500	60,000	58,800	-----	70,100	53,300	103,000	52,200	53,200	39,700	130,000
30	61,400	52,500	40,000	50,200	-----	67,200	54,000	102,000	52,500	50,600	38,000	86,100
31	62,600	-----	86,500	48,900	-----	90,000	-----	83,900	-----	50,600	38,500	-----
TOTAL	1,827.4M	2,048.1M	1,194.7M	1,418.0M	1,492.3M	2,548.4M	2,094.5M	2,151.7M	1,886.4M	1,792.9M	1,498.2M	1,649.5M
MEAN	58,950	68,270	38,540	45,740	53,300	82,210	69,820	69,410	62,880	57,840	48,330	54,980
MAX	65,800	82,700	90,000	115,000	122,000	116,000	152,000	113,000	78,600	106,000	100,000	140,000
MIN	55,800	52,500	19,000	16,900	38,000	48,200	52,900	55,800	52,200	41,900	38,000	39,200
AC-FT	3,625M	4,062M	2,370M	2,813M	2,960M	5,055M	4,154M	4,268M	3,742M	3,556M	2,972M	3,272M
CAL YR 1972	TOTAL 18,945,220.00			MEAN 51,760	MAX 90,000	MIN 9,520	AC-FT 37,580,000					
WTR YR 1973	TOTAL 21,602,100.00			MEAN 59,180	MAX 152,000	MIN 16,900	AC-FT 42,850,000					

M Expressed in thousands.

06819500 One Hundred and Two River at Maryville, Mo.

LOCATION.--Lat 40°20'45", long 94°49'56", in SW¼SW¼ sec.34, T.64 N., R.35 W., Nodaway County, on right bank at intake for city waterworks, just upstream from City Waterworks dam, 150 ft (45.7 m) upstream from bridge on U.S. Highway 136, 0.3 mi (0.48 km) downstream from Thill Branch, 1 mi (1.6 km) east of Maryville and at mile 64.0 (103.0 km).

DRAINAGE AREA.--515 mi² (1,334 km²).

PERIOD OF RECORD.--October 1932 to current year. April to June 1934 monthly discharge only, published in WSP 1310. June 1934 to October 1971, published as "near Maryville".

GAGE.--Water-stage recorder. Datum of gage is 964.65 ft (294.025 m) above mean sea level. Nonrecording gage prior to Sept. 15, 1958. Prior to June 20, 1934, at present site and datum. June 20, 1934 to Oct. 31, 1971, at site 3 mi (4.8 km) upstream at datum 5.68 ft (1.731 m) higher.

AVERAGE DISCHARGE.--41 years, 197 ft³/s (5.58 m³/s), 5.35 in/yr (136 mm/yr), 142,700 acre-ft/yr (175.9 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 14,200 ft³/s (481 m³/s) Feb. 2 (gage height, 17.51 ft or 5.337 m); minimum, 11 ft³/s (0.312 m³/s) Oct. 18, 19, 22 (gage height, 1.86 ft or 0.567 m).

Period of record: Maximum discharge, 17,000 ft³/s (481 m³/s) June 13, 1967 (gage height, 16.5 ft or 5.03 m, present site); maximum gage height, 17.51 ft (5.337 m) Feb. 2, 1973; no flow at times August, September 1934, July 25, 26, 1940, Jan. 28, 30, 1954 and for part of each day July 29, 30, 1960, caused by temporary storage behind dam, built to direct flow into new channel.

Flood of Sept. 16, 1926, reached a stage of 15 ft (4.6 m), present site, from floodmark (discharge, 14,500 ft³/s or 411 m³/s).

REMARKS.--Records fair except periods of no gage-height record, 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	510	320	200	6,320	435	5,720	1,060	214	39	100	17
2	20	756	335	200	10,400	660	1,190	1,890	183	810	100	18
3	19	660	292	100	1,820	610	810	710	162	222	95	18
4	19	315	114	100	1,640	610	660	485	172	315	90	17
5	18	218	73	100	1,640	1,130	535	360	218	172	85	16
6	19	197	80	100	1,010	860	435	635	169	109	80	16
7	17	1,310	80	100	660	1,160	385	3,990	117	68	80	16
8	16	760	80	100	460	685	360	5,180	101	50	82	23
9	14	385	80	100	435	920	560	980	87	40	190	75
10	13	340	80	100	435	1,160	340	660	78	82	582	225
11	16	510	80	100	460	2,730	920	535	68	62	233	101
12	14	320	80	100	435	1,040	1,820	410	73	40	435	46
13	16	385	80	100	1,130	1,250	1,160	330	162	31	320	40
14	16	2,100	80	100	1,220	4,340	810	274	94	29	152	40
15	14	1,070	80	100	560	1,040	1,170	253	84	29	100	39
16	14	710	80	200	274	685	6,860	225	94	27	71	50
17	13	610	80	3,000	245	535	5,720	204	82	24	201	155
18	12	610	73	1,890	237	460	980	186	66	24	237	194
19	11	500	68	735	274	385	710	176	64	26	104	106
20	12	450	70	385	350	315	685	158	66	459	57	64
21	12	400	80	310	860	265	920	145	55	835	42	44
22	18	385	90	208	560	229	535	142	48	274	31	37
23	126	335	100	225	685	218	410	132	44	129	30	31
24	355	350	100	208	710	283	360	119	40	91	28	66
25	142	685	100	245	735	4,340	310	112	39	64	35	822
26	91	1,130	90	288	485	3,220	274	112	39	82	33	1,340
27	64	710	90	1,130	350	890	249	152	35	130	27	1,460
28	59	560	100	1,400	340	710	225	735	31	110	22	2,100
29	50	385	200	660	-----	685	208	410	30	100	20	2,030
30	42	310	2,000	535	-----	560	204	660	35	100	20	980
31	197	-----	500	460	-----	4,340	-----	340	-----	110	18	-----
TOTAL	1,469	17,966	5,755	13,579	34,730	36,750	35,525	21,760	2,750	4,683	3,700	10,186
MEAN	47.4	599	186	438	1,240	1,185	1,184	702	91.7	151	119	340
MAX	355	2,100	2,000	3,000	10,400	4,340	6,860	5,180	218	835	582	2,100
MIN	11	197	68	100	237	218	204	112	30	24	18	16
CFSM	.09	1.16	.36	.85	2.41	2.30	2.30	1.36	.18	.29	.23	.66
IN.	.11	1.30	.42	.98	2.51	2.65	2.57	1.57	.20	.34	.27	.74
AC-FT	2,910	35,640	11,420	26,930	68,890	72,890	70,460	43,160	5,450	9,290	7,340	20,200

CAL YR 1972 TOTAL 53,058.8 MEAN 145 MAX 4,140 MIN 1.5 CFSM .28 IN 3.83 AC-FT 105,200
WTR YR 1973 TOTAL 188,853.0 MEAN 517 MAX 10,400 MIN 11 CFSM 1.00 IN 13.64 AC-FT 374,600

PEAK DISCHARGE (BASE, 7,500 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-2	1230	17.51	14,200	4-17	0200	16.70	10,800
4-1	0900	16.50	10,000				

PLATTE RIVER BASIN (IOWA-MISSOURI)

06820500 Platte River near Agency, Mo.

LOCATION.--Lat 39°41'19", long 94°42'10", in NE¼NW¼ sec. 10, T.56 N., R.34 W., Buchanan County, on left bank 10 ft (0.3 m) downstream from bridge of U.S. Highway 169, 1.5 mi (2.4 km) downstream from Third Fork, 3.5 mi (5.6 km) northeast of Agency, and at mile 66.8 (107.5 km).

DRAINAGE AREA.--1,760 mi² (4,560 km²), approximately.

PERIOD OF RECORD.--May 1924 to August 1930 (published as "at Agency"), May 1932 to current year.

GAGE.--Water-stage recorder. Datum of gage is 807.38 ft (246.089 m) above mean sea level. May 22, 1924, to Aug. 9, 1930, nonrecording gage at site 4 mi (6.4 km) downstream at different datum. May 13, 1932, to Nov. 14, 1965, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--46 years (1924-29, 1932-73), 836 ft³/s (23.7 m³/s), 6.45 in/yr (164 mm/yr), 605,700 acre-ft/yr (747 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 25,200 ft³/s (714 m³/s) Apr. 1 (gage height, 25.20 ft or 7.681 m); minimum, 62 ft³/s (1.76 m³/s) Oct. 18, 19 (gage height, 4.08 ft or 1.244 m).

Period of record: Maximum discharge, 53,000 ft³/s (1,500 m³/s) from loop rating, July 20, 1965 (gage height, 35.05 ft or 10.683 m); no flow at times in July and August 1934 and October 1956.

REMARKS.--Records fair except those for period of ice effect, 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	132	256	634	11,200	8,180	1,320	24,100	7,100	1,000	279	167	121
2	122	919	590	3,760	19,400	1,640	22,500	7,480	756	356	230	204
3	123	1,240	570	2,250	21,600	2,050	18,500	5,780	910	1,410	224	218
4	155	1,330	499	1,700	19,000	3,510	8,240	3,220	2,220	3,940	159	163
5	123	685	352	1,300	13,300	4,900	2,920	1,920	1,290	2,130	141	106
6	107	719	176	1,000	6,750	4,570	2,180	4,860	796	1,380	122	91
7	102	1,700	256	900	3,740	6,300	1,980	15,000	583	910	118	83
8	108	3,080	200	800	2,530	4,610	1,750	21,700	484	504	7,980	136
9	96	1,950	200	700	1,870	3,480	1,830	20,200	385	353	5,170	288
10	95	1,140	200	600	1,630	3,940	1,990	13,100	312	288	759	233
11	97	802	200	500	1,490	7,260	2,290	4,500	286	228	1,990	248
12	84	928	200	500	1,580	8,230	3,660	2,450	291	218	3,030	243
13	82	2,210	200	500	4,700	4,870	6,210	1,810	487	204	1,280	514
14	80	5,100	200	500	7,020	12,800	4,360	1,410	508	169	1,210	454
15	73	5,000	200	500	3,870	14,400	3,570	1,170	428	165	1,060	180
16	73	2,750	200	600	1,880	8,140	13,000	1,000	425	148	547	383
17	69	1,750	200	2,000	1,030	2,930	21,000	868	864	132	526	715
18	64	1,440	200	8,950	925	2,080	19,500	759	481	122	544	288
19	65	1,360	200	8,740	1,140	1,730	16,300	713	325	167	538	226
20	66	1,170	200	3,850	1,140	3,100	7,600	651	263	3,330	457	332
21	69	906	200	2,990	1,260	2,260	3,560	612	224	4,560	288	312
22	85	778	200	2,580	2,120	1,470	6,410	986	237	1,840	206	634
23	129	770	200	1,640	2,160	1,260	2,760	622	230	1,240	186	2,000
24	149	749	200	1,250	1,970	2,310	1,920	542	210	745	145	2,510
25	471	728	200	1,480	2,230	11,900	1,550	460	202	529	136	9,530
26	483	1,310	200	2,290	2,150	20,500	1,320	439	206	454	127	10,300
27	309	2,760	300	2,470	1,690	16,400	1,160	619	198	517	120	11,600
28	247	1,670	400	4,640	1,190	9,410	1,030	537	182	388	122	10,500
29	206	1,050	1,000	3,540	-----	3,650	960	1,330	182	353	134	13,800
30	182	792	5,000	1,940	-----	2,780	912	1,880	176	263	130	12,200
31	173	-----	14,700	1,630	-----	12,400	-----	1,400	-----	210	130	-----
TOTAL	4,419	47,042	28,277	77,300	137,545	186,200	205,062	125,118	15,141	27,532	27,976	78,612
MEAN	143	1,568	912	2,494	4,912	6,006	6,835	4,036	505	888	902	2,620
MAX	483	5,100	14,700	11,200	21,600	20,500	24,100	21,700	2,220	4,560	7,980	13,800
MIN	64	256	176	500	925	1,260	912	439	176	122	118	83
CFSM	.08	.89	.52	1.42	2.79	3.41	3.88	2.29	.29	.50	.51	1.49
IN.	.09	.99	.60	1.63	2.91	3.94	4.33	2.64	.32	.58	.59	1.66
AC-FT	8,770	93,310	56,090	153,300	272,800	369,300	406,700	248,200	30,030	54,610	55,490	155,900

CAL YR 1972 TOTAL 208,347 MEAN 569 MAX 14,700 MIN 35 CFSM .32 IN 4.40 AC-FT 413,300
WTR YR 1973 TOTAL 960,224 MEAN 2,631 MAX 24,100 MIN 64 CFSM 1.49 IN 20.30 AC-FT 1,905,000

PEAK DISCHARGE (BASE, 7,000 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-31	0745	22.47	15,200	3-26	1315	24.28	21,600	5-8	1930	24.67	22,900
1-19	0300	18.35	9,570	4-1	1645	25.20	25,200	7-20	2030	17.43	7,400
2-3	0245	24.47	22,300	4-17	1445	24.42	22,100	8-8	0915	20.40	10,600
2-14	0530	17.87	7,680	4-22	0900	17.64	7,480	9-29	1500	23.50	14,200
3-15	0415	22.76	16,100	5-1	1430	19.50	9,350				

06821000 Jenkins Branch at Gower, Mo.

LOCATION.--Lat 39°37'29", long 94°36'01", in SW¼NW¼ sec.34, T.56 N., R.33 W., Clinton County, on right bank at upstream side of culvert on U.S. Highway 169, 0.8 mi (1.3 km) north of Gower, and 4.4 mi (7.1 km) upstream from mouth.

DRAINAGE AREA.--2.72 mi² (7.04 km²).

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

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 905 ft (275.8 m) from topographic map.

AVERAGE DISCHARGE.--23 years, 1.55 ft³/s (0.044 m³/s), 7.74 in/yr (197 mm/yr), 1,120 acre-ft/yr (1.38 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 557 ft³/s (15.8 m³/s) Sept. 28 (gage height, 4.80 ft or 1.463 m); minimum, 0.1 ft³/s (0.003 m³/s) Sept. 6, 7 (gage height, 1.26 ft or 0.384 m).
Period of record: Maximum discharge, 3,460 ft³/s (98.0 m³/s) July 20, 1965 (gage height, 13.27 ft or 4.045 m), from rating curve extended above 240 ft³/s (6.8 m³/s) on basis of slope-area measurement at gage height, 9.03 ft (2.752 m) and contracted-opening measurement at gage height 13.27 ft (4.045 m); no flow on many days most years.

REMARKS.--Records poor.

REVISIONS (WATER YEARS).--WSP 1440: 1950-51, 1954-55.

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	5.0	1.2	.30	36	5.2	10	39	.80	.20	.30	.20
2	.20	2.0	1.2	.40	8.0	3.4	7.0	7.0	1.0	.40	.30	.40
3	.20	1.0	.80	1.4	4.0	2.0	5.0	4.3	1.2	.60	.30	.30
4	.20	.90	.70	.60	3.6	25	4.0	3.8	6.5	5.6	.30	.30
5	.20	.80	.70	1.0	2.8	7.0	3.0	3.4	5.8	.70	.30	.20
6	.20	10	.70	.90	2.6	12	2.8	67	1.8	.60	.30	.10
7	.30	20	.70	.70	2.8	9.5	2.6	83	1.5	.40	.30	.10
8	.20	1.2	.70	.50	2.0	3.6	3.4	9.0	1.2	.40	.62	.20
9	.20	2.1	.50	.50	1.8	12	3.2	4.9	.70	.40	.70	.20
10	.20	2.6	.50	.50	1.8	21	6.4	3.2	.60	.30	.40	.10
11	.20	1.5	.50	.50	1.8	7.5	5.5	2.6	.40	.30	.60	.20
12	.20	1.7	.50	.50	3.2	3.8	3.8	2.6	.50	.30	4.9	.20
13	.30	21	.40	.80	12	74	3.2	2.4	1.3	.20	.70	1.5
14	.50	4.0	.30	.70	3.2	14	9.2	2.0	.60	.20	.50	.30
15	.20	2.6	.40	1.0	1.8	4.3	16	1.8	.40	.20	.40	.20
16	.40	2.4	.40	6.4	1.5	3.8	47	1.7	.80	.20	.40	.60
17	.30	2.4	.40	9.0	1.4	3.0	5.5	1.5	1.0	.20	.30	.60
18	.30	2.0	.60	5.8	1.4	2.8	4.3	1.4	.60	.40	.30	.30
19	.30	2.0	.90	3.0	1.4	14	4.6	1.4	.40	.60	.30	.30
20	.40	1.8	1.2	2.4	1.7	9.0	3.6	1.0	.20	18	.30	.30
21	.60	1.7	1.2	8.0	1.7	4.0	9.1	.90	.10	8.9	.30	.30
22	.70	1.5	1.4	3.8	1.8	3.4	4.3	1.8	.40	1.0	.50	.30
23	.40	1.5	.60	2.8	1.8	3.4	3.4	1.2	.40	.60	.30	7.1
24	.40	1.4	.20	3.6	2.0	46	3.0	.80	.30	.50	.30	60
25	.40	2.6	.40	5.7	1.7	40	2.6	.70	.30	.50	.30	8.5
26	.40	1.8	.40	4.6	1.4	7.0	2.4	.70	.20	.40	.30	23
27	.40	1.4	.60	4.0	1.4	4.9	2.2	2.2	.20	.40	.30	5.8
28	.30	1.0	1.0	2.0	1.3	4.0	2.2	1.4	.20	.40	.30	68
29	.30	1.0	3.2	1.8	-----	3.0	2.0	2.2	.20	.40	.20	5.5
30	.30	1.3	2.8	1.8	-----	5.0	2.8	1.7	.10	.40	.20	15
31	.50	-----	.60	2.4	-----	50	-----	1.2	-----	.40	.20	-----
TOTAL	9.90	102.20	25.70	77.40	107.9	407.6	184.1	257.80	29.70	44.10	77.10	200.10
MEAN	.32	3.41	.83	2.50	3.85	13.1	6.14	8.32	.99	1.42	2.49	6.67
MAX	.70	21	3.2	9.0	36	74	47	83	6.5	18	62	68
MIN	.20	.80	.20	.30	1.3	2.0	2.0	.70	.10	.20	.20	.10
CFSM	.12	1.25	.31	.92	1.42	4.82	2.26	3.06	.36	.52	.92	2.45
IN.	.14	1.40	.35	1.06	1.48	5.57	2.52	3.53	.41	.60	1.05	2.74
AC-FT	20	203	51	154	214	808	365	511	59	87	153	397

CAL YR 1972 TOTAL 349.20 MEAN .95 MAX 21 MIN 0 CFSM .35 IN 4.78 AC-FT 693
WTR YR 1973 TOTAL 1,523.60 MEAN 4.17 MAX 83 MIN .10 CFSM 1.53 IN 20.84 AC-FT 3,020

PEAK DISCHARGE (BASE, 200 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-13	2000	4.30	462	5-7	1600	3.51	325
3-31	0400	3.68	350	8-8	0345	4.11	424
4-16	0045	3.67	350	9-24	2115	4.45	481
5-6	0645	3.49	325	9-28	0930	4.80	557

PLATTE RIVER BASIN (IOWA-MISSOURI)

06821150 Little Platte River at Smithville, Mo.

LOCATION.--Lat 39°23'17", long 94°34'44", in N½SW¼ sec.23, T.53 N., R.33 W., Clay County, on left bank behind city equipment shelter on old bridge abutment, 500 ft (152 m) upstream from town bridge in Smithville, 1,500 ft (457 m) upstream from bridge on U.S. Highway 169, and 0.5 mi (0.8 km) downstream from Wilkerson Creek.

DRAINAGE AREA.--234 mi² (606 km²).

PERIOD OF RECORD.--June 1965 to current year. Occasional measurements 1942, 1943, 1946, 1962-65.

GAGE.--Water-stage recorder. Datum of gage is 778.18 ft (237.189 m) above mean sea level (levels by Corps of Engineers). Prior to Mar. 23, 1966, nonrecording gage at site 1,500 ft (457 m) downstream at same datum.

AVERAGE DISCHARGE.--8 years, 146 ft³/s (4.13 m³/s), 8.47 in/yr (215 mm/yr), 105,800 acre-ft/yr (130 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 7,510 ft³/s (213 m³/s) May 2 (gage height, 32.09 ft or 9.781 m); no flow Aug. 30, 31.

Period of record: Maximum discharge, 76,600 ft³/s (2,170 m³/s), slope-area measurement of peak flow, July 20, 1965 (gage height, 44.8 ft or 13.66 m, from floodmark); no flow at times in many years.

Highest known flood, 44.8 ft (13.66 m) from floodmark, July 20, 1965. Flood of 1947 reached a stage of 37.4 ft (11.40 m).

REMARKS.--Records fair.

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	106	36	78	1,750	207	4,770	2,170	105	12	22	26
2	9.3	264	32	69	2,550	414	1,360	6,780	107	10	20	157
3	7.9	90	29	300	600	278	435	2,090	92	15	18	31
4	2.2	33	23	442	306	1,600	345	377	433	2,000	16	20
5	0	21	22	200	262	1,940	279	283	714	368	15	15
6	0	83	22	150	197	788	224	2,160	286	144	13	11
7	0	800	25	100	181	1,880	197	4,010	135	64	13	10
8	0	215	22	80	150	564	192	4,470	74	34	841	264
9	3.1	85	22	60	137	1,220	218	1,440	54	24	1,280	184
10	14	269	22	40	143	1,370	216	398	50	20	143	59
11	4.9	224	21	30	127	2,330	299	315	34	15	60	28
12	4.9	85	20	20	123	702	342	236	31	12	118	25
13	4.8	1,390	20	20	411	1,150	247	181	85	12	197	22
14	25	2,250	20	20	605	2,920	202	134	33	11	82	21
15	9.9	355	20	30	196	988	313	114	30	9.5	40	16
16	5.4	174	20	100	150	335	2,780	102	26	8.5	28	13
17	2.0	133	20	800	137	262	1,270	87	28	7.0	23	76
18	1.5	102	20	859	103	224	327	87	22	7.2	19	113
19	1.0	88	25	437	99	469	274	81	20	14	17	35
20	1.0	80	50	193	108	2,390	292	71	15	1,000	15	18
21	2.0	70	100	686	102	612	573	65	14	2,620	13	12
22	24	61	90	542	90	348	1,380	135	15	331	11	9.4
23	13	54	150	246	92	293	431	82	16	561	10	255
24	10	50	120	158	87	1,480	240	70	11	804	9.8	938
25	8.5	69	100	248	84	4,870	189	63	9.0	269	9.7	5,470
26	7.8	75	70	391	78	3,130	154	75	8.5	110	9.2	4,580
27	7.6	70	80	266	80	558	132	292	133	61	9.3	1,940
28	7.2	50	100	194	71	406	113	133	44	46	8.8	2,990
29	7.1	40	200	76	-----	329	102	138	19	37	8.1	4,200
30	7.4	39	500	85	-----	265	98	140	15	30	4.6	1,050
31	18	-----	301	96	-----	4,760	-----	148	-----	26	16	-----
TOTAL	220.5	7,425	2,302	7,016	9,019	39,082	17,994	26,927	2,658.5	8,682.2	3,089.5	22,588.4
MEAN	7.11	248	74.3	226	322	1,261	600	869	88.6	280	99.7	753
MAX	25	2,250	500	859	2,550	4,870	4,770	6,780	714	2,620	1,280	5,470
MIN	0	21	20	20	71	207	98	63	8.5	7.0	4.6	9.4
CFSM	.03	1.06	.32	.97	1.38	5.39	2.56	3.71	.38	1.20	.43	3.22
IN.	.04	1.18	.37	1.12	1.43	6.21	2.86	4.28	.42	1.38	.49	3.59
AC-FT	437	14,730	4,570	13,920	17,890	77,520	35,690	53,410	5,270	17,220	6,130	44,800

CAL YR 1972 TOTAL 32,278.20 MEAN 88.2 MAX 2,250 MIN 0 CFSM .38 IN 5.13 AC-FT 64,020
WTR YR 1973 TOTAL 147,004.10 MEAN 403 MAX 6,780 MIN 0 CFSM 1.72 IN 23.37 AC-FT 291,600

PEAK DISCHARGE (BASE, 3,000 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-14	0130	25.87	3,200	4-16	0730	26.30	3,410	7-21	0315	26.40	3,290
3-20	0645	25.57	3,060	5-2	0745	32.09	7,510	9-25	0300	30.76	5,850
3-25	0845	29.76	5,230	5-7	1845	31.60	6,300	9-29	0145	29.03	4,700
3-31	1900	31.01	5,930	7-4	0700	26.60*	3,560	*From Floodmark			

06892500 Kansas River at Bonner Springs, Kans.

LOCATION.--Lat 39°03'37", long 94°52'21", in SE $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.29, T.11 S., R.23 E., Wyandotte County, on left bank at upstream side of bridge on State Highway 7, 0.6 mi (1.0 km) east of Bonner Springs, 0.9 mi (1.4 km) downstream from Wolf Creek, and at mile 20.8 (33.5 km).

DRAINAGE AREA.--59,928 mi² (155,214 km²), of which a large area is noncontributing.

PERIOD OF RECORD.--July 1917 to September 1973 (discontinued). Re-established 13.8 mi (22.2 km) upstream as "at De Soto". Monthly discharge only for some periods, published in WSP 1310.

GAGE.--Water-stage recorder. Datum of gage is 736.06 ft (224.351 m) above mean sea level. July 9, 1917, to Apr. 23, 1934, nonrecording gage, Apr. 24, 1934, to Nov. 25, 1961, water-stage recorder at site 0.5 mi (0.8 km) upstream at datum 11.00 ft (3.353 m) higher, and Nov. 26, 1961 to Sept. 30, 1971; water-stage recorder at same site at datum 5.00 ft (1.524 m) higher.

AVERAGE DISCHARGE.--56 years, 6,766 ft³/s (191.6 m³/s), 4,902,000 acre-ft/yr (6.04 km³/yr).

EXTREMES.--Current year: Maximum discharge, 109,000 ft³/s (3,090 m³/s) Sept. 28 (gage height, 24.50 ft or 7.464 m); minimum, 1,240 ft³/s (35.1 m³/s) Oct. 20.

Period of record: Maximum discharge, 510,000 ft³/s (14,400 m³/s) July 13, 1951 (gage height, 49.2 ft or 15.00 m, from floodmarks), present site and datum, from rating curve extended above 230,000 ft³/s (6,510 m³/s) on basis of slope-area measurement of peak flow; minimum observed, 160 ft³/s (4.53 m³/s) Oct. 11, 1956.

Maximum stage known since at least 1844, that of July 13, 1951. Flood of June 1, 1903 (second highest since at least 1844), reached a stage of about 44.5 ft (13.56 m), present datum, from information by Corps of Engineers.

REMARKS.--Records good except those for December and January, which are poor. Natural flow of stream affected by lakes and reservoirs in Colorado, Nebraska, and Kansas, and by numerous diversions for irrigation above station. Records of chemical analyses for the water year 1973 are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 806: 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	2,430	1,600	9,720	26,400	22,500	6,560	74,600	25,500	8,600	4,880	13,000	4,950
2	2,390	2,800	9,620	16,800	44,900	6,800	57,600	33,200	8,570	4,330	10,900	5,030
3	2,270	3,080	9,480	14,800	39,800	6,650	43,700	25,000	8,570	5,740	9,650	4,970
4	1,950	2,720	9,230	15,600	29,000	11,800	38,400	20,600	11,300	8,640	8,810	5,030
5	1,870	2,510	8,980	12,200	24,600	29,500	37,600	17,200	18,400	7,010	9,050	5,000
6	1,850	2,450	8,450	10,500	24,400	32,100	41,700	18,600	17,200	3,950	9,490	4,850
7	1,760	2,820	6,860	10,000	21,200	37,400	51,200	40,200	13,700	3,720	9,300	4,670
8	1,750	3,810	5,400	9,200	18,600	38,400	52,500	50,900	13,200	3,680	9,160	4,900
9	1,750	4,040	4,800	9,200	18,700	35,600	51,300	37,600	13,000	3,520	13,400	5,850
10	1,760	3,290	4,400	9,400	21,100	37,600	46,500	30,800	12,800	3,770	23,200	6,160
11	1,750	4,550	4,000	10,000	20,300	42,900	46,200	33,900	11,800	3,580	19,800	6,260
12	1,750	6,480	3,600	11,000	20,000	49,300	48,900	32,000	11,000	3,460	16,400	6,290
13	1,760	5,850	3,400	11,000	20,400	38,100	43,600	32,000	10,700	3,170	15,500	6,550
14	1,780	16,900	3,200	12,000	18,600	41,300	44,500	31,200	11,000	3,030	11,800	7,230
15	1,710	23,400	3,200	15,000	15,000	43,300	48,200	29,100	11,100	3,000	14,100	8,390
16	1,510	13,600	3,500	20,000	15,600	35,800	64,400	30,800	13,600	3,110	15,000	8,680
17	1,480	10,900	4,000	25,000	15,400	29,900	70,800	31,600	16,500	3,150	14,900	9,320
18	1,420	11,500	6,400	26,400	15,000	29,200	47,200	30,900	15,900	2,960	15,000	9,670
19	1,400	10,900	8,000	20,100	14,200	30,600	41,400	30,400	14,800	7,240	15,200	9,660
20	1,380	10,500	9,600	17,100	13,700	39,700	40,000	25,600	13,100	23,600	14,400	9,160
21	1,420	9,650	11,000	18,400	10,900	41,000	40,000	17,600	9,510	45,600	13,900	9,020
22	1,480	8,980	11,500	19,200	9,930	37,900	39,200	16,700	7,970	36,300	13,800	9,210
23	1,730	8,510	11,500	17,700	9,790	36,200	39,000	17,800	7,880	25,500	11,600	10,600
24	2,080	8,420	11,000	15,800	9,580	39,700	36,000	14,200	7,850	23,100	9,710	24,800
25	1,990	8,420	10,500	17,000	10,400	54,800	32,300	11,500	7,640	19,300	9,460	46,700
26	1,750	8,640	10,500	17,800	14,600	56,600	29,400	10,700	7,430	21,400	9,110	42,300
27	1,660	9,120	10,500	19,200	12,900	49,500	28,200	14,800	7,400	18,500	8,580	66,800
28	1,580	9,440	11,000	19,400	7,400	45,400	26,800	15,400	7,250	17,300	8,260	102,000
29	1,530	9,260	14,000	18,200	-----	45,000	24,100	10,900	6,980	16,600	7,890	94,200
30	1,510	9,580	19,800	16,000	-----	41,900	21,700	10,600	6,020	16,700	6,250	61,700
31	1,530	-----	37,400	15,200	-----	62,900	-----	9,120	-----	15,000	5,450	-----
TOTAL	53,980	233,720	284,540	495,600	518,500	1,133,4M	1,307.0M	756,420	330,770	360,840	372,070	599,950
MEAN	1,741	7,791	9,179	15,990	18,520	36,560	43,570	24,400	11,030	11,640	12,000	20,000
MAX	2,430	23,400	37,400	26,400	44,900	62,900	74,600	50,900	18,400	45,600	23,200	102,000
MIN	1,380	1,600	3,200	9,200	7,400	6,560	21,700	9,120	6,020	2,960	5,450	4,670
AC-FT	107,100	463,600	564,400	983,000	1,028M	2,248M	2,592M	1,500M	656,100	715,700	738,000	1,190M

CAL YR 1972 TOTAL 1,747,410 MEAN 4,774 MAX 43,800 MIN 900 AC-FT 3,466,000
WTR YR 1973 TOTAL 6,446,800 MEAN 17,660 MAX 102,000 MIN 1,380 AC-FT 12,790,000

PEAK DISCHARGE (BASE, 17,000 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-15	0500	11.93	25,200	4-1	1800	20.95	77,600	6-5	1600	10.92	20,500
12-31	1300	14.59	40,800	4-17	0400	20.64	75,600	7-21	0600	15.93	47,100
1-18	1400	12.37	29,700	5-2	1800	13.85	35,800	8-10	0500	11.50	24,500
2-2	1900	16.60	49,300	5-7	1900	16.84	52,400	9-25	0700	16.96	53,300
3-12	0600	17.15	52,600	5-27	2300	10.51	17,700	9-28	1400	24.50	109,000
3-25	1800	18.15	58,200								

MISSOURI RIVER MAIN STEM

06893000 Missouri River at Kansas City, Mo.

LOCATION.--Lat 39°06'43", long 94°35'16", in sec.32, T.50 N., R.33 W., Jackson County, on downstream side of right pier of Chicago, Burlington, & Quincy Railroad bridge at Kansas City, 1.4 mi (2.3 km) downstream from Kansas River. River mile, 366.1 (589.1 km).

DRAINAGE AREA.--489,200 mi² (1,267,000 km²), approximately.

PERIOD OF RECORD.--October 1897 to current year. Prior to August 1928 monthly discharge only, published in WSP 1310. Gage-height records collected at same site 1873-99 are contained in reports of Missouri River Commission; those since 1900 are contained in reports of National Weather Service.

GAGE.--Water-stage recorder. Datum of gage is 716.40 ft (218.359 m) above mean sea level. Prior to May 4, 1931, nonrecording gage, and May 4, 1931, to Aug. 23, 1934, water-stage recorder, at present site and datum. Aug. 24, 1934, to May 15, 1947, water-stage recorder at site 200 ft (61.0 m) upstream at same datum. May 16, 1947 to Feb. 28, 1948, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--76 years (1898-1973), 54,580 ft³/s (1,545.7 m³/s), 39,540,000 acre-ft/yr (48.75 km³/yr).

EXTREMES.--Current year: Maximum discharge, 252,000 ft³/s (7,140 m³/s) Sept. 28 (gage height, 24.86 ft or 7.577 m); minimum, 20,100 ft³/s (569 m³/s) Dec. 14 (gage height, 1.11 ft or 0.338 m).

Period of record: Maximum discharge, 573,000 ft³/s (16,230 m³/s) July 14, 1951; maximum gage height, 36.2 ft (11.03 m) July 14, 1951; minimum discharge, about 1,500 ft³/s (42.5 m³/s) Jan. 9, 10, 1937; minimum gage height, -2.91 ft (-0.887 m) Jan. 29, 1966.

Maximum stage known, 38.0 ft (11.58 m) June 16, 1844 (discharge, about 625,000 ft³/s or 17,000 m³/s, computed by Corps of Engineers).

REMARKS.--Records good. Discharge measurements made 6 or more times a month during winter and 10 or more times monthly during rest of year. Flow partly regulated by many reservoirs above station.

REVISIONS (WATER YEARS).--WSP 761: Drainage area. WSP 1310: 1905.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	61,300	67,800	65,400	97,300	78,700	59,000	211,000	79,100	84,700	55,100	60,400	46,200
2	60,600	73,400	64,600	72,700	160,000	61,500	216,000	109,000	80,700	58,400	58,700	45,600
3	60,000	77,600	65,000	63,200	157,000	84,300	181,000	109,000	77,100	65,100	52,200	44,400
4	59,000	77,600	65,000	58,700	123,000	93,800	141,000	101,000	81,500	107,000	50,900	43,500
5	58,400	75,200	64,000	52,200	102,000	117,000	129,000	86,700	91,600	96,600	49,600	44,400
6	58,700	72,000	59,000	45,000	97,500	124,000	121,000	81,100	93,000	83,100	49,600	45,000
7	58,700	72,700	51,200	41,400	93,800	128,000	119,000	109,000	89,100	65,900	49,600	46,200
8	59,000	77,200	45,600	39,900	85,400	132,000	117,000	163,000	83,500	59,000	58,700	46,800
9	58,400	78,600	42,000	26,200	75,100	127,000	115,000	168,000	79,100	55,700	74,300	48,300
10	56,400	78,000	32,700	24,800	70,700	129,000	112,000	144,000	75,100	53,800	76,300	50,200
11	56,700	76,600	35,000	27,000	66,300	142,000	110,000	125,000	71,900	52,800	71,900	50,200
12	57,400	78,000	34,300	27,500	64,300	166,000	108,000	116,000	69,900	59,000	81,900	48,900
13	58,400	78,600	22,800	28,800	65,500	145,000	102,000	103,000	69,500	58,000	110,000	48,900
14	59,300	91,900	20,500	29,100	75,100	133,000	106,000	93,400	69,900	50,900	75,500	48,600
15	59,600	103,000	23,800	29,100	72,700	159,000	106,000	88,300	71,500	47,400	62,700	49,200
16	58,400	95,700	26,500	33,200	63,100	145,000	144,000	87,500	71,100	46,500	60,000	49,600
17	58,000	90,800	28,000	58,700	53,800	132,000	184,000	89,100	72,700	45,900	57,000	53,200
18	59,300	87,400	28,000	129,000	49,900	120,000	163,000	87,900	67,900	45,600	56,400	56,400
19	60,000	84,800	29,100	119,000	49,900	112,000	136,000	85,400	66,700	50,900	56,700	56,400
20	59,300	82,900	30,200	96,600	51,200	118,000	125,000	82,700	65,900	65,500	56,000	54,800
21	59,300	80,800	33,000	90,300	50,600	116,000	120,000	77,100	69,900	128,000	54,800	53,800
22	60,300	79,700	34,600	84,300	54,800	106,000	118,000	80,300	69,100	118,000	53,200	53,200
23	61,900	78,300	37,100	77,100	58,700	94,800	108,000	81,500	64,300	89,100	52,200	56,700
24	65,400	75,200	40,200	67,900	56,700	96,600	95,600	77,100	60,400	81,500	49,600	68,700
25	67,400	72,000	41,400	63,500	67,500	141,000	83,100	70,700	57,700	71,900	49,200	122,000
26	66,000	69,600	42,300	62,300	84,700	171,000	77,900	69,500	56,000	72,300	48,600	115,000
27	64,000	69,200	44,700	65,900	80,300	171,000	76,700	74,300	57,000	71,100	48,600	184,000
28	61,300	69,200	45,000	70,300	67,100	153,000	76,300	79,500	55,400	65,100	50,600	247,000
29	60,000	66,800	48,900	75,900	-----	139,000	72,700	93,400	55,100	61,500	50,200	244,000
30	60,600	66,000	97,700	69,900	-----	127,000	70,700	108,000	53,800	61,500	47,400	193,000
31	63,200	-----	106,000	63,500	-----	168,000	-----	97,000	-----	59,500	46,800	-----
TOTAL	1,866.3M	2,346.6M	1,403.6M	1,890.3M	2,175.4M	3,911.0M	3,645.0M	3,016.6M	2,131.1M	2,101.7M	1,819.6M	2,314.2M
MEAN	60,200	78,220	45,280	60,980	77,690	126,200	121,500	97,310	71,040	67,800	58,700	77,140
MAX	67,400	103,000	106,000	129,000	160,000	171,000	216,000	168,000	93,000	128,000	110,000	247,000
MIN	56,400	66,000	20,500	24,800	49,900	59,000	70,700	69,500	53,800	45,600	46,800	43,500
AC-FT	3,702M	4,654M	2,784M	3,749M	4,315M	7,757M	7,230M	5,983M	4,227M	4,169M	3,609M	4,590M

CAL YR 1972 TOTAL 20,800,100 MEAN 56,830 MAX 120,000 MIN 12,600 AC-FT 41,260,000
WTR YR 1973 TOTAL 28,621,400 MEAN 78,410 MAX 247,000 MIN 20,500 AC-FT 56,770,000

M Expressed in thousands.

06893500 Blue River near Kansas City, Mo.

LOCATION.--Lat 38°57'26", long 94°33'31", in SE¼NE¼ sec.28, T.48 N., R.33 W., Jackson County, on downstream side of right pier of bridge on Bannister Road, 0.4 mi (0.6 km) downstream from Indian Creek, in Kansas City and at river mile 23.16 (37.3 km).

DRAINAGE AREA.--188 mi² (487 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 753.73 ft (229.737 m) above mean sea level (levels by Corps of Engineers). Prior to July 1, 1939, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--34 years, 146 ft³/s (4.13 m³/s), 10.55 in/yr (268 mm/yr), 105,800 acre-ft/yr (130 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 10,000 ft³/s (283 m³/s) Mar. 31 (gage height, 25.12 ft or 7.657 m); minimum, 8.9 ft³/s (0.252 m³/s) Oct. 10, 11 (gage height, 4.10 ft or 1.250 m).

Period of record: Maximum discharge, 41,000 ft³/s (1,160 m³/s) Sept. 13, 1961 (gage height, 44.46 ft or 13.551 m); no flow September 1939 to February 1940 and in August 1946.

Maximum stage known prior to 1961, about 39 ft (11.9 m) Nov. 17, 1928, from information by City of Kansas City.

REMARKS.--Records poor. Low flow regulated by commercial plants above station.

REVISIONS.--WSP 926: 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	22	79	40	73	1,460	239	1,480	259	235	50	44	62
2	21	50	40	40	787	349	573	394	794	282	40	50
3	19	36	40	344	368	273	438	182	346	766	36	133
4	19	31	40	476	299	1,730	378	149	359	1,650	35	450
5	17	28	35	148	257	779	300	134	550	202	33	91
6	17	202	34	120	220	1,320	260	1,180	297	118	30	46
7	17	81	32	93	201	1,080	240	2,210	238	98	28	186
8	17	54	31	93	184	462	220	871	204	83	34	370
9	16	70	31	86	158	1,640	200	389	179	71	28	206
10	13	121	29	80	157	2,840	190	282	160	64	98	98
11	12	80	27	75	161	1,970	176	243	146	66	40	49
12	24	55	30	71	177	572	159	215	132	54	33	89
13	29	641	30	71	241	3,130	143	167	137	50	27	328
14	44	311	30	91	244	1,090	1,540	144	250	48	22	116
15	23	118	29	109	163	542	1,490	126	222	46	22	57
16	19	73	28	410	119	377	1,790	124	156	44	26	52
17	16	73	28	915	116	350	458	117	142	44	27	898
18	16	73	28	410	124	377	318	114	120	42	25	155
19	15	55	118	245	132	641	665	111	130	130	22	73
20	18	73	245	150	131	2,540	2,270	108	97	170	22	55
21	50	55	180	674	128	708	2,680	105	83	262	24	48
22	146	55	73	608	124	443	999	1,210	74	85	19	26
23	58	55	60	410	121	377	438	417	59	1,940	20	148
24	36	55	50	245	119	3,000	325	432	65	2,540	18	212
25	29	73	40	212	115	5,950	265	332	62	489	20	5,650
26	31	55	40	278	112	1,680	224	327	66	196	18	2,060
27	27	55	40	250	111	608	201	589	186	110	18	2,620
28	25	55	40	230	111	503	171	267	80	100	17	6,200
29	23	40	55	212	-----	442	156	258	64	69	16	1,600
30	28	40	100	167	-----	435	152	368	55	57	18	308
31	43	-----	150	256	-----	7,160	-----	232	-----	52	22	-----
TOTAL	890	2,842	1,773	7,642	6,640	43,607	18,899	12,056	5,688	9,978	882	22,436
MEAN	28.7	94.7	57.2	247	237	1,407	630	389	190	322	28.5	748
MAX	146	641	245	915	1,460	7,160	2,680	2,210	794	2,540	98	6,200
MIN	12	28	27	40	111	239	143	105	55	42	16	26
CFSM	.15	.50	.30	1.31	1.26	7.48	3.35	2.07	1.01	1.71	.15	3.98
IN.	.18	.56	.35	1.51	1.31	8.63	3.74	2.39	1.13	1.97	.17	4.44
AC-FT	1,770	5,640	3,520	15,160	13,170	86,490	37,490	23,910	11,280	19,790	1,750	44,500

CAL YR 1972 TOTAL 36,096 MEAN 98.6 MAX 5,680 MIN 12 CFSM .52 IN 7.14 AC-FT 71,600
WTR YR 1973 TOTAL 133,333 MEAN 365 MAX 7,160 MIN 12 CFSM 1.94 IN 26.38 AC-FT 264,500

PEAK DISCHARGE (BASE, 5,800 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-10	2015	19.81	6,450	9-25	0315	22.87	8,170
3-25	1000	23.52	8,900	9-28	1030	22.92	8,200
3-31	1445	25.12	10,000				

BLUE RIVER BASIN

06893560 Brush Creek at Main St. in Kansas City, Mo.

LOCATION.--Lat 39°02'24", long 94°35'12", SW¼NE¼SW¼ sec.29, T.49 N., R.33 W., Jackson County, on right bank
25 ft (8 m) downstream from bridge on Main St. and 4 mi (6.4 km) upstream from Blue River.

DRAINAGE AREA.--14.8 mi² (38.3 km²).

PERIOD OF RECORD.--October 1970 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 815 ft (248.4 m) from topographic map.

EXTREMES.--Current year: Maximum discharge, 2,340 ft³/s (66.27 m³/s) Mar. 31 (gage height, 7.25 ft or 2.210 m);
no flow Dec. 9-16, July 17.
Period of record: Maximum discharge, 2,340 ft³/s (66.27 m³/s) Mar. 31 (gage height, 7.25 ft or 2.210 m);
no flow Dec. 9-16, July 17.
Maximum stage since 1969 was 8.46 ft (2.579 m) Sept. 21, 1970.

REMARKS.--Records poor. Flow affected by waste water from urbanized 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	.39	10	1.1	2.3	28	4.8	100	22	2.6	.40	1.4	16
2	.33	.72	1.0	2.7	10	1.6	30	7.1	10	48	1.4	12
3	.39	.51	1.2	108	3.2	34	15	7.1	5.9	20	1.4	5.6
4	.22	.48	.93	14	2.0	22	10	6.5	11	9.8	1.9	7.7
5	.05	.37	.67	3.3	2.5	11	8.0	6.8	4.6	3.6	1.2	5.0
6	.06	35	.50	2.0	1.1	39	6.0	68	1.2	1.2	1.0	5.0
7	.07	2.7	.20	1.0	1.3	17	5.0	61	1.0	.38	1.4	9.6
8	.06	.94	.10	.90	5.3	32	4.0	18	1.1	.39	5.0	7.8
9	.06	11	0	.90	4.8	50	4.0	14	1.1	.32	11	3.4
10	.06	5.5	0	.90	1.8	250	4.3	3.7	.77	.28	2.3	3.6
11	.06	.91	0	.90	1.6	100	3.5	7.1	.77	.41	1.4	1.7
12	1.1	4.3	0	.90	7.4	40	3.5	4.1	1.1	.28	3.7	20
13	.28	77	0	.90	5.0	100	3.5	2.8	1.0	.25	1.9	8.3
14	1.4	3.1	0	1.0	2.2	50	135	2.8	31	.26	1.9	2.1
15	.06	1.2	0	2.0	4.8	20	125	2.0	3.0	.31	1.6	1.4
16	.06	3.6	0	20	3.7	15	75	2.0	2.5	.21	1.3	3.3
17	.06	1.6	.50	8.0	5.0	10	41	3.0	1.8	.07	1.1	5.0
18	.05	.58	5.0	4.3	11	8.0	28	2.6	.90	.16	1.1	1.9
19	.05	2.7	10	3.9	2.6	150	25	2.0	6.2	43	1.0	1.3
20	.05	1.2	5.0	1.0	1.8	50	35	1.9	.60	32	1.0	1.0
21	6.2	.38	2.0	5.9	1.1	30	16	2.6	.30	48	.80	.76
22	16	.30	3.0	8.4	.90	15	10	21	.30	1.7	.80	4.0
23	.19	.29	10	5.3	1.1	10	9.6	2.6	.30	142	.80	23
24	.07	1.6	4.9	2.5	1.6	100	6.2	2.6	.30	104	.70	33
25	.05	6.0	3.3	2.2	1.6	200	4.3	2.2	.30	5.0	.60	58
26	.05	1.4	2.6	1.6	1.6	160	3.9	9.2	1.8	2.5	.50	39
27	.05	1.0	3.2	1.1	1.6	42	3.2	3.9	6.2	3.9	.50	1.9
28	.05	1.5	6.4	2.2	17	19	2.8	3.2	.90	6.2	.50	23
29	.05	1.0	12	3.5	-----	14	3.0	2.5	.70	1.9	.40	2.4
30	3.9	.95	39	2.2	-----	16	2.8	2.5	.40	1.8	.50	2.7
31	2.1	-----	3.4	2.5	-----	766	-----	1.8	-----	1.6	.50	-----
TOTAL	33.57	177.83	116.00	216.30	131.60	2,376.4	722.6	298.6	99.64	479.92	50.60	309.46
MEAN	1.08	5.93	3.74	6.98	4.70	76.7	24.1	9.63	3.32	15.5	1.63	10.3
MAX	16	77	39	108	28	766	135	68	31	142	11	58
MIN	.05	.29	0	.90	.90	1.6	2.8	1.8	.30	.07	.40	.76
CFSM	.07	.40	.25	.47	.32	5.18	1.63	.65	.22	1.05	.11	.70
IN.	.08	.45	.29	.54	.33	5.97	1.82	.75	.25	1.21	.13	.78
AC-FT	67	353	230	429	261	4,710	1,430	592	198	952	100	614
CAL YR 1972	TOTAL 2,461.91	MEAN 6.73	MAX 214	MIN 0	CFSM .45	IN 6.19	AC-FT 4,880					
WTR YR 1973	TOTAL 5,012.52	MEAN 13.7	MAX 766	MIN 0	CFSM .93	IN 12.60	AC-FT 9,940					

PEAK DISCHARGE (BASE, 800 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-10	1400	5.21	1,060	6-26	2330	5.50	1,190	9-23	0515	6.89	2,180
3-31	1415	7.25	2,340	7-21	0015	5.81	1,330	9-28	0730	7.10	2,260
4-14	1415	7.23	2,180	7-24	1415	6.14	1,550				
5-7	1345	5.08	820	9-1	1400	6.89	2,180				

ROCK CREEK BASIN

59

06893600 Rock Creek at Independence, Mo.

LOCATION.--Lat 39°04'37", long 94°27'03", in NW¼SW¼SE¼ sec.9, T.49 N., R.32 W., Jackson County, on left bank 20 ft (6 m) upstream from bridge on Northern Boulevard in Independence, 0.2 mi (0.3 km) south of 23rd Street and 4 mi (6.4 km) upstream from mouth.

DRAINAGE AREA.--5.20 mi² (13.47 km²).

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 825.23 ft (251.530 m) above mean sea level.

AVERAGE DISCHARGE.--6 years, 4.43 ft³/s (0.125 m³/s), 11.57 in/yr (294 mm/yr), 3,210 acre-ft/yr (3.958 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,220 ft³/s (34.5 m³/s) Apr. 21 (gage height, 9.24 ft or 2.816 m); no flow on many days.

Period of record: Maximum discharge, 2,520 ft³/s (71.4 m³/s) June 19, 1967 (gage height, 14.22 ft or 4.334 m, from floodmark), on basis of contracted opening and flow-over-road measurement of peak flow; no flow on many days each year.

Maximum stage known prior to 1967 in at least 32 years, 13.4 ft (4.08 m) in July 1965, from information by local resident.

REMARKS.--Records fair.

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	.10	11	.70	.30	29	7.7	20	12	6.4	0	0	1.9
2	.10	1.1	.80	.20	6.6	1.4	12	2.9	6.3	8.5	0	0
3	.10	.70	.70	29	4.1	1.1	9.1	2.3	3.2	.60	0	4.2
4	.20	.60	.40	1.6	2.9	25	6.1	2.0	2.6	7.2	0	.60
5	.10	.70	.40	1.4	2.3	5.0	4.9	1.7	4.9	6.7	0	0
6	.10	18	.50	.50	2.0	34	3.8	79	1.7	.60	0	0
7	.20	1.4	.30	.20	2.0	12	3.2	46	1.4	0	0	7.0
8	0	1.0	.40	.10	1.6	9.2	3.8	7.9	1.4	0	.90	2.0
9	0	5.8	.10	0	1.4	31	3.8	4.9	1.2	0	0	6.1
10	.10	3.3	.20	0	1.4	87	2.6	3.8	1.0	0	.40	0
11	.10	.80	0	0	1.2	33	2.0	3.5	.80	0	0	0
12	1.5	1.2	0	0	4.5	13	2.3	2.6	1.0	0	4.5	.50
13	.40	45	0	0	2.6	50	2.3	2.3	1.0	0	0	18
14	3.6	2.6	0	0	1.6	15	92	2.0	1.0	0	0	.20
15	.20	1.4	0	.10	1.4	9.1	55	2.0	.20	0	0	0
16	.30	1.4	0	1.0	1.4	6.9	32	1.7	1.2	0	0	.40
17	.40	1.2	0	1.0	1.4	5.3	10	1.4	.10	0	0	8.8
18	.50	1.0	.10	.50	1.6	4.9	7.4	1.2	0	.60	0	.20
19	.50	1.4	1.2	.30	1.6	60	8.4	1.0	.80	10	0	0
20	.50	1.0	1.2	7.3	1.6	22	31	.80	0	22	0	0
21	2.6	1.1	.20	6.1	1.6	9.8	104	.80	0	7.3	0	0
22	8.7	.80	0	2.6	1.6	7.4	19	27	0	4.6	0	.10
23	.70	.70	0	1.2	1.6	7.4	13	2.6	0	43	0	34
24	.60	1.0	0	1.0	1.4	108	8.4	8.1	0	46	0	69
25	.50	1.4	0	1.1	1.4	110	6.9	2.3	0	4.9	0	61
26	.40	.70	0	1.2	1.4	18	6.1	45	0	2.6	0	59
27	.40	.70	0	1.2	1.4	10	4.9	6.9	.40	1.4	0	9.8
28	.40	.60	0	1.4	1.1	9.8	2.9	3.2	0	.80	0	65
29	.40	.60	0	1.1	-----	6.9	2.3	3.8	0	.20	0	7.4
30	1.0	.60	6.2	1.4	-----	26	2.0	2.0	0	.20	0	4.9
31	1.0	-----	.40	2.9	-----	167	-----	1.7	-----	.20	0	-----
TOTAL	25.70	108.80	13.80	64.70	83.7	912.9	481.2	284.40	36.60	167.40	5.80	360.10
MEAN	.83	3.63	.45	2.09	2.99	29.4	16.0	9.17	1.22	5.40	.19	12.0
MAX	8.7	45	6.2	29	29	167	104	79	6.4	46	4.5	69
MIN	0	.60	0	0	1.1	1.1	2.0	.80	0	0	0	0
CFSM	.16	.70	.09	.40	.58	5.65	3.08	1.76	.23	1.04	.04	2.31
IN.	.18	.78	.10	.46	.60	6.53	3.44	2.03	.26	1.20	.04	2.58
AC-FT	51	216	27	128	166	1,810	954	564	73	332	12	714

CAL YR 1972 TOTAL 866.10 MEAN 2.37 MAX 82 MIN 0 CFSM .46 IN 6.20 AC-FT 1,720
WTR YR 1973 TOTAL 2,545.10 MEAN 6.97 MAX 167 MIN 0 CFSM 1.34 IN 18.21 AC-FT 5,050

PEAK DISCHARGE (BASE, 500 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-31	0200	7.85	600	5-6	1930	7.60	500	7-24	1215	7.80	580
4-14	1515	8.07	680	5-26	2145	7.62	500	9-24	2315	8.48	860
4-21	1530	9.24	1,220	7-21	2245	7.67	520	9-28	0730	7.64	520

LITTLE BLUE RIVER BASIN

06893790 Little Blue River at Longview Road in Kansas City, Mo.

LOCATION.--Lat 38°54'49", long 94°27'57", in SW¼SW¼ sec.4, T.47 N., R.32 W., Jackson County, on downstream side of left main pier of bridge on Longview Road in Kansas City and 3.5 mi (5.6 km) upstream from Cedar Creek.

DRAINAGE AREA.--47.4 mi² (122.8 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 823.50 ft (251.003 m) above mean sea level.

AVERAGE DISCHARGE.--7 years, 50.8 ft³/s (1.44 m³/s), 14.55 in/yr (370 mm/yr), 36,800 acre-ft/yr (45.4 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 5,440 ft³/s (154 m³/s) Mar. 31 (gage height, 8.22 ft or 2.506 m); minimum, 2.2 ft³/s (0.062 m³/s) Oct. 2, 3, 9, 10, 11, 12 (gage height, 1.80 ft or 0.549 m).

Period of record: Maximum discharge, 9,880 ft³/s (280 m³/s) June 27, 1969 (gage height, 11.19 ft or 3.411 m); minimum, 0.5 ft³/s (0.014 m³/s) Oct. 3, 1966.

REMARKS.--Records fair.

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	2.9	9.7	5.4	27	708	51	404	284	158	6.0	4.2	5.1
2	2.4	13	5.1	18	237	46	163	233	377	7.0	8.7	10
3	2.4	5.7	4.4	333	104	17	95	103	37	10	7.9	15
4	3.0	3.8	4.5	251	86	562	72	96	19	20	6.9	141
5	3.1	3.4	4.5	100	67	130	49	95	49	19	6.5	14
6	2.6	52	5.0	50	59	527	39	1,540	16	10	6.6	9.6
7	2.4	18	6.0	20	54	238	30	1,840	14	9.1	6.7	42
8	2.5	6.4	5.0	15	50	117	40	349	13	8.6	6.7	26
9	2.4	20	6.0	13	45	778	71	142	12	8.1	18	96
10	2.4	79	7.0	8.7	40	1,380	48	81	11	7.4	14	19
11	2.6	9.8	8.0	7.0	33	539	38	65	10	6.8	6.9	15
12	4.5	7.0	9.0	6.8	49	199	25	38	9.0	6.2	5.9	16
13	8.0	412	10	9.0	136	742	21	25	8.0	5.9	6.3	189
14	16	123	8.0	10	69	457	768	19	20	5.9	6.1	25
15	6.1	39	7.0	50	50	149	829	15	19	6.1	5.8	17
16	4.8	28	6.0	289	60	104	697	14	18	6.0	5.6	23
17	5.0	21	5.0	202	80	80	153	13	16	6.0	5.2	201
18	3.1	17	30	71	51	68	103	11	14	7.3	5.2	26
19	3.3	27	100	32	49	779	104	11	12	37	5.2	17
20	3.0	23	80	27	45	709	929	10	10	27	5.2	16
21	12	14	50	417	25	177	1,160	10	9.0	8.1	4.6	14
22	93	12	30	198	20	117	530	268	8.0	7.0	4.6	15
23	13	11	20	77	21	115	181	29	7.0	374	4.1	13
24	6.5	9.7	15	70	19	1,580	123	41	7.0	279	4.1	139
25	5.7	36	10	80	16	1,950	93	19	6.0	38	4.1	374
26	5.4	15	8.0	61	14	344	62	19	6.0	15	4.1	296
27	5.3	11	7.0	52	12	157	46	138	7.0	12	3.6	167
28	5.3	8.0	6.0	56	12	151	35	24	6.0	11	3.8	808
29	4.5	5.3	10	66	-----	118	29	54	6.0	11	4.6	111
30	4.9	5.5	88	65	-----	156	27	39	6.0	11	4.3	51
31	9.1	-----	14	127	-----	2,330	-----	9.6	-----	10	4.9	-----
TOTAL	247.2	1,045.3	573.9	2,808.5	2,211	14,867	6,964	5,634.6	910.0	995.5	195.4	2,910.7
MEAN	7.97	34.8	18.5	90.6	79.0	480	232	182	30.3	32.1	6.30	97.0
MAX	93	412	100	417	708	2,330	1,160	1,840	377	374	18	808
MIN	2.4	3.4	4.4	6.8	12	17	21	9.6	6.0	5.9	3.6	5.1
CFSM	.17	.73	.39	1.91	1.67	10.1	4.89	3.84	.64	.68	.13	2.05
IN ₂	.19	.82	.45	2.20	1.74	11.67	5.47	4.42	.71	.78	.15	2.28
AC-FT	490	2,070	1,140	5,570	4,390	29,490	13,810	11,180	1,800	1,970	388	5,770

CAL YR 1972 TOTAL 9,103.6 MEAN 24.9 MAX 1,820 MIN 1.9 CFMS .53 IN 7.14 AC-FT 18,060
WTR YR 1973 TOTAL 39,363.1 MEAN 108 MAX 2,330 MIN 2.4 CFMS 2.28 IN 30.89 AC-FT 78,080

PEAK DISCHARGE (BASE, 2,200 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-10	1600	7.69	4,560	3-31	0500	8.22	5,440
3-13	1500	6.15	2,560	4-14	1700	6.87	3,430
3-19	2000	7.06	3,680	4-15	1845	6.47	2,920
3-24	1430	7.15	3,810	5-6	2200	8.15	5,300

06894000 Little Blue River near Lake City, Mo.

LOCATION.--Lat 39°06'02", long 94°18'01", in SW¼SE¼ sec.35, T.50 N., R.31 W., Jackson County, at downstream side of right pier of upstream bridge on dual State Highway 78, 3 mi (4.8 km) southwest of Lake City, and 10.5 mi (16.9 km) upstream from mouth.

DRAINAGE AREA.--184 mi² (477 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 719.15 ft (219.197 m) above mean sea level. Prior to July 24, 1957, wire-weight gage at site 50 ft (15 m) downstream at same datum.

AVERAGE DISCHARGE.--25 years, 131 ft³/s (3.71 m³/s), 9.67 in/yr (246 mm/yr), 94,910 acre-ft/yr (117 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,890 ft³/s (138 m³/s) Mar. 26 (gage height, 24.47 ft or 7.458 m); no flow Aug. 30, 31 (regulation upstream).

Period of record: Maximum discharge, 9,460 ft³/s (268 m³/s) Sept. 14, 1961 (gage height, 27.94 ft or 8.516 m); no flow at times during 1953-54, 1973.

REMARKS.--Records fair.

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	27	64	26	54	663	105	3,940	278	155	44	53	25
2	21	89	25	39	958	235	1,530	552	771	59	46	39
3	19	62	23	335	426	189	543	291	582	92	43	41
4	20	44	21	900	290	389	381	208	273	129	41	249
5	21	38	19	500	236	1,040	301	182	287	125	39	178
6	21	72	19	250	197	586	255	1,000	239	93	36	49
7	21	181	17	100	173	1,550	226	2,800	164	67	34	35
8	20	83	15	80	155	751	199	3,540	139	49	34	114
9	19	53	16	70	128	1,200	235	1,020	117	45	35	229
10	17	122	16	60	122	1,630	243	455	105	43	39	152
11	18	123	13	50	116	2,860	214	339	94	41	43	56
12	18	58	20	40	118	1,740	194	288	88	39	44	46
13	27	473	28	40	210	762	165	235	76	36	41	191
14	46	530	32	64	263	1,720	637	203	107	36	35	242
15	40	150	25	100	167	802	3,020	184	128	34	33	69
16	35	91	19	171	111	411	3,120	168	109	34	30	49
17	27	71	17	524	127	301	1,750	143	107	33	28	164
18	25	58	21	368	95	242	556	129	102	31	27	242
19	24	53	91	202	98	413	433	117	82	54	25	72
20	23	54	196	136	103	2,120	955	111	71	174	23	52
21	33	50	131	461	99	1,510	2,470	100	60	437	23	45
22	99	43	75	638	93	498	3,030	337	54	78	23	36
23	156	40	45	360	89	367	1,090	456	53	400	22	175
24	61	36	36	225	86	783	519	234	49	866	22	84
25	41	39	31	212	81	3,640	399	417	44	630	21	1,280
26	36	42	28	197	74	4,410	318	227	44	184	21	707
27	35	38	26	165	72	1,550	263	756	46	125	20	1,170
28	33	33	26	152	70	588	235	374	47	95	19	1,060
29	31	30	32	144	-----	465	227	239	45	82	21	1,880
30	30	28	103	129	-----	365	213	249	42	68	17	451
31	36	-----	130	146	-----	2,520	-----	203	-----	61	15	-----
TOTAL	1,080	2,848	1,322	6,912	5,420	35,742	27,661	15,835	4,280	4,284	953	9,182
MEAN	34.8	94.9	42.6	223	194	1,153	922	511	143	138	30.7	306
MAX	156	530	196	900	958	4,410	3,940	3,540	771	866	53	1,880
MIN	17	28	13	39	70	105	165	100	42	31	15	25
CFSM	.19	.52	.23	1.21	1.05	6.27	5.01	2.78	.78	.75	.17	1.66
IN.	.22	.58	.27	1.40	1.10	7.23	5.59	3.20	.87	.87	.19	1.86
AC-FT	2,140	5,650	2,620	13,710	10,750	70,890	54,870	31,410	8,490	8,500	1,890	18,210

CAL YR 1972 TOTAL 33,751 MEAN 92.2 MAX 2,320 MIN 13 CFSM .50 IN 6.82 AC-FT 66,950
WTR YR 1973 TOTAL 115,519 MEAN 316 MAX 4,410 MIN 13 CFSM 1.72 IN 23.35 AC-FT 229,100

PEAK DISCHARGE (BASE, 2,000 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-11	2015	22.71	3,360	4-15	2015	22.96	3,480
3-20	2215	21.36	2,620	4-22	0045	23.03	3,520
3-26	0400	24.47	4,890	5-8	0700	23.12	3,780
4-1	1000	23.82	4,180	9-29	1300	19.98	2,190

SNI-A-BAR BASIN

06894680 Sni-A-Bar Creek near Tarsney, Mo.

LOCATION.--Lat 38°56'28", long 94°10'05", in SW¼SW¼NW¼ sec.30, T.48 N., R.29 W., Jackson County, on right bank 8 ft (2.4 m) downstream from bridge on Colburn Road, 2.3 mi (3.7 km) upstream from West Fork, 2.7 mi (4.3 km) east of Tarsney and 5 mi (8.0 km) southeast of Grain Valley.

DRAINAGE AREA.--29.1 mi² (75.4 km²).

PERIOD OF RECORD.--June 1970 to current year.

GAGE.--Water-stage recorder. Datum of gage is 788.37 ft (240.295 m) above mean sea level.

EXTREMES.--Current year: Maximum discharge, 2,720 ft³/s (77.03 m³/s) Apr. 14 (gage height, 20.25 ft or 6.172 m); no flow on many days.

Period of record: Maximum discharge, 3,650 ft³/s (103.4 m³/s) Dec. 14, 1971 (gage height, 20.60 ft or 6.279 m); no flow at times in 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	.40	3.2	237	14	200	132	7.2	0	.10	0
2		0	.40	.40	77	27	69	108	12	.10	.10	0
3		0	.40	16	30	16	42	38	10	.10	0	.20
4		0	.30	5.0	21	260	34	22	8.0	5.3	0	.20
5		0	.20	2.0	14	104	30	14	17	.90	0	.10
6		0	.10	1.0	14	256	20	211	8.5	.10	0	0
7		0	0	1.0	9.0	200	15	293	5.6	.10	0	0
8		0	0	1.0	9.0	57	19	86	4.0	0	0	0
9		0	0	1.0	8.0	298	41	40	3.2	0	0	0
10		5.1	0	1.0	8.0	620	44	24	1.6	0	0	.10
11		2.9	0	1.0	8.5	220	39	15	1.2	0	0	0
12		.90	0	1.0	10	69	20	12	.80	0	0	0
13		45	0	1.0	44	180	15	9.0	.80	0	.20	.10
14		9.0	0	1.0	28	170	842	7.6	3.5	0	0	.20
15		3.2	0	1.0	17	53	448	7.2	2.4	0	0	0
16		1.8	0	2.0	9.5	36	412	6.0	1.3	0	0	0
17		1.3	0	40	8.0	26	86	4.8	1.2	0	0	6.4
18		1.1	0	32	9.5	22	53	4.4	1.1	0	0	.60
19		.90	1.0	15	10	300	57	4.4	.80	65	0	0
20		1.0	1.0	9.5	10	355	488	4.0	.40	17	0	0
21		1.0	.90	138	9.0	45	748	3.2	.20	5.6	0	0
22		1.0	.80	104	7.2	22	190	23	.10	1.1	0	0
23		.90	.70	29	6.8	19	73	12	0	75	0	0
24		.90	.60	20	6.4	480	44	16	0	259	0	0
25		1.0	.50	16	6.0	1,110	34	18	0	39	0	236
26		1.2	.30	13	5.6	140	25	8.0	0	5.2	0	8.0
27		1.3	.10	9.0	5.2	65	20	52	0	3.2	0	38
28		1.1	.10	15	5.2	45	15	23	0	2.1	0	149
29		.80	1.0	15	-----	38	13	16	0	1.2	0	24
30		.40	5.0	10	-----	28	13	14	0	.60	0	15
31		-----	3.7	31	-----	688	-----	10	-----	.40	0	-----
TOTAL	0	81.80	17.50	535.10	632.9	5,963	4,149	1,237.6	90.90	481.00	.40	477.90
MEAN	0	2.73	.56	17.3	22.6	192	138	39.9	3.03	15.5	.013	15.9
MAX	0	45	5.0	138	237	1,110	842	293	17	259	.20	236
MIN	0	0	0	.40	5.2	14	13	3.2	0	0	0	0
CFSM	0	.09	.02	.59	.78	6.60	4.74	1.37	.10	.53	.0004	.55
IN.	0	.10	.02	.68	.81	7.62	5.30	1.58	.12	.61	0	.61
AC-FT	0	162	35	1,060	1,260	11,830	8,230	2,450	180	954	.8	948

CAL YR 1972 TOTAL 2,832.30 MEAN 7.74 MAX 413 MIN 0 CFSM .27 IN 3.62 AC-FT 5,620
WTR YR 1973 TOTAL 13,667.10 MEAN 37.4 MAX 1,110 MIN 0 CFSM 1.29 IN 17.47 AC-FT 27,110

PEAK DISCHARGE (BASE, 700 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-4	1500	12.40	788	3-25	1100	18.77	2,130	4-20	1200	15.60	1,180
3-9	0500	12.53	810	3-31	0745	16.47	1,420	4-21	0530	17.70	1,750
3-10	1600	15.76	1,660	4-14	1800	20.25	2,720	9-25	0600	15.70	1,200
3-19	2100	15.75	1,360	4-16	0200	15.38	1,130				

MISSOURI RIVER MAIN STEM

63

06895500 Missouri River at Waverly, Mo.

LOCATION.--Lat 39°12'50", long 93°30'50", sec.14, T.51 N., R.24 W., Lafayette County, on right bank 450 ft (137 m) downstream from bridge on U.S. Highway 65 at Waverly. River mile, 239.4 (385.2 km).

DRAINAGE AREA.--491,200 mi² (1,272,000 km²), approximately.

PERIOD OF RECORD.--October 1928 to current year. Gage-height records collected at same site 1878-79, 1883-99 are contained in reports of Missouri River Commission; since 1915 in reports of National Weather Service.

GAGE.--Water-stage recorder. Datum of gage is 646.00 ft (196.901 m) above mean sea level. Prior to Jan. 1, 1934, at datum 5.00 ft (1.524 m) lower; Mar. 30, 1929, to Apr. 4, 1934, nonrecording gage, Apr. 5, 1934, to June 13, 1943, water-stage recorder, June 14, 1943, to Sept. 15, 1944, nonrecording gage, and Sept. 16, 1944, to May 28, 1969, water-stage recorder at present datum; all at site 450 ft (137 m) upstream.

AVERAGE DISCHARGE.--45 years, 47,880 ft³/s (1,356 m³/s), 34,690,000 acre-ft/yr (42,770 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 252,000 ft³/s (7,140 m³/s) Sept. 29 (gage height, 28.05 ft or 8.550 m); minimum daily, 20,000 ft³/s (566 m³/s) Dec. 15.

Period of record: Maximum discharge, 549,000 ft³/s (15,550 m³/s) July 16, 1951; maximum gage height, 28.20 ft (8.595 m) July 14, 1951; minimum discharge, about 1,700 ft³/s (48.1 m³/s) Jan. 9, 1940; minimum gage height, 0.4 ft (0.122 m) Jan. 12, 1930, present datum.

REMARKS.--Records good. Discharge measurements made 3 times a month during winter and 6 or more times monthly during rest of the year. Flow partly regulated by many reservoirs above station.

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	62,900	64,600	65,300	126,000	64,200	65,500	192,000	75,300	93,600	52,400	59,200	47,200
2	62,400	71,800	65,200	95,200	124,000	66,000	217,000	103,000	86,400	57,200	58,400	46,200
3	61,000	75,300	65,700	75,900	159,000	73,300	211,000	120,000	84,800	61,200	56,400	45,900
4	60,000	78,800	66,500	74,400	132,000	94,100	179,000	109,000	81,400	84,200	51,400	46,200
5	58,800	75,800	67,000	64,400	106,000	112,000	148,000	99,000	78,800	114,000	49,600	45,200
6	58,900	73,500	65,800	55,300	99,000	128,000	132,000	91,900	99,000	94,600	48,900	46,500
7	59,600	72,800	57,700	48,400	87,500	139,000	125,000	108,000	95,200	85,300	48,400	45,900
8	59,900	74,800	51,400	45,000	85,800	140,000	124,000	151,000	88,000	65,000	47,200	47,500
9	59,900	78,800	46,400	39,600	77,300	133,000	122,000	173,000	83,600	60,000	68,200	47,800
10	59,200	78,800	42,700	27,600	73,000	132,000	117,000	168,000	78,800	55,600	74,800	48,900
11	58,400	78,300	34,100	27,900	70,000	142,000	112,000	145,000	74,300	52,800	73,300	50,600
12	58,900	79,800	36,000	29,100	66,800	157,000	112,000	130,000	71,400	52,000	72,300	51,000
13	60,500	84,800	34,000	29,700	67,800	155,000	109,000	115,000	70,900	60,000	109,000	51,400
14	61,300	99,000	25,000	30,400	70,400	147,000	106,000	101,000	70,900	57,600	98,500	52,400
15	61,900	110,000	20,000	30,400	78,300	151,000	117,000	91,400	69,100	50,600	65,500	48,900
16	61,300	104,000	25,000	31,800	73,300	161,000	128,000	87,500	79,800	50,300	60,000	49,200
17	59,800	88,100	28,000	40,600	67,800	139,000	166,000	88,600	71,800	46,800	57,600	48,900
18	59,300	81,400	29,000	111,000	65,000	129,000	177,000	87,500	69,100	45,600	57,200	58,800
19	60,000	80,400	29,200	126,000	62,800	120,000	147,000	86,400	69,100	44,900	54,800	59,600
20	59,700	80,900	29,900	104,000	56,000	124,000	131,000	83,600	67,300	56,400	54,800	56,400
21	59,900	82,600	32,000	97,300	56,400	131,000	136,000	79,300	64,600	108,000	52,800	54,400
22	60,800	81,400	34,200	93,700	56,400	117,000	137,000	78,300	69,100	129,000	52,400	54,800
23	62,000	79,800	36,300	83,600	59,600	105,000	120,000	82,000	66,000	104,000	53,600	59,200
24	64,600	77,300	39,800	73,600	65,500	103,000	105,000	79,300	61,600	95,800	49,600	64,200
25	66,900	72,800	42,300	65,200	72,000	133,000	98,500	75,800	59,600	86,400	49,200	118,000
26	67,300	69,100	43,400	62,800	78,300	174,000	89,700	71,400	56,400	75,800	49,600	134,000
27	64,200	67,800	45,100	63,600	85,300	185,000	85,300	76,300	56,800	75,800	50,000	152,000
28	62,400	68,600	45,900	68,600	74,300	167,000	83,100	80,900	57,200	70,000	50,300	203,000
29	61,200	68,600	46,500	75,800	-----	145,000	79,800	87,500	56,400	66,000	53,600	239,000
30	60,800	65,800	94,800	76,300	-----	132,000	74,800	105,000	54,800	63,200	51,000	230,000
31	62,000	-----	121,000	64,200	-----	155,000	-----	108,000	-----	62,000	47,200	-----
TOTAL	1,895.8M	2,365.5M	1,465.2M	2,037.4M	2,233.8M	4,054.9M	3,881.2M	3,138.0M	2,185.8M	2,182.5M	1,824.8M	2,303.1M
MEAN	61,150	78,850	47,260	65,720	79,780	130,800	129,400	101,200	72,860	70,400	58,860	76,770
MAX	67,300	110,000	121,000	126,000	159,000	185,000	217,000	173,000	99,000	129,000	109,000	239,000
MIN	58,400	64,600	20,000	27,600	56,000	65,500	74,800	71,400	54,800	44,900	47,200	45,200
AC-FT	3,760M	4,692M	2,906M	4,041M	4,431M	8,043M	7,698M	6,224M	4,336M	4,329M	3,619M	4,568M

CAL YR 1972 TOTAL 20,876,700.00 MEAN 57,040 MAX 121,000 MIN 13,100 AC-FT 41,410,000
WTR YR 1973 TOTAL 29,568,000.00 MEAN 81,010 MAX 239,000 MIN 20,000 AC-FT 58,650,000

M Expressed in thousands.

GRAND RIVER BASIN

06897500 Grand River near Gallatin, Mo.

LOCATION.--Lat 39°55'37", long 93°56'33", in SW¼NW¼ sec.16, T.59 N., R.27 W., Daviess County, on left bank 100 ft (30 m) upstream from new bridge on State Highway 6, 50 ft (15 m) downstream from Chicago, Rock Island & Pacific Railroad Co. bridge, 1 mi (1.6 km) northeast of Gallatin, and 6 mi (9.7 km) upstream from Honey Creek, and at mile 90 (144.8 km).

DRAINAGE AREA.--2,250 mi² (5,830 km²), approximately.

PERIOD OF RECORD.--June 1921 to current year.

GAGE.--Water-stage recorder. Datum of gage is 712.56 ft (217.188 m) above mean sea level. Prior to Jan. 31, 1922, nonrecording gage at site 100 ft (30 m) upstream at same datum. Jan. 31, 1922, to Nov. 15, 1936, nonrecording gage, at site about 1,100 ft (335 m) upstream at datum 0.17 ft (0.052 m) higher. Nov. 16, 1936, to Nov. 14, 1937, nonrecording gage, and Nov. 15, 1937, to Sept. 21, 1961, water-stage recorder on center pier of highway bridge at present datum. Sept. 22-27, 1961, nonrecording gage at railroad bridge, 100 ft (30 m) upstream at same datum, Sept. 28, 1961, to Mar. 4, 1964, water-stage recorder on downstream side of left bank pier of highway bridge and wire-weight gage for stages below 7.2 ft (2.2 m) at present datum.

AVERAGE DISCHARGE.--52 years, 1,123 ft³/s (31.803 m³/s), 6.78 in/yr (172 mm/yr), 813,600 acre-ft/yr (1003.2 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 32,700 ft³/s (926 m³/s) Apr. 2 (gage height, 25.80 ft or 7.864 m); minimum, 40 ft³/s (1.13 m³/s) July 18; minimum gage height, 0.31 ft (0.094 m) Oct. 20. Period of record: Maximum discharge, 69,100 ft³/s (1,960 m³/s) June 24, 1947 (gage height, 34.55 ft or 10.531 m); maximum gage height, 37.02 ft (11.284 m) June 2, 1929 (present site and datum); minimum discharge, 2.2 ft³/s (0.062 m³/s) June 3, 4, Oct. 27, 28, 29, 1956; minimum gage height, 0.21 ft (0.064 m) Oct. 17, 1971.

Maximum stage known, about 40 ft (12.2 m) July 8, 1909, from floodmarks.

REMARKS.--Records fair except those for period of ice effect, which are poor.

REVISIONS (WATER YEARS).--WSP 786: 1933-34. WSP 1280: 1922.

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	114	124	615	8,110	5,000	1,400	28,700	13,200	1,080	124	194	86
2	106	185	535	3,280	10,000	2,260	31,800	20,400	700	200	227	101
3	117	335	475	2,200	15,000	2,330	14,400	12,200	615	1,100	132	106
4	111	655	388	2,500	9,000	3,880	5,300	4,710	3,120	1,260	93	122
5	101	511	167	1,500	4,000	8,000	4,000	3,200	2,460	1,520	70	104
6	101	658	81	1,000	3,000	6,300	3,280	5,280	1,490	1,100	57	96
7	93	3,870	173	900	2,000	10,700	2,810	19,200	800	635	45	88
8	88	4,440	254	800	1,500	7,700	2,530	26,300	555	420	1,900	96
9	88	2,200	250	800	1,000	4,800	2,600	26,100	432	257	3,680	164
10	86	1,460	209	700	800	6,800	2,880	7,700	331	164	2,810	555
11	81	1,290	170	700	1,000	14,300	4,000	4,260	279	119	2,140	408
12	75	950	179	600	1,500	11,200	7,100	3,280	268	98	1,230	240
13	75	2,980	179	500	4,000	6,400	7,500	2,600	1,050	81	1,740	212
14	75	10,800	170	400	8,000	20,200	5,300	2,140	655	62	1,520	312
15	66	6,500	170	400	3,000	21,000	4,260	1,810	700	59	875	535
16	64	3,360	176	600	2,000	7,500	15,200	1,520	750	50	595	404
17	64	2,200	170	5,000	1,200	3,600	24,900	1,290	700	45	447	725
18	62	1,880	170	8,330	1,000	2,400	14,300	1,080	750	45	357	950
19	59	1,680	170	5,700	1,200	1,880	4,170	900	725	59	309	750
20	59	1,430	185	3,120	1,350	3,440	2,880	725	655	2,180	246	499
21	66	1,150	212	2,810	1,400	4,000	4,880	575	408	9,100	209	335
22	75	1,020	264	3,760	2,000	2,530	10,300	575	282	6,000	185	3,620
23	86	925	280	2,600	2,200	2,070	5,800	595	230	2,600	161	3,360
24	104	850	300	1,810	1,810	2,000	3,100	507	194	1,200	146	2,740
25	170	850	350	2,070	1,880	16,700	2,330	439	167	900	132	18,300
26	224	1,550	600	3,440	1,810	29,400	1,940	396	146	678	124	21,000
27	230	2,400	550	3,700	1,620	25,900	1,740	471	124	471	119	20,300
28	170	1,620	400	4,000	1,290	7,300	1,550	900	109	373	103	8,990
29	135	975	2,000	2,500	-----	4,350	1,460	1,150	91	257	93	11,600
30	114	725	10,000	1,500	-----	3,760	1,430	1,340	84	206	93	7,000
31	109	-----	15,000	1,000	-----	13,100	-----	1,880	-----	173	86	-----
TOTAL	3,168	59,573	34,842	76,330	89,560	257,200	222,440	166,723	19,950	31,536	20,118	103,798
MEAN	102	1,986	1,124	2,462	3,199	8,297	7,415	5,378	665	1,017	649	3,460
MAX	230	10,800	15,000	8,330	15,000	29,400	31,800	26,300	3,120	9,100	3,680	21,000
MIN	59	124	81	400	800	1,400	1,430	396	.84	45	45	86
CFSM	.05	.88	.50	1.09	1.42	3.69	3.30	2.39	.30	.45	.29	1.54
IN.	.05	.98	.58	1.26	1.48	4.25	3.68	2.76	.33	.52	.33	1.72
AC-FT	6,280	118,200	69,110	151,400	177,600	510,200	441,200	330,700	39,570	62,550	39,900	205,900

CAL YR 1972 TOTAL 325,730 MEAN 890 MAX 25,500 MIN 52 CFSM .40 IN 5.39 AC-FT 646,100
WTR YR 1973 TOTAL 1,085,238 MEAN 2,973 MAX 31,800 MIN 45 CFSM 1.32 IN 17.94 AC-FT 2,153,000

PEAK DISCHARGE (BASE, 18,000 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-31	1130	20.70	22,100	4-17	1800	22.50	25,700
3-15	0330	21.70	24,100	5-1	2100	22.40	24,300
3-27	0200	23.85	30,000	5-9	0600	24.05	29,400
4-2	1300	25.80	32,700	9-27	0630	21.70	22,100

06898100 Thompson River at Mount Moriah, Mo.

LOCATION.--Lat 40°20'11", long 93°46'02", on line between SE¼ sec.13 and NE¼ sec.24, T.64 N., R.26 W., Harrison County, on downstream side of right pier of bridge on U.S. Highway 136, 0.7 mi (1.1 km) upstream from Panther Creek, 1.5 mi (2.4 km) northeast of Mount Moriah, and at mile 43 (69.2 km).

DRAINAGE AREA.--891 mi² (2,308 km²), including Panther Creek.

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

GAGE.--Water-stage recorder. Datum of gage is 784 ft (238.96 m) above mean sea level (from data furnished by Missouri State Highway Commission).

AVERAGE DISCHARGE.--13 years, 536 ft³/s (15.18 m³/s), 8.17 in/yr (208 mm/yr), 388,000 acre-ft/yr (478.4 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 12,500 ft³/s (354 m³/s) Mar. 31 (gage height, 13.4 ft or 4.084 m); minimum discharge, 84 ft³/s (2.38 m³/s) Oct. 20 (gage height, 2.04 ft or 0.622 m).
Period of record: Maximum discharge, 32,500 ft³/s (920 m³/s) June 13, 1967 (gage height, 22.00 ft or 6.706 m); minimum, 6.5 ft³/s (0.184 m³/s) Dec. 6, 1968 (gage height, 1.09 ft or 0.332 m), result of ice conditions upstream.

REMARKS.--Records fair except those for winter months, 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	196	166	516	3,570	4,480	708	5,930	4,710	570	198	216	125
2	211	444	496	2,410	5,100	1,050	5,800	6,060	701	496	180	142
3	199	1,370	504	1,250	4,700	1,310	5,090	4,760	1,030	910	169	164
4	184	1,620	492	1,310	4,420	1,590	2,830	3,630	1,220	2,560	148	175
5	169	780	405	1,100	3,300	2,340	1,890	1,540	516	3,600	135	135
6	172	520	500	730	2,060	2,550	1,460	2,220	449	2,490	125	126
7	169	1,370	417	472	1,620	3,570	1,150	4,220	417	1,120	123	119
8	147	2,780	380	500	995	2,550	1,000	6,580	344	550	268	128
9	128	1,620	400	500	621	2,200	970	5,440	300	390	530	328
10	125	805	370	480	540	2,800	1,060	4,870	265	318	585	183
11	122	600	350	460	580	4,700	1,860	3,100	239	275	1,730	207
12	114	664	340	450	560	4,130	4,210	1,740	223	242	4,540	195
13	104	968	330	450	1,380	3,390	4,540	1,150	623	223	3,010	239
14	102	2,550	320	450	2,060	6,840	4,210	850	530	204	1,570	344
15	99	2,620	320	450	1,140	6,060	4,000	718	473	189	795	318
16	96	1,560	310	600	580	4,100	7,100	595	314	175	506	268
17	94	1,280	310	1,500	390	1,850	6,190	562	550	166	386	1,160
18	92	1,080	310	3,030	448	1,290	6,060	482	585	213	296	1,540
19	87	940	300	2,940	540	1,000	5,200	435	426	1,730	262	880
20	84	885	300	2,410	560	940	2,250	399	910	5,350	232	449
21	89	775	300	1,080	940	850	2,650	386	970	3,500	204	300
22	94	685	300	664	1,660	724	5,200	373	477	1,220	172	620
23	99	642	320	516	1,520	641	1,710	506	356	1,930	156	595
24	152	600	340	468	1,430	984	1,150	369	300	1,030	148	394
25	730	642	360	512	1,720	7,640	768	318	1,420	560	148	5,440
26	452	1,140	380	621	1,590	6,060	674	321	468	444	172	6,190
27	266	1,620	400	1,220	1,020	5,090	652	690	268	910	158	4,000
28	229	1,100	500	1,720	708	2,570	580	2,030	223	449	146	2,740
29	205	755	1,000	1,660	-----	1,640	530	1,780	210	289	142	1,680
30	187	600	4,320	1,050	-----	1,290	501	1,500	204	262	128	1,740
31	172	-----	4,130	1,160	-----	6,220	-----	850	-----	210	123	-----
TOTAL	5,369	33,181	20,020	35,733	46,662	88,677	87,215	63,184	15,581	32,203	17,503	30,924
MEAN	173	1,106	646	1,153	1,667	2,861	2,907	2,038	519	1,039	565	1,031
MAX	730	2,780	4,320	3,570	5,100	7,640	7,100	6,580	1,420	5,350	4,540	6,190
MIN	84	166	300	450	390	641	501	318	204	166	123	119
CFSM	.19	1.24	.73	1.29	1.87	3.21	3.26	2.29	.58	1.17	.63	1.16
IN.	.22	1.39	.84	1.49	1.95	3.70	3.64	2.64	.65	1.34	.73	1.29
AC-FT	10,650	65,810	39,710	70,880	92,550	175,900	173,000	125,300	30,900	63,870	34,720	61,340

CAL YR 1972 TOTAL 168,615 MEAN 461 MAX 7,180 MIN 18 CFSM .52 IN 7.04 AC-FT 334,400
WTR YR 1973 TOTAL 476,252 MEAN 1,305 MAX 7,640 MIN 84 CFSM 1.46 IN 19.88 AC-FT 944,600

PEAK DISCHARGE (BASE, 8,000 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-1	2130	11.35	7,660	4-16	0300	12.32	10,500
3-25	0900	12.30	10,500	5-1	2300	11.00	8,500
3-31	1230	13.40	12,500	7-20	0800	11.85	9,700

GRAND RIVER BASIN

06899500 Thompson River at Trenton, Mo.

LOCATION.--Lat 40°04'46", long 93°38'39", in NE¼SW¼ sec.18, T.61 N., R.24 W., Grundy County, on right bank at downstream side of bridge on old State Highway 6, 1 mi (1.6 km) west of Trenton, 1.8 mi (2.9 km) downstream from Weldon River, and at mile 26.0 (41.8 km).

DRAINAGE AREA.--1,670 mi² (4,330 km²), approximately.

PERIOD OF RECORD.--June 1921 to September 1923 (published as "near Hickory"), August 1928 to current year. Monthly discharge only for some periods, published in WSP 1310. Gage-height records collected in vicinity 1910-14 and since 1925 are contained in reports of National Weather Service.

GAGE.--Water-stage recorder. Datum of gage is 721.87 ft (220.026 m) above mean sea level. June 25, 1921, to Aug. 26, 1923, nonrecording gage at two sites 12 mi (19.3 km) downstream (by old channel route) at different datums. Aug. 1, 1928, to Sept. 15, 1930, nonrecording gage at present site and datum. Sept. 16, 1930, to May 31, 1945, nonrecording gage at site 1.5 mi (2.4 km) downstream at datum 3.46 ft (1.055 m) lower. June 1, 1945, to Dec. 7, 1959, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--47 years (1921-23, 1928-73), 911 ft³/s (25.80 m³/s), 7.41 in/yr (188 mm/yr), 660,000 acre-ft/yr (813.8 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 50,200 ft³/s (1,420 m³/s) Mar. 25 (gage height, 20.20 ft or 6.157 m); minimum, 146 ft³/s (4.13 m³/s) Oct. 20 (gage height, 2.83 ft or 0.863 m) Sept. 7. Period of record: Maximum discharge, 95,000 ft³/s (2,690 m³/s) June 6, 1947 (gage height, 25.7 ft or 7.833 m, from floodmark); minimum daily 1 ft³/s (0.028 m³/s) June 17, 1956. Maximum stage known, 30.7 ft (9.357 m) July 6, 1909, present site and datum, from information by local residents (discharge, 50,000 ft³/s or 1,420 m³/s, determination by Corps of Engineers, occurred before new channel was dredged).

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

REVISIONS (WATER YEARS).--WSP 1116: 1945(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	341	249	633	5,730	4,800	1,260	16,100	16,400	885	287	473	171
2	328	261	593	3,950	17,500	1,900	10,500	15,400	718	1,260	425	182
3	319	1,100	573	2,100	8,250	2,710	8,500	6,600	2,100	1,710	300	230
4	309	1,850	553	1,500	7,200	3,950	4,950	4,650	4,940	3,820	277	290
5	284	1,160	500	1,000	5,890	5,730	2,250	2,590	2,100	4,950	255	238
6	264	785	450	900	4,230	4,650	1,410	4,820	1,100	3,560	230	179
7	268	1,360	400	800	2,470	8,000	1,120	11,000	860	1,810	210	161
8	255	2,710	400	750	1,300	4,800	915	11,900	633	835	201	171
9	239	2,250	450	720	1,000	3,820	1,000	7,400	502	553	995	432
10	230	1,260	420	700	900	6,330	915	5,730	401	457	915	674
11	221	915	400	680	900	12,800	3,430	4,230	351	361	860	377
12	204	835	390	660	900	7,200	9,500	2,360	348	303	6,280	357
13	204	1,770	380	640	900	6,230	8,000	1,370	695	271	4,650	364
14	193	4,950	380	620	2,000	14,100	7,200	1,000	1,060	221	2,470	633
15	181	3,950	370	600	5,000	7,600	5,570	885	810	215	1,300	762
16	176	2,360	360	1,000	3,000	5,250	26,800	785	613	182	740	525
17	164	1,620	360	2,000	2,000	3,070	10,500	740	553	168	653	1,460
18	156	1,410	360	3,000	1,500	2,000	7,600	718	740	146	510	2,950
19	151	1,200	350	4,000	1,000	1,670	6,230	653	1,220	1,160	425	1,540
20	146	1,060	350	3,000	1,000	1,490	3,690	593	915	11,000	354	810
21	166	945	350	2,000	1,500	1,540	7,490	533	1,030	14,400	332	553
22	190	835	360	1,670	2,000	1,370	11,000	553	810	5,250	293	1,360
23	193	785	370	1,200	1,670	1,060	3,560	613	457	3,190	261	915
24	198	740	380	975	1,670	1,160	2,150	553	533	1,580	236	885
25	483	695	400	945	1,850	33,000	1,710	446	2,150	1,760	221	11,900
26	810	885	450	1,670	1,850	14,000	1,490	411	1,120	945	236	9,500
27	494	1,620	500	2,450	1,300	6,600	1,160	989	479	835	246	7,400
28	354	1,300	550	4,090	975	4,370	975	3,820	293	915	233	4,370
29	309	885	600	2,470	-----	2,830	860	3,430	287	695	218	2,950
30	284	718	5,000	1,900	-----	2,000	835	2,470	255	510	212	2,470
31	258	-----	6,230	1,340	-----	2,000	-----	1,450	-----	835	195	-----
TOTAL	8,372	42,463	23,862	55,560	84,555	174,490	167,410	115,092	28,958	64,184	25,206	54,809
MEAN	270	1,415	770	1,792	3,020	5,624	5,580	3,713	965	2,070	813	1,827
MAX	810	4,950	6,230	5,730	17,500	33,000	26,800	16,400	4,940	14,400	6,280	11,900
MIN	146	244	350	600	900	1,060	835	411	255	146	195	161
CFSM	.16	.85	.46	1.07	1.81	3.37	3.34	2.22	.58	1.24	.49	1.09
IN.	.14	.95	.53	1.24	1.88	3.89	3.73	2.56	.65	1.43	.56	1.22
AC-FT	16,610	84,230	47,330	110,200	167,700	346,100	332,100	228,300	57,440	127,300	50,000	108,700

CAL YR 1972 TOTAL 262,676 MEAN 718 MAX 12,300 MIN 38 CF5M .43 IN 5.85 AC-FT 521,000
WTR YR 1973 TOTAL 844,961 MEAN 2,315 MAX 33,000 MIN 146 CF5M 1.34 IN 18.82 AC-FT 1,676,000

PEAK DISCHARGE (BASE, 15,000 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-2	0400	18.20	38,200	5-1	1100	15.50	24,000
3-25	1200	20.20	50,200	5-7	1945	14.38	19,100
4-1	0600	16.50	29,000	7-21	0100	15.50	24,000
4-16	1000	19.10	43,600	9-25	0900	14.30	18,700
4-21	2400	16.60	29,500				

06899700 Shoal Creek near Braymer, Mo.

LOCATION.--Lat 39°40'50", long 93°46'05", in NW¼NE¼ sec.13, T.56 N., R.26 W., Caldwell County, at downstream side of left pier of bridge on County Highway O, 1.8 mi (2.9 km) downstream from Panther Creek, 6 mi (9.7 km) north of Braymer, and at mile 26 (41.8 km).

DRAINAGE AREA.--391 mi² (1,013 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 700 ft (213.4 m) from topographic map. Prior to Nov. 21, 1957, and Apr. 4 to Oct. 9, 1962, nonrecording gage at same site and datum. Nov. 21, 1957, to Apr. 3, 1962, water-stage recorder at site 50 ft (15 m) upstream at same datum.

AVERAGE DISCHARGE.--16 years, 255 ft³/s (7.22 m³/s), 8.86 in/yr (225 mm/yr), 184,700 acre-ft/yr (227.7 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 7,900 ft³/s (224 m³/s) May 3 (gage height, 24.90 ft or 7.590 m); minimum, 1.6 ft³/s (0.045 m³/s) Aug. 7, 8, 9 (gage height, 1.49 ft or 0.454 m).

Period of record: Maximum discharge, 26,000 ft³/s (736 m³/s) from loop rating June 22, 1964 (gage height, 22.00 ft or 6.706 m), result of levee break; maximum gage height, 29.05 ft (8.854 m) June 22, 1964; no flow Oct. 12-14, 1957.

REMARKS.--Records fair except those for no gage-height record and ice effect, 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	15	14	84	348	1,990	201	4,820	1,480	153	15	4.2	1.8
2	12	76	85	187	4,150	802	6,700	4,150	122	30	2.5	2.1
3	11	201	79	500	4,240	830	2,190	6,180	194	71	2.5	1.7
4	10	60	69	1,800	850	1,370	435	5,500	415	207	2.3	4.3
5	8.9	32	55	700	490	3,160	337	542	1,120	622	2.1	5.2
6	8.2	35	61	400	378	1,880	272	1,500	377	178	1.8	2.5
7	7.8	1,270	47	300	313	2,980	189	4,250	211	55	1.7	2.8
8	7.5	899	41	250	257	2,240	206	5,600	126	32	1.6	2.8
9	6.9	170	37	200	194	1,260	266	6,420	92	29	1,470	7.7
10	6.6	250	35	150	229	2,380	363	1,800	72	15	337	60
11	5.4	642	30	130	222	3,620	738	480	58	13	62	49
12	5.7	201	27	120	208	3,230	1,000	350	44	11	31	17
13	6.0	1,780	24	110	548	1,030	574	285	44	9.0	18	15
14	5.7	4,060	22	100	1,480	2,920	337	247	44	7.4	75	15
15	4.5	3,670	20	100	554	2,270	363	211	122	6.3	24	16
16	4.3	554	20	200	215	538	1,800	178	126	6.3	16	17
17	4.3	348	20	500	243	385	2,430	158	70	5.8	12	17
18	4.3	264	21	1,000	208	310	542	134	59	5.2	8.7	81
19	4.5	208	30	900	184	306	363	118	42	5.2	7.1	83
20	4.3	114	60	2,920	194	1,730	1,520	102	29	48	5.0	24
21	5.4	162	100	1,920	201	1,500	2,160	245	22	960	3.8	8.1
22	12	135	150	1,620	172	490	2,860	420	16	318	3.6	4.5
23	16	119	120	1,140	160	341	1,460	200	16	88	3.3	4.5
24	17	108	180	624	167	467	453	139	15	49	3.1	18
25	19	118	200	870	163	3,640	307	106	13	311	1.9	1,510
26	16	155	150	990	149	4,960	223	198	8.7	93	2.7	3,460
27	12	162	100	750	133	4,600	173	687	67	34	2.5	3,700
28	10	115	200	554	124	750	148	391	229	18	2.3	1,620
29	8.2	91	500	348	-----	522	128	266	82	11	2.1	2,700
30	6.6	83	1,000	243	-----	430	115	363	25	7.4	2.3	2,100
31	6.6	-----	1,580	341	-----	2,270	-----	241	-----	5.6	2.1	-----
TOTAL	271.7	16,096	5,147	20,315	18,416	53,412	33,472	42,941	4,013.7	3,266.2	2,114.2	15,550.0
MEAN	8.76	537	166	655	658	1,723	1,116	1,385	134	105	68.2	518
MAX	19	4,060	1,580	2,920	4,240	4,960	6,700	6,420	1,120	960	1,470	3,700
MIN	4.3	14	20	100	124	201	115	102	8.7	5.2	1.6	1.7
CFSM	.02	1.37	.42	1.68	1.68	4.41	2.85	3.54	.34	.27	.17	1.32
IN.	.03	1.53	.49	1.93	1.75	5.08	3.18	4.09	.38	.31	.20	1.48
AC-FT	539	31,930	10,210	40,290	36,530	105,900	66,390	85,170	7,960	6,480	4,190	30,840

CAL YR 1972 TOTAL 61,314.7 MEAN 168 MAX 4,060 MIN 2.0 CFSM .43 IN 5.83 AC-FT 121,600
WTR YR 1973 TOTAL 215,014.8 MEAN 589 MAX 6,700 MIN 1.6 CFSM 1.51 IN 20.46 AC-FT 426,500

PEAK DISCHARGE (BASE, 3,000 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-15	0800	19.75	4,510	3-14	0400	17.43	3,460	5-3	2200	24.90	7,900
1-20	2230	17.62	3,540	3-27	0530	22.11	5,550	5-9	1500	23.55	6,600
2-3	0830	20.44	4,780	4-2	1630	24.17	7,200	9-27	0300	18.95	4,000
3-5	1800	17.20	3,380	4-17	0630	17.55	3,340	9-29	2300	17.45	3,260
3-7	2400	17.08	3,340	4-21	0230	16.75	3,020				
3-12	0700	19.05	4,150	4-22	2100	17.37	3,260				

06900000 Medicine Creek near Galt, Mo.

LOCATION.--Lat 40°07'45", long 93°21'45", in SW¼NW¼ sec.34, T.62 N., R.22 W., Sullivan County, on left bank 30 ft (9 m) upstream from bridge on State Highway 6, 1.2 mi (1.9 km) east of Galt, 2 mi (3.2 km) upstream from West Medicine Creek, and at mile 32.0 (51.5 km).

DRAINAGE AREA.--225 mi² (583 km²).

PERIOD OF RECORD.--July 1921 to current year. Monthly discharge only for some periods, published in WSP 1310.

GAGE.--Water-stage recorder. Datum of gage is 767.48 ft (233.928 m) above mean sea level. Prior to Dec. 3, 1934, nonrecording gage at site 150 ft (46 m) downstream at following datums: prior to Oct. 1, 1924, at datum 6.97 ft (2.124 m) higher; Oct. 1, 1924 to Sept. 30, 1926, at datum 4.97 ft (1.515 m) higher; Oct. 1, 1926, to Dec. 2, 1934, at datum 1.97 ft (0.600 m) higher; Dec. 3, 1934, to Apr. 25, 1956, nonrecording gage, and Apr. 26 to Sept. 30, 1956; water-stage recorder at site 30 ft (9 m) downstream at datum 2.00 ft (0.610 m) higher; Oct. 1, 1956, to Apr. 5, 1969, water-stage recorder at site 30 ft (9 m) downstream at present datum.

AVERAGE DISCHARGE.--52 years, 139 ft³/s (3.94 m³/s), 8.39 in/yr (213 mm/yr), 100,700 acre-ft/yr (124 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 10,400 ft³/s (295 m³/s) May 1 (gage height, 15.22 ft or 4.639 m); minimum, 4.6 ft³/s (0.130 m³/s) Oct. 17, 18, 19, 20 (gage height, 0.98 ft or 0.299 m).

Period of record: Maximum discharge, 24,200 ft³/s (685 m³/s) June 6, 1947 (gage height, 20.9 ft or 6.37 m, present datum, from floodmark); no flow at times in 1934, 1936-37, 1940, 1954, 1956.

Flood of July 1909 reached a discharge of about 8,000 ft³/s (227 m³/s), determined by Corps of Engineers.

REMARKS.--Records poor.

REVISIONS (WATER YEARS).--WSP 1340: 1926. WSP 1730: 1948(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	24	13	29	175	1,520	116	2,720	5,690	66	15	52	8.2
2	14	29	28	122	2,580	267	699	5,500	57	25	30	9.5
3	11	30	25	365	377	253	509	947	76	80	24	14
4	9.9	28	23	250	265	331	216	324	145	148	22	9.7
5	9.1	22	21	200	214	415	158	232	340	253	20	8.2
6	8.2	18	21	150	190	441	128	643	174	92	18	7.4
7	7.8	32	15	100	144	1,720	105	2,210	90	43	18	7.7
8	7.4	99	10	80	71	671	95	1,780	62	30	30	23
9	6.0	55	9.0	60	100	227	137	439	48	23	262	76
10	5.8	36	8.0	50	100	625	123	253	40	20	36	17
11	5.8	33	7.0	41	108	2,260	494	179	34	18	58	12
12	5.8	43	6.0	37	125	1,120	2,050	141	30	17	24	11
13	5.8	59	5.0	34	146	459	1,610	115	27	14	104	107
14	5.8	590	5.0	30	208	1,210	1,160	99	28	13	156	43
15	5.8	172	5.0	29	136	534	1,130	85	30	13	103	27
16	5.0	106	5.0	114	65	182	3,470	76	26	12	39	132
17	4.7	77	5.0	1,140	80	134	2,360	68	24	12	23	166
18	4.6	84	5.0	961	103	106	398	61	50	14	17	74
19	4.6	63	7.0	530	64	92	243	55	33	56	15	60
20	5.0	52	5.0	245	97	90	820	48	39	1,880	13	32
21	8.3	44	5.0	197	150	101	3,040	45	27	5,320	12	21
22	12	39	5.0	180	117	87	4,300	65	24	897	11	59
23	13	36	8.0	160	92	65	562	70	20	254	10	26
24	13	33	10	144	99	134	268	50	19	205	11	294
25	25	33	14	191	105	5,010	181	41	39	156	9.9	1,720
26	16	46	12	233	101	3,680	145	39	46	98	9.0	519
27	11	107	10	373	77	678	124	401	25	65	9.0	164
28	11	53	9.0	515	67	307	109	901	19	51	9.0	152
29	8.9	41	100	295	-----	272	100	203	15	49	9.0	179
30	8.7	31	1,020	182	-----	225	103	125	15	33	8.4	267
31	11	-----	175	142	-----	2,810	-----	87	-----	54	8.9	-----
TOTAL	294.0	2,104	1,612.0	7,325	7,501	24,622	27,557	20,972	1,668	9,960	1,171.2	4,245.7
MEAN	9.48	70.1	52.0	236	268	794	919	677	55.6	321	37.8	142
MAX	25	590	1,020	1,140	2,580	5,010	4,300	5,690	340	5,320	262	1,720
MIN	4.6	13	5.0	29	64	65	95	39	15	12	8.4	7.4
CFSM	.04	.31	.23	1.05	1.19	3.53	4.08	3.01	.25	1.43	.17	.63
IN.	.05	.35	.27	1.21	1.24	4.07	4.56	3.47	.28	1.65	.19	.70
AC-FT	583	4,170	3,200	14,530	14,880	48,840	54,660	41,600	3,310	19,760	2,320	8,420

CAL YR 1972 TOTAL 21,132.8 MEAN 57.7 MAX 1,860 MIN 3.8 CFSM .26 IN 3.49 AC-FT 41,920
WTR YR 1973 TOTAL 109,031.9 MEAN 299 MAX 5,690 MIN 4.6 CFSM 1.33 IN 18.03 AC-FT 216,300

PEAK DISCHARGE (BASE, 3,000 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-2	0015	8.40	3,580	4-16	1130	9.44	4,530	5-7	1930	8.65	3,940
3-25	1145	11.60	6,460	4-21	2245	13.11	8,080	7-21	0300	12.78	7,720
3-31	1800	9.93	4,900	5-1	2130	15.22	10,400	9-25	0215	8.77	3,920

06902000 Grand River near Sumner, Mo.

LOCATION.--Lat 39°38'21", long 93°16'22", in NE¼ sec.29, T.56 N., R.21 W., Livingston County, near right bank on downstream side of pier of bridge on State Highway 139, 240 ft (73 m) downstream from Chicago, Burlington & Quincy Railroad bridge, 2 mi (3.2 km) southwest of Sumner, 2.5 mi (4.0 km) downstream from Locust Creek, and at mile 41.0 (66.0 km).

DRAINAGE AREA.--6,880 mi² (17,800 km²), approximately.

PERIOD OF RECORD.--October 1923 to current year. Prior to April 1924 monthly discharge only, published in WSP 1310.

GAGE.--Water-stage recorder. Datum of gage is 631.18 ft (192.384 m) above mean sea level. Prior to July 11, 1926, nonrecording gage at site 200 ft (61 m) upstream at same datum. July 11, 1926 to July 9, 1939, nonrecording gage at same site and datum. July 10, 1939 to Aug. 8, 1952, water-stage recorder at site 200 ft (61 m) upstream at same datum. Aug. 9, 1952 to Nov. 12, 1953, nonrecording gage at site 120 ft (37 m) upstream and at same datum. Nov. 13, 1953 to July 6, 1964, water-stage recorder and nonrecording gage for stages below 8.3 ft (2.53 m) at site 120 ft (37 m) upstream and at same datum. July 7, 1964 to May 26, 1965, nonrecording gage at present site and datum. Auxiliary water-stage recorder at site 3.2 mi (5.1 km) downstream from base gage at datum 631.30 ft (192.420 m) above mean sea level. Mar. 15, 1939 to Aug. 4, 1942, auxiliary nonrecording gage at various sites. Aug. 5, 1942 to Dec. 14, 1956, auxiliary nonrecording gage at present site.

AVERAGE DISCHARGE.--50 years, 3,770 ft³/s (106.8 m³/s), 7.44 in/yr (189 mm/yr), 2,731,000 acre-ft/yr (3,367 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 74,600 ft³/s (2,113 m³/s) Mar. 28 (gage height, 38.40 ft or 11.704 m); minimum daily, 300 ft³/s (8.50 m³/s) Aug. 31, Sept. 1; minimum gage height, 6.78 ft (2.067 m), Oct. 19, 20.

Period of record: Maximum discharge, 180,000 ft³/s (5,100 m³/s) June 7, 8, 1947 (gage height, 39.5 ft or 12.04 m, from floodmark); minimum observed, 10 ft³/s (0.28 m³/s) Aug. 12, 1934; minimum gage height, 2.19 ft (0.668 m) Aug. 22, 23, 31, Sept. 1, 1936.

Flood of July 9, 1909, reached a stage of 36.7 ft (11.19 m) from floodmark.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	852	524	2,040	29,700	11,000	3,480	41,700	12,200	5,710	808	1,890	300
2	830	808	1,890	18,700	34,100	5,620	65,500	31,100	4,560	808	1,470	600
3	740	1,060	1,770	12,000	49,500	8,200	67,000	61,000	3,920	2,500	1,210	1,010
4	695	1,380	1,600	14,000	62,100	8,910	57,300	63,900	5,700	3,420	898	1,000
5	650	2,250	1,500	11,000	49,000	20,900	34,600	37,900	12,500	7,650	785	600
6	582	1,770	1,360	6,000	22,300	21,400	11,600	18,700	9,460	7,470	695	500
7	538	2,990	1,200	4,000	12,400	26,500	8,100	32,900	5,620	5,380	605	400
8	507	7,470	1,300	2,000	7,640	32,500	6,980	43,000	3,410	3,270	582	400
9	481	7,140	1,000	1,500	6,020	25,400	4,940	54,700	2,430	2,130	3,340	600
10	455	4,600	900	1,000	4,450	20,000	5,420	55,400	1,950	1,440	7,140	1,000
11	435	3,780	800	1,000	4,150	32,500	9,850	38,600	1,650	1,060	5,060	1,710
12	415	2,990	700	1,000	4,220	43,000	19,300	13,000	1,410	898	4,220	1,280
13	395	5,030	600	1,000	5,380	41,900	26,100	6,680	1,890	830	6,260	1,060
14	373	21,700	550	1,000	19,000	42,200	26,500	6,340	2,920	718	5,540	1,160
15	367	22,700	500	1,000	21,100	46,300	20,800	4,680	2,570	650	4,450	1,440
16	355	15,400	500	1,600	11,800	44,500	25,300	3,920	2,430	605	2,850	1,770
17	341	8,360	500	10,000	5,140	24,600	36,800	3,480	2,070	551	1,830	2,430
18	338	5,540	500	21,500	3,270	9,450	46,000	3,130	1,830	524	1,440	4,000
19	327	4,600	600	27,500	3,400	7,120	43,000	2,850	2,780	533	1,180	4,380
20	320	4,080	800	21,500	4,080	7,920	29,500	2,710	3,270	3,410	988	2,990
21	324	3,480	1,000	18,300	4,520	11,000	38,300	2,570	2,250	20,900	650	2,070
22	371	2,990	1,000	23,000	5,000	8,200	43,800	2,780	2,070	25,300	550	2,990
23	483	2,640	1,000	15,100	5,300	5,940	47,400	2,920	1,590	17,500	500	7,830
24	524	2,430	1,100	9,500	5,060	5,220	41,400	2,640	1,210	12,200	475	6,020
25	473	2,250	1,200	6,380	4,900	23,300	13,300	2,780	1,060	7,380	450	15,300
26	499	2,370	1,300	8,500	4,820	44,300	8,040	2,640	2,190	5,220	425	32,500
27	1,010	3,200	1,500	10,300	4,750	72,200	6,320	6,390	2,010	3,850	400	41,700
28	875	4,680	2,000	12,800	4,000	67,100	5,770	8,400	1,410	2,850	375	46,900
29	740	3,550	3,000	14,900	-----	44,000	5,220	9,770	1,160	2,570	350	39,000
30	582	2,570	20,600	8,010	-----	19,000	4,680	10,200	942	2,190	325	32,900
31	533	-----	31,800	5,860	-----	21,100	-----	7,770	-----	1,890	300	-----
TOTAL	16,410	154,332	86,110	319,650	378,400	793,760	800,520	555,050	93,972	147,005	57,233	255,840
MEAN	529	5,144	2,778	10,310	13,510	25,610	26,680	17,900	3,132	4,742	1,846	8,528
MAX	1,010	22,700	31,800	29,700	62,100	72,200	67,000	63,900	12,500	25,300	7,140	46,900
MIN	320	524	500	1,000	3,270	3,480	4,680	2,570	942	524	300	300
CFSM	.08	.75	.40	1.50	1.96	3.72	3.88	2.60	.46	.69	.27	1.24
IN.	.09	.83	.47	1.73	2.05	4.29	4.33	3.00	.51	.79	.31	1.38
AC-FT	32,550	306,100	170,800	634,000	750,600	1,574M	1,588M	1,101M	186,400	291,600	113,500	507,500
CAL YR 1972 TOTAL	906,973			MEAN 2,478	MAX 33,300	MIN 220	CFSM .36	IN 4.90	AC-FT 1,799,000			
WTR YR 1973 TOTAL	3,658,282			MEAN 10,020	MAX 72,200	MIN 300	CFSM 1.46	IN 19.78	AC-FT 7,256,000			

PEAK DISCHARGE (BASE, 38,000 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
2-4	1400	33.65	63,300	4-3	2000	34.50	67,000	5-10	1400	33.37	56,900
3-8	1400	31.13	33,300	4-18	1900	32.66	50,500	9-28	1800	33.44	62,500
3-16	0100	32.60	48,800	4-23	1300	33.84	48,700				
3-28	0200	34.80	74,600	5-4	0900	34.44	69,400				

06902200 West Yellow Creek near Brookfield, Mo.

LOCATION.--Lat 39°50'40", long 93°01'36", in SE¼NE¼ sec.16, T.58 N., R.19 W., Linn County, on right bank at right downstream pier of county highway bridge, 1.5 mi (2.4 km) downstream from Bear Creek, and 3.5 mi (5.6 km) northeast of Brookfield.

DRAINAGE AREA.--135 mi² (3,430 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 733.64 ft (223.613 m) above mean sea level.

AVERAGE DISCHARGE.--14 years, 107 ft³/s (3.03 m³/s), 10.76 in/yr (273 mm/yr), 77,520 acre-ft/yr (95.6 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 7,000 ft³/s (198 m³/s) Apr. 21 (gage height, 15.34 ft or 4.676 m); no flow Oct. 8-21.

Period of record: Maximum discharge, 7,400 ft³/s (210 m³/s) July 9, 1969 (gage height, 15.50 ft or 4.724 m); no flow at times in 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	1.0	.30	8.2	94	420	57	3,250	636	66	2.2	9.8	1.9		
2	.60	38	7.0	52	1,040	193	1,330	3,000	58	4.2	4.8	2.1		
3	.30	58	6.2	146	880	218	272	3,500	68	4.8	3.4	3.3		
4	.20	32	4.6	626	197	178	173	690	74	28	2.6	90		
5	.10	20	3.0	425	96	367	124	143	80	16	2.1	48		
6	.10	12	3.0	206	71	413	101	276	153	5.7	1.8	17		
7	.10	7.0	2.2	125	56	2,000	86	965	80	3.8	1.5	5.2		
8	0	2.8	1.7	80	39	1,410	76	1,330	44	3.2	1.4	5.2		
9	0	13	1.3	50	47	319	143	930	28	2.6	397	4.3		
10	0	13	1.1	30	42	522	168	173	20	2.1	1,580	5.6		
11	0	16	1.2	25	34	2,250	461	92	15	1.7	1,390	20		
12	0	31	1.2	20	30	1,500	1,750	66	19	1.5	144	6.4		
13	0	54	1.2	18	263	457	2,000	47	51	1.3	45	6.2		
14	0	341	1.1	16	645	1,200	1,140	36	15	1.2	25	86		
15	0	139	.90	15	266	870	750	29	11	1.1	16	67		
16	0	58	.70	14	143	203	1,540	24	8.9	1.1	14	21		
17	0	32	.90	395	80	107	1,000	20	9.5	1.0	9.5	254		
18	0	23	.90	785	40	80	266	16	9.5	1.0	7.1	379		
19	0	21	1.3	1,350	30	64	143	14	16	1.9	5.5	84		
20	0	18	10	785	30	91	3,960	13	27	3.0	4.7	35		
21	0	15	20	415	35	104	5,500	12	12	130	4.2	20		
22	.10	14	15	700	40	76	5,500	16	7.3	645	3.5	791		
23	.40	11	14	476	50	57	1,300	16	5.4	256	2.9	380		
24	24	8.2	13	233	59	93	261	129	4.5	43	2.8	102		
25	7.5	7.5	12	260	58	2,500	133	399	3.8	282	2.7	971		
26	3.4	8.2	11	332	54	3,000	96	431	3.6	72	2.5	1,140		
27	1.9	17	10	305	45	2,500	74	5,250	3.4	26	2.2	1,050		
28	.70	21	20	368	38	418	60	4,000	2.8	12	2.1	599		
29	.40	18	156	215	-----	173	50	3,000	2.6	29	2.0	1,270		
30	.30	12	574	90	-----	133	45	296	2.3	134	1.9	790		
31	.20	-----	476	83	-----	1,360	-----	110	-----	29	2.1	-----		
TOTAL	41.30	1,061.00	1,378.70	8,734	4,828	22,913	31,752	25,659	900.6	1,745.4	3,694.1	8,254.2		
MEAN	1.33	35.4	44.5	282	172	739	1,058	828	30.0	56.3	119	275		
MAX	24	341	574	1,350	1,040	3,000	5,500	5,250	153	645	1,580	1,270		
MIN	0	.30	.70	14	30	57	45	12	2.3	1.0	1.4	1.9		
CFSM	.010	.26	.33	2.09	1.27	5.47	7.84	6.13	.22	.42	.88	2.04		
IN.	.01	.29	.38	2.41	1.33	6.31	8.75	7.07	.25	.48	1.02	2.27		
AC-FT	82	2,100	2,730	17,320	9,580	45,450	62,980	50,890	1,790	3,460	7,330	16,370		
CAL YR 1972	TOTAL	11,434.00	MEAN	31.2	MAX	720	MIN	0	CFSM	.23	IN	3.15	AC-FT	22,680
WTR YR 1973	TOTAL	110,961.30	MEAN	304	MAX	5,500	MIN	0	CFSM	2.25	IN	30.58	AC-FT	220,100

PEAK DISCHARGE (BASE, 1,200 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
1-9	1730	13.62	1,500	3-25	2130	14.12	4,250	4-21	0100	15.34	7,000
3-7	1800	13.30	2,250	4-1	0400	13.84	3,500	5-9	1000	13.07	1,750
3-11	1400	13.44	2,500	4-13	0300	13.29	2,250	5-27	1330	14.97	6,400
3-15	1500	12.70	1,260	4-16	0700	13.13	1,750	5-31	1730	13.96	4,000

CHARITON RIVER BASIN

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06904500 Chariton River at Novinger, Mo.

LOCATION.--Lat 40°14'05", long 92°41'14", on south line SE¼NE¼ sec.28, T.63 N., R.16 W., Adair County, on right bank at the downstream side of center pier on bridge on State Highway 6, 0.6 mi (1.0 km) east of Novinger, 1 mi (1.6 km) downstream from Rye Creek, 2 mi (3.2 km) upstream from Spring Creek, and at mile 73.1 (117.6 km).

DRAINAGE AREA.--1,370 mi² (3,550 km²), approximately.

PERIOD OF RECORD.--October 1930 to September 1952. October 1954 to current year. Prior to February 1931 monthly discharge only, published in WSP 1310.

GAGE.--Water-stage recorder. Datum of gage is 737.65 ft (224.836 m) above mean sea level. Prior to Dec. 20, 1939, nonrecording gage at bridge over old channel, 500 ft (152 m) east, at same datum. Dec. 20, 1939 to Sept. 30, 1952, and Oct. 1, 1954 to Aug. 1, 1956, water-stage recorder, supplemented by nonrecording gage, at same site and datum. Aug. 2, 1956 to May 16, 1957, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--41 years, 740 ft³/s (20.96 m³/s), 7.33 in/yr (186 mm/yr), 536,100 acre-ft/yr (661 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 18,100 ft³/s (513 m³/s) Apr. 21 (gage height, 24.20 ft or 7.376 m); minimum, 38 ft³/s (1.08 m³/s) Oct. 18-21 (gage height, 1.95 ft or 0.594 m) Oct. 18-21.
Period of record: Maximum discharge, 22,900 ft³/s (649 m³/s) June 7, 13, 1947 (gage height, 28.50 ft or 8.687 m); minimum, 0.1 ft³/s (0.003 m³/s) Aug. 31, Sept. 1, 1936.
Maximum stage known, 28.6 ft (8.72 m) in June 1917.

REMARKS.--Records fair except those during winter periods, which are poor. Flow partly regulated by Rathbun Lake.

REVISIONS (WATER YEARS).--WSP 896: 1939. WSP 1116: 1932(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	750	218	550	1,500	4,960	2,100	8,260	8,500	2,300	1,700	2,000	1,300
2	725	530	530	466	7,300	2,650	7,220	15,400	2,250	1,800	1,600	1,300
3	650	550	398	1,080	5,240	2,600	4,200	14,400	2,150	1,450	1,550	1,350
4	270	310	302	1,900	4,010	2,350	2,500	8,180	2,300	1,000	1,400	1,300
5	89	198	286	1,300	3,510	2,250	1,900	4,080	2,550	925	1,400	1,300
6	76	123	169	700	2,400	2,550	1,300	3,300	2,400	900	1,350	1,300
7	63	137	494	530	2,050	6,780	1,020	5,310	2,250	1,400	1,550	1,300
8	59	346	650	500	2,150	4,200	2,650	5,730	2,100	1,750	2,400	1,300
9	54	258	650	500	2,050	2,900	3,150	4,200	2,000	1,750	2,950	875
10	50	230	650	500	1,950	1,900	3,000	3,510	1,900	1,700	1,400	346
11	47	254	650	500	2,050	5,240	4,140	3,000	1,900	1,550	925	105
12	45	186	650	500	1,950	4,080	7,620	2,650	1,800	1,350	1,500	1,100
13	44	613	650	500	1,900	3,880	7,380	2,150	1,400	1,300	2,250	2,920
14	44	3,000	650	500	1,950	5,380	6,620	2,100	1,150	1,350	1,800	2,350
15	43	2,300	650	500	1,950	3,630	6,250	2,000	1,600	1,300	1,900	1,080
16	41	975	650	700	1,900	2,900	7,940	2,000	1,800	1,180	1,700	1,100
17	40	600	650	2,000	1,800	2,300	6,850	1,950	2,000	1,050	1,500	2,550
18	40	470	650	5,000	1,700	2,200	4,750	1,900	1,900	1,350	1,450	1,600
19	39	394	650	6,000	1,400	2,000	3,880	1,900	2,250	2,050	1,400	1,300
20	39	390	650	3,350	1,400	2,050	8,260	1,900	2,400	5,030	1,350	1,100
21	52	362	650	1,750	1,600	2,300	17,400	1,850	2,150	9,140	1,300	1,000
22	97	354	650	1,250	1,800	2,200	15,700	1,800	1,900	6,320	1,300	1,050
23	109	314	650	1,600	2,350	2,000	11,500	1,650	1,800	3,000	1,300	600
24	109	298	650	1,250	1,950	1,900	7,460	550	1,800	2,900	1,300	700
25	94	302	650	1,250	1,700	8,660	3,400	1,400	2,100	2,200	1,300	2,500
26	74	430	650	1,650	1,800	9,460	1,700	3,100	2,200	1,150	1,300	1,750
27	64	470	650	2,450	1,500	7,000	925	13,800	1,850	1,000	1,300	2,300
28	59	450	650	3,350	1,650	3,880	775	14,100	1,800	1,450	1,300	2,050
29	84	510	1,000	1,800	-----	1,900	675	9,460	1,750	1,650	1,300	4,270
30	238	575	3,000	1,080	-----	1,250	625	5,310	1,650	1,500	1,300	5,100
31	254	-----	3,820	2,150	-----	5,450	-----	3,050	-----	2,100	1,300	-----
TOTAL	4,442	16,147	24,199	48,106	67,970	109,940	159,050	150,230	59,400	64,295	47,675	48,196
MEAN	143	538	781	1,552	2,428	3,546	5,302	4,846	1,980	2,074	1,538	1,607
MAX	750	3,000	3,820	6,000	7,300	9,460	17,400	15,400	2,550	4,140	2,950	5,100
MIN	39	123	169	466	1,400	1,250	625	550	1,150	900	425	105
CFSM	.10	.39	.57	1.13	1.77	2.59	3.87	3.54	1.45	1.51	1.12	1.17
IN.	.12	.44	.66	1.31	1.85	2.99	4.32	4.08	1.61	1.75	1.29	1.31
AC-FT	8,810	32,030	48,000	95,420	134,800	218,100	315,500	298,000	117,800	127,500	94,560	95,600

CAL YR 1972 TOTAL 174,240 MEAN 476 MAX 6,180 MIN 30 CFSM .35 IN 4.73 AC-FT 345,600
WTR YR 1973 TOTAL 799,650 MEAN 2,191 MAX 17,400 MIN 39 CFSM 1.60 IN 21.71 AC-FT 1,586,000

PEAK DISCHARGE (BASE, 6,500 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
1-18	2300	17.90	6,500	4-12	2300	16.70	8,660	5-27	2000	23.50	16,800
2-2	0900	16.30	7,940	4-16	1200	17.10	8,980	7-21	1300	20.60	12,500
3-7	0700	16.00	7,780	4-21	0800	24.20	18,100	9-30	2100	14.62	7,000
3-25	0800	19.02	10,300	5-2	2100	23.05	16,000				
3-31	2100	18.60	10,200	5-7	1700	14.43	6,850				

CHARITON RIVER BASIN

06905500 Chariton River near Prairie Hill, Mo.

LOCATION.--Lat 39°32'25", long 92°47'23", in NW¼SW¼ sec.26, T.55 N., R.17 W., Chariton County, on right bank on downstream side of road at bridge on State Highway 129, 3.2 mi (5.1 km) northwest of Prairie Hill, 13.5 mi (21.7 km) upstream from Puzzle Creek, and at mile 19.6 (31.5 km).

DRAINAGE AREA.--1,870 mi² (4,840 km²), approximately.

PERIOD OF RECORD.--October 1928 to current year. Prior to Oct. 1, 1953, published as "near Keytesville". Prior to May 1929 monthly discharge only, published in WSP 1309.

GAGE.--Water-stage recorder. Datum of gage is 632.05 ft (192.649 m) above mean sea level (levels by Corps of Engineers). Prior to Oct. 1, 1953, nonrecording gage at site 8.2 mi (13.2 km) downstream at datum 13.68 ft (4.170 m) lower. Oct. 1, 1953, to July 2, 1958, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--45 years, 1,120 ft³/s (31.72 m³/s), 8.13 in/yr (207 mm/yr), 811,400 acre-ft/yr (1,000 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 31,900 ft³/s (903 m³/s) Apr. 23 (gage height, 21.96 ft or 6.693 m); minimum, 48 ft³/s (1.36 m³/s) Oct. 18, 20, 21 (gage height, 1.94 ft or 0.591 m).

Period of record: Maximum discharge, 31,900 ft³/s (903 m³/s) Apr. 23, 1973 (gage height, 21.96 ft or 6.693 m); maximum gage height, 25.3 ft (7.71 m), from floodmark, at site and datum then in use, June 8, 9, 1947; minimum, 4.6 ft³/s (0.13 m³/s) Aug. 7, 9, 10, 1934.

REMARKS.--Records fair except those for winter periods, which are poor. Flow partly regulated by Rathbun Lake. Records of chemical analyses for the current year are published in Part 2 of this report.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	845	326	564	3,310	4,020	2,130	15,100	3,870	3,940	1,580	2,250	1,370		
2	732	578	552	1,370	9,090	2,660	9,830	16,100	3,200	1,610	2,010	1,370		
3	689	586	534	1,150	6,140	2,830	7,060	18,500	2,900	1,620	1,510	1,460		
4	667	619	440	3,340	5,240	2,830	3,980	18,600	2,750	1,550	1,410	1,920		
5	449	418	345	2,710	4,050	2,810	2,270	12,300	4,430	1,100	1,370	1,650		
6	225	325	419	2,000	2,470	3,510	1,540	5,700	3,350	1,270	1,340	1,440		
7	141	251	408	1,000	1,650	9,550	1,190	9,560	3,060	989	1,320	1,360		
8	108	202	400	800	2,040	6,600	1,040	15,500	2,530	1,470	1,310	2,320		
9	89	357	700	600	1,890	4,880	2,720	9,400	2,230	1,560	14,100	2,710		
10	79	468	700	600	1,760	5,190	2,990	5,580	2,070	1,570	11,100	1,880		
11	73	427	700	600	1,770	10,800	4,160	4,320	1,970	1,530	3,020	1,000		
12	71	402	700	600	1,730	7,250	9,580	3,390	1,910	1,280	2,020	469		
13	64	1,120	700	600	2,270	6,100	10,700	2,740	2,000	1,200	3,470	2,200		
14	59	2,120	700	600	3,990	9,440	8,750	2,410	1,780	1,190	2,590	6,910		
15	52	2,790	700	600	3,030	6,550	7,720	2,230	1,200	1,170	1,970	2,660		
16	52	1,760	700	600	2,280	4,100	11,400	2,130	1,820	1,170	2,400	1,440		
17	50	835	700	1,500	1,980	3,080	10,200	2,050	2,310	1,160	1,900	4,800		
18	50	592	700	5,000	1,840	2,620	7,370	1,980	2,120	1,070	1,720	3,740		
19	50	499	700	10,500	1,870	2,340	5,780	1,930	5,420	1,390	1,640	1,990		
20	49	443	700	5,240	1,900	2,510	11,100	1,880	2,860	1,890	1,590	1,510		
21	54	441	700	4,350	1,990	2,440	23,700	1,890	2,560	11,000	1,550	1,240		
22	187	413	700	4,010	1,960	2,350	29,600	1,920	2,170	14,600	1,520	7,100		
23	350	394	700	2,780	1,930	2,210	30,000	1,840	1,840	7,070	1,500	4,510		
24	212	365	700	1,910	1,960	2,420	23,300	1,860	1,740	2,330	1,490	2,830		
25	196	362	700	1,630	1,980	15,200	15,100	2,510	1,720	3,010	1,480	11,500		
26	183	395	700	2,010	1,950	20,100	5,800	1,910	2,170	2,720	1,460	7,160		
27	149	483	700	2,250	1,900	12,200	2,780	16,000	2,120	1,420	1,440	8,910		
28	118	500	700	4,140	1,840	7,540	1,890	21,900	1,740	1,190	1,420	4,520		
29	102	470	700	3,450	-----	5,700	1,490	23,500	1,630	1,560	1,400	7,780		
30	90	534	2,000	1,670	-----	2,830	1,300	18,700	1,590	1,740	1,400	10,300		
31	160	-----	5,590	1,150	-----	6,680	-----	9,610	-----	1,550	1,390	-----		
TOTAL	6,395	19,475	25,952	72,070	76,520	177,450	269,440	241,810	73,130	75,559	76,090	110,049		
MEAN	206	649	837	2,325	2,733	5,724	8,981	7,800	2,438	2,437	2,455	3,668		
MAX	845	2,790	5,590	10,500	9,090	20,100	30,000	23,500	5,420	14,600	14,100	11,500		
MIN	49	202	345	600	1,650	2,130	1,040	1,840	1,200	989	1,310	469		
CFSM	.11	.35	.45	1.24	1.46	3.06	4.80	4.17	1.30	1.30	1.31	1.96		
IN.	.13	.39	.52	1.43	1.52	3.53	5.36	4.81	1.45	1.50	1.51	2.19		
AC-FT	12,680	38,630	51,480	143,000	151,800	352,000	534,400	479,600	145,100	149,900	150,900	218,300		
CAL YR 1972	TOTAL	228,379	MEAN	624	MAX	8,330	MIN	41	CFSM	.33	IN	4.54	AC-FT	453,000
WTR YR 1973	TOTAL	1,223,940	MEAN	3,353	MAX	30,000	MIN	49	CFSM	1.79	IN	24.35	AC-FT	2,428,000

PEAK DISCHARGE (BASE, 5,500 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-30	2230	12.06	7,590	4-13	0815	15.28	12,600	7-22	0915	17.25	16,000
1-19	0345	15.47	14,600	4-16	1930	16.19	14,100	8-9	2300	18.41	18,100
2-2	1330	13.84	9,900	4-23	0400	21.96	31,900	9-14	0645	12.68	8,620
3-7	0700	14.06	10,700	5-3	1700	18.99	19,200	9-17	1945	12.24	7,960
3-11	0200	14.69	11,700	5-8	1345	17.50	16,400	9-22	1330	13.74	10,200
3-14	1730	14.49	10,000	5-29	0800	21.10	24,900	9-25	1515	16.58	14,800
3-26	0745	19.80	20,900	6-19	0715	11.77	7,330	9-30	2400	17.08	15,600
4-1	0815	17.26	16,000								

06906000 Mussel Fork Near Musselfork, Mo.

LOCATION.--Lat 39°31'26", long 92°56'59", in SW¼SW¼SE¼ sec.32, T.55 N., R.18 W., Chariton County, on left bank at downstream side of pier of bridge on State Highway 5, 4.5 mi (7.2 km) southwest of Musselfork, and 1.5 mi (2.4 km) upstream from Long Branch.

DRAINAGE AREA.--267 mi² (692 km²).

PERIOD OF RECORD.--October 1948 to December 1951, October 1962 to current year.

GAGE.--Water-stage recorder. Datum of gage is 639.25 ft (194.843 m) above mean sea level. Prior to Jan. 1, 1952, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--14 years (1948-51, 1962-73), 227 ft³/s (6.429 m³/s), 11.55 in/yr (293 mm/yr), 164,500 acre-ft/yr (202.2 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 23,100 ft³/s (654 m³/s) Apr. 22 (gage height, 22.11 ft or 6.739 m); minimum, 4.5 ft³/s (0.13 m³/s) Oct. 16 (gage height, 3.01 ft or 0.917 m).
Period of record: Maximum discharge, 23,100 ft³/s (654 m³/s) Apr. 22, 1973 (gage height, 22.11 ft or 6.739 m); no flow, Sept. 29 to Oct. 16, Oct. 30 to Nov. 2, 1963.

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	12	12	24	642	682	220	2,830	159	430	19	75	12		
2	12	68	21	168	1,940	592	2,880	1,210	297	30	34	12		
3	11	122	20	276	2,080	494	2,280	1,890	242	52	24	13		
4	10	52	18	250	1,430	395	601	2,100	209	47	19	66		
5	9.9	28	13	200	367	409	324	835	1,090	148	16	165		
6	9.3	24	11	160	239	710	249	503	616	83	14	69		
7	8.0	27	9.0	140	154	2,240	199	1,600	205	40	13	59		
8	7.1	30	8.0	120	150	2,340	169	2,140	125	27	11	37		
9	6.1	22	7.5	100	80	1,860	349	2,190	87	21	14	317		
10	5.7	93	7.6	90	75	980	640	1,260	64	17	1,240	341		
11	5.6	240	6.6	80	70	2,510	973	330	52	15	1,730	92		
12	5.2	94	6.8	70	70	2,540	1,950	189	44	14	2,130	73		
13	5.1	394	6.7	62	200	2,350	2,300	136	166	13	1,260	53		
14	5.1	1,450	6.8	52	1,400	2,290	2,020	107	184	12	147	551		
15	5.0	659	7.0	46	1,050	2,220	1,750	86	55	11	68	711		
16	4.7	256	6.8	58	401	932	1,950	74	62	10	49	240		
17	5.1	115	6.6	534	229	331	2,190	65	266	9.7	40	580		
18	5.1	69	6.7	1,330	206	240	1,230	59	177	9.0	33	1,370		
19	5.3	51	43	2,080	164	187	346	53	1,540	9.4	28	926		
20	5.6	47	188	2,190	131	209	2,030	49	1,240	72	25	216		
21	6.1	50	177	2,120	133	297	15,500	49	169	815	23	110		
22	13	42	91	1,920	124	230	18,300	148	76	1,050	21	864		
23	141	34	66	1,170	114	163	8,890	112	51	348	19	2,150		
24	97	28	48	501	118	227	4,620	228	40	150	18	2,710		
25	37	27	41	363	114	2,510	1,580	1,890	33	65	17	4,070		
26	23	29	39	443	111	3,420	428	701	31	148	17	5,000		
27	19	34	36	616	100	4,180	321	4,160	36	100	16	6,070		
28	15	32	33	587	88	3,950	260	12,000	26	47	15	4,400		
29	13	31	48	667	-----	1,590	214	7,430	23	31	14	3,600		
30	11	28	568	291	-----	599	180	4,260	21	25	14	3,970		
31	9.8	-----	1,430	207	-----	1,260	-----	1,670	-----	319	13	-----		
TOTAL	527.8	4,188	3,001.3	17,533	12,020	42,475	77,553	47,683	7,657	3,757.1	7,157	38,847		
MEAN	17.0	140	96.8	566	429	1,370	2,585	1,538	255	121	231	1,295		
MAX	141	1,450	1,430	2,190	2,080	4,180	18,300	12,000	1,540	1,050	2,130	6,070		
MIN	4.7	12	6.6	46	70	163	169	49	21	9.0	11	12		
CFSM	.06	.52	.36	2.12	1.61	5.13	9.68	5.76	.96	.45	.87	4.85		
IN.	.07	.58	.42	2.44	1.67	5.92	10.81	6.64	1.07	.52	1.00	5.41		
AC-FT	1,050	8,310	5,950	34,780	23,840	84,250	153,800	94,580	15,190	7,450	14,200	77,050		
CAL YR 1972	TOTAL	41,014.1	MEAN	112	MAX	2,060	MIN	4.7	CFSM	.42	IN	5.71	AC-FT	81,350
WTR YR 1973	TOTAL	262,399.2	MEAN	719	MAX	18,300	MIN	4.7	CFSM	2.69	IN	36.56	AC-FT	520,500

PEAK DISCHARGE (BASE, 1,200 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-14	1100	15.72	1,590	3-27	2345	20.11	4,740	5-28	1115	21.21	14,000
12-31	1115	15.27	1,500	4-2	0845	19.02	2,910	6-5	1530	14.37	1,320
1-21	0600	18.03	2,240	4-14	0630	18.02	2,380	6-20	0215	17.25	1,960
2-2	1845	17.41	2,100	4-22	0645	22.11	23,100	7-22	0145	15.74	1,570
2-14	1745	15.69	1,640	5-4	1830	17.90	2,190	8-12	2215	18.48	2,370
3-7	1230	18.10	2,370	5-9	0545	17.99	2,220	9-18	1845	14.98	1,440
3-11	0800	18.67	2,630	5-25	1045	18.01	2,230	9-27	0600	20.09	6,700

LITTLE CHARITON RIVER BASIN

06906200 East Fork Chariton River near Macon, Mo.

LOCATION.--Lat 39°44'47", long 92°31'05", NW¼NW¼NW¼ sec.18, T.57 N., R.14 W., Macon County, on downstream end of right abutment of bridge on U.S. Highway 36, 2 mi (3.2 km) downstream from Long Branch, and 3 mi (4.8 km) west of Macon.

DRAINAGE AREA.--112 mi² (290 km²).

PERIOD OF RECORD.--September 1971 to current year. Partial-record station since May 1970.

GAGE.--Water-stage recorder. Datum of gage is 741.43 ft (225.988 m) above mean sea level.

EXTREMES.--Current year: Maximum discharge, 8,700 ft³/s (246 m³/s) Apr. 21 (gage height, 20.60 ft or 6.279 m); no flow Oct. 12-21, 31, Aug. 31, Sept. 1, 2.

Period of record: Maximum discharge, 8,700 ft³/s (246 m³/s) Apr. 21, 1973 (gage height, 20.60 ft or 6.279 m); no flow in most years.

REMARKS.--Records fair except those for periods of ice effect, which are poor. Records of chemical analyses 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	1.5	2.6	10	263	256	117	2,090	74	87	3.8	13	0
2	1.7	245	8.0	172	988	319	2,820	797	45	3.4	8.2	0
3	1.2	174	7.0	120	970	326	640	505	38	3.9	5.3	20
4	.90	47	6.0	100	233	255	173	135	217	22	3.6	145
5	.57	18	4.0	80	100	242	102	68	227	200	2.2	76
6	.46	7.9	3.0	60	80	329	70	167	184	80	1.4	41
7	.25	4.3	2.7	40	60	1,020	53	967	66	28	.79	19
8	.13	1.7	2.5	30	50	1,130	53	1,910	34	15	.48	151
9	.08	.38	2.4	25	40	295	348	1,270	22	8.9	988	596
10	.06	13	2.1	20	30	522	292	166	16	6.1	5,190	168
11	.06	58	1.3	15	20	1,580	383	76	11	18	2,560	60
12	0	15	2.2	10	20	1,610	965	47	8.5	28	106	30
13	0	191	2.7	10	50	400	1,320	34	6.4	13	32	187
14	0	421	2.7	10	340	1,300	821	28	13	6.4	20	606
15	0	224	2.8	15	250	1,330	315	22	9.6	3.6	13	272
16	0	97	2.1	20	150	262	887	17	6.7	1.8	11	68
17	0	34	1.8	60	50	191	840	15	13	.85	8.4	408
18	0	17	3.6	200	37	132	193	14	107	2.7	7.1	705
19	0	12	18	1,150	28	108	100	13	775	70	5.6	139
20	0	9.5	77	872	31	218	899	12	679	164	4.2	49
21	0	9.9	50	353	36	214	4,920	12	85	1,160	3.0	31
22	64	11	30	616	32	150	5,460	15	38	216	2.0	1,460
23	273	8.7	20	482	43	82	3,460	17	25	73	1.1	2,660
24	111	7.2	15	352	52	164	594	68	22	36	.99	1,870
25	38	7.7	10	316	56	1,900	127	105	16	44	.98	1,930
26	17	18	10	280	60	3,270	72	116	12	41	.87	4,030
27	9.6	33	10	250	61	2,310	52	2,090	11	28	.64	2,940
28	6.0	29	10	200	51	231	41	4,820	9.0	15	.35	1,730
29	2.1	19	50	170	-----	340	35	1,280	6.3	10	.20	707
30	.20	13	560	130	-----	225	32	500	4.8	7.9	.08	701
31	0	-----	560	100	-----	764	-----	467	-----	8.6	0	-----
TOTAL	527.81	1,748.88	1,486.4	6,521	4,174	21,336	28,157	15,827	2,794.3	2,318.95	8,990.48	21,799.0
MEAN	17.0	58.3	48.0	210	149	688	939	511	93.1	74.8	290	727
MAX	273	421	560	1,150	988	3,270	5,460	4,820	775	1,160	5,190	4,030
MIN	0	.38	1.3	10	20	82	32	12	4.8	.85	0	0
CFSM	.15	.52	.43	1.88	1.33	6.14	8.38	4.56	.83	.67	2.59	6.49
IN.	.18	.58	.49	2.17	1.39	7.09	9.35	5.26	.93	.77	2.99	7.24
AC-FT	1,050	3,470	2,950	12,930	8,280	42,320	55,850	31,390	5,540	4,600	17,830	43,240

CAL YR 1972 TOTAL 15,142.53 MEAN 41.4 MAX 560 MIN 0 CFSM .37 IN 5.03 AC-FT 30,040
 WTR YR 1973 TOTAL 115,681.32 MEAN 317 MAX 5,460 MIN 0 CFSM 2.83 IN 38.42 AC-FT 229,500

PEAK DISCHARGE (BASE, 1,000 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
1-19	1800	14.19	1,420	4-2	1145	16.75	3,020	5-28	0645	19.06	5,750
2-3	0615	14.19	1,230	4-13	1645	14.40	1,440	6-20	0415	13.77	1,170
3-8	1215	14.32	1,390	4-17	0100	13.79	1,180	7-21	1645	14.40	1,440
3-12	1330	15.25	1,950	4-21	1445	20.60	8,700	8-10	0545	19.48	6,470
3-15	1000	14.81	1,690	5-2	2315	13.28	1,090	9-23	1915	16.89	3,020
3-26	1845	17.53	3,780	5-9	0230	15.62	2,170	9-26	1100	18.36	4,550

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DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-14	0530	17.45	2,750	4-16	1200	16.85	1,600	8-13	0130	18.05	4,450
3-28	1630	17.64	3,250	4-21	0300	20.78	30,000	9-24	*	17.20	2,300
4-4	1500	17.12	2,100	5-29	2030	17.93	4,150	9-27	*	17.93	4,150
								*Time Unknown			

LITTLE CHARITON RIVER BASIN

06906350 Thomas Hill Lake near Thomas Hill, Mo.

LOCATION.--Lat 39°33'01", long 92°38'23", in SW¼ sec.19, T.55 N., R.15 W., Randolph County, on intake structure at dam on Middle Fork Chariton River, 2 mi (3.2 km) north of Thomas Hill, and at mile 36 (57.9 km).

DRAINAGE AREA.--147 mi² (381 km²).

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

GAGE.--Water-stage recorder. Datum of gage is mean sea level. Prior to Dec. 9, 1966, nonrecording gage at present site and datum.

EXTREMES.--Current year: Maximum contents, 94,200 acre-ft (116 hm³) Apr. 22, 23 (elevation, 716.62 ft or 218.426 m); minimum, 56,100 acre-ft (69.2 hm³) Oct. 20 (elevation, 708.95 ft or 216.088 m).

Period of record: Maximum contents, 94,200 acre-ft (116 hm³) Apr. 22, 23 (elevation, 716.62 ft or 218.426 m); minimum, since filling to conservation pool level, 55,200 acre-ft (68.1 hm³) Nov. 26, 1971 (elevation, 708.73 ft or 216.021 m).

REMARKS.--Lake is formed by an earthfill dam with an ungated outlet. Invert of outlet tunnel, elevation, 708 ft (215.8 m). Initial filling began Jan. 7, 1966. Capacity at top of flood control pool is 85,175 acre-ft (105 hm³), elevation, 715.0 ft or 217.93 m, crest of spillway, of which 24,485 acre-ft (30.2 hm³), between elevation 710.0 ft or 216.41 m and 715.0 ft or 217.93 m, is used for flood control; 45,990 acre-ft (56.7 hm³) is used for power plant cooling water and conservation purposes; and 14,700 acre-ft (18.1 hm³) is for sediment storage. Top of conservation pool is elevation 712 ft or 217.0 m. Lake is used for power plant cooling water, flood control, and recreation. Contents computed from daily readings at 0800. Power plant, dam, and reservoir facilities are owned by the Associated Electric Cooperative of Springfield, Missouri.

COOPERATION.--Records furnished by the Corps of Engineers.

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

709	56,330	714	79,900
711	65,240	717	96,380

CONTENTS, IN THOUSANDS OF ACRE-FEET, AT 0800, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	58,000	57,800	62,700	63,100	67,700	64,300	81,000	74,400	73,600	62,900	62,700	60,400
2	58,000	58,800	62,600	63,100	69,100	65,300	81,000	76,000	72,600	62,700	62,400	60,400
3	57,800	59,300	62,800	63,300	69,600	65,600	79,400	75,800	71,600	62,700	62,200	60,400
4	57,900	59,300	62,400	65,300	69,200	65,600	77,900	74,900	70,800	62,800	62,000	61,000
5	57,800	59,200	62,400	65,800	68,800	65,500	76,500	73,600	71,500	62,700	61,800	61,200
6	57,700	59,300	62,300	65,500	68,400	65,500	75,000	71,900	71,200	62,400	61,600	61,300
7	57,600	59,400	62,000	65,200	68,000	68,200	73,900	73,800	70,200	62,200	61,400	61,100
8	57,500	59,300	62,000	65,000	67,500	70,100	72,900	75,300	69,500	62,000	61,200	61,100
9	57,400	59,200	62,000	64,800	67,000	69,800	73,300	76,100	68,800	61,900	61,400	62,000
10	57,200	59,500	61,800	64,500	66,700	69,400	73,500	75,300	68,200	61,600	63,400	62,600
11	57,100	59,700	61,700	64,300	66,300	72,900	73,400	73,800	67,600	61,600	64,200	62,600
12	57,200	59,800	62,000	64,100	65,900	73,800	74,800	73,200	67,100	61,400	64,100	62,500
13	57,100	60,900	61,900	63,900	65,900	73,400	75,400	72,200	66,800	61,100	63,900	62,400
14	57,100	63,400	61,800	63,700	67,100	75,400	74,700	71,200	66,300	61,100	63,600	63,900
15	56,900	63,900	61,700	63,500	67,500	76,700	73,900	70,200	65,800	61,000	63,300	63,900
16	56,800	63,900	61,600	63,400	67,200	75,700	74,100	69,400	65,400	60,800	63,100	63,900
17	56,800	63,900	61,400	63,800	66,700	79,500	75,900	68,700	65,600	60,600	62,900	64,300
18	56,800	63,700	61,400	64,400	66,400	73,300	74,800	68,000	65,200	60,400	62,700	65,300
19	56,500	63,800	61,600	67,500	66,100	72,400	74,000	67,400	66,000	60,500	62,400	65,100
20	56,300	63,600	61,900	68,400	65,900	72,000	73,900	67,000	66,100	60,800	62,300	64,900
21	56,400	63,500	62,000	68,700	65,700	71,400	84,000	66,400	65,800	61,700	62,100	64,600
22	57,100	63,400	62,000	70,800	65,400	70,700	93,100	66,400	65,400	64,400	61,800	65,600
23	57,900	63,200	62,000	71,600	65,200	70,000	93,000	66,200	65,000	64,400	61,600	70,300
24	58,000	63,000	62,000	71,000	65,000	69,400	89,700	65,800	64,600	64,400	61,500	73,600
25	57,900	63,100	61,900	70,500	64,900	73,400	85,200	67,900	64,300	64,400	61,300	74,600
26	57,600	63,200	61,900	70,100	64,800	79,700	83,600	67,900	63,900	64,200	61,200	80,600
27	57,700	63,200	61,700	69,700	64,600	78,100	81,200	69,900	64,100	63,900	61,100	80,800
28	57,800	63,000	61,800	69,800	64,400	77,600	79,000	77,400	63,800	63,700	60,900	80,300
29	57,700	62,800	61,800	68,800	-----	76,700	76,800	77,300	63,500	63,400	60,800	80,200
30	57,600	62,800	62,600	68,200	-----	76,500	75,300	76,400	63,200	63,200	60,600	79,600
31	57,800	-----	63,100	67,900	-----	75,900	-----	76,300	-----	63,000	60,600	-----
(+)	709.34	710.47	710.53	711.56	710.81	713.21	713.10	713.00	710.56	710.52	709.98	713.95
(‡)	-500	+5,000	+300	+4,800	-3,500	+11,500	-600	+1,000	-13,100	-200	-2,400	+19,000
MAX	58,000	63,900	63,100	71,600	69,600	79,700	93,100	77,400	73,600	64,400	64,200	80,800
MIN	56,300	57,800	61,400	63,100	64,400	64,300	72,900	65,800	63,200	60,400	60,600	60,400

CAL YR 1972.....‡ +5,400

WTR YR 1973.....‡ +21,300

† Elevation at 0800 at end of month.

‡ Change in contents, in acre-feet.

06906600 Burge Branch near Arrow Rock, Mo.

LOCATION.--Lat 39°02'43", long 92°56'35", in SW¼NE¼ sec.1, T.49 N., R.19 W., Cooper County, on right bank 30 ft (9 m) upstream from culvert on county road, and 1.5 mi (2.4 km) south of Arrow Rock.

DRAINAGE AREA.--0.33 mi² (0.85 km²).

PERIOD OF RECORD.--October 1959 to September 1973 (discontinued).

GAGE.--Water-stage recorder, V-notch sharp-crested weir, and recording rain gages. Altitude of gage is 610 ft (185.9 m) from topographic map.

AVERAGE DISCHARGE.--14 years, 0.154 ft³/s (0.004 m³/s), 6.34 in/yr (161 mm/yr), 111.6 acre-ft/yr (137,600 m³/yr).

EXTREMES.--Current year: Maximum discharge, 276 ft³/s (7.82 m³/s) Apr. 20 (gage height, 9.27 ft or 2.825 m, from floodmark); no flow for many days.

Period of record: Maximum discharge, 276 ft³/s (7.82 m³/s) Apr. 20, 1973 (gage height, 9.27 ft or 2.825 m, from floodmark); no flow for many days each year.

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	.03	0	.01	.93	1.2	.49	2.2	0	0		0
2	0	.03	.01	.01	1.4	.41	.17	.15	.02	0		0
3	0	0	.01	.48	.75	.23	.13	.02	.01	0		0
4	0	0	0	.07	.41	.21	.12	.01	.01	0		0
5	0	0	0	.01	.15	.25	.10	.01	.30	0		0
6	0	0	0	.01	.05	6.1	.09	.33	.02	0		0
7	0	0	0	0	.03	.69	.07	1.7	0	0		0
8	0	0	.01	0	.01	.09	.62	.07	0	0		.02
9	0	0	.01	0	.01	.10	.80	.02	0	0		0
10	0	.02	.01	0	.01	8.7	1.0	.02	0	0		0
11	0	0	0	0	.01	1.1	.21	.01	0	0		0
12	0	.05	.01	0	.17	.19	.09	.01	0	0		0
13	0	.13	.01	0	4.7	.06	.05	.01	0	0		0
14	0	.09	0	0	1.3	.15	1.6	0	0	0		0
15	0	.02	0	.01	.69	.09	2.0	0	0	0		0
16	0	.01	0	.01	.21	.04	3.2	0	0	0		0
17	0	.01	0	.10	.10	.01	.17	0	0	0		.02
18	0	0	.10	.20	.07	0	.12	.01	.73	0		0
19	0	.01	.10	.40	.02	.07	.12	.01	.26	0		0
20	0	.01	.08	.30	.02	.45	40	0	0	.71		0
21	0	.01	.05	3.4	.01	.07	14	0	0	1.0		0
22	.43	.01	.03	1.3	.02	.01	1.0	0	0	0		0
23	.02	.01	.03	.38	.01	0	.15	0	0	0		6.6
24	0	.02	.01	.19	0	7.2	.10	0	0	.04		.03
25	0	.07	.01	.09	0	6.4	.09	0	0	.01		.01
26	0	.07	.01	.05	0	.38	.03	.11	0	0		0
27	0	.02	.01	.03	0	.12	.02	1.6	0	0		0
28	0	0	.01	.05	0	.13	.02	.10	0	0		0
29	0	0	.09	.01	-----	.41	.03	.01	0	0		0
30	0	0	.19	.01	-----	.10	.03	0	0	0		1.2
31	0	-----	.03	.01	-----	9.0	-----	0	-----	0		-----
TOTAL	.45	.62	.82	7.13	11.08	43.96	66.62	6.40	1.35	1.76	0	7.88
MEAN	.015	.021	.027	.23	.40	1.42	2.22	.21	.045	.057	0	.26
MAX	.43	.13	.19	3.4	4.7	9.0	40	2.2	.73	1.0	0	6.6
MIN	0	0	0	0	0	0	.02	0	0	0	0	0
CFSM	.05	.06	.08	.70	1.21	4.30	6.73	.64	.14	.17	0	.79
IN.	.05	.07	.09	.80	1.25	4.96	7.51	.72	.15	.20	0	.89
AC-FT	.9	1.2	1.6	14	22	87	132	13	2.7	3.5	0	16

CAL YR 1972 TOTAL 21.68 MEAN .059 MAX 2.5 MIN 0 CFSM .18 IN 2.44 AC-FT 43
WTR YR 1973 TOTAL 148.07 MEAN .41 MAX 40 MIN 0 CFSM 1.24 IN 16.69 AC-FT 294

PEAK DISCHARGE (BASE, 25 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-31	0615	4.10	36	5-7	1400	3.90	27
4-15	2330	3.84	27	9-23	0745	4.14	39
4-20	2300	9.27	276				

LAMINE RIVER BASIN

06907500 South Fork Blackwater River near Elm, Mo.

LOCATION.--Lat 38°49'08", long 90°02'08", in SE¼SW¼ sec.5, T.46 N., R.28 W., Johnson County, on left bank at downstream side of bridge on county highway, 2.5 mi (4.0 km) southeast of Elm, and 3 mi (4.8 km) upstream from mouth.

DRAINAGE AREA.--16.6 mi² (43.0 km²).

PERIOD OF RECORD.--June 1954 to current year. Prior to October 1, 1963 published as "East Branch South Fork Blackwater River."

GAGE.--Water-stage recorder and concrete control. Datum of gage is about 795 ft (242.3 m) above mean sea level.

AVERAGE DISCHARGE.--19 years, 12.6 ft³/s (0.537 m³/s), 10.31 in/yr (262 mm/yr), 9,130 acre-ft/yr (11.3 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,450 ft³/s (69.4 m³/s) Apr. 14 (gage height, 8.56 ft or 2.609 m); no flow on many days.

Period of record: Maximum discharge, 5,600 ft³/s (159 m³/s) Apr. 15, 1960 (gage height, 12.0 ft or 3.66 m), from rating curve extended above 420 ft³/s (11.9 m³/s) on basis of contracted-opening and flow-over-road measurement of peak flow; no flow for many days each year.

Flood in July 1951 reached a stage of 14.8 ft (4.51 m), from information by local residents.

REMARKS.--Records fair. Runoff affected at times by many soil conservation ponds upstream.

REVISIONS (WATER YEARS).--WSP 1919: 1958(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		.09	.11	1.8	121	5.0	84	237	2.0	0		0
2		10	.12	1.1	40	10	25	72	36	0		0
3		6.0	.09	121	13	9.0	15	19	7.1	.03		0
4		4.0	.01	20	9.0	40	12	12	4.6	2.6		0
5		2.0	.02	5.6	7.3	100	9.4	8.4	30	.38		0
6		1.0	.01	2.6	6.1	50	7.5	98	5.0	.03		0
7		1.0	0	1.6	5.7	200	6.7	229	2.6	0		0
8		.90	.01	1.6	4.4	40	8.2	51	1.7	0		0
9		.80	.01	1.5	3.5	50	23	18	1.3	0		0
10		.70	0	1.4	3.6	300	24	11	1.0	0		0
11		.60	0	1.1	3.8	100	19	7.6	.62	0		0
12		.50	.03	.64	8.7	50	11	6.3	.51	0		0
13		40	.01	.46	59	20	7.4	4.9	.46	0		0
14		10	0	.55	24	15	613	4.0	.72	0		0
15		5.0	0	1.5	8.0	14	277	3.4	1.5	0		0
16		3.0	0	32	5.3	9.4	261	3.0	.47	0		0
17		2.0	0	59	4.2	7.0	40	2.6	.36	0		0
18		1.7	3.7	28	4.8	5.9	20	2.7	.25	0		0
19		1.4	16	11	5.5	52	22	2.8	.16	27		0
20		1.2	5.2	8.3	6.2	189	395	2.4	.12	4.5		0
21		.83	2.9	166	6.0	26	524	2.2	.03	1.5		0
22		.84	1.3	66	5.4	14	102	14	.01	.24		0
23		.74	1.3	15	5.5	11	26	5.3	.01	12		0
24		.73	.99	9.1	5.2	313	15	3.4	.01	68		0
25		.80	.62	7.3	5.0	548	12	4.0	0	13		23
26		1.3	.56	6.4	4.5	62	8.4	3.9	0	2.4		2.4
27		.77	.49	5.7	4.0	22	7.2	25	0	.62		10
28		.28	.52	7.5	3.0	18	6.0	6.3	0	2.9		42
29		.15	1.1	5.6	-----	15	5.4	4.2	0	.69		6.9
30		.12	23	5.2	-----	12	5.0	3.1	0	.15		16
31		-----	4.2	23	-----	274	-----	2.4	-----	.05		-----
TOTAL	0	98.45	62.30	617.55	381.7	2,581.3	2,591.2	868.9	96.53	136.09	0	100.3
MEAN	0	3.28	2.01	19.9	13.6	83.3	86.4	28.0	3.22	4.39	0	3.34
MAX	0	40	23	166	121	548	613	237	36	68	0	42
MIN	0	.09	0	.46	3.0	5.0	5.0	2.2	0	0	0	0
CFSM	0	.20	.12	1.20	.82	5.02	5.20	1.69	.19	.26	0	.20
IN.	0	.22	.14	1.38	.86	5.78	5.81	1.95	.22	.30	0	.22
AC-FT	0	195	124	1,220	757	5,120	5,140	1,720	191	270	0	199

WTR YR 1973 TOTAL 7,534.32 MEAN 20.6 MAX 613 MIN 0 CFSM 1.24 IN 16.88 AC-FT 14,940

PEAK DISCHARGE (BASE, 1,100 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-25	0800	6.43	1,320	4-21	0215	6.48	1,350
4-14	1915	8.56	2,450				

LAMINE RIVER BASIN

79

06907700 Blackwater River at Valley City, Mo.

LOCATION.--Lat 38°52'12", long 93°37'19", in SW¼NW¼ sec.13, T.47 N., R.25 W., Johnson County, on right bank at downstream side of bridge on County Highway E, 0.5 mi (0.8 km) upstream from Blackjack Creek, 0.5 mi (0.8 km) northwest of Valley City, and 1 mi (1.6 km) downstream from Clear Creek.

DRAINAGE AREA.--547 mi² (1,417 km²).

PERIOD OF RECORD.--October 1958 to September 1973 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 650.23 ft (198.190 m) above mean sea level. Auxiliary water-stage recorder 4.5 mi (7.2 km) downstream from base gage at bridge on State Highway 23 since Oct. 11, 1961. Datum of gage is 647.48 ft (197.350 m) above mean sea level.

AVERAGE DISCHARGE.--15 years, 451 ft³/s (12.77 m³/s), 11.20 in/yr (284 mm/yr), 326,750 acre-ft/yr (402.88 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 57,200 ft³/s (1,620 m³/s) Apr. 21 (gage height, 31.08 ft or 9.473 m); minimum, 0.1 ft³/s (0.003 m³/s) Oct. 10 (gage height, 2.86 ft or 0.872 m).
Period of record: Maximum discharge, 66,500 ft³/s (1,880 m³/s) Apr. 16, 1960, from rating curve extended above 18,000 ft³/s (510 m³/s) on basis of slope-area measurement of peak flow (gage height, 30.4 ft or 9.266 m); maximum gage height, 31.75 ft (9.677 m) Sept. 14, 1961; no flow Oct. 11-15, 1963.

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	15	38	62	400	4,330	130	5,330	1,330	98	9.5	12	5.7
2	5.0	533	24	150	2,460	433	1,340	7,220	396	9.1	8.0	8.0
3	1.7	100	27	500	857	334	648	1,220	478	10	6.0	8.7
4	.70	40	20	1,000	734	1,400	393	612	140	125	4.5	11
5	.50	16	24	800	404	3,560	644	223	2,950	139	3.2	12
6	.40	14	16	700	282	2,400	390	1,840	523	42	2.5	11
7	.30	33	16	600	206	6,040	282	3,920	236	20	2.0	13
8	.30	34	16	500	140	1,520	256	6,460	140	12	1.8	14
9	.20	18	16	450	140	1,810	762	630	90	7.3	1.8	58
10	.20	66	16	400	140	4,380	809	716	74	5.0	1.9	18
11	.30	96	16	300	182	9,100	804	390	62	4.0	1.9	6.0
12	.30	40	16	250	200	1,880	768	282	48	3.5	1.9	3.0
13	.50	3,270	16	200	1,790	1,060	448	206	45	2.4	1.9	6.6
14	1.5	2,490	16	150	1,600	2,250	2,740	171	130	2.2	2.2	13
15	3.6	601	16	100	575	973	9,950	150	592	2.0	2.0	6.6
16	4.0	141	16	100	282	626	14,800	140	194	1.9	.80	2.0
17	3.6	93	16	1,000	218	362	4,060	111	116	1.8	2.2	19
18	4.2	65	47	1,870	194	269	1,070	102	86	1.8	1.9	38
19	3.3	41	662	1,000	182	269	714	94	55	763	1.3	20
20	2.9	79	1,220	1,200	194	4,500	8,570	82	42	494	1.6	7.6
21	4.2	86	475	2,000	194	1,330	35,000	74	34	404	1.8	3.2
22	416	100	302	3,000	160	533	6,660	2,500	29	90	1.6	1.8
23	479	104	196	2,000	160	393	1,280	1,360	27	150	1.8	1.2
24	43	120	244	1,000	150	5,350	833	478	21	552	2.2	.80
25	18	128	159	700	140	21,700	541	230	19	1,380	2.2	84
26	9.7	191	141	500	125	7,340	352	150	18	248	2.8	66
27	6.2	116	68	400	111	1,340	680	1,500	16	74	3.0	321
28	4.6	67	68	300	106	760	418	789	14	70	3.2	194
29	3.6	47	112	300	-----	1,090	282	282	11	55	3.0	334
30	3.3	44	349	250	-----	570	243	160	9.5	30	3.2	1,390
31	4.2	-----	700	732	-----	8,460	-----	120	-----	18	3.6	-----
TOTAL	1,040.30	8,811	5,092	22,852	16,256	92,162	101,067	33,542	6,693.5	4,726.5	89.80	2,677.20
MEAN	33.6	294	164	737	581	2,973	3,369	1,082	223	152	2.90	89.2
MAX	479	3,270	1,220	3,000	4,330	21,700	35,000	7,220	2,950	1,380	12	1,390
MIN	.20	14	16	100	106	130	243	74	9.5	1.8	.80	.80
CFSM	.06	.54	.30	1.35	1.06	5.44	6.16	1.98	.41	.28	.005	.16
IN.	.07	.60	.35	1.55	1.11	6.27	6.87	2.28	.46	.32	.006	.18
AC-FT	2,060	17,480	10,100	45,330	32,240	182,800	200,500	66,530	13,280	9,380	178	5,310

CAL YR 1972 TOTAL 55,698.60 MEAN 152 MAX 5,910 MIN .20 CFSM .28 IN 3.79 AC-FT 110,500
WTR YR 1973 TOTAL 295,009.30 MEAN 808 MAX 35,000 MIN .20 CFSM 1.48 IN 20.06 AC-FT 585,200

PEAK DISCHARGE (BASE, 10,000 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-11	0500	27.32	12,800	4-16	1600	28.20	18,500
3-25	1800	29.10	27,100	4-21	1145	31.08	57,200
3-31	1800	27.19	12,300				

LAMINE RIVER BASIN

06908000 Blackwater River at Blue Lick, Mo.

LOCATION.--Lat 38°59'25", long 93°12'14", in NW¼NE¼ sec.34, T.49 N., R.21 W., Saline County, on right bank upstream from bridge on old U.S. Highway 65, 0.8 mile (1.3 km) downstream from Finney Creek, 1 mi (1.6 km) south of Blue Lick, and at mile 30.8 (49.6 km).

DRAINAGE AREA.--1,120 mi² (2,900 km²), approximately.

PERIOD OF RECORD.--June 1922 to September 1933, May 1938 to current year.

GAGE.--Water-stage recorder. Datum of gage is 593.79 ft (180.987 m) above mean sea level. Prior to July 25, 1925, nonrecording gage at site 75 ft (23 m) downstream at datum 0.10 ft (0.030 m) lower. July 25, 1925 to Sept. 30, 1933, and May 23, 1938 to Dec. 3, 1956, nonrecording gage at site 25 ft (7.6 m) downstream at same datum.

AVERAGE DISCHARGE.--46 years, 713 ft³/s (20.2 m³/s), 8.64 in/yr (219.5 mm/yr), 516,600 acre-ft/yr (637 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 35,300 ft³/s (1,000 m³/s) Apr. 21 (gage height, 38.06 ft or 11.601 m); minimum, 1.0 ft³/s (0.028 m³/s) Sept. 1 (gage height, 6.13 ft or 1.868 m).

Period of record: Maximum discharge, 54,000 ft³/s (1,530 m³/s) Nov. 18, 1928 (gage height, 41.25 ft or 12.573 m, from floodmarks), from rating curve extended above 32,000 ft³/s (906 m³/s) by logarithmic plotting; minimum, 0.1 ft³/s (0.003 m³/s) Sept. 4 to Oct. 20, Oct. 26, 29, Nov. 16-18, 1956, Oct. 4, 5, 1963; minimum gage height, 0.96 ft (0.293 m) July 6, 1926.

REMARKS.--Records fair.

REVISIONS (WATER YEARS).--WSP 1006: 1929.

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	175	16	78	629	2,190	178	6,470	514	197	32	61	1.5
2	59	98	70	212	3,830	428	6,670	2,620	219	30	48	2.1
3	25	520	65	402	3,880	551	7,600	3,520	367	30	40	1.9
4	15	200	57	1,500	3,560	569	6,750	3,950	591	44	34	3.5
5	10	83	50	1,100	1,490	2,020	4,210	2,790	625	288	29	3.5
6	7.2	49	41	900	612	3,580	1,080	1,370	1,390	221	23	2.7
7	5.3	36	35	700	377	4,710	587	2,980	1,540	131	21	2.4
8	3.7	31	31	600	297	4,500	446	4,080	725	80	19	4.2
9	2.5	51	26	500	224	4,620	795	4,200	301	53	16	53
10	2.0	51	22	500	184	5,160	1,300	3,110	168	40	13	32
11	2.7	108	21	400	194	5,940	1,700	1,160	119	33	12	46
12	4.3	159	20	300	211	6,170	1,260	613	94	27	11	28
13	4.8	944	20	250	1,790	7,120	877	393	82	23	10	40
14	9.5	2,500	20	200	2,670	7,420	1,230	289	74	22	11	27
15	13	2,560	20	150	2,000	6,180	4,280	237	108	21	9.6	12
16	14	1,480	20	150	884	4,340	6,260	201	426	19	8.0	10
17	14	503	20	1,060	391	1,240	8,420	177	337	19	7.6	72
18	14	244	60	2,430	249	587	10,500	156	304	19	8.2	85
19	18	164	800	2,620	241	437	10,100	145	357	20	8.0	42
20	17	134	1,800	1,450	260	2,040	9,390	129	138	375	7.1	34
21	19	159	1,500	2,140	280	3,150	28,200	118	89	1,850	6.0	24
22	78	188	800	3,830	259	3,210	32,900	144	69	1,680	5.6	15
23	571	188	500	3,860	227	1,990	33,800	1,060	59	524	5.4	881
24	452	182	388	4,090	215	2,720	27,500	1,430	52	877	5.4	178
25	116	206	317	3,780	196	7,020	18,200	789	46	1,140	4.5	48
26	54	232	241	1,340	173	8,670	11,300	405	42	1,010	3.4	232
27	32	318	180	540	153	12,600	7,600	599	39	391	2.8	643
28	22	225	126	409	139	13,200	3,610	902	38	193	2.6	737
29	16	134	121	452	-----	10,600	698	856	36	120	2.4	400
30	14	97	267	357	-----	7,860	450	491	34	100	2.3	766
31	14	-----	984	376	-----	7,080	-----	277	-----	79	1.6	-----
TOTAL	1,804.0	11,860	8,700	37,227	27,176	145,890	254,183	39,705	8,666	9,491	438.5	4,426.8
MEAN	58.2	395	281	1,201	971	4,706	8,473	1,281	289	306	14.1	148
MAX	571	2,560	1,800	4,090	3,880	13,200	33,800	4,200	1,540	1,850	61	881
MIN	2.0	16	20	150	139	178	446	118	34	19	1.6	1.5
CFSM	.05	.35	.25	1.07	.87	4.20	7.57	1.14	.26	.27	.01	.13
IN.	.06	.39	.29	1.24	.90	4.85	8.44	1.32	.29	.32	.01	.15
AC-FT	3,580	23,520	17,260	73,840	53,900	289,400	504,200	78,750	17,190	18,830	870	8,780

CAL YR 1972 TOTAL 107,800.3 MEAN 295 MAX 5,110 MIN 2.0 CFSM .26 IN 3.58 AC-FT 213,800
WTR YR 1973 TOTAL 549,567.3 MEAN 1,506 MAX 33,800 MIN 1.5 CFSM 1.34 IN 18.25 AC-FT 1,090,000

PEAK DISCHARGE (BASE, 10,000 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-27	2245	32.60	13,800	4-21	0530	38.06	35,300

06909000 Missouri River at Boonville, Mo.

LOCATION.--Lat 38°58'42", long 92°45'13", sec.35, T.49 N., R.17 W., Cooper County, on downstream side of second pier from right abutment of Missouri-Kansas-Texas Railroad Co. bridge at Boonville. River mile 196.6 (316.3 km).

DRAINAGE AREA.--505,700 mi² (1,310,000 km²), approximately.

PERIOD OF RECORD.--October 1925 to current year. Gage-height records collected at same site 1893-99 are contained in reports of Missouri River Commission; since 1900 in reports of National Weather Service.

GAGE.--Water-stage recorder. Datum of gage is 565.42 ft (172.340 m) above mean sea level. Prior to Oct. 1, 1928, nonrecording gage at site 0.4 mi (0.6 km) downstream at datum 3.14 ft (0.957 m) lower. Oct. 1, 1928, to May 9, 1931, nonrecording gage at site 50 ft (15 m) upstream from present site at present datum. May 10, 1931, to Apr. 12, 1934, water-stage recorder at site 0.4 mi (0.6 km) downstream at different datum.

AVERAGE DISCHARGE.--48 years, 57,210 ft³/s (1,620 m³/s), 41,450,000 acre-ft/yr (51.11 km³/yr).

EXTREMES.--Current year: Maximum discharge, 334,000 ft³/s (9,460 m³/s) Apr. 22 (gage height, 30.60 ft or 9.327 m); minimum daily, 25,400 ft³/s (719 m³/s) Dec. 16; minimum gage height, 4.29 ft (1.308 m) Dec. 15, 16.

Period of record: Maximum discharge, 550,000 ft³/s (15,580 m³/s) July 17, 1951; maximum gage height, 32.82 ft (10.004 m) July 17, 1951; minimum discharge, about 1,800 ft³/s (51.0 m³/s) Jan. 10, 1940; minimum gage height, -0.85 ft (-0.259 m) Jan. 13, 1937.

Flood of June 21, 1844 reached a stage of 32.7 ft or 9.97 m (discharge, about 710,000 ft³/s or 20,110 m³/s, computed by Corps of Engineers). Flood of June 6, 1903, reached a stage of 30.5 ft or 9.30 m (discharge, about 612,000 ft³/s or 17,330 m³/s, computed by Corps of Engineers).

REMARKS.--Records good. Discharge measurements made 3 times a month during winter and 6 or more times monthly during rest of year. Flow partly regulated by many reservoirs above station.

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	64,700	66,100	68,900	150,000	80,400	79,500	249,000	94,900	142,000	59,400	68,700	47,700
2	64,300	72,500	68,400	130,000	121,000	75,400	271,000	124,000	119,000	58,800	65,800	47,400
3	64,700	80,100	67,600	112,000	186,000	80,700	275,000	162,000	106,000	63,400	66,100	48,500
4	62,700	79,900	67,300	92,300	190,000	96,300	276,000	172,000	97,200	71,000	60,400	50,400
5	60,800	81,100	65,900	79,900	174,000	129,000	262,000	177,000	104,000	112,000	56,000	49,700
6	59,200	79,300	65,500	70,000	159,000	167,000	231,000	169,000	120,000	119,000	53,800	49,800
7	59,100	76,900	60,300	63,000	150,000	194,000	196,000	164,000	115,000	102,000	52,300	48,900
8	60,000	78,600	53,700	58,400	134,000	203,000	165,000	182,000	105,000	83,300	51,000	48,900
9	60,000	85,700	48,500	52,800	110,000	194,000	152,000	199,000	95,600	72,700	55,000	54,100
10	59,900	89,100	44,700	45,000	92,100	189,000	149,000	209,000	89,600	66,100	87,400	56,000
11	59,500	86,600	41,200	35,000	84,000	208,000	147,000	215,000	85,900	61,300	89,000	55,200
12	58,700	85,100	36,500	35,000	80,700	219,000	147,000	205,000	81,900	57,800	82,700	55,100
13	58,700	90,500	36,200	37,000	83,400	224,000	155,000	185,000	80,400	59,200	84,500	54,100
14	59,800	115,000	40,300	37,000	101,000	223,000	154,000	150,000	80,600	65,100	119,000	57,700
15	60,200	143,000	26,500	38,000	116,000	223,000	168,000	120,000	81,800	60,300	92,500	60,300
16	61,300	143,000	25,400	50,000	108,000	219,000	192,000	106,000	80,800	54,600	75,300	57,400
17	60,000	122,000	27,400	55,100	85,500	208,000	209,000	100,000	83,100	52,800	68,400	58,200
18	58,000	105,000	30,200	97,000	71,900	191,000	228,000	99,900	84,300	51,000	64,000	65,100
19	58,100	98,100	33,500	181,000	63,900	168,000	231,000	99,300	93,300	48,600	61,500	69,100
20	59,700	91,900	39,600	167,000	60,700	147,000	228,000	96,800	88,200	49,300	60,000	66,800
21	61,600	89,200	42,000	148,000	61,100	153,000	292,000	93,700	83,100	81,500	60,400	60,700
22	64,700	86,400	39,300	151,000	62,700	152,000	320,000	94,900	81,200	158,000	59,800	58,200
23	66,000	84,200	39,300	143,000	63,500	137,000	313,000	92,400	80,000	160,000	59,400	69,300
24	67,100	83,000	40,900	120,000	70,300	128,000	300,000	93,700	74,400	136,000	59,300	79,200
25	68,000	80,600	43,700	101,000	69,100	176,000	274,000	96,400	69,400	120,000	56,200	90,600
26	69,600	76,900	45,300	86,900	71,900	238,000	241,000	94,100	65,300	101,000	53,600	165,000
27	68,600	74,100	45,800	83,900	88,000	269,000	194,000	109,000	63,800	88,400	52,700	169,000
28	66,200	72,500	47,100	86,400	88,500	270,000	145,000	132,000	64,000	82,900	51,900	191,000
29	63,800	72,600	48,900	98,000	-----	260,000	116,000	144,000	62,200	77,000	52,700	216,000
30	62,500	71,300	63,800	102,000	-----	247,000	102,000	156,000	60,600	72,300	54,000	238,000
31	63,700	-----	140,000	89,000	-----	233,000	-----	161,000	-----	71,700	51,100	-----
TOTAL	1,931.2M	2,660.3M	1,543.7M	2,794.7M	2,826.7M	5,700.9M	6,382.0M	4,297.1M	2,637.7M	2,516.5M	2,024.5M	2,437.4M
MEAN	62,300	88,680	49,800	90,150	101,000	183,900	212,700	138,600	87,920	81,180	65,310	81,250
MAX	69,600	143,000	140,000	181,000	190,000	270,000	320,000	215,000	142,000	160,000	119,000	238,000
MIN	58,000	66,100	25,400	35,000	60,700	75,400	102,000	92,400	60,600	48,600	51,000	47,400
AC-FT	3,831M	5,277M	3,062M	5,543M	5,607M	11,310M	12,660M	8,523M	5,232M	4,991M	4,016M	4,835M
CAL YR 1972	TOTAL 22,541,100.00			MEAN 61,590	MAX 143,000	MIN 15,000	AC-FT 44,710,000					
WTR YR 1973	TOTAL 37,752,700.00			MEAN 103,400	MAX 320,000	MIN 25,400	AC-FT 74,880,000					

M Expressed in thousands.

PERCHE CREEK BASIN

06910230 Hinkson Creek at Columbia, Mo.

LOCATION.--Lat 38°55'42", long 92°20'26", in NE&NW&SW¼ sec.24, T.48 N., R.13 W., Boone County, on left bank 400 ft (122 m) downstream from bridge on County Highway K, 0.5 mi (0.8 km) south of Columbia, and 1 mi (1.6 km) upstream from Flat Branch.

DRAINAGE AREA.--70.2 mi² (182 km²).

PERIOD OF RECORD.--October 1966 to current year. Occasional low-flow measurements, 1942, 1943, 1946, 1952, 1953, 1962, 1963.

GAGE.--Water-stage recorder. Datum of gage is 583.52 ft (177.857 m) above mean sea level.

AVERAGE DISCHARGE.--7 years, 61.4 ft³/s (1.74 m³/s), 11.87 in/yr (302 mm/yr), 44,480 acre-ft/yr (54.8 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,920 ft³/s (121 m³/s) July 23 (gage height, 16.35 ft or 4.983 m); no flow Oct. 10-12.

Period of record: Maximum discharge, 9,100 ft³/s (258 m³/s) May 15, 1970 (gage height, 18.91 ft or 5.764 m) from rating extended above 5,000 ft³/s (142 m³/s) on basis of step-backwater computations; no flow Sept. 11, 12, Oct. 4, 5, 1967, Aug. 13, 25-31, Sept. 1, 3-6, 9-14, Oct. 3-9, 1969, Oct. 10-12, 1972.

REMARKS.--Records fair except periods of ice effect, 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	.05	176	6.7	58	282	423	710	37	12	3.6	30	.06
2	.03	47	4.8	53	339	450	150	87	11	6.5	11	3.1
3	.02	9.3	3.5	434	104	140	92	39	15	5.6	5.5	309
4	.01	3.4	3.1	216	71	177	73	27	179	9.4	3.3	116
5	.02	2.0	2.0	116	56	251	60	21	264	7.4	2.5	31
6	.02	1.6	1.0	50	46	1,820	49	32	69	4.7	1.9	10
7	.04	1.4	1.0	20	30	690	44	685	33	3.6	1.4	3.2
8	.02	1.2	1.0	15	20	149	57	382	20	3.0	1.0	105
9	.01	1.2	1.0	14	15	91	532	77	14	426	126	1,100
10	0	4.2	1.0	12	10	1,220	278	47	9.6	156	49	97
11	0	3.6	1.0	12	10	425	223	34	7.0	35	11	40
12	0	4.3	2.0	12	20	115	118	25	5.0	13	3.7	20
13	.01	391	5.0	12	784	92	71	19	3.7	6.0	5.9	42
14	.11	160	10	18	330	423	229	15	3.2	3.4	3.3	26
15	.07	35	5.0	20	173	102	301	13	8.7	2.4	1.3	6.6
16	.05	19	2.0	18	166	65	930	14	4.9	1.8	.88	3.7
17	.04	11	2.0	121	161	51	157	16	52	1.1	.70	112
18	.03	6.4	2.0	551	156	44	85	16	24	369	.56	69
19	.04	7.9	20	426	149	41	71	17	927	184	.83	19
20	.04	13	80	114	133	194	70	15	97	107	.86	14
21	.38	16	30	611	93	99	915	259	36	745	.75	5.8
22	16	10	30	375	58	60	652	157	21	77	.55	3.4
23	8.0	7.3	20	110	52	47	124	47	15	1,840	.31	303
24	1.3	7.2	15	71	49	769	75	25	12	601	.16	137
25	.65	13	15	56	45	1,490	55	17	8.8	213	.15	53
26	.45	47	15	48	41	203	42	14	7.4	110	.12	25
27	.33	29	15	43	37	97	34	249	5.6	63	.12	13
28	.29	16	30	47	34	191	28	68	4.2	38	.22	75
29	.28	10	100	43	-----	452	25	34	3.6	21	.14	97
30	.65	8.1	250	40	-----	142	22	26	3.6	180	.16	220
31	2.6	-----	94	38	-----	1,450	-----	16	-----	126	.10	-----
TOTAL	31.54	1,062.1	768.1	3,774	3,464	11,963	6,272	2,530	1,876.3	5,362.5	263.41	3,058.86
MEAN	1.02	35.4	24.8	122	124	386	209	81.6	62.5	173	8.50	102
MAX	16	391	250	611	784	1,820	930	685	927	1,840	126	1,100
MIN	0	1.2	1.0	12	10	41	22	13	3.2	1.1	.10	.06
CFSM	.01	.50	.35	1.74	1.77	5.50	2.98	1.16	.89	2.46	.12	1.45
IN.	.02	.56	.41	2.00	1.84	6.34	3.32	1.34	.99	2.84	.14	1.62
AC-FT	63	2,110	1,520	7,490	6,870	23,730	12,440	5,020	3,720	10,640	522	6,070

CAL YR 1972 TOTAL 9,917.25 MEAN 27.1 MAX 1,240 MIN 0 CFSM .39 IN 5.26 AC-FT 19,670
WTR YR 1973 TOTAL 40,425.81 MEAN 111 MAX 1,840 MIN 0 CFSM 1.58 IN 21.42 AC-FT 80,180

PEAK DISCHARGE (BASE, 2,000 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-6	0845	12.96	3,100	4-21	0545	12.11	2,600	7-23	2030	16.35	4,920
3-10	1645	12.29	2,740	7-9	1800	10.90	2,130	9-9	0300	12.16	2,840
3-24	2030	11.70	2,430	7-18	2030	11.63	2,440				
3-31	1000	13.03	3,080	7-21	0245	11.22	2,260				

CEDAR CREEK BASIN

83

06910410 Cedar Creek near Columbia, Mo.

LOCATION.--Lat 38°57'16", long 92°08'57", in NW¼SW¼ sec.10, T.48 N., R.11 W., Boone County, on downstream side of right pier of bridge on access road to Interstate Highway 70, 1 mi (1.6 km) downstream from Manacle Creek, and 9.5 mi (15.3 km) east of Columbia.

DRAINAGE AREA.--44.8 mi² (116 km²).

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

GAGE.--Water-stage recorder. Datum of gage 776.45 ft (236.661 m) above mean sea level (levels by Missouri State Highway Commission).

AVERAGE DISCHARGE.--9 years, 37.5 ft³/s (1.06 m³/s), 11.37 in/yr (289 mm/yr), 27,170 acre-ft/yr (33.5 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,730 ft³/s (106 m³/s) Sept. 9 (gage height, 14.52 ft or 4.426 m); minimum, 0.02 ft³/s (0.001 m³/s) Oct. 1; minimum gage height, 3.44 ft (1.049 m) Oct. 1, 24, 27.
Period of record: Maximum discharge, 5,140 ft³/s (146 m³/s) Oct. 12, 1969 (gage height, 16.13 ft or 4.916 m); no flow on some days in most years.

REMARKS.--Records fair except periods of ice effect, which are poor. Records of daily water conductivity and chemical analyses 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	.03	36	1.8	23	336	68	820	12	5.0	.66	9.5	.80
2	.04	17	1.2	11	321	214	78	16	3.8	6.6	4.2	3.4
3	.04	4.0	1.0	261	51	64	39	12	4.4	8.8	2.3	12
4	.04	1.6	.90	214	24	134	28	7.8	46	4.0	1.5	7.7
5	.04	.72	.80	50	15	211	20	5.9	126	2.5	1.0	3.7
6	.04	.43	.70	20	9.6	1,420	16	9.6	36	1.9	.75	1.7
7	.04	.36	.60	10	7.1	1,120	13	288	14	1.3	.56	1.0
8	.04	.45	.50	8.0	6.2	82	16	301	7.8	.87	.56	296
9	.04	.63	.50	6.0	5.6	43	389	45	4.7	35	15	1,610
10	.04	1.7	.50	5.6	4.4	989	194	27	3.4	22	21	48
11	.05	.50	.50	5.0	3.9	896	158	18	2.7	5.7	6.2	17
12	.06	2.4	1.0	5.0	7.8	71	55	12	2.1	2.4	2.9	8.3
13	.08	136	2.0	5.0	333	79	27	8.2	1.8	1.3	28	4.6
14	.08	89	12	12	184	289	65	6.2	1.9	.87	32	4.0
15	.06	18	5.0	13	39	55	132	5.3	2.0	.54	5.3	2.9
16	.09	6.5	2.0	11	15	27	717	4.1	1.6	.50	2.2	1.6
17	.09	3.2	1.0	20	10	18	89	3.2	1.4	.45	1.5	6.4
18	.09	1.6	1.0	329	9.0	13	37	2.7	2.4	55	1.2	7.2
19	.09	2.0	10	450	7.0	10	28	2.4	326	15	.85	4.7
20	.09	3.4	50	65	5.7	93	30	1.9	50	23	.86	2.9
21	.40	3.5	20	325	2.9	54	942	12	12	87	.73	2.0
22	5.1	2.5	20	419	2.6	23	441	32	5.8	13	.70	1.4
23	.17	1.7	15	60	2.5	15	72	14	3.2	647	.55	353
24	.06	1.6	10	24	2.2	363	34	7.3	1.9	667	.58	68
25	.06	3.3	15	16	2.3	1,500	23	4.3	1.4	88	.79	18
26	.06	18	10	12	2.0	211	17	3.2	1.2	23	1.3	9.3
27	.06	17	10	9.8	1.7	48	13	231	.94	13	.67	5.6
28	.06	7.6	20	14	1.5	72	10	48	.85	6.7	.90	26
29	.06	3.7	50	11	-----	273	8.5	20	.73	4.0	.66	37
30	.08	2.3	333	6.5	-----	106	7.1	12	.67	3.1	.73	62
31	.27	-----	82	27	-----	1,330	-----	6.9	-----	17	.72	-----
TOTAL	7.55	386.69	678.00	2,447.9	1,412.0	9,891	4,518.6	1,179.0	671.69	1,757.19	145.71	2,626.20
MEAN	.24	12.9	21.9	79.0	50.4	319	151	38.0	22.4	56.7	4.70	87.5
MAX	5.1	136	333	450	336	1,500	942	301	326	667	32	1,610
MIN	.03	.36	.50	5.0	1.5	10	7.1	1.9	.67	.45	.55	.80
CFSM	.005	.29	.49	1.76	1.13	7.12	3.37	.85	.50	1.27	.10	1.95
IN.	.006	.32	.56	2.03	1.17	8.21	3.75	.98	.56	1.46	.12	2.18
AC-FT	15	767	1,340	4,860	2,800	19,620	8,960	2,340	1,330	3,490	289	5,210

CAL YR 1972 TOTAL 5,927.54 MEAN 16.2 MAX 725 MIN .01 CFSM .36 IN 4.92 AC-FT 11,760
WTR YR 1973 TOTAL 25,721.53 MEAN 70.5 MAX 1,610 MIN .03 CFSM 1.57 IN 21.36 AC-FT 51,020

PEAK DISCHARGE (BASE, 1,100 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-6	2230	13.46	2,710	4-16	0645	9.66	1,100
3-10	1600	12.38	2,060	4-21	0630	11.85	1,770
3-25	0730	11.80	1,800	7-23	1730	13.00	2,440
3-31	0945	12.94	2,390	9-9	0045	14.52	3,730

MOREAU RIVER BASIN

06910500 Moreau River near Jefferson City, Mo.

LOCATION.--Lat 38°31'44", long 92°11'31", SE¼NW¼SE¼ sec.25, T.44 N., R.11 W., Cole County, near right bank on downstream side of right pier of bridge on Tanner Bridge Road, 3 mi (4.8 km) south of Jefferson City, 15.8 mi (25.4 km) downstream from confluence of North and South Moreau Creeks, and at mile 17 (27.4 km).

DRAINAGE AREA.--561 mi² (1,453 km²). Prior to May 21, 1968, 531 mi² (1,375 km²).

PERIOD OF RECORD.--December 1947 to current year (discharge measurements only October 1956 to September 1957).

GAGE.--Water-stage recorder. Datum of gage is 546.33 ft (166.521 m) above mean sea level. Prior to Aug. 17, 1958, nonrecording gage, and Aug. 17, 1958, to May 20, 1967, water-stage recorder at site 10 mi (16.1 km) upstream and at datum 16.40 ft (4.999 m) higher.

AVERAGE DISCHARGE.--24 years (1948-56, 1958-73), 373 ft³/s (10.6 m³/s), 9.03 in/yr (229 mm/yr), 270,200 acre-ft/yr (333.2 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 14,500 ft³/s (411 m³/s) Mar. 7 (gage height, 24.72 ft or 7.535 m); minimum, 7.2 ft³/s (0.204 m³/s) Aug. 31, Sept. 1, 2 (gage height, 0.98 ft or 0.299 m).

Period of record: Maximum discharge, 24,400 ft³/s (691 m³/s) Oct. 14, 1969 (gage height, 28.60 ft or 8.717 m); minimum discharge observed, 0.1 ft³/s (0.003 m³/s) Sept. 30, 1956.

Flood in 1904 reached a stage of about 39 ft (11.9 m), flood on Oct. 5, 1941, 36.5 ft (11.13 m), present site, from information and floodmarks by local residents.

REMARKS.--Records fair.

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	284	2,280	282	449	1,030	165	9,840	267	76	51	259	7.2
2	145	6,920	261	304	2,890	1,710	4,020	584	69	47	162	7.6
3	88	1,530	236	656	1,230	1,020	1,070	793	124	43	102	12
4	60	441	214	3,880	637	926	778	370	213	40	69	106
5	45	336	195	1,000	472	3,670	634	283	5,000	37	54	851
6	36	273	150	500	390	5,800	496	255	4,220	35	44	145
7	30	228	100	300	342	13,000	410	4,030	568	33	37	69
8	25	187	100	250	352	6,240	380	6,490	355	31	32	44
9	23	165	100	200	315	1,090	2,300	1,540	256	28	28	32
10	19	161	100	190	255	3,800	2,570	689	196	26	26	32
11	18	155	100	182	249	9,600	1,490	497	160	25	24	52
12	17	235	150	150	278	5,330	851	389	138	23	22	44
13	14	5,890	500	100	2,510	999	540	319	137	22	20	36
14	14	10,000	500	100	2,790	3,700	651	260	379	21	20	27
15	14	2,700	400	100	985	2,190	5,410	221	1,300	19	20	22
16	13	624	300	100	478	730	5,510	188	446	18	22	19
17	12	492	200	100	318	517	5,660	165	446	17	21	19
18	11	444	150	1,000	280	415	1,160	149	176	16	18	17
19	9.9	401	200	6,460	263	365	830	137	4,680	45	18	16
20	8.6	396	2,870	1,600	261	460	1,370	126	1,390	43	16	14
21	10	471	1,760	3,620	270	1,190	2,970	124	396	39	15	14
22	88	554	1,080	4,930	259	565	7,160	138	240	419	15	14
23	383	498	802	1,430	241	418	6,850	141	166	332	14	12
24	357	491	600	694	225	831	1,400	154	134	3,340	12	12
25	203	555	400	502	207	7,810	871	134	111	652	12	12
26	125	688	300	425	189	10,800	897	119	97	292	11	12
27	86	700	250	385	174	2,340	522	112	86	171	9.6	12
28	66	447	200	380	165	974	400	109	71	116	8.8	14
29	58	357	200	511	-----	4,390	338	106	64	94	8.8	14
30	46	309	400	370	-----	2,390	295	97	58	199	8.0	16
31	49	-----	1,340	398	-----	4,810	-----	85	-----	695	7.6	-----
TOTAL	2,357.5	38,928	14,440	31,266	18,055	98,245	67,673	19,071	21,752	6,969	1,135.8	1,703.8
MEAN	76.0	1,298	466	1,009	645	3,169	2,256	615	725	225	36.6	56.8
MAX	383	10,000	2,870	6,460	2,890	13,000	9,840	6,490	5,000	3,340	259	851
MIN	8.6	155	100	100	165	165	295	85	58	16	7.6	7.2
CFSM	.14	2.31	.83	1.80	1.15	5.65	4.02	1.10	1.29	.40	.07	.10
IN.	.16	2.58	.96	2.07	1.20	6.51	4.49	1.26	1.44	.46	.08	.11
AC=FT	4,680	77,210	28,640	62,020	35,810	194,900	134,200	37,830	43,150	13,820	2,250	3,380

CAL YR 1972 TOTAL 100,387.4 MEAN 274 MAX 10,000 MIN 1.2 CFSM .49 IN 6.66 AC=FT 199,100
WTR YR 1973 TOTAL 321,596.1 MEAN 881 MAX 13,000 MIN 7.2 CFSM 1.57 IN 21.33 AC=FT 637,900

PEAK DISCHARGE (BASE, 7,500 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-14	1415	22.01	10,600	4-1	1615	22.41	10,700
3-7	1545	24.72	14,500	4-17	0700	19.61	7,760
3-11	1645	22.63	10,900	4-23	0345	20.97	8,900
3-26	0800	23.68	12,700	6-6	0130	19.65	7,760

06918440 Sac River near Dadeville, Mo.

LOCATION.--Lat 37°26'35", long 93°41'05", in NE¼NE¼NW¼ sec.9, T.31 N., R.25 W., Dade County, on downstream side of bridge on State Highway 245, 2 mi (3.2 km) upstream from Cave Spring Branch and 2 mi (3.2 km) south of Dadeville.

DRAINAGE AREA.--257 mi² (666 km²).

PERIOD OF RECORD.--June 1966 to current year. Annual maximum, water years 1965-66.

GAGE.--Water-stage recorder. Datum of gage is 869.78 ft (265.109 m) above mean sea level (levels by Missouri State Highway Commission). Prior to June 1966, crest-stage gage at same site and datum.

AVERAGE DISCHARGE.--7 years, 228 ft³/s (6.46 m³/s), 12.05 in/yr (306 mm/yr), 165,200 acre-ft/yr (203.7 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 8,030 ft³/s (227 m³/s) Nov. 1 (gage height, 20.63 ft or 6.288 m, from floodmark); minimum, 24 ft³/s (0.680 m³/s) Aug. 31, Sept. 1 (gage height, 4.79 ft or 1.460 m).
Period of record: Maximum discharge, 8,030 ft³/s (227 m³/s) Nov. 1, 1972 (gage height, 20.63 ft or 6.288 m); minimum, 9.4 ft³/s (0.266 m³/s) Aug. 21, 1972 (gage height, 4.34 ft or 1.323 m).

REMARKS.--Records fair.

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	400	6,000	350	250	466	194	1,880	1,500	150	226	65	26
2	300	3,950	300	250	451	231	1,200	1,500	415	539	63	32
3	250	2,000	300	400	414	237	900	1,200	627	231	61	32
4	220	1,000	250	600	391	244	700	1,000	446	194	58	66
5	200	900	250	500	374	292	600	900	680	167	55	386
6	180	800	250	500	358	1,420	500	800	610	151	53	116
7	160	700	200	450	358	2,590	400	1,470	487	139	50	82
8	150	597	190	400	402	1,570	400	1,800	382	130	48	70
9	140	512	180	400	363	1,200	1,000	1,300	315	123	47	78
10	140	522	170	350	377	2,020	700	1,000	272	119	46	76
11	130	484	160	300	366	3,680	500	900	248	151	47	60
12	110	573	400	300	358	2,010	400	700	231	125	44	54
13	100	3,900	450	300	354	1,310	350	600	217	112	53	51
14	120	2,340	400	250	339	1,230	320	500	224	106	52	48
15	200	1,380	350	300	315	1,000	300	400	746	129	47	45
16	150	914	300	350	294	838	1,300	300	380	125	44	42
17	100	800	300	400	279	732	900	250	299	105	42	41
18	90	700	312	800	274	658	600	220	258	96	39	39
19	90	600	589	1,500	264	638	900	200	244	89	37	37
20	80	500	683	1,000	255	754	1,100	200	228	84	36	37
21	90	500	621	1,500	244	629	1,000	180	204	82	34	38
22	800	500	560	1,800	235	514	5,000	180	187	79	32	173
23	700	500	505	1,370	231	434	3,000	180	175	87	32	88
24	500	500	413	1,180	222	904	2,000	200	165	95	31	61
25	400	550	366	964	213	2,350	3,000	180	156	131	30	280
26	300	600	318	838	205	1,490	2,000	170	149	97	29	160
27	250	500	300	732	198	1,170	1,800	180	149	83	27	111
28	250	450	300	645	194	1,090	1,600	170	137	76	26	106
29	200	400	250	552	-----	1,350	1,400	160	132	72	25	120
30	200	350	300	502	-----	1,190	1,200	150	130	77	25	247
31	400	-----	300	472	-----	2,020	-----	150	-----	69	25	-----
TOTAL	7,400	34,022	10,617	20,155	8,794	35,989	36,950	18,640	9,043	4,089	1,303	2,802
MEAN	239	1,134	342	650	314	1,161	1,232	601	301	132	42.0	93.4
MAX	800	6,000	683	1,800	466	3,680	5,000	1,800	746	539	65	386
MIN	80	350	160	250	194	194	300	150	130	69	25	26
CFSM	.93	4.41	1.33	2.53	1.22	4.52	4.79	2.34	1.17	.51	.16	.36
IN.	1.07	4.92	1.54	2.92	1.27	5.21	5.35	2.70	1.31	.59	.19	.41
AC-FT	14,680	67,480	21,060	39,980	17,440	71,380	73,290	36,970	17,940	8,110	2,580	5,560

CAL YR 1972 TOTAL 76,989.8 MEAN 210 MAX 6,000 MIN 9.8 CFSM .82 IN 11.14 AC-FT 152,700
WTR YR 1973 TOTAL 189,804.0 MEAN 520 MAX 6,000 MIN 25 CFSM 2.02 IN 27.47 AC-FT 376,500

PEAK DISCHARGE (BASE, 3,000 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-1	1200	20.63	8,030	3-11	0230	16.19	4,670
11-13	1130	16.40	4,810	3-24	2045	18.03	5,300
3-7	0315	13.33	4,210	4-22	1415	17.13	5,250

OSAGE RIVER BASIN

06918460 Turnback Creek above Greenfield, Mo.

LOCATION.--Lat 37°24'09", long 93°48'06", on line between secs.21 and 28, T.31 N., R.26 W., Dade County, on downstream side of left pier of bridge on County Highway O, 1.5 mi (2.4 km) downstream from Limestone Creek, and 2 mi (3.2 km) southeast of Greenfield.

DRAINAGE AREA.--252 mi² (653 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 870.34 ft (265.280 m) above mean sea level (levels by Missouri State Highway Commission).

AVERAGE DISCHARGE.--8 years, 235 ft³/s (6.66 m³/s), 12.66 in/yr (322 mm/yr), 170,300 acre-ft/yr (210 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 23,100 ft³/s (654 m³/s) Nov. 1 (gage height, 24.45 ft or 7.452 m, floodmark); minimum, 32 ft³/s (0.91 m³/s) Sept. 1 (gage height, 6.25 ft or 1.905 m).
Period of record.--Maximum discharge, 23,100 ft³/s (654 m³/s) Nov. 1, 1972 (gage height, 24.45 ft or 7.452 m, floodmark); minimum, 13 ft³/s (0.37 m³/s) Aug. 21, 1972; minimum gage height, 5.76 ft (1.756 m) Oct. 5, 10, 1970.

REMARKS.--Records good except period of backwater from Stockton Lake, 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	426	5,480	348	303	566	176	2,160	1,500	150	126	80	36
2	331	4,770	319	284	530	253	1,200	1,500	375	122	72	221
3	271	1,670	294	485	484	225	900	1,200	1,940	116	68	70
4	229	1,140	272	613	455	259	700	1,000	681	113	64	62
5	201	861	254	556	429	608	600	900	735	108	62	547
6	183	715	238	518	407	3,130	500	800	599	103	59	159
7	166	620	216	485	414	3,020	400	1,430	485	101	58	128
8	151	511	206	456	473	1,640	400	1,800	413	98	56	114
9	140	449	193	420	422	1,280	1,000	1,300	360	96	52	109
10	140	448	174	394	412	3,340	700	1,000	325	94	53	104
11	133	389	170	374	404	3,660	500	900	295	96	52	86
12	117	500	433	364	394	1,840	400	700	271	90	51	77
13	109	4,230	442	340	401	1,350	350	600	261	87	56	82
14	112	1,820	401	325	378	1,150	320	500	261	85	55	72
15	115	1,170	360	350	345	876	300	400	441	104	50	70
16	103	908	317	386	322	731	1,300	300	318	92	49	65
17	96	742	288	418	302	625	900	250	274	85	46	62
18	89	629	286	1,060	293	539	600	220	243	84	45	58
19	88	589	631	1,340	282	585	900	200	227	80	43	56
20	83	533	676	1,040	273	781	1,100	200	213	76	42	53
21	87	509	647	2,600	257	565	1,000	180	194	75	44	49
22	618	501	575	2,360	242	483	6,500	180	180	74	42	126
23	684	504	522	1,600	234	445	3,000	180	168	74	40	113
24	512	518	468	1,260	220	1,590	2,000	200	160	108	38	92
25	424	541	428	1,060	210	3,530	3,000	180	151	135	37	1,210
26	367	538	393	930	199	1,810	2,000	170	147	85	35	462
27	326	484	364	832	186	1,350	1,800	180	166	77	34	320
28	289	437	341	745	177	1,200	1,600	170	147	71	34	265
29	258	399	323	654	-----	1,680	1,400	160	138	69	34	249
30	237	372	356	606	-----	1,360	1,200	150	135	71	34	566
31	365	-----	341	569	-----	2,620	-----	150	-----	103	34	-----
TOTAL	7,450	32,977	11,276	23,727	9,711	42,701	38,730	18,600	10,453	2,898	1,519	5,683
MEAN	240	1,099	364	765	347	1,377	1,291	600	348	93.5	49.0	189
MAX	684	5,480	676	2,600	566	3,660	6,500	1,800	1,940	135	80	1,210
MIN	83	372	170	284	177	176	300	150	135	69	34	36
CFSM	.95	4.36	1.44	3.04	1.38	5.46	5.12	2.38	1.38	.37	.19	.75
IN.	1.10	4.87	1.66	3.50	1.43	6.30	5.72	2.75	1.54	.43	.22	.84
AC-FT	14,780	65,410	22,370	47,060	19,260	84,700	76,820	36,890	20,730	5,750	3,010	11,270

CAL YR 1972 TOTAL 79,941 MEAN 218 MAX 5,480 MIN 14 CFSM .87 IN 11.80 AC-FT 158,600
WTR YR 1973 TOTAL 205,725 MEAN 564 MAX 6,500 MIN 34 CFSM 2.24 IN 30.37 AC-FT 408,100

PEAK DISCHARGE (BASE, 3,000 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-1	1130	24.45	23,100	3-25	0345	16.37	5,470
11-13	1115	16.77	6,060	3-31	1430	13.25	3,100
1-21	0800	12.60	3,070	4-22	0730	17.62	7,000
3-6	1930	16.21	5,620	6-3	0700	13.73	3,660
3-10	1845	18.69	9,660				

OSAGE RIVER BASIN

87

06918700 Oak Grove Branch near Brighton, Mo.

LOCATION.--Lat 37°24'11", long 93°21'21", in SE¼NW¼ sec.21, T.31 N., R.22 W., Greene County, on left bank just upstream from culvert on County Highway BB, 0.6 mi (1.0 km) west of State Highway 13 and 4 mi (6.4 km) south of Brighton.

DRAINAGE AREA.--1.30 mi² (3.38 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 1,030 ft (314 m) from topographic map.

AVERAGE DISCHARGE.--17 years, 0.89 ft³/s (0.252 m³/s), 9.30 in/yr (236 mm/yr), 645 acre-ft/yr (795,300 m³/yr).

EXTREMES.--Current year: Maximum discharge, 368 ft³/s (10.4 m³/s) Nov. 1 (gage height, 4.30 ft or 1.311 m); no flow on many days.

Period of record: Maximum discharge, 845 ft³/s (23.9 m³/s) May 22, 1957 (gage height, 7.60 ft or 2.316 m); no flow at times each year.

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	.10	81	.50	.10	1.4	.30	3.4	5.0	.10			0
2	.10	5.2	.40	.10	1.9	4.0	1.9	3.4	.80			0
3	0	1.4	.30	.50	1.9	2.3	1.3	1.7	3.2			0
4	0	.40	.30	.10	1.7	2.0	1.1	1.4	.90			0
5	0	.10	.20	.10	1.4	2.2	.90	.90	3.8			0
6	0	.10	.20	.20	1.3	27	.70	1.4	1.9			0
7	0	0	.20	.10	2.1	5.9	.50	14	1.1			0
8	0	0	.20	.10	2.9	2.5	1.4	4.0	.60			0
9	0	0	.20	.10	1.6	2.7	5.2	1.7	.50			12
10	0	.10	.20	.10	1.1	38	3.6	1.2	.40			.40
11	0	.20	.10	.10	.90	5.0	1.7	.90	.20			.10
12	0	20	1.5	.10	.70	2.3	1.2	.50	.20			0
13	0	24	2.1	.10	.70	1.9	.90	.30	.10			0
14	.60	3.0	1.7	.10	.80	4.6	.70	.20	.10			0
15	.50	1.6	1.2	.10	.70	2.3	.70	.10	15			0
16	.50	1.1	.90	.40	.50	1.6	14	0	.90			0
17	.30	.70	.40	1.0	.40	1.2	3.0	0	.30			0
18	.20	.50	.20	.50	.40	.90	1.7	0	.10			0
19	.20	.50	.30	.10	.40	.70	8.1	0	.10			0
20	.20	.50	.10	.10	.20	1.2	5.0	0	0			0
21	.70	.70	0	1.0	.20	1.3	8.7	0	0			0
22	10	1.1	0	5.0	.20	1.2	40	0	0			.50
23	2.0	1.7	0	3.4	.20	.90	3.0	0	0			.10
24	.80	2.2	0	2.7	.20	19	10	0	0			0
25	.30	2.2	0	2.0	.20	14	14	0	0			1.3
26	.10	2.2	0	1.7	.20	5.2	4.0	0	0			.70
27	0	1.3	0	1.6	.20	3.4	2.3	0	0			.20
28	0	.90	0	1.4	.20	3.4	1.4	0	0			.30
29	0	.60	0	1.3	-----	8.4	1.1	0	0			.30
30	0	.50	.60	1.2	-----	4.8	.90	0	0			1.4
31	2.8	-----	.20	1.2	-----	23	-----	0	-----			-----
TOTAL	19.40	153.80	12.00	26.60	24.60	193.20	142.40	36.70	30.30	0	0	17.30
MEAN	.63	5.13	.39	.86	.88	6.23	4.75	1.18	1.01	0	0	.58
MAX	10	81	2.1	5.0	2.9	38	40	14	15	0	0	12
MIN	0	0	0	.10	.20	.30	.50	0	0	0	0	0
CFSM	.48	3.95	.30	.66	.68	4.79	3.65	.91	.78	0	0	.45
IN.	.56	4.40	.34	.76	.70	5.53	4.07	1.05	.87	0	0	.50
AC-FT	38	305	24	53	49	383	282	73	60	0	0	34

CAL YR 1972 TOTAL 328.30 MEAN .90 MAX 81 MIN 0 CFSM .69 IN 9.39 AC-FT 651
WTR YR 1973 TOTAL 656.30 MEAN 1.80 MAX 81 MIN 0 CFSM 1.38 IN 18.78 AC-FT 1,300

PEAK DISCHARGE (BASE, 100 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-1	0315	4.30	368	4-22	0015	3.67	290
11-12	2045	3.35	254	6-15	0045	2.78	190
3-10	0830	2.46	52	9-10	0315	2.94	206
3-31	0230	2.10	113				

06918740 Little Sac River near Morrisville, Mo.

LOCATION.--Lat 37°28'58", long 93°29'07", SW¼SW¼ sec.20, T.32 N., R.23 W., Polk County, on downstream side of center pier of Hamilton Bridge on State Highway 215, 0.7 mi (1.1 km) upstream from Slagle Creek and 3 mi (4.8 km) west of Morrisville.

DRAINAGE AREA.--237 mi² (614 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 881 ft (268.5 m) from topographic map.

AVERAGE DISCHARGE.--5 years, 226 ft³/s (6.40 m³/s), 12.95 in/yr (329 mm/yr), 163,700 acre-ft/yr (202 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 13,200 ft³/s (374 m³/s) Nov. 1 (gage height, 21.95 ft or 6.690 m); minimum, 13 ft³/s (0.37 m³/s) Aug. 31, Sept. 1-4 (gage height, 2.66 ft or 0.811 m).
Period of record: Maximum discharge, 13,200 ft³/s (374 m³/s) Nov. 1, 1972 (gage height, 21.95 ft or 6.690 m) from rating curve extended above 4,000 ft³/s (113 m³/s); minimum, 3.2 ft³/s (0.091 m³/s) Aug. 21, 1972 (gage height, 2.24 ft or 0.683 m).

REMARKS.--Records fair.

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	196	7,850	275	191	383	126	2,020	1,480	150	490	23	13
2	138	3,820	250	179	415	309	1,230	1,660	331	994	22	13
3	102	1,430	230	362	364	281	896	1,240	600	347	22	13
4	79	976	225	494	330	265	723	1,010	287	246	22	71
5	62	716	203	335	303	331	582	845	401	193	21	430
6	48	592	190	280	278	3,050	466	820	321	155	21	92
7	40	530	175	240	334	2,720	391	2,580	245	127	20	56
8	33	411	173	220	539	1,380	407	1,800	209	101	19	44
9	27	348	161	200	374	1,050	997	1,300	183	88	19	540
10	26	417	155	180	323	4,150	703	1,060	166	80	18	121
11	26	347	150	180	294	2,880	529	894	154	122	19	62
12	28	843	421	180	280	1,420	430	761	145	124	18	43
13	25	6,100	370	180	289	1,010	363	602	136	95	18	34
14	135	1,980	318	186	261	1,230	319	481	133	75	18	30
15	295	1,150	263	192	226	854	301	375	1,340	77	17	27
16	192	823	224	211	205	654	1,300	312	329	107	16	24
17	148	629	202	247	191	515	846	259	231	90	15	22
18	119	502	211	1,720	186	415	603	227	187	74	16	21
19	103	521	417	2,060	175	451	925	206	183	63	15	18
20	91	446	478	1,120	170	531	1,100	193	173	52	15	18
21	109	435	400	2,960	160	391	986	183	144	44	14	16
22	1,010	469	332	2,490	152	326	6,500	176	125	41	14	216
23	715	497	292	1,520	148	303	2,570	183	110	38	14	138
24	406	556	269	1,050	138	1,420	1,710	195	99	41	14	72
25	302	584	239	805	133	3,450	3,040	181	88	60	14	134
26	250	606	227	675	129	1,690	2,090	171	80	62	14	134
27	215	508	209	568	126	1,110	1,710	178	75	46	14	87
28	188	396	199	492	122	909	1,550	170	64	36	13	77
29	146	338	194	408	-----	1,730	1,380	162	58	30	13	82
30	109	302	226	356	-----	1,080	1,220	154	55	28	13	177
31	224	-----	211	335	-----	3,970	-----	147	-----	24	13	-----
TOTAL	5,587	35,122	7,889	20,616	7,028	40,001	37,887	20,005	6,802	4,150	524	2,825
MEAN	180	1,171	254	665	251	1,290	1,263	645	227	134	16.9	94.2
MAX	1,010	7,850	478	2,960	539	4,150	6,500	2,580	1,340	994	23	540
MIN	25	302	150	179	122	126	301	147	55	24	13	13
CFSM	.76	4.94	1.07	2.81	1.06	5.44	5.33	2.72	.96	.57	.07	.40
IN.	.88	5.51	1.24	3.24	1.10	6.28	5.95	3.14	1.07	.65	.08	.44
AC-FT	11,080	69,660	15,650	40,890	13,940	79,340	75,150	39,680	13,490	8,230	1,040	5,600

CAL YR 1972 TOTAL 74,479.7 MEAN 203 MAX 7,850 MIN 3.5 CFSM .86 IN 11.69 AC-FT 147,700
WTR YR 1973 TOTAL 188,436.0 MEAN 516 MAX 7,850 MIN 13 CFSM 2.18 IN 29.58 AC-FT 373,800

PEAK DISCHARGE (BASE, 3,000 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-1	1015	21.95	13,200	3-6	1630	13.53	6,010	4-22	0930	17.69	9,280
11-13	0515	16.97	8,600	3-10	1630	15.12	7,210	5-7	0945	9.94	3,340
1-18	1800	10.56	3,950	3-25	0015	11.32	4,420	6-15	0615	9.30	3,070
1-21	0745	10.07	3,620	3-31	0930	13.41	5,970				

06918990 Stockton Lake near Stockton, Mo.

LOCATION.--Lat 37°41'38", long 93°45'55", SW¼SE¼SW¼ sec.10, T.34 N., R.26 W., Cedar County, in power house at dam on Sac River, 2 mi (3.2 km) east of Stockton.

DRAINAGE AREA.--1,160 mi² (3,004 km²).

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

GAGE.--Water-stage recorder. Nonrecording gage prior to May 30, 1973. Datum of gage is at mean sea level (levels by Corps of Engineers).

EXTREMES.--Current year: Maximum contents observed, 1,450,000 acre-ft (1,790 hm³) Apr. 28 (elevation, 885.94 ft or 270.034 m); minimum, 748,000 acre-ft (922 hm³) Sept. 29 (elevation, 861.08 ft or 262.457 m).

Period of record: Maximum contents, 1,450,000 acre-ft (1,790 hm³) Apr. 28, 1973 (elevation, 885.94 ft or 270.034 m); minimum, since initial filling to minimum power pool level, 352,000 acre-ft (434 hm³) Aug. 27 to Sept. 4, 1970 (elevation, 839.60 ft or 255.910 m).

REMARKS.--Lake is formed by a rock shell earth-fill dam (crest elevation, 911 ft or 277.7 m). Spillway is equipped with 4 tainter gates, 40 ft (12.2 m) by 30.5 ft (9.30 m), crest elevation, 861.5 ft or 262.59 m. Embankment closed and river diverted on Sept. 23, 1968. Gates closed and storage began on Dec. 12, 1969; minimum power elevation 830.0 ft (252.98 m) reached on May 1, 1970. Gross storage at top of flood control pool is 1,166,659 acre-ft (1,440 hm³) at elevation 892 ft (271.88 m), of which 779,550 acre-ft (961 hm³) between elevations 867 ft (264.3 m) and 892 ft (271.9 m) is used for flood control, and 887,109 acre-ft (1,093 hm³) between elevations 760 ft (231.6 m) and 867 ft (264.3 m) is used for multipurpose and power. Sedimentation reserve is 25,000 acre-ft (30.8 hm³). Lake is used for flood control, power, and recreational purposes. Contents computed from daily readings at 0800.

COOPERATION.--Records furnished by Corps of Engineers.

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

861	745,700
865	883,400
870	963,400
880	1,250,000
886	1,450,000

CONTENTS, IN THOUSANDS OF ACRE-FEET, AT 0800, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	870	925	950	995	1,040	939	1,260	1,430	1,170	931	875	803
2	870	1,000	953	995	1,040	938	1,270	1,430	1,160	928	875	807
3	870	1,010	956	995	1,030	939	1,280	1,420	1,160	925	872	807
4	872	1,010	956	995	1,030	940	1,280	1,420	1,150	924	870	806
5	875	1,010	961	995	1,030	944	1,290	1,410	1,140	923	870	805
6	875	1,000	961	995	1,020	951	1,290	1,400	1,130	920	870	804
7	875	990	961	995	1,010	982	1,300	1,410	1,120	917	870	797
8	875	984	961	990	1,010	996	1,290	1,420	1,110	916	866	795
9	875	977	961	995	1,000	1,000	1,290	1,420	1,100	913	861	795
10	875	967	963	990	996	1,010	1,290	1,410	1,090	910	857	795
11	875	958	963	987	990	1,060	1,290	1,400	1,070	909	853	790
12	875	948	963	984	984	1,080	1,280	1,400	1,060	906	853	786
13	877	963	963	984	978	1,090	1,280	1,390	1,050	905	858	783
14	880	1,000	974	982	971	1,100	1,270	1,380	1,040	904	853	780
15	880	1,020	977	982	965	1,100	1,270	1,370	1,030	904	853	777
16	880	1,010	979	982	963	1,110	1,270	1,360	1,020	904	853	777
17	880	1,010	977	982	963	1,120	1,290	1,340	1,010	902	853	777
18	880	1,010	977	984	963	1,120	1,290	1,330	995	894	853	774
19	880	1,000	987	998	963	1,120	1,300	1,320	983	886	853	764
20	880	995	987	1,010	959	1,120	1,300	1,310	970	883	853	760
21	880	990	992	1,020	959	1,120	1,310	1,300	958	882	847	757
22	885	987	992	1,040	961	1,120	1,320	1,290	958	882	841	753
23	892	977	992	1,050	960	1,120	1,370	1,270	954	881	838	754
24	895	969	998	1,050	957	1,120	1,380	1,270	952	879	832	757
25	897	966	998	1,050	949	1,150	1,410	1,250	949	876	829	755
26	897	963	998	1,050	941	1,170	1,430	1,250	946	877	828	755
27	902	963	998	1,040	939	1,190	1,440	1,230	944	880	826	752
28	902	963	998	1,040	939	1,190	1,450	1,220	944	877	822	751
29	902	956	998	1,040	-----	1,210	1,440	1,200	941	877	816	748
30	902	950	998	1,040	-----	1,220	1,440	1,200	936	882	812	750
31	907	-----	995	1,040	-----	1,240	-----	1,190	-----	876	807	-----
(†)	867.80	869.50	871.20	872.76	869.07	879.54	885.69	877.92	868.94	866.54	863.89	861.20
(‡)	+37	+43	+45	+45	-101	+301	+200	-250	-154	-60	-69	-57
MAX	907	1,020	998	1,050	1,040	1,240	1,450	1,430	1,170	931	875	807
MIN	870	925	950	982	939	938	1,260	1,190	936	876	807	748
CAL YR 1972.....‡			+88									
WTR YR 1973.....‡			-120									

† Elevation, in feet, at end of month.

‡ Change in contents, in thousands of acre-feet.

OSAGE RIVER BASIN

06919000 Sac River near Stockton, Mo.

LOCATION.--Lat 37°42'03", long 93°45'20", in SW¼NW¼ sec.11, T.34 N., R.26 W., Cedar County, on right bank 20 ft (6 m) upstream from bridge on State Highway 32, 0.4 mi (0.6 km) downstream from Stockton Dam, 0.8 mi (1.3 km) upstream from Bear Creek, and 2 mi (3.2 km) east of Stockton, and at mile 49.0 (78.8 km).

DRAINAGE AREA.--1,160 mi² (3,000 km²), approximately.

PERIOD OF RECORD.--July 1921 to current year.

GAGE.--Water-stage recorder. Datum of gage is 764.12 ft (232.904 m) above mean sea level. Prior to Oct. 7, 1932, nonrecording gage at site 57 ft (17 m) downstream at same datum. Oct. 7, 1932, to May 3, 1960, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--52 years, 968 ft³/s (27.4 m³/s), 11.34 in/yr (288 mm/yr), 701,300 acre-ft/yr (864.7 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 7,930 ft³/s (225 m³/s) Dec. 16 (gage height, 16.85 ft or 5.136 m); minimum recorded, 9.2 ft³/s (0.261 m³/s) Aug. 12; minimum gage height recorded, 0.50 ft (0.152 m) Aug. 12, 14, 16, 17.

Period of record: Maximum discharge, 120,000 ft³/s (3,400 m³/s) May 19, 1943 (gage height, 31.8 ft or 9.693 m); no flow Sept. 9-23, 1954, Oct. 14, 17-20, 1956; minimum gage height, 0.50 ft (0.152 m) Aug. 12, 14, 16, 17, 1973.

Maximum stage known prior to 1943, 29.3 ft (8.93 m) in July, 1909.

REMARKS.--Records poor. Flow regulated by Stockton Lake since Dec. 12, 1969.

REVISIONS (WATER YEARS).--WSP 926: 1940.

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	107	1,500	368	1,440	952	1,590	15	6,700	6,940	2,500	31	77
2	100	3,000	205	1,420	3,160	924	15	6,780	6,890	2,500	1,260	43
3	109	4,700	207	2,180	3,100	919	15	6,760	6,950	1,610	858	39
4	115	7,050	207	2,920	3,080	931	15	6,790	6,850	1,010	50	2,430
5	115	6,890	207	2,640	3,800	969	15	6,780	6,880	1,630	21	2,510
6	115	6,720	308	2,580	4,900	1,000	15	6,880	6,950	1,640	21	2,490
7	117	6,530	602	2,560	4,840	1,100	2,340	5,870	7,050	1,050	1,470	2,490
8	117	6,360	823	2,540	4,840	1,210	4,310	6,330	7,060	1,440	1,760	68
9	119	6,200	218	2,500	4,740	1,140	4,460	6,780	7,040	1,690	2,410	18
10	121	6,400	218	2,480	4,620	1,000	3,070	6,790	7,100	841	2,410	2,450
11	117	7,460	1,420	2,140	4,570	500	3,570	6,800	7,040	1,680	46	2,500
12	115	4,100	317	1,300	4,500	174	4,190	6,760	7,080	1,700	11	2,060
13	117	2,730	331	1,290	4,450	86	4,210	6,770	7,070	1,490	11	1,340
14	139	343	241	1,290	4,370	60	4,170	6,760	7,080	39	12	1,500
15	125	2,000	216	1,300	2,740	40	4,220	6,790	6,940	23	12	82
16	113	5,190	1,630	1,300	1,290	19	3,010	6,800	7,080	2,100	12	41
17	107	5,110	187	1,320	1,280	17	100	6,800	7,080	847	13	2,030
18	109	5,020	187	1,500	1,270	12	20	6,810	7,070	1,670	23	3,300
19	109	4,980	296	964	1,270	2,780	5,330	6,830	7,020	1,670	24	4,630
20	109	4,930	468	434	931	3,220	5,250	6,840	6,810	1,730	2,370	1,620
21	113	4,860	562	2,480	511	2,650	1,000	6,830	1,460	54	2,440	1,640
22	234	5,470	865	2,470	892	4,460	100	6,850	1,420	21	2,450	52
23	159	7,390	1,370	3,190	1,870	3,430	15	6,850	1,680	1,260	2,430	30
24	121	6,020	1,480	4,140	4,830	1,370	15	6,880	1,630	1,490	1,790	1,600
25	117	2,380	1,460	4,000	4,750	100	15	6,850	1,280	54	61	1,640
26	115	2,380	1,450	3,930	3,350	50	15	6,840	1,120	21	34	1,640
27	115	2,350	1,450	3,250	802	20	100	6,850	1,510	20	2,420	1,620
28	115	4,050	1,440	2,530	829	15	2,410	6,960	1,510	20	2,460	1,560
29	117	5,280	1,440	2,500	-----	15	6,720	6,930	2,080	21	2,450	46
30	119	1,160	1,460	3,250	-----	15	6,800	6,910	2,500	1,480	2,450	20
31	133	-----	1,460	3,920	-----	15	-----	6,940	-----	399	2,420	-----
TOTAL	3,753	138,553	23,093	71,758	82,537	29,831	65,530	210,110	156,170	33,700	34,230	41,566
MEAN	121	4,618	745	2,315	2,948	962	2,184	6,778	5,206	1,087	1,104	1,386
MAX	234	7,460	1,630	4,140	4,900	4,460	6,800	6,960	7,100	2,500	2,460	4,630
MIN	100	343	187	434	511	12	15	5,870	1,120	20	11	18
AC-FT	7,440	274,800	45,800	142,300	163,700	59,170	130,000	416,800	309,800	66,840	67,900	82,450

CAL YR 1972 TOTAL 278,820.9 MEAN 762 MAX 7,460 MIN 3.3 AC-FT 553,000
 WTR YR 1973 TOTAL 890,831.0 MEAN 2,441 MAX 7,460 MIN 11 AC-FT 1,767,000

06919500 Cedar Creek near Pleasant View, Mo.

LOCATION.--Lat 37°50'03", long 93°52'31", in NE¼ sec.2, T.35 N., R.27 W., Cedar County, on downstream side of right pier of bridge on State Highway 39, 1.5 mi (2.4 km) north of Pleasant View, 1.8 mi (2.9 km) downstream from Alder Creek, and 5.8 mi (9.3 km) upstream from mouth.

DRAINAGE AREA.--420 mi² (1,090 km²), approximately.

PERIOD OF RECORD.--April 1923 to September 1926, October 1948 to current year.

GAGE.--Water-stage recorder. Datum of gage is 739.5 ft (225.40 m) above mean sea level. Apr. 22, 1923, to Sept. 30, 1926, and Oct. 1, 1948, to May 10, 1950, nonrecording gage at site 50 ft (15 m) downstream at same datum. May 11, 1950, to Dec. 17, 1952, nonrecording gage, at present site and datum.

AVERAGE DISCHARGE.--28 years, 291 ft³/s (8.24 m³/s), 9.41 in/yr (239 mm/yr), 210,800 acre-ft/yr (259.9 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 11,200 ft³/s (317 m³/s) Apr. 17, 21; maximum gage height, 22.66 ft (6.907 m) Apr. 17; minimum, 0.6 ft³/s (0.017 m³/s) Aug. 30, 31 (gage height, 2.98 ft or 0.908 m).
Period of record: Maximum discharge, 33,900 ft³/s (960 m³/s) July 17, 1958 (gage height, 27.35 ft or 8.336 m); no flow at times in 1953-54, 1956, 1959-61, 1963.
Maximum stage known, 27.7 ft (8.44 m) July 20, 1909, from floodmark.

REMARKS.--Records fair.

REVISIONS (WATER YEARS).--WSP 1146: 1923-26, drainage area. WSP 1176: 1924(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	5.0	3,050	253	382	792	147	3,120	659	74	11	149	1.3
2	3.5	4,500	230	278	1,210	256	1,190	1,920	136	10	38	1.2
3	3.2	1,780	209	912	879	496	765	1,450	361	10	19	161
4	3.2	560	192	2,880	599	777	619	722	559	10	10	1,820
5	3.2	380	177	1,000	487	3,110	520	545	387	12	6.7	1,720
6	3.2	305	162	400	416	3,730	438	568	477	13	5.0	185
7	3.2	281	143	370	502	5,630	378	5,220	321	12	3.5	88
8	3.0	238	136	340	892	3,340	358	7,090	185	16	2.9	53
9	2.8	207	130	320	594	1,520	768	3,490	130	15	2.9	38
10	2.3	189	114	300	440	3,360	1,030	991	96	12	3.4	30
11	2.3	177	100	300	389	7,520	670	693	74	9.6	3.9	24
12	2.2	267	175	300	377	4,740	508	552	61	8.1	4.0	22
13	1.8	4,670	376	300	397	1,100	420	441	51	7.3	4.3	19
14	111	6,150	465	300	386	961	630	366	44	6.6	5.0	16
15	135	2,100	420	300	330	863	842	311	138	6.3	4.3	14
16	48	680	315	300	271	604	6,710	269	624	5.5	3.6	13
17	31	521	268	400	242	485	8,430	234	259	5.7	3.2	13
18	16	419	246	1,000	230	412	4,270	206	134	6.0	2.9	11
19	12	400	739	1,500	229	369	1,080	182	86	7.0	2.9	11
20	8.5	482	2,150	1,000	226	866	3,180	161	61	9.0	2.9	9.5
21	8.5	584	2,300	2,000	213	1,040	10,200	140	47	11	2.7	8.7
22	778	644	1,320	1,500	201	571	8,280	130	39	13	2.2	8.3
23	917	698	752	1,000	186	446	4,010	141	34	18	1.8	9.0
24	400	653	611	928	174	2,080	1,230	194	30	104	1.5	9.0
25	195	623	509	758	169	8,780	3,550	355	25	22	1.3	12
26	135	701	421	677	159	7,750	5,890	193	21	27	1.0	9.7
27	97	611	365	662	153	3,180	2,400	158	18	15	.89	8.7
28	72	411	327	607	149	964	958	134	16	19	.83	10
29	56	319	297	526	-----	1,210	712	110	14	14	.71	12
30	52	278	374	472	-----	1,220	581	92	13	8.5	.63	24
31	471	-----	474	519	-----	3,020	-----	85	-----	10	.74	-----
TOTAL	3,581.9	32,878	14,750	22,531	11,292	70,527	73,737	27,802	4,515	453.6	291.70	4,361.4
MEAN	116	1,096	476	727	403	2,275	2,458	897	151	14.6	9.41	145
MAX	917	6,150	2,300	2,880	1,210	8,780	10,200	7,090	624	104	149	1,820
MIN	1.8	177	100	278	149	147	358	85	13	5.5	.63	1.2
CFSM	.28	2.61	1.13	1.73	.96	5.42	5.85	2.14	.36	.03	.02	.35
IN.	.32	2.91	1.31	2.00	1.00	6.25	6.53	2.46	.40	.04	.03	.39
AC-FT	7,100	65,210	29,260	44,690	22,400	139,900	146,300	55,150	8,960	900	579	8,650

CAL YR 1972 TOTAL 83,328.98 MEAN 228 MAX 6,150 MIN .60 CFSM .54 IN 7.38 AC-FT 165,300
WTR YR 1973 TOTAL 266,720.60 MEAN 731 MAX 10,200 MIN .63 CFSM 1.74 IN 23.62 AC-FT 529,000

PEAK DISCHARGE (BASE, 3,500 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-2	0730	17.75	5,020	3-25	2015	22.30	10,300	4-26	0500	19.62	6,520
11-14	0500	19.98	6,880	3-31	2215	16.43	4,180	5-7	2345	21.42	8,740
3-7	1430	19.03	5,940	4-17	0015	22.66	11,200	9-4	0700	15.43	3,820
3-11	1245	21.31	8,420	4-21	1515	22.65	11,200				

OSAGE RIVER BASIN

06920500 Osage River at Osceola, Mo.

LOCATION.--Lat 38°03'44", long 93°41'37", in NE¼NE¼ sec.17, T.38 N., R.25 W., St. Clair County, on left bank at downstream side of bridge on State Highway 13, 0.5 mi (0.8 km) downstream from Gallinipper Creek, 1 mi (1.6 km) downstream from hydroelectric plant of Missouri Public Service Co., 1 mi (1.6 km) northeast of Osceola, and at mile 230.9 (371.5 km).

DRAINAGE AREA.--8,220 mi² (21,300 km²), approximately.

PERIOD OF RECORD.--October 1917 to September 1928, October 1930 to current year. Monthly discharge only for some periods, published in WSP 1310. Gage-height records collected at site 1.2 mi (1.9 km) upstream April 1910 to November 1930, at present site November 1930 to April 1933 and since February 1938 are contained in reports of National Weather Service.

GAGE.--Water-stage recorder. Datum of gage is 679.23 ft (207.029 m) above mean sea level. Prior to Oct. 1, 1929, nonrecording gage at site 1.2 mi (1.9 km) upstream at datum 3.67 ft (1.119 m) higher. Nov. 28, 1930, to Sept. 27, 1934, water-stage recorder 233 ft (71.0 m) right on downstream side of bridge pier at present datum.

AVERAGE DISCHARGE.--54 years, 5,181 ft³/s (146.7 m³/s), 3,754,000 acre-ft/yr (4,629 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 64,800 ft³/s (1,835 m³/s) Apr. 22 (gage height, 29.39 ft or 8.958 m); minimum, 60 ft³/s (1.70 m³/s) Oct. 12; minimum gage height, 1.69 ft (0.515 m) Oct. 12, 14.
Period of record: Maximum discharge, 146,000 ft³/s (4,135 m³/s) May 21, 1943 (gage height, 41.48 ft or 12.643 m, in gage well, 41.7 ft or 12.71 m, from outside gage); minimum, 3.6 ft³/s (0.102 m³/s) Nov. 16-19, 1956; minimum gage height, 0.22 ft (0.067 m) Aug. 11, 1941.
Maximum stage known, about 45 ft (13.7 m) in June 1844 (discharge, about 150,000 ft³/s or 4,250 m³/s).

REMARKS.--Records fair. Low and medium flow regulated by powerplant 1 mi (1.6 km) upstream.

REVISIONS (WATER YEARS).--WSP 606: 1922.

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	1,060	14,900	4,700	12,300	18,000	3,240	54,300	28,500	13,400	2,980	1,930	3,020
2	810	24,000	3,280	12,300	20,300	10,100	51,300	25,700	13,300	2,830	1,440	1,570
3	946	19,700	2,740	11,600	22,900	12,400	46,800	25,900	14,300	2,770	1,600	1,200
4	516	14,800	2,570	20,100	22,900	13,900	44,200	25,600	16,200	2,080	1,760	2,950
5	369	14,300	2,480	21,700	23,600	19,300	42,800	25,600	20,800	1,550	1,340	5,640
6	361	13,100	2,250	18,600	25,200	25,600	41,400	26,500	22,000	1,920	890	6,620
7	295	10,600	2,070	17,400	25,700	31,900	39,300	34,600	22,400	2,060	623	5,900
8	71	8,880	2,340	17,400	24,600	31,800	35,700	38,700	22,100	1,370	1,150	4,030
9	101	8,340	2,600	13,600	20,600	30,700	32,400	36,400	19,600	1,390	2,030	2,070
10	559	8,070	1,780	9,410	16,700	35,500	27,800	31,800	14,500	1,670	2,640	2,260
11	360	8,280	1,750	7,950	14,800	44,900	22,700	28,200	11,600	1,060	2,640	4,480
12	188	9,250	3,140	7,110	14,600	47,800	20,200	27,200	10,000	1,370	1,220	4,430
13	288	21,800	2,890	6,920	14,300	46,700	17,800	25,600	9,290	1,570	643	3,600
14	692	25,600	3,040	6,360	14,400	44,800	17,000	20,900	9,300	1,430	708	4,870
15	3,150	21,900	2,800	5,300	12,200	44,800	23,200	15,700	9,470	712	504	8,280
16	2,720	17,600	2,480	5,700	9,580	44,300	36,000	13,500	9,400	305	479	6,490
17	1,650	17,900	4,610	7,580	7,600	42,800	38,400	12,600	11,400	1,170	324	3,970
18	997	16,500	3,790	14,300	6,220	39,800	36,500	11,900	11,400	965	385	4,040
19	660	14,900	3,910	22,200	5,980	34,600	33,000	11,000	11,000	1,530	174	6,410
20	404	12,700	8,670	21,600	4,520	30,800	39,500	10,400	9,440	2,050	195	6,860
21	404	11,400	12,600	26,300	3,850	27,400	56,100	10,200	7,800	5,600	1,620	3,930
22	4,440	11,600	13,000	31,100	3,400	25,700	64,200	12,300	3,560	8,170	2,700	3,380
23	11,000	12,400	12,400	29,700	3,560	27,100	61,800	15,500	2,550	8,530	2,760	2,240
24	8,450	13,600	11,800	27,000	4,700	32,300	54,400	18,900	2,500	6,810	2,740	1,720
25	5,960	12,200	9,780	26,400	6,930	44,900	50,200	20,800	2,390	6,200	2,310	3,870
26	3,300	10,000	8,080	27,000	6,950	48,200	52,800	20,800	2,210	7,310	1,320	10,700
27	1,960	9,890	6,770	22,400	5,280	49,100	50,300	19,400	1,910	7,050	637	14,900
28	1,430	9,100	6,120	24,600	3,080	46,600	42,800	16,900	1,960	4,210	1,890	16,600
29	1,030	9,600	5,820	23,200	-----	46,700	36,600	17,400	2,430	1,960	2,840	17,500
30	1,040	8,640	7,010	20,400	-----	47,600	32,900	17,400	3,060	1,540	2,900	17,600
31	3,130	-----	11,000	18,200	-----	51,000	-----	15,600	-----	2,090	2,990	-----
TOTAL	58,341	411,550	168,270	535,730	362,450	1,082.3M	1,202.4M	661,500	311,270	92,252	47,382	181,130
MEAN	1,882	13,720	5,428	17,280	12,940	34,910	40,080	21,340	10,380	2,976	1,528	6,038
MAX	11,000	25,600	13,000	31,100	25,700	51,000	64,200	38,700	22,400	8,530	2,990	17,600
MIN	71	8,070	1,750	5,300	3,080	3,240	17,000	10,200	1,910	305	174	1,200
AC-FT	115,700	816,300	333,800	1,063M	718,900	2,147M	2,385M	1,312M	617,400	183,000	93,980	359,300

CAL YR 1972 TOTAL 1,275,568 MEAN 3,485 MAX 25,600 MIN 44 AC-FT 2,530,000
WTR YR 1973 TOTAL 5,114,615 MEAN 14,010 MAX 64,200 MIN 71 AC-FT 10,140,000

PEAK DISCHARGE (BASE, 32,000 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-12	1915	25.83	48,300	4-22	1300	29.39	64,800
4-1	1145	27.29	54,700	5-8	0645	22.14	39,400

OSAGE RIVER BASIN

93

06921070 Pomme de Terre River near Polk, Mo.

LOCATION.--Lat 37°40'56", long 93°22'12", in NE¼NW¼ sec.17, T.34 N., R.22 W., Polk County, on right bank 150 ft (46 m) upstream from Jefferson Bridge on County Highway D and 5 mi (8.0 km) southwest of Polk.

DRAINAGE AREA.--276 mi² (715 km²).

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

AVERAGE DISCHARGE.--5 years, 259 ft³/s (7.33 m³/s), 12.74 in/yr (324 mm/yr), 187,600 acre-ft/yr (231 hm³/yr).

GAGE.--Water-stage recorder. Datum of gage is 872.61 ft (265.971 m) above mean sea level.

EXTREMES.--Current year: Maximum discharge, 20,300 ft³/s (575 m³/s) Nov. 1 (gage height, 21.88 ft or 6.669 m); minimum, 4.6 ft³/s (0.130 m³/s) Sept. 1, 2 (gage height, 1.26 ft or 0.384 m).
Period of record: Maximum discharge, 20,300 ft³/s (575 m³/s) Nov. 1, 1972 (gage height, 21.88 ft or 6.669 m); minimum, 4.2 ft³/s (0.119 m³/s) Aug. 13, 14, 1969; minimum gage height, 1.26 ft (0.384 m) Sept. 1, 2, 1973.

REMARKS.--Records fair.

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	63	11,100	158	149	352	125	1,840	752	122	29	19	6.0
2	53	9,710	145	116	487	394	1,190	1,320	220	29	14	5.0
3	41	631	134	617	357	374	945	783	1,060	28	13	12
4	33	355	126	529	293	334	851	568	298	27	11	57
5	27	243	118	450	255	431	737	445	544	26	9.8	117
6	24	199	119	295	226	5,120	622	681	295	25	9.5	84
7	21	205	105	248	245	2,770	543	4,290	201	25	9.0	57
8	19	175	103	219	556	1,140	554	1,860	151	24	8.5	54
9	17	153	102	212	394	933	1,380	951	126	23	7.4	305
10	16	165	102	202	295	5,820	1,000	700	108	22	8.2	78
11	16	153	100	212	262	3,440	753	555	95	32	9.2	29
12	14	418	651	193	247	1,130	622	483	85	29	8.2	17
13	13	8,210	425	178	285	880	518	370	88	49	10	14
14	30	1,120	351	162	276	1,340	506	304	193	35	29	12
15	37	570	232	186	236	891	494	260	264	28	19	9.5
16	53	371	173	233	199	697	1,410	230	127	23	13	9.0
17	43	261	153	315	173	576	914	208	102	23	13	7.8
18	37	206	166	2,170	168	495	663	189	78	26	11	7.1
19	32	212	737	1,970	166	510	1,120	177	65	28	9.6	6.4
20	28	221	588	815	164	809	1,080	165	78	27	9.5	6.8
21	42	245	451	2,890	157	589	908	152	61	21	8.8	8.2
22	375	298	334	1,880	149	494	8,460	144	52	17	8.5	111
23	279	315	278	946	148	447	2,200	194	42	18	12	94
24	142	385	236	653	140	2,470	1,190	206	37	18	8.5	45
25	104	393	205	525	136	5,120	3,260	170	45	22	8.5	139
26	84	496	190	431	130	1,590	1,500	146	63	17	8.5	85
27	72	345	176	378	128	1,150	1,040	147	50	16	8.5	46
28	65	241	165	330	125	1,040	793	153	40	18	8.2	34
29	60	191	160	268	-----	2,750	659	146	35	19	7.4	32
30	57	173	186	252	-----	1,210	541	135	30	19	7.1	53
31	66	-----	191	252	-----	6,790	-----	128	-----	38	6.8	-----
TOTAL	1,963	37,760	7,360	18,276	6,749	51,859	38,293	17,012	4,755	781	333.7	1,540.8
MEAN	63.3	1,259	237	590	241	1,673	1,276	549	159	25.2	10.8	51.4
MAX	375	11,100	737	2,890	556	6,790	8,460	4,290	1,060	49	29	305
MIN	13	153	100	116	125	125	494	128	30	16	6.8	5.0
CFSM	.23	4.56	.86	2.14	.87	6.06	4.62	1.99	.58	.09	.04	.19
IN.	.26	5.09	.99	2.46	.91	6.99	5.16	2.29	.64	.11	.04	.21
AC-FT	3,890	74,900	14,600	36,250	13,390	102,900	75,950	33,740	9,430	1,550	662	3,060

CAL YR 1972 TOTAL 77,982.4 MEAN 213 MAX 11,100 MIN 4.6 CFSM .77 IN 10.51 AC-FT 154,700
WTR YR 1973 TOTAL 186,682.5 MEAN 511 MAX 11,100 MIN 5.0 CFSM 1.85 IN 25.16 AC-FT 370,300

PEAK DISCHARGE (BASE, 5,500 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-1	1715	21.88	20,300	3-25	0245	11.61	7,380
11-13	0745	15.94	11,200	3-31	0845	13.85	10,100
3-6	1730	13.71	9,560	4-22	2130	16.06	12,500
3-10	1615	14.75	10,900	5-7	1930	10.35	5,700

OSAGE RIVER BASIN

06921200 Lindley Creek near Polk, Mo.

LOCATION.--Lat 37°45'02", long 93°15'58", in NE¼SE¼ sec.29, T.35 N., R.21 W., Polk County, on left bank 30 ft (9 m) upstream from county highway bridge, 0.5 mi (0.8 km) downstream from Panther Creek, 2.5 mi (4.0 km) northeast of Polk, and 11 mi (17.7 km) upstream from Ingalls Creek.

DRAINAGE AREA.--112 mi² (290 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 884.08 ft (269.468 m) above mean sea level. Prior to September 25, 1957, nonrecording gage at site 30 ft (9 m) downstream at same datum.

AVERAGE DISCHARGE.--16 years, 91.9 ft³/s (2.60 m³/s), 11.14 in/yr (283 mm/yr), 66,580 acre-ft/yr (82 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 11,800 ft³/s (334 m³/s) Nov. 1 (gage height, 18.78 ft or 5.724 m); no flow Aug. 30 to Sept. 2.
 Period of record: Maximum discharge, 28,000 ft³/s (793 m³/s) May 5, 1961 (gage height, 23.60 ft or 7.193 m), from rating extended above 12,000 ft³/s (340 m³/s) on basis of slope-conveyance study; no flow on many days in 1957, 1960-66, 69, 70, 72, 73.
 Flood in September 1914, reached a stage of about 25.2 ft (7.68 m).

REMARKS.--Records fair.

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	.76	5,410	102	85	205	51	587	212	43	5.1	2.2	0
2	.64	689	93	75	228	154	384	296	48	4.4	2.1	0
3	.52	229	86	663	141	123	297	180	752	4.0	1.9	.02
4	.48	163	80	378	121	131	281	151	134	4.0	1.8	.62
5	.33	132	77	169	106	164	235	137	496	3.6	1.7	1.0
6	.26	115	74	122	94	3,320	199	338	172	3.6	1.6	.80
7	.20	110	63	102	153	860	179	3,030	112	2.7	1.5	.74
8	.17	94	65	96	208	362	217	1,080	85	2.0	1.4	.68
9	.13	85	62	85	110	306	616	331	67	1.5	1.3	.62
10	.13	95	53	80	97	3,170	356	234	56	3.1	1.2	.50
11	.13	83	48	76	90	716	250	191	48	4.9	1.2	.38
12	.11	534	550	70	94	328	206	164	42	2.1	1.1	.26
13	.10	3,870	321	64	128	262	177	136	50	1.5	.98	.38
14	45	358	211	60	119	526	294	122	118	1.3	.89	.44
15	27	218	148	102	90	259	289	108	84	1.2	.74	.44
16	6.9	179	117	140	75	219	1,040	99	43	1.2	.68	.38
17	3.5	153	101	180	67	186	403	89	52	1.0	.62	.38
18	2.1	134	129	1,850	66	167	282	82	37	.92	.56	.32
19	1.5	159	603	950	66	201	923	76	29	.78	.50	.26
20	1.2	174	372	400	66	461	582	68	26	.76	.44	.20
21	24	196	286	2,800	63	250	435	62	21	.72	.38	.20
22	391	209	193	990	58	200	1,360	76	17	.66	.32	144
23	82	217	165	400	57	184	401	72	14	.78	.26	34
24	40	213	143	250	53	2,420	316	85	12	.76	.26	6.5
25	26	223	125	148	51	2,220	1,250	67	10	.79	.18	158
26	18	256	114	139	51	567	474	58	9.2	1.8	.14	42
27	13	170	103	130	50	379	289	58	8.6	3.7	.10	12
28	10	136	95	122	47	447	217	57	7.4	2.8	.06	7.0
29	8.3	118	93	116	-----	4,100	186	54	6.3	2.6	.02	5.7
30	7.3	110	125	113	-----	472	163	52	5.7	2.5	0	14
31	38	-----	107	128	-----	3,300	-----	47	-----	2.3	0	-----
TOTAL	748.76	14,832	4,904	11,083	2,754	26,505	12,888	7,812	2,605.2	69.07	26.13	431.82
MEAN	24.2	494	158	358	98.4	855	430	252	86.8	2.23	.84	14.4
MAX	391	5,410	603	2,800	228	4,100	1,360	3,030	752	5.1	2.2	158
MIN	.10	83	48	60	47	51	163	47	5.7	.66	0	0
CFSM	.22	4.41	1.41	3.20	.88	7.63	3.84	2.25	.78	.02	.008	.13
IN.	.25	4.93	1.63	3.68	.91	8.80	4.28	2.59	.87	.02	.008	.14
AC-FT	1,490	29,420	9,730	21,980	5,460	52,570	25,560	15,500	5,170	137	52	857

CAL YR 1972 TOTAL 32,788.83 MEAN 89.6 MAX 5,410 MIN 0 CFSM .80 IN 10.89 AC-FT 65,040
 WTR YR 1973 TOTAL 84,658.98 MEAN 232 MAX 5,410 MIN 0 CFSM 2.07 IN 28.12 AC-FT 167,900

PEAK DISCHARGE (BASE, 2,000 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-1	1400	18.78	11,800	3-10	1515	17.15	6,880	3-31	1015	16.98	7,300
11-13	0515	17.75	8,590	3-24	2245	16.58	6,290	4-22	1030	13.88	3,140
3-6	1500	16.61	5,740	3-29	0630	15.57	4,810	5-7	2115	15.44	4,370

06921325 Pomme de Terre Lake near Hermitage, Mo.

LOCATION.--Lat 37°54'06", long 93°19'05", in NE¼ sec. 2, T.36 N., R.22 W., Hickory County, in intake tower at dam on Pomme de Terre River, 3 mi (4.8 km) southwest of Hermitage.

DRAINAGE AREA.--611 mi² (1,583 km²).

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

GAGE.--Water-stage recorder. Nonrecording gage prior to Nov. 9, 1961. Datum of gage is at mean sea level (levels by Corps of Engineers).

EXTREMES.--Current year: Maximum contents, 481,000 acre-ft (593 hm³) Apr. 30 (elevation, 862.35 ft or 262.844 m); minimum, 229,000 acre-ft (282 hm³) Oct. 9, 10, 11, 14 (elevation 837.31 ft or 255.212 m).

Period of record: Maximum contents, 481,000 acre-ft (593 hm³) Apr. 30, 1973 (elevation, 862.35 ft or 262.844 m), minimum, since initial filling to conservation pool level, 215,880 acre-ft (266 hm³) Mar. 3, 1964 (elevation, 835.61 ft or 254.694 m).

REMARKS.--Lake is formed by earth fill embankment with a concrete gravity section-type dam. Closure operation began on June 28, 1960; conservation pool level reached June 15, 1963. Capacity nominal top of flood control pool, 648,700 acre-ft (800 hm³) at elevation, 874 ft or 266.4 m, crest of spillway, of which 407,200 acre-ft (502 hm³) between elevations 839 ft or 255.7 m and 874 ft or 266.4 m is used for flood control, and 228,700 acre-ft (282 hm³) between elevations 783 ft or 238.7 m and 839 ft or 255.7 m is used for conservation and 12,840 acre-ft (15.8 hm³) below elevation 783 ft or 238.7 m is sediment storage. Lake used for flood control and recreational purposes. Contents computed from daily readings at 0800.

COOPERATION.--Records furnished by Corps of Engineers.

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

837	226,200	850	339,600
838	233,800	860	451,200
840	249,500	862.4	481,500

CONTENTS, IN THOUSANDS OF ACRE-FEET, AT 0800, WATER YEAR OCTOBER 1971 to SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	230	243	243	247	280	243	435	474	305	240	237	231
2	230	292	243	244	279	243	439	468	297	240	236	231
3	230	304	243	243	279	245	442	462	294	236	236	232
4	229	303	242	248	277	246	444	454	291	240	236	232
5	230	299	242	248	276	246	446	446	285	240	236	233
6	230	295	242	246	274	251	448	438	279	240	236	233
7	230	289	242	245	272	283	449	446	273	240	236	233
8	229	284	242	243	272	291	450	464	266	236	236	233
9	229	279	242	242	269	294	454	463	261	240	235	233
10	229	274	242	241	265	298	456	459	256	240	235	233
11	229	268	241	241	262	334	449	454	251	240	235	233
12	229	263	242	241	258	342	442	459	246	240	235	233
13	229	274	248	240	255	345	434	438	244	239	235	233
14	229	295	250	240	252	348	423	428	245	239	235	233
15	230	293	252	240	248	350	421	420	246	239	234	233
16	230	289	252	240	244	353	420	416	246	239	234	232
17	230	285	253	240	243	354	423	417	246	238	234	232
18	230	280	253	241	242	354	418	411	246	238	234	232
19	230	275	255	256	242	355	412	403	245	238	234	232
20	230	270	260	260	242	359	413	395	245	238	233	232
21	229	266	262	270	242	359	414	387	244	238	233	232
22	232	262	264	286	243	352	421	381	243	238	233	231
23	235	256	264	290	243	344	442	374	243	238	233	232
24	235	253	262	290	243	337	446	365	242	238	232	232
25	236	250	261	290	243	358	454	358	241	238	232	233
26	235	246	258	289	243	373	469	351	241	238	232	233
27	236	242	257	288	243	378	474	344	241	238	232	234
28	236	242	255	286	243	381	477	336	241	237	231	234
29	236	243	253	285	-----	392	479	327	241	237	231	234
30	237	243	251	283	-----	402	481	320	241	237	231	235
31	237	-----	249	282	-----	414	-----	313	-----	237	231	-----
(†)	838.42	839.17	839.73	843.82	839.15	856.90	862.33	847.24	838.91	838.46	837.62	838.13
(‡)	+7	+6	+6	+33	-39	+171	+67	-168	-72	-4	-6	+4
MAX	237	304	264	290	280	414	481	474	305	240	237	235
MIN	229	242	241	240	242	243	412	313	241	236	231	231

CAL YR 1972.....‡ 0

WTR YR 1973.....‡ +5

† Elevation, in feet, at end of month.

‡ Change in contents, in thousands of acre-feet.

06921590 South Grand River at Archie, Mo.

LOCATION.--Lat 38°28'44", long 94°20'03", in NW¼NW¼SE¼ sec.34, T.43 N., R.31 W., Cass County, on right bank 25 ft (8 m) downstream from bridge on County Highway B, 0.9 mi (1.4 km) east of Archie, 1.4 mi (2.3 km) upstream from Mormon Fork, and 7.4 mi (11.9 km) downstream from South Fork.

DRAINAGE AREA.--256 mi² (663 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 768.99 ft (234.388 m) above mean sea level.

EXTREMES.--Current year: Maximum discharge, 11,100 ft³/s (314 m³/s) Mar. 25 (gage height, 15.61 ft or 4.758 m); minimum, 0.43 ft³/s (12.2 m³/s) Oct. 10; minimum gage height, 2.35 ft (0.716 m) Oct. 10, 11. Period of record: Maximum discharge, 15,600 ft³/s (442 m³/s) Oct. 13, 1969 (gage height, 19.4 ft or 5.91 m); minimum, 0.03 ft³/s (0.001 m³/s) Sept. 4, 1971 (gage height, 2.15 ft or 0.655 m). Floods of Nov. 13, 1928 and Sept. 15, 1961 reached stages of 27.6 ft (8.41 m) and 23.8 ft (7.25 m), respectively, at point 1 mi (1.6 km) northeast of gage, from information by local resident.

REMARKS.--Records fair.

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	1.9	16	38	143	2,890	119	5,690	912	218	15	49	19
2	1.8	20	33	79	1,720	623	777	1,940	781	149	26	12
3	1.4	24	31	1,290	506	373	463	429	641	161	20	11
4	1.1	19	27	1,530	326	2,260	359	276	372	580	16	1,540
5	.90	15	27	505	269	2,370	292	235	2,920	370	14	825
6	.84	17	22	300	225	2,490	248	1,200	462	99	12	135
7	.64	19	22	200	204	4,090	214	4,500	248	56	11	70
8	.67	16	21	150	189	702	209	2,910	195	35	9.3	117
9	.49	20	19	100	148	4,000	305	605	154	25	11	463
10	.45	64	18	80	148	4,560	298	427	122	19	36	215
11	.47	83	17	70	147	5,250	231	415	94	16	19	115
12	1.1	74	19	60	147	771	208	406	81	13	17	140
13	2.0	562	19	60	287	653	174	261	72	11	12	2,150
14	4.0	683	18	60	408	1,880	266	220	121	9.8	10	644
15	3.1	239	18	70	226	500	1,380	190	159	9.4	7.4	228
16	2.0	128	16	200	131	320	6,310	166	115	8.6	6.9	166
17	1.2	90	16	1,360	113	240	966	138	124	7.2	6.0	529
18	1.2	70	22	874	133	227	437	129	106	7.2	6.4	451
19	1.2	64	197	418	121	1,540	353	119	65	41	5.9	212
20	1.0	59	369	298	124	5,250	2,930	106	49	79	4.8	150
21	1.4	56	232	2,680	122	870	9,880	96	39	60	4.6	117
22	18	57	147	2,900	119	419	6,930	1,030	31	31	4.1	94
23	28	54	103	1,050	112	330	1,030	686	28	64	3.3	77
24	26	50	77	379	104	3,940	522	867	23	1,210	3.5	69
25	17	52	64	394	97	10,500	1,000	1,370	21	578	3.3	4,340
26	15	55	55	340	91	5,360	424	341	20	200	2.8	779
27	9.7	53	47	279	83	735	311	2,450	21	101	2.8	2,260
28	9.4	50	45	255	80	505	258	526	17	147	2.6	7,020
29	7.4	43	52	218	-----	482	225	344	19	67	2.0	4,860
30	7.4	39	250	189	-----	368	208	634	18	43	4.8	558
31	9.6	-----	276	317	-----	6,930	-----	275	-----	44	9.7	-----
TOTAL	176.36	2,791	2,317	16,848	9,270	68,657	42,898	24,203	7,336	4,256.2	343.2	28,366
MEAN	5.69	93.0	74.7	543	331	2,215	1,430	781	245	137	11.1	946
MAX	28	683	369	2,900	2,890	10,500	9,880	4,500	2,920	1,210	49	7,020
MIN	.45	15	16	60	80	119	174	96	17	7.2	2.0	11
CFSM	.02	.36	.29	2.12	1.29	8.65	5.59	3.05	.96	.54	.04	3.70
IN.	.03	.41	.34	2.45	1.35	9.98	6.23	3.52	1.07	.62	.05	4.12
AC-FT	350	5,540	4,600	33,420	18,390	136,200	85,090	48,010	14,550	8,440	681	56,260

CAL YR 1972 TOTAL 43,558.69 MEAN 119 MAX 3,810 MIN .21 CFSM .46 IN 6.33 AC-FT 86,400
 MTR YR 1973 TOTAL 207,461.76 MEAN 568 MAX 10,500 MIN .45 CFSM 2.22 IN 30.15 AC-FT 411,500

PEAK DISCHARGE (BASE, 5,500 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-7	0200	11.46	6,340	3-31	1715	14.28	9,580	9-25	1215	11.32	6,250
3-10	2115	13.37	8,540	4-16	0515	12.95	8,040	9-28	2115	13.31	8,540
3-20	0200	11.86	6,790	4-21	0800	15.40	10,800				
3-25	1245	15.61	11,100	5-7	1215	11.73	6,680				

OSAGE RIVER BASIN

06921720 Big Creek at Blainstown, Mo.

LOCATION.--Lat 38°33'17", long 93°57'54", in NE¼SW¼ sec.36, T.44 N., R.28 W., Henry County, on downstream side of right bridge pier on County Highway N, 0.3 mi (0.5 km) west of Blainstown, 0.8 mi (1.3 km) downstream from Bear Creek, and 1.5 mi (2.4 km) upstream from Brushy Creek.

DRAINAGE AREA.--414 mi² (1,072 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 734.06 ft (223.741 m) above mean sea level.

AVERAGE DISCHARGE.--13 years, 311 ft³/s (8.81 m³/s), 10.21 in/yr (259 mm/yr), 225,300 acre-ft/yr (277.8 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 12,600 ft³/s (357 m³/s) Apr. 20 (gage height, 24.14 ft or 7.358 m); minimum, 0.88 ft³/s (0.025 m³/s) Sept. 24, 25; minimum gage height, 2.32 ft (0.707 m) Oct. 7, 8. Period of record: Maximum discharge, 24,400 ft³/s (691 m³/s) Sept. 14, 1961 (gage height, 25.40 ft or 7.742 m); no flow at times in 1960, 1962-64, 1966.

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	10	91	42	86	1,820	123	4,820	1,430	158	26	50	15
2	6.8	142	38	80	1,750	217	3,060	3,540	552	27	30	4.9
3	4.7	76	35	1,910	619	257	1,600	1,340	397	27	20	1.6
4	2.9	39	32	2,000	339	995	1,250	800	282	386	15	46
5	2.1	29	30	600	280	2,490	1,130	400	2,700	225	12	17
6	1.7	27	28	400	242	1,740	783	1,360	600	95	9.0	12
7	1.4	28	26	300	223	3,810	403	2,010	243	55	7.0	2.8
8	1.4	27	24	200	203	1,680	375	1,880	196	39	6.0	5.0
9	1.6	25	22	150	177	1,810	541	1,150	166	32	5.0	6.7
10	1.7	52	20	96	183	3,600	576	688	149	29	5.0	7.0
11	1.9	109	20	93	168	5,340	501	600	136	25	5.0	6.9
12	2.3	88	20	90	178	2,500	428	541	126	22	5.0	2.2
13	3.4	726	20	80	406	1,200	367	400	126	20	10	17
14	5.2	715	20	80	576	1,400	642	294	365	18	8.0	30
15	6.7	202	20	100	297	839	2,450	200	246	16	5.8	16
16	7.3	107	20	200	174	447	6,160	150	115	15	5.0	6.3
17	7.9	74	25	1,500	175	360	4,230	124	101	14	4.2	23
18	8.6	56	29	879	168	310	1,470	99	116	15	3.8	45
19	8.8	52	200	323	155	393	918	90	76	26	3.0	26
20	10	53	400	300	152	3,290	2,340	85	70	97	3.0	15
21	12	57	300	2,160	160	2,620	11,700	80	59	58	3.0	7.1
22	40	62	200	2,310	151	1,220	9,000	1,580	50	30	3.0	3.0
23	33	67	150	542	145	582	4,320	872	43	100	2.8	1.7
24	44	68	100	300	142	2,190	1,680	900	40	605	2.8	.92
25	32	71	80	216	135	7,320	970	1,000	37	1,000	2.2	120
26	22	78	70	196	128	7,090	584	500	34	300	2.0	282
27	18	70	60	179	122	4,330	430	1,000	32	100	2.0	230
28	17	50	50	198	119	1,480	400	425	31	200	1.8	394
29	16	48	60	203	-----	911	370	275	29	150	1.4	1,080
30	18	45	574	218	-----	588	341	234	28	122	1.5	304
31	23	-----	300	304	-----	3,320	-----	205	-----	70	1.9	-----
TOTAL	371.4	3,334	3,015	16,293	9,387	64,452	63,839	24,252	7,303	3,944	236.2	2,728.12
MEAN	12.0	111	97.3	526	335	2,079	2,128	782	243	127	7.62	90.9
MAX	44	726	574	2,310	1,820	7,320	11,700	3,540	2,700	1,000	50	1,080
MIN	1.4	25	20	80	119	123	341	80	28	14	1.4	.92
CFSM	.03	.27	.24	1.27	.81	5.02	5.14	1.89	.59	.31	.02	.22
IN.	.03	.30	.27	1.46	.84	5.79	5.74	2.18	.66	.35	.02	.25
AC-FT	737	6,610	5,980	32,320	18,620	127,800	126,600	48,100	14,490	7,820	469	5,410

CAL YR 1972 TOTAL 29,431.50 MEAN 80.4 MAX 1,860 MIN .90 CFSM .19 IN 2.64 AC-FT 58,380
WTR YR 1973 TOTAL 199,154.72 MEAN 546 MAX 11,700 MIN .92 CFSM 1.32 IN 17.90 AC-FT 395,000

PEAK DISCHARGE (BASE, 6,000 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-25	1330	23.28	8,190	4-20	0730	24.14	12,600
4-16	1230	23.03	7,220				

06921740 Brushy Creek near Blairstown, Mo.

LOCATION.--Lat 38°31'42", long 94°00'37", in NE¼SE¼ sec.9, T.43 N., R.28 W., Henry County, on left bank, upstream from culvert under County Highway B, 3 mi (4.8 km) upstream from mouth, and 3.5 mi (5.6 km) southwest of Blairstown.

DRAINAGE AREA.--1.15 mi² (2.98 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 790 ft (240.8 m) from topographic map.

AVERAGE DISCHARGE.--13 years, 1.11 ft³/s (0.031 m³/s), 13.11 in/yr (333 mm/yr), 804 acre-ft/yr (991,000 m³/yr).

EXTREMES.--Current year: Maximum discharge, 995 ft³/s (28.2 m³/s) Apr. 20 (gage height, 9.00 ft or 2.743 m); no flow on many days.

Period of record: Maximum discharge, 1,270 ft³/s (40 m³/s) May 5, 1961 (gage height, 9.90 ft or 3.018 m); no flow at times each year.

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	7.9	.10	.20	30	1.1	1.7	20	.20	0		0
2	0	.30	.10	.20	2.9	1.1	1.1	5.0	.20	0		0
3	0	0	0	15	1.3	.80	.60	2.0	.10	0		0
4	0	0	0	1.0	1.1	26	.60	1.0	14	.90		6.9
5	0	0	0	.30	.80	3.9	.40	2.0	5.6	.10		0
6	0	0	.10	.10	.60	40	.30	2.0	.30	.10		0
7	0	0	0	0	.60	8.6	.30	1.0	.20	0		0
8	0	0	0	0	.60	2.4	.80	.40	.10	0		.20
9	0	0	0	0	.60	6.8	1.9	.30	.10	.10		0
10	0	.20	0	0	.50	59	.80	.20	.10	0		0
11	0	0	0	0	.40	6.6	.80	.30	.10	0		0
12	0	3.3	2.0	0	1.2	2.4	.60	.20	.10	0		0
13	0	27	1.0	0	6.8	16	.50	.20	.10	0		.20
14	0	.80	.40	0	1.5	5.0	13	.20	2.3	0		0
15	0	.20	0	0	.60	1.7	35	.20	.30	0		0
16	0	.10	0	0	.60	1.1	22	.20	.30	0		0
17	0	.10	.10	0	.50	1.0	1.7	.10	.20	0		.40
18	0	.10	3.0	0	.50	.80	1.1	.10	.10	0		0
19	0	.10	5.0	1.5	.50	18	1.1	.50	.10	0		0
20	0	.30	1.0	8.9	.40	14	122	25	.10	0		0
21	0	.40	.50	43	.40	4.6	10	5.0	.10	0		0
22	.20	.80	.40	4.3	.40	3.2	5.0	2.0	.10	0		0
23	0	1.1	.40	1.1	.30	2.7	2.0	1.0	.10	.40		0
24	0	.50	.20	.80	.30	72	1.0	.50	.10	1.1		0
25	0	1.7	.10	.60	.30	32	.50	.50	.10	.10		0
26	0	1.1	.10	.60	.30	2.4	.30	1.0	.10	0		.20
27	0	.60	.20	1.0	.30	1.1	.20	.50	.10	0		.10
28	0	.10	.30	1.1	.30	1.5	.20	.40	0	0		13
29	0	.10	3.3	1.0	-----	1.9	.10	.30	0	0		.10
30	0	.10	4.0	1.5	-----	1.1	.50	.30	0	0		.10
31	0	-----	.60	7.6	-----	24	-----	.30	-----	0		-----
TOTAL	.20	46.90	22.90	89.80	54.60	362.80	226.10	72.70	25.30	2.80	0	21.20
MEAN	.007	1.56	.74	2.90	1.95	11.7	7.54	2.35	.84	.090	0	.71
MAX	.20	27	5.0	43	30	72	122	25	14	1.1	0	13
MIN	0	0	0	0	.30	.80	.10	.10	0	0	0	0
CFSM	.006	1.36	.64	2.52	1.70	10.2	6.56	2.04	.73	.08	0	.62
IN.	.006	1.52	.74	2.90	1.77	11.74	7.31	2.35	.82	.09	0	.69
AC-FT	.4	93	45	178	108	720	448	144	50	5.6	0	42

CAL YR 1972 TOTAL 162.20 MEAN .44 MAX 27 MIN 0 CFSM .38 IN 5.25 AC-FT 322
WTR YR 1973 TOTAL 925.30 MEAN 2.54 MAX 122 MIN 0 CFSM 2.21 IN 29.93 AC-FT 1,840

PEAK DISCHARGE (BASE, 200 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-10	1345	4.47	255	6-4	2245	4.34	235
4-20	2100	9.00	995				

OSAGE RIVER BASIN

06922800 Big Buffalo Creek near Stover, Mo.

LOCATION.--Lat 38°20'04", long 93°05'04", NE¼SE¼SW¼ sec.12, T.41 N., R.20 W., Benton County, on right bank, 1.5 mi (2.4 km) southwest of Boylers Mill, 3 mi (4.8 km) upstream from mouth, and 9 mi (14.5 km) southwest of Stover.

DRAINAGE AREA.--24.2 mi² (62.7 km²).

PERIOD OF RECORD.--March 1965 to Sept. 1973 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 716.6 ft (218.420 m) above mean sea level (levels by Missouri Conservation Commission).

AVERAGE DISCHARGE.--8 years, 21.0 ft³/s (0.59 m³/s), 11.79 in/yr (300 mm/yr), 15,210 acre-ft/yr (18.8 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 6,350 ft³/s (180 m³/s) Apr. 22 (gage height, 8.72 ft or 2.658 m); minimum, 2.3 ft³/s (0.065 m³/s) Aug. 29 (gage height, 0.75 ft or 0.23 m).

Period of record: Maximum discharge, 12,400 ft³/s (351 m³/s) computation of peak flow over roadway, Sept. 4, 1965 (gage height, 10.1 ft or 3.08 m); minimum, 1.2 ft³/s (0.034 m³/s) Sept. 9, 1967; minimum gage height, 0.75 ft (0.229 m) Aug. 29, 1973.

REMARKS.--Records fair. Records of water temperatures 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	3.9	343	14	19	25	12	159	24	9.2	7.4	5.5	3.1
2	3.8	88	11	17	48	31	68	49	8.9	7.4	5.1	5.1
3	3.9	34	9.9	130	34	28	48	35	9.6	7.4	4.8	5.8
4	3.8	19	9.2	198	27	50	39	26	80	7.6	4.6	5.3
5	3.6	14	9.2	40	22	71	30	22	319	7.5	4.6	5.5
6	3.8	11	8.9	25	19	309	26	39	47	7.3	4.3	4.3
7	3.8	9.9	8.2	19	18	128	24	318	28	7.1	4.3	3.9
8	3.8	8.5	8.2	17	17	58	23	117	19	7.1	4.1	3.9
9	3.8	7.9	8.2	14	14	43	48	64	15	7.1	3.9	5.5
10	3.6	8.5	8.2	12	14	355	48	48	13	7.1	3.9	5.1
11	3.4	8.2	8.9	11	13	150	46	44	11	7.1	3.8	4.8
12	3.8	12	14	10	15	62	37	38	9.9	7.0	3.8	4.3
13	4.6	402	21	9.6	54	47	29	32	9.6	6.9	4.6	4.3
14	6.0	74	19	9.6	48	61	186	29	8.9	7.0	5.1	4.6
15	5.8	39	16	9.9	32	45	132	19	8.9	6.9	4.3	4.3
16	5.3	27	15	9.6	25	35	515	17	8.2	6.8	4.1	4.3
17	5.1	21	12	11	19	31	103	16	11	6.8	3.9	5.1
18	4.8	17	11	102	17	23	62	14	8.9	6.9	3.8	5.1
19	4.8	17	42	80	17	21	50	14	9.9	7.2	3.4	4.6
20	5.3	15	64	45	15	27	143	14	8.9	7.1	3.2	4.3
21	5.8	16	54	194	14	28	257	20	7.9	7.2	3.1	4.3
22	18	17	42	88	13	24	450	56	7.5	7.2	3.1	4.3
23	12	18	34	46	12	21	80	24	6.8	12	2.9	4.1
24	8.9	20	30	33	10	442	52	21	6.5	11	2.9	4.1
25	8.2	23	25	26	10	380	52	17	6.5	8.2	2.9	4.3
26	7.5	28	21	22	10	96	45	16	6.3	6.5	2.7	4.3
27	6.8	23	19	20	9.9	57	36	15	6.3	5.8	2.7	4.6
28	6.5	21	17	19	9.6	46	29	14	5.8	6.0	2.9	5.1
29	6.3	15	17	16	-----	58	25	13	5.8	5.8	2.6	5.5
30	6.5	14	25	15	-----	49	22	11	5.8	5.8	2.7	11
31	9.9	-----	25	14	-----	533	-----	9.9	-----	6.3	3.1	-----
TOTAL	183.1	1,371.0	626.9	1,281.7	581.5	3,321	2,864	1,195.9	709.1	224.5	116.7	144.8
MEAN	5.91	45.7	20.2	41.3	20.8	107	95.5	38.6	23.6	7.24	3.76	4.83
MAX	18	402	64	198	54	533	515	318	319	12	5.5	11
MIN	3.4	7.9	8.2	9.6	9.6	12	22	9.9	5.8	5.8	2.6	3.1
CFSM	.24	1.89	.83	1.71	.86	4.42	3.95	1.60	.98	.30	.16	.20
IN.	.28	2.11	.96	1.97	.89	5.11	4.40	1.84	1.09	.35	.18	.22
AC-FT	363	2,720	1,240	2,540	1,150	6,590	5,680	2,370	1,410	445	231	287

CAL YR 1972 TOTAL 5,107.7 MEAN 14.0 MAX 531 MIN 1.4 CFSM .58 IN 7.85 AC-FT 10,130
WTR YR 1973 TOTAL 12,620.2 MEAN 34.6 MAX 533 MIN 2.6 CFSM 1.43 IN 19.40 AC-FT 25,030

PEAK DISCHARGE (BASE, 1,000 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-1	1200	5.90	1,350	4-16	0430	5.70	1,240
3-10	1530	6.04	1,440	4-22	0100	8.72	6,350
3-24	1900	6.14	1,520	6-4	2400	6.75	2,150
3-31	0630	6.27	1,600				

06923500 Bennett Spring at Bennett Springs, Mo.

LOCATION.--Lat 37°43'03", long 92°51'26", in NW¼ sec.1, T.34 N., R.18 W., Dallas County, on left bank 300 ft (91 m) downstream from spring outlet, 1.5 mi (2.4 km) upstream from Niangua River and at Bennett Springs.

PERIOD OF RECORD.--September 1916 to March 1920, October 1928 to September 1941, October 1965 to current year. Prior to March 1920 and October 1939 to September 1941 monthly discharge only published in WSP 1310. Occasional discharge measurements 1923, 1954, 1964, 1965.

GAGE.--Nonrecording gage. Datum of gage 864.71 ft (263.564 m) above mean sea level. Sept. 1916 to Mar. 1920, in the vicinity, datum unknown; Oct. 17, 1928, to Apr. 11, 1934, at site 1,780 ft (543 m) downstream at datum 2.30 ft (0.70 m) lower; Apr. 12 to Dec. 13, 1934, nonrecording gage and Dec. 14, 1934, to Sept. 17, 1941, water-stage recorder at present site and datum.

AVERAGE DISCHARGE.--24 years (1916-19, 1928-41, 1965-73), 155 ft³/s (4.39 m³/s), 112,300 acre-ft/yr (138.5 hm³/s).

EXTREMES.--Current year: Maximum discharge, 9,000 ft³/s (255 m³/s) Nov. 1 (gage height, 9.14 ft or 2.786 m, from floodmark); minimum observed, 94 ft³/s (2.7 m³/s) Oct. 11-16, Sept. 14, 17-21, 23 (gage height, 0.62 ft or 0.189 m).

Period of record: Maximum discharge, 9,000 ft³/s (255 m³/s) Nov. 1, 1973 (gage height, 9.14 ft or 2.786 m, from floodmark) includes about 7,200 ft³/s (204 m³/s) from Spring Creek, by indirect measurement of peak flow over dam; minimum, about 55 ft³/s (1.6 m³/s) Nov. 13, 1934.

REMARKS.--Records poor. Occasional runoff from drainage area of 42.4 mi² (109.8 km²) included in records. Records of chemical analyses 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	105	3,550	236	155	264	157	1,000	360	253	160	134	103
2	100	1,230	220	150	270	161	555	380	247	155	130	103
3	100	774	208	166	258	175	498	346	253	155	126	103
4	100	555	205	177	250	200	457	318	247	155	126	103
5	100	530	201	206	236	300	417	304	241	155	126	103
6	98	465	186	193	225	1,720	409	304	233	150	126	105
7	98	342	182	186	220	1,100	398	300	225	146	126	105
8	98	314	177	180	247	873	374	895	218	146	126	101
9	96	288	173	168	241	752	398	746	210	142	126	101
10	96	258	160	164	236	1,850	425	746	210	142	126	101
11	94	231	155	159	230	1,640	409	555	205	146	122	101
12	94	215	180	155	225	1,000	398	512	193	155	122	101
13	94	400	210	150	231	873	380	490	189	155	122	98
14	94	660	240	150	384	884	360	469	250	146	119	94
15	94	630	260	150	314	800	450	429	241	142	119	98
16	94	461	240	150	270	750	425	421	220	142	115	96
17	98	430	235	157	244	650	409	384	215	134	115	94
18	108	400	230	225	244	650	388	370	210	134	115	94
19	105	370	225	453	241	625	425	360	201	134	113	94
20	100	330	225	398	238	600	409	335	196	134	112	94
21	95	310	210	500	238	829	388	321	191	134	112	94
22	110	294	195	400	238	402	730	328	191	130	112	101
23	120	290	185	375	223	366	1,200	321	186	130	112	94
24	130	288	173	350	186	400	725	335	182	130	112	101
25	134	300	173	325	182	500	736	332	177	138	112	101
26	125	285	173	300	164	700	600	332	173	164	112	96
27	119	279	173	275	159	600	516	307	168	150	108	96
28	115	264	170	260	157	473	457	294	164	142	108	96
29	112	247	168	250	-----	580	409	276	164	138	105	96
30	112	241	168	241	-----	473	380	294	161	138	105	96
31	115	-----	164	247	-----	1,000	-----	258	-----	134	105	-----
TOTAL	3,253	15,231	6,100	7,415	6,615	22,083	15,125	12,422	6,214	4,456	3,649	2,963
MEAN	105	508	197	239	236	712	504	401	207	144	118	98.8
MAX	134	3,550	260	500	384	1,850	1,200	895	253	164	134	105
MIN	94	215	155	150	157	157	360	258	161	130	105	94
AC-FT	6,450	30,210	12,100	14,710	13,120	43,800	30,000	24,640	12,330	8,840	7,240	5,880
CAL YR 1972	TOTAL	63,636	MEAN	174	MAX	3,550	MIN	93	AC-FT	126,200		
WTR YR 1973	TOTAL	105,526	MEAN	289	MAX	3,550	MIN	94	AC-FT	209,300		

06925200 Starks Creek at Preston, Mo.

LOCATION.--Lat 37°56'27", long 93°11'48", in SW¼NW¼ sec.24, T.37 N., R.21 W., Hickory County, in right bank on downstream side of bridge on U.S. Highway 54, 0.6 mi (1.0 km) east of junction of U.S. Highways 65 and 54 at Preston.

DRAINAGE AREA.--4.18 mi² (10.8 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 980 ft (298.7 m) from topographic map.

AVERAGE DISCHARGE.--17 years, 3.56 ft³/s (0.101 m³/s), 11.57 in/yr (294 mm/yr), 2,580 acre-ft/yr (3.18 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 550 ft³/s (15.6 m³/s) Mar. 31 (gage height, 6.70 ft or 2.042 m); no flow on many days.

Period of record: Maximum discharge, 1,900 ft³/s (53.8 m³/s) June 23, 1965 (gage height, 10.57 ft or 3.222 m); no flow at times each year.

REMARKS.--Records fair.

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	179	1.1	1.3	35	2.4	12	3.2	.60	0		0
2	0	10	.90	.90	12	8.2	4.6	6.4	.60	0		23
3	0	3.0	.80	78	3.7	3.1	3.1	2.7	12	0		.30
4	0	2.1	.70	7.2	3.0	10	3.1	1.9	1.2	0		0
5	0	1.8	.80	1.7	2.5	7.2	2.7	1.6	1.2	0		0
6	0	1.6	.70	1.2	2.2	232	2.2	23	.80	0		0
7	0	1.5	.60	.90	9.8	49	2.1	233	.50	0		0
8	0	1.2	.60	1.0	4.1	6.1	8.7	53	.30	0		0
9	0	1.3	.60	.90	2.1	5.3	27	13	.30	0		0
10	0	2.0	.60	.90	1.9	188	5.8	4.8	.20	5.2		0
11	0	1.3	.60	.90	1.8	14	3.7	3.1	.10	.30		0
12	0	54	1.6	.90	2.6	3.9	2.6	2.6	.20	0		0
13	0	129	2.1	.80	5.3	6.4	2.1	2.0	2.0	0		0
14	.30	3.9	2.2	.70	4.6	14	80	1.6	.80	0		0
15	0	2.1	2.2	.70	1.8	2.7	11	1.5	.20	0		0
16	0	2.0	2.1	.80	1.6	2.1	114	1.2	.10	0		0
17	0	1.8	1.7	3.2	1.5	1.8	6.1	1.1	.30	0		0
18	0	1.6	12	112	1.6	1.6	3.4	.90	.10	0		0
19	0	2.6	80	9.5	1.6	42	23	.80	0	0		0
20	0	3.4	31	3.2	1.6	68	29	.70	0	0		0
21	.40	5.0	13	134	1.6	33	7.8	.70	0	0		0
22	9.9	5.8	4.6	18	1.6	28	24	8.7	0	0		0
23	.90	14	3.2	5.8	1.5	27	3.9	1.2	0	0		0
24	.30	7.1	3.0	4.1	1.4	224	4.1	.90	0	0		0
25	.20	25	2.2	3.6	1.2	83	106	.80	0	0		0
26	.20	8.3	2.0	3.4	1.3	19	8.6	.80	0	0		0
27	.10	2.4	1.6	3.0	1.3	13	3.9	.70	0	0		0
28	.10	1.6	1.4	4.8	1.2	19	2.7	.60	0	0		0
29	.10	1.3	1.5	3.1	-----	58	2.2	.60	0	0		0
30	.10	1.2	12	4.6	-----	4.1	2.1	.60	0	0		.10
31	1.0	-----	2.0	5.8	-----	159	-----	.60	-----	0		-----
TOTAL	13.60	476.9	189.40	416.90	111.4	1,334.9	511.5	374.30	21.50	5.50	0	23.40
MEAN	.44	15.9	6.11	13.4	3.98	43.1	17.1	12.1	.72	.18	0	.78
MAX	9.9	179	80	134	35	232	114	233	12	5.2	0	23
MIN	0	1.2	.60	.70	1.2	1.6	2.1	.60	0	0	0	0
CFSM	.11	3.80	1.46	3.21	.95	10.3	4.09	2.89	.17	.04	0	.19
IN.	.12	4.24	1.69	3.71	.99	11.88	4.55	3.33	.19	.05	0	.21
AC-FT	27	946	376	827	221	2,650	1,010	742	43	11	0	46

CAL YR 1972 TOTAL 937.00 MEAN 2.56 MAX 179 MIN 0 CFSM .61 IN 8.34 AC-FT 1,860
WTR YR 1973 TOTAL 3,479.30 MEAN 9.53 MAX 233 MIN 0 CFSM 2.28 IN 30.96 AC-FT 6,900

PEAK DISCHARGE (BASE, 200 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-1	1100	6.52	514	3-10	1100	6.63	536	4-16	1800	6.05	420
11-12	2245	6.30	470	3-19	2230	5.01	232	4-25	0900	5.13	252
1-3	1200	5.20	230	3-24	1530	6.43	496	5-7	0115	6.68	546
1-18	1200	5.60	335	3-29	1230	5.68	349	5-7	2200	5.57	330
1-21	0300	6.30	470	3-31	0500	6.70	550	9-2	2130	5.18	261
3-6	1330	5.85	382	4-14	1400	6.57	524				

06925500 Lake of the Ozarks near Bagnell, Mo.

LOCATION.--Lat 38°12'19", long 92°37'21", in SE¼ sec.19, T.40 N., R.15 W., Miller County, at left end of powerhouse section near left end of Bagnell Dam on Osage River, 2 mi (3.2 km) southwest of Bagnell, and at mile 81.7 (131.5 km).

DRAINAGE AREA.--14,000 mi² (36,000 km²), approximately.

PERIOD OF RECORD.--April 1931 to current year. Gage-height records collected at same site since 1932 are contained in reports of the National Weather Service, published as Osage River at Bagnell Dam, Lakeside.

GAGE.--Water-stage recorder. Datum of gage is mean sea level, adjustment of 1912. To obtain datum of 1929 mean sea level, subtract 0.88 ft (0.286 m).

EXTREMES.--Current year: Maximum contents, 1,321,000 acre-ft (1.63 km³) Apr. 1 (elevation, 661.91 ft or 201.750 m); minimum, 948,300 acre-ft (1.17 km³) Oct. 1 (elevation, 655.05 ft or 199.659 m).

Period of record: Maximum contents, 1,527,000 acre-ft (1.88 km³) May 22, 1943 (elevation, 665.45 ft or 202.829 m); minimum, 322,100 acre-ft (397 hm³) Feb. 13, 1948 (elevation, 639.95 ft or 195.057 m).

REMARKS.--Lake is formed by concrete gravity dam. Spillway is equipped with 12 taintor gates 34 ft (10 m) wide by 22 ft (6.7 m) high. Storage began in 1931. Usuable capacity 1,218,000 acre-ft (1.50 km³) between elevations 630.00 ft or 192.024 m (maximum draw-down) and 660.00 ft or 201.168 m (top of gates). Dead storage, 708,800 acre-ft (874 hm³). Figures given herein are usable contents. Water is used for generating electricity. Elevations given herein are referred to mean sea level, adjustment of 1912.

COOPERATION.--Records furnished by Union Electric Company of Missouri.

MONTH-END ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	655.09	950,400	
Oct. 31	656.88	1,044,000	+ 93,600
Nov. 30	659.00	1,161,000	+117,000
Dec. 31	658.16	1,114,000	- 47,000
CAL YR 1972	---	---	- 22,000
Jan. 31	659.70	1,201,000	+ 87,000
Feb. 28	655.98	996,300	-204,700
Mar. 31	661.76	1,317,000	+320,700
Apr. 30	659.66	1,198,000	-119,000
May 31	656.54	1,025,000	-173,000
June 30	659.36	1,181,000	+156,000
July 31	659.52	1,190,000	+ 9,000
Aug. 31	656.14	1,004,000	-186,000
Sept. 30	657.80	1,093,000	+ 89,000
WATER YR 1973	---	---	+142,600

06926000 Osage River near Bagnell, Mo.

LOCATION.--Lat 38°12'27", long 92°36'20", in N½SE¼ sec.21, T.40 N., R.15 W., Miller County, on left bank 1.5 mi (2.4 km) upstream from Bagnell, 3 mi (4.8 km) downstream from hydroelectric plant of Union Electric Company of Missouri, and at mile 78.5 (126.3 km).

DRAINAGE AREA.--14,000 mi² (36,300 km²), approximately.

PERIOD OF RECORD.--October 1880 to current year. Monthly discharge only for some periods published in WSP 1310. Gage-height records collected in this vicinity 1880-1931 are contained in reports of Missouri River Commission or National Weather Service.

GAGE.--Water-stage recorder. Datum of gage is 548.87 ft (167.296 m) above mean sea level. Prior to Oct. 15, 1930, nonrecording gage at present site and datum. Since Oct. 1, 1940, auxiliary water-stage recorder at power plant 3 mi (4.8 km) upstream from base gage.

AVERAGE DISCHARGE.--93 years, 9,599 ft³/s (271.8 m³/s), 6,955,000 acre-ft/yr (8,576 hm³/s).

EXTREMES.--Current year: Maximum discharge, 99,000 ft³/s (2,800 m³/s) Apr. 25 (gage height, 32.34 ft or 9.857 m); minimum, 238 ft³/s (6.74 m³/s) Sept. 23 (gage height, 0.60 ft or 0.183 m); minimum daily, 335 ft³/s (9.49 m³/s) Aug. 1.
Period of record: Maximum discharge, 220,000 ft³/s (6,230 m³/s) May 19, 1943 (gage height, 48.8 ft or 14.87 m); minimum, 183 ft³/s (5.18 m³/s) Sept. 9, 1969; minimum daily discharge, 220 ft³/s (6.23 m³/s) Dec. 12, 1917.
Maximum stage known prior to 1943, 43.1 ft (13.14 m) in June 1844 (discharge, 164,000 ft³/s or 4,640 m³/s).

REMARKS.--Records good except those below 2,000 ft³/s (56.6 m³/s), which are poor. Flow regulated by Lake of the Ozarks.

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	451	13,500	11,600	12,000	34,200	10,800	90,300	58,900	22,600	456	335	1,830
2	479	35,600	4,500	13,000	34,600	16,900	90,200	50,700	11,400	425	776	415
3	369	45,300	4,150	17,000	34,600	23,300	85,600	47,300	18,000	1,140	9,310	470
4	466	44,300	16,500	18,500	34,700	21,300	81,000	42,200	22,400	782	849	5,410
5	986	29,500	9,920	28,000	34,700	24,400	75,000	41,800	25,700	2,530	739	6,260
6	435	24,800	13,700	20,000	35,600	38,300	69,300	44,700	32,000	3,680	805	5,770
7	432	22,800	11,200	29,000	36,500	54,100	63,300	51,700	25,900	2,270	10,700	6,820
8	434	20,400	19,300	31,000	36,500	58,700	57,900	61,700	26,500	3,620	11,900	1,110
9	477	16,500	9,520	32,900	36,000	58,500	53,700	64,500	26,300	5,280	2,100	405
10	423	17,300	9,400	24,600	34,900	58,000	51,500	61,900	29,900	8,390	3,270	6,310
11	939	9,630	5,300	20,400	33,700	73,000	49,300	58,400	20,000	6,970	1,740	6,260
12	1,500	8,550	2,000	16,100	30,900	77,000	48,900	53,300	9,430	6,810	413	6,910
13	471	40,100	10,100	12,200	29,400	76,000	46,900	48,500	3,140	9,880	3,130	6,710
14	429	52,500	7,700	4,690	28,200	75,900	44,100	46,500	5,770	3,460	3,190	6,370
15	462	49,400	16,500	9,780	30,300	74,200	45,800	43,600	13,400	411	2,520	780
16	2,380	43,700	11,000	7,430	31,900	71,100	49,000	39,700	14,600	1,030	6,080	383
17	1,720	42,000	6,800	9,480	24,400	67,000	56,000	35,500	7,790	415	8,140	6,260
18	1,010	38,800	9,000	15,300	11,300	62,800	59,900	26,600	11,800	4,520	3,750	6,390
19	5,340	35,700	7,000	17,600	9,090	57,400	60,000	14,100	9,380	6,780	894	7,060
20	1,570	33,100	7,500	25,000	13,900	51,100	58,500	4,790	9,010	11,800	9,310	6,520
21	574	27,000	15,500	25,100	13,900	47,300	64,200	18,800	4,050	2,580	3,340	8,230
22	519	20,500	17,000	35,100	9,980	44,000	80,700	32,700	2,990	371	2,970	605
23	495	3,000	13,000	38,900	7,750	44,800	91,600	32,800	539	7,440	3,060	394
24	4,150	24,400	9,800	43,000	1,690	48,100	96,700	32,000	473	2,910	9,110	5,230
25	3,450	32,700	7,800	43,000	671	65,300	98,400	28,500	9,640	8,610	4,710	8,950
26	2,620	26,700	8,800	43,000	14,000	76,800	96,600	34,300	3,050	8,290	753	6,930
27	6,930	21,000	12,500	40,200	17,300	80,300	93,400	34,000	427	10,400	10,900	8,900
28	1,170	16,700	11,500	37,700	15,600	78,000	88,300	34,400	440	3,160	8,290	9,140
29	572	16,000	11,000	36,200	-----	78,600	82,600	33,700	445	2,230	4,120	6,890
30	5,120	15,600	8,000	31,800	-----	79,500	72,600	27,900	470	3,490	3,560	7,280
31	875	-----	13,000	26,200	-----	83,700	-----	25,800	-----	511	2,770	-----
TOTAL	47,248	827,080	320,590	764,180	676,281	1,776.2M	2,101.3M	1,231.3M	367,544	130,641	133,534	150,992
MEAN	1,524	27,570	10,340	24,650	24,150	57,300	70,040	39,720	12,250	4,214	4,308	5,033
MAX	6,930	52,500	19,300	43,000	36,500	83,700	98,400	64,500	32,000	11,800	11,900	9,140
MIN	369	3,000	2,000	4,690	671	10,800	44,100	4,790	427	371	335	383
AC-FT	93,720	1,641M	635,900	1,516M	1,341M	3,523M	4,168M	2,442M	729,000	259,100	264,900	299,500
CAL YR 1972	TOTAL	2,465,203	MEAN	6,736	MAX	52,500	MIN	290	AC-FT	4,890,000		
WTR YR 1973	TOTAL	8,526,880	MEAN	23,360	MAX	98,400	MIN	335	AC-FT	16,910,000		

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	500	7,500	14,900	12,500	34,500	26,000	89,100	68,800	24,100	875	1,090	3,300
2	492	42,500	9,430	12,700	36,800	28,700	91,500	56,400	15,200	870	684	2,480
3	504	42,800	5,360	16,000	36,900	19,300	89,700	50,700	14,100	797	2,150	1,100
4	497	47,800	9,080	27,700	37,300	22,400	85,600	45,800	24,000	1,640	7,250	1,520
5	510	33,100	14,100	24,500	37,200	25,900	80,100	44,000	27,900	1,260	1,370	6,290
6	1,080	26,200	10,800	28,200	37,100	43,400	74,400	45,000	33,800	3,060	1,040	6,220
7	732	19,900	13,300	23,600	38,100	62,400	68,600	54,000	26,900	4,030	1,660	6,380
8	632	21,500	14,200	29,700	38,300	63,400	62,200	62,300	26,800	3,020	10,500	6,310
9	618	14,100	17,100	33,100	37,900	62,600	57,300	66,400	26,700	4,270	10,300	1,860
10	646	16,600	6,680	27,700	36,400	65,500	54,500	66,200	31,200	5,970	1,930	1,320
11	611	12,200	8,560	20,600	35,800	76,800	50,400	63,700	22,300	7,470	3,800	6,210
12	974	9,030	7,450	20,800	31,100	80,200	48,900	59,800	13,800	6,520	2,440	6,440
13	1,600	31,200	5,450	11,300	31,000	79,300	47,800	54,500	7,430	7,200	971	7,090
14	920	51,500	10,700	10,200	30,300	79,300	45,000	50,900	4,740	8,630	3,560	5,800
15	653	53,200	8,960	6,390	30,600	78,400	45,400	47,600	7,350	3,590	3,560	6,100
16	684	48,100	17,300	9,250	32,900	75,700	48,800	43,400	16,900	1,000	3,330	1,630
17	2,370	44,500	12,300	8,020	27,200	72,500	54,200	38,700	9,510	1,320	6,630	1,520
18	1,910	41,600	8,950	13,000	20,000	68,000	59,500	30,100	9,460	894	7,230	6,330
19	2,180	37,800	10,200	20,200	8,140	63,200	61,600	20,500	17,600	4,470	4,190	6,680
20	4,000	34,800	7,630	28,100	9,960	57,600	61,900	8,350	9,700	7,530	2,100	7,180
21	1,900	30,400	11,100	27,400	14,000	51,600	62,400	8,900	7,920	10,600	7,980	7,410
22	1,120	21,900	17,700	38,800	12,900	47,300	73,500	30,500	4,370	1,980	3,870	6,670
23	974	14,400	14,500	40,200	8,480	45,400	85,900	33,500	3,710	1,660	3,520	1,490
24	1,240	11,200	11,000	44,500	7,550	47,900	94,600	33,500	1,320	8,080	4,070	920
25	3,840	31,500	8,500	45,000	3,180	61,300	99,600	28,800	1,180	3,250	8,390	6,240
26	3,620	32,100	7,350	44,800	5,170	73,000	101,000	33,800	9,680	8,100	5,010	8,360
27	3,280	23,200	10,700	44,200	23,600	78,400	98,500	35,300	2,680	8,540	1,820	7,140
28	5,550	16,800	12,200	40,400	21,300	80,000	94,000	35,100	1,070	8,040	10,300	9,380
29	1,470	16,200	10,800	38,800	-----	80,600	88,100	35,600	911	3,570	7,320	9,330
30	1,520	15,600	10,700	36,400	-----	80,800	80,400	30,600	871	3,200	4,510	8,130
31	4,310	-----	9,170	26,400	-----	83,600	-----	26,900	-----	3,690	4,270	-----
TOTAL	50,937	849,230	336,170	810,460	723,680	1,880.5M	2,154.5M	1,309.7M	403,202	135,126	136,845	157,830
MEAN	1,643	28,310	10,840	26,140	25,850	60,660	71,820	42,250	13,440	4,359	4,414	5,261
MAX	5,550	53,200	17,700	45,000	38,300	83,600	101,000	68,800	33,800	10,600	10,500	9,380
MIN	492	7,500	5,360	6,390	3,180	19,300	45,000	8,350	871	797	684	920
AC-FT	101,000	1,684M	666,800	1,608M	1,435M	3,730M	4,273M	2,598M	799,800	268,000	271,400	313,100
CAL YR 1972	TOTAL 2,554,594		MEAN 6,980		MAX 53,200		MIN 429		AC-FT 5,067,000			
WTR YR 1973	TOTAL 8,948,130		MEAN 24,520		MAX 101,000		MIN 492		AC-FT 17,750,000			

GASCONADE RIVER BASIN

06927800 Osage Fork at Drynob, Mo.

LOCATION.--Lat 37°38'00", long 92°27'12", in NW¼NE¼ sec.27, T.34 N., R.14 W., Laclede County, on downstream end of right bridge pier on State Highway 32, 0.1 mi (0.2 km) downstream from Walker Hollow, 0.6 mi (1.0 km) southwest of Drynob, 1.6 mi (2.6 km) upstream from Core Creek, and 12 mi (19.3 km) southeast of Lebanon.

DRAINAGE AREA.--404 mi² (1,046 km²).

PERIOD OF RECORD.--August 1962 to current year. Occasional low-flow measurements 1942, 1944-47, 1952, 1953, 1956.

GAGE.--Water-stage recorder. Datum of gage is 927.85 ft (282.809 m) above mean sea level.

AVERAGE DISCHARGE.--11 years, 272 ft³/s (7.70 m³/s), 9.14 in/yr (232 mm/yr), 197,100 acre-ft/yr (243 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 15,200 ft³/s (430 m³/s) Nov. 2 (gage height, 16.53 ft or 5.038 m); minimum, 25 ft³/s (0.708 m³/s) Sept. 20; minimum gage height, 2.70 ft (0.823 m) Oct. 8, 9.
Period of record: Maximum discharge, 16,900 ft³/s (479 m³/s) Jan. 30, 1969 (gage height, 16.48 ft or 5.023 m); maximum gage height, 16.53 ft (5.038 m) Nov. 2, 1972; minimum, 16 ft³/s (0.453 m³/s) Oct. 5-15, 1963, Oct. 21, 22, 1964.

A discharge of 12 ft³/s (0.340 m³/s) was measured on Sept. 21, 1956.

Maximum stage known about 31 ft (9.45 m) in 1903, flood in September 1914 reached a stage of 29.3 ft (8.93 m), flood in May 1943 reached a stage of 28.5 ft (8.69 m), from information by local resident.

REMARKS.--Records fair.

REVISIONS (WATER YEARS).--WRD Mo. 1968: 1963(M), 1965(M), 1966(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	60	4,010	348	265	471	240	2,790	654	259	80	91	32
2	50	12,900	318	246	685	250	1,400	861	242	90	82	30
3	45	1,030	294	303	597	275	1,050	715	239	80	74	39
4	40	727	277	489	508	344	1,070	586	253	75	69	39
5	35	492	264	497	454	568	960	533	269	70	63	37
6	34	397	250	406	401	1,190	796	525	326	66	58	41
7	33	479	234	342	384	3,010	700	4,970	334	63	54	78
8	31	422	222	307	588	1,660	636	7,430	279	60	52	87
9	35	322	214	280	590	1,180	1,310	2,270	247	70	49	67
10	43	275	204	275	497	3,830	1,500	1,470	219	90	49	53
11	45	244	194	275	441	7,140	1,060	1,130	200	100	47	45
12	45	236	258	275	409	2,240	858	931	188	90	44	40
13	52	4,700	457	275	402	1,440	713	778	178	80	43	37
14	58	4,180	488	274	415	1,510	626	672	1,020	70	44	36
15	77	1,220	420	242	395	1,330	574	592	442	80	40	33
16	77	796	335	227	353	976	561	523	300	90	39	31
17	70	614	288	240	321	810	582	468	242	80	39	29
18	84	500	268	646	304	695	519	427	206	70	37	28
19	98	437	302	2,720	297	703	493	393	192	65	67	27
20	81	402	445	1,230	290	1,140	506	361	180	60	77	26
21	70	396	450	1,540	279	953	506	330	160	55	58	27
22	121	420	418	2,290	272	740	4,440	326	140	50	46	27
23	185	443	366	1,380	269	629	3,640	338	120	50	39	29
24	201	490	326	928	265	727	1,530	516	110	60	37	28
25	205	541	297	731	257	3,540	2,040	426	100	55	35	33
26	172	613	276	605	251	2,280	1,640	348	90	60	32	42
27	150	618	265	531	246	1,300	1,170	318	85	70	31	80
28	136	509	253	484	240	983	921	305	80	60	29	91
29	118	425	246	441	-----	981	786	290	80	50	29	75
30	105	376	248	392	-----	915	700	273	80	87	29	61
31	126	-----	260	385	-----	2,350	-----	284	-----	99	35	-----
TOTAL	2,682	39,214	9,485	19,521	10,881	45,929	36,077	30,043	6,860	2,225	1,518	1,328
MEAN	86.5	1,307	306	630	389	1,482	1,203	969	229	71.8	49.0	44.3
MAX	205	12,900	488	2,720	685	7,140	4,440	7,430	1,020	100	91	91
MIN	31	236	194	227	240	240	493	273	80	50	29	26
CFSM	.21	3.24	.76	1.56	.96	3.67	2.98	2.40	.57	.18	.12	.11
IN.	.25	3.61	.87	1.80	1.00	4.23	3.32	2.77	.63	.20	.14	.12
AC-FT	5,320	77,780	18,810	38,720	21,580	91,100	71,560	59,590	13,610	4,410	3,010	2,630
CAL YR 1972	TOTAL 99,259	MEAN 271	MAX 12,900	MIN 19	CFSM .67	IN 9.14	AC-FT 196,900					
WTR YR 1973	TOTAL 205,763	MEAN 564	MAX 12,900	MIN 26	CFSM 1.40	IN 18.95	AC-FT 408,100					

PEAK DISCHARGE (BASE, 5,000 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-2	0845	16.53	15,200	4-22	2030	12.68	7,130
11-14	0145	13.43	7,660	5-8	0430	14.44	11,100
3-11	1130	13.96	9,720				

06928700 Beeler Branch near Cabool, Mo.

LOCATION.--Lat 37°06'06", long 92°04'17", in SE¼NE¼SE¼ sec.18, T.28 N., R.10 W., Texas County, at bridge on U.S. Highway 60 and 63, 2 mi (3.2 km) upstream from mouth, and 2.1 mi (3.4 km) southeast of Cabool.

DRAINAGE AREA.--7.78 mi² (20.2 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 1,260.46 ft (384.188 m) above mean sea level.

AVERAGE DISCHARGE.--6 years, 6.40 ft³/s (0.181 m³/s), 11.17 in/yr (284 mm/yr), 4,640 acre-ft/yr (5.72 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,980 ft³/s (56.1 m³/s) Nov. 1 (gage height, 6.93 ft or 2.112 m); minimum, 0.2 ft³/s (0.001 m³/s) Oct. 1-17, Aug. 17 to Sept. 2; minimum gage height, 0.07 ft (0.021 m) Oct. 17. Period of record: Maximum discharge, 4,700 ft³/s (133 m³/s) Oct. 26, 1970, Apr. 15, 1972; estimate of peak flow by slope-area measurement; maximum gage height, 8.90 ft (2.713 m) Apr. 15, 1972; no flow at times in October, November 1971, August 1972.

REMARKS.--Records fair. Flow affected by construction of U.S. Highway 63 at site October 1969 to October 1970.

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	307	5.5	11	13	3.8	25	9.3	3.6	1.5	.40	.20
2	.20	56	5.0	6.8	10	3.8	18	7.8	7.0	1.4	.50	.20
3	.20	19	4.5	16	7.6	3.8	22	6.2	18	1.3	.50	31
4	.20	11	4.2	11	6.8	4.2	24	5.2	14	1.1	.50	2.7
5	.20	7.6	4.2	7.0	5.8	5.2	18	4.8	12	1.1	.50	2.3
6	.20	17	3.8	4.5	5.5	16	15	17	8.4	1.0	.50	2.0
7	.20	15	3.6	3.4	15	28	14	416	6.8	1.0	.50	1.9
8	.20	9.2	3.8	2.7	19	15	14	33	6.2	1.0	.40	2.3
9	.20	7.0	3.8	2.0	12	12	27	26	5.5	1.0	.50	2.5
10	.20	5.5	3.6	1.7	8.7	210	22	21	4.5	1.1	.50	2.0
11	.20	4.2	3.6	1.6	7.0	29	17	26	3.6	.90	.40	1.9
12	.20	8.8	19	1.4	14	21	14	19	3.4	.80	.40	1.6
13	.20	195	16	1.4	34	18	13	14	3.2	.80	.40	2.0
14	.20	26	11	1.4	22	22	11	11	7.9	.80	.40	2.0
15	.20	16	8.1	1.4	14	15	10	8.7	6.0	.80	.30	1.9
16	.20	13	6.2	1.4	9.5	14	23	7.6	3.4	.80	.30	1.6
17	.20	9.5	5.2	1.5	7.6	11	18	6.5	2.7	.80	.20	1.4
18	13	8.1	4.8	10	6.2	9.2	15	5.0	2.7	.80	.20	1.1
19	1.7	7.8	5.5	9.9	5.5	8.1	23	4.5	2.5	.70	.20	1.0
20	1.5	7.0	5.0	7.0	5.2	7.6	23	3.6	2.5	.70	.20	.90
21	3.4	7.0	4.5	64	5.2	7.3	19	3.4	2.3	.70	.20	.80
22	3.6	6.8	4.1	35	5.2	7.3	146	3.2	2.3	.70	.20	.80
23	2.7	6.8	3.8	19	5.0	7.3	51	20	2.7	.70	.20	.70
24	2.1	7.0	3.4	13	4.5	16	73	12	2.3	.70	.20	.80
25	1.9	8.9	3.2	9.9	4.0	26	32	8.7	2.1	.60	.20	9.2
26	1.7	10	2.9	8.1	3.8	20	23	6.2	2.0	.50	.20	3.8
27	1.6	8.9	2.7	7.3	3.8	15	15	6.5	1.9	.40	.20	2.7
28	1.3	7.6	2.7	6.5	3.8	12	10	5.5	1.7	.40	.20	4.3
29	1.1	6.8	3.8	5.5	-----	15	8.1	4.5	1.7	.50	.20	4.8
30	1.1	6.2	99	5.5	-----	12	6.8	4.0	1.6	.60	.20	3.4
31	26	-----	22	5.5	-----	43	-----	3.8	-----	.60	.20	-----
TOTAL	66.10	825.7	278.5	282.4	263.7	637.6	749.9	730.0	144.5	25.80	10.00	93.80
MEAN	2.13	27.5	8.98	9.11	9.42	20.6	25.0	23.5	4.82	.83	.32	3.13
MAX	26	307	99	64	34	210	146	416	18	1.5	.50	31
MIN	.20	4.2	2.7	1.4	3.8	3.8	6.8	3.2	1.6	.40	.20	.20
CFSM	.27	3.53	1.15	1.17	1.21	2.65	3.21	3.02	.62	.11	.04	.40
IN.	.32	3.95	1.33	1.35	1.26	3.05	3.59	3.49	.69	.12	.05	.45
AC-FT	131	1,640	552	560	523	1,260	1,490	1,450	287	51	20	186

CAL YR 1972 TOTAL 2,416.20 MEAN 6.60 MAX 330 MIN 0 CFSM .85 IN 11.55 AC-FT 4,790
WTR YR 1973 TOTAL 4,108.00 MEAN 11.3 MAX 416 MIN .20 CFSM 1.45 IN 19.64 AC-FT 8,150

PEAK DISCHARGE (BASE, 500 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-1	1815	6.93	1,980	5-7	0430	6.58	1,800
11-13	0530	4.39	790	5-7	1645	5.50	1,260
3-10	1515	4.65	890				

06930000 Big Piney River near Big Piney, Mo.

LOCATION.--Lat 37°39'58", long 92°03'02", in NE¼SE¼ sec.8, T.34 N., R.10 W., Pulaski County, on downstream side of left pier of Ross bridge, 3 mi (4.8 km) east of Big Piney, 14.8 mi (23.8 km) upstream from Spring Creek, and at mile 22 (35.4 km).

DRAINAGE AREA.--560 mi² (1,450 km²), approximately.

PERIOD OF RECORD.--October 1921 to current year.

GAGE.--Water-stage recorder. Datum of gage is 800.99 ft (244.142 m) above mean sea level. Prior to July 12, 1961, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--52 years, 533 ft³/s (15.1 m³/s), 12.93 in/yr (328 mm/yr), 386,200 acre-ft/yr (476 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 23,100 ft³/s (654 m³/s) Mar. 11 (gage height, 18.19 ft or 5.544 m); minimum, 141 ft³/s (3.99 m³/s) Oct. 11, 12, 13 (gage height, 2.06 ft or 0.628 m).

Period of record: Maximum discharge, 32,700 ft³/s (926 m³/s) Dec. 27, 1942 (gage height, 20.7 ft or 6.31 m, from floodmark); minimum, 69 ft³/s (1.95 m³/s) Sept. 17, 18, 1954; minimum gage height, 1.60 ft (0.488 m) July 30, 31, 1926, Sept. 5, 6, 9-11, 17, 18, 1954.

REMARKS.--Records good.

REVISIONS (WATER YEARS).--WSP 826: 1935. WSP 1176: 1943, 1945. WSP 1340: 1922-23, 1927-28(M), 1933(M), 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	230	2,340	560	1,250	658	419	3,310	1,050	512	259	242	149
2	211	12,300	525	881	881	416	2,090	1,050	493	259	224	151
3	200	6,220	490	754	888	419	1,620	989	545	252	214	178
4	186	1,810	466	1,100	773	445	2,540	880	924	251	207	488
5	174	1,250	448	1,140	711	606	2,360	810	901	243	201	505
6	165	981	430	902	655	853	1,730	785	898	239	195	314
7	160	966	418	748	617	1,370	1,450	4,050	732	231	191	258
8	154	1,020	394	658	830	1,770	1,290	13,600	618	234	187	244
9	149	838	390	594	1,190	1,380	1,900	4,670	551	246	184	234
10	145	724	386	566	964	5,900	2,880	2,360	501	242	182	324
11	143	641	381	561	828	19,000	1,900	1,770	469	263	187	344
12	142	576	399	535	748	5,730	1,510	1,510	441	261	217	280
13	144	4,590	944	466	767	2,540	1,280	1,290	430	239	226	245
14	166	10,400	1,200	435	1,340	2,440	1,120	1,100	578	225	210	225
15	200	2,450	944	417	1,200	2,320	1,020	971	490	223	202	210
16	218	1,570	760	408	968	1,710	998	884	513	222	186	199
17	209	1,220	646	404	812	1,410	1,300	814	446	237	179	191
18	226	1,000	561	505	723	1,210	1,180	756	412	232	183	184
19	301	880	535	1,530	671	1,090	1,080	715	397	251	179	178
20	261	796	582	1,390	625	4,680	1,230	678	372	237	171	178
21	281	738	617	1,380	581	2,480	2,610	635	351	223	166	178
22	304	724	599	3,040	546	1,640	4,470	640	333	212	161	178
23	387	717	561	2,380	524	1,330	7,090	742	318	485	156	173
24	458	708	525	1,590	505	1,240	3,510	1,050	306	346	157	174
25	410	732	490	1,220	481	2,380	2,480	991	300	630	157	200
26	360	783	458	1,020	460	2,870	2,420	776	293	539	152	236
27	324	811	435	909	442	1,900	1,870	689	287	383	150	245
28	296	742	422	825	428	1,500	1,520	647	278	323	148	264
29	276	656	412	748	-----	1,320	1,290	594	271	290	148	256
30	259	596	426	682	-----	1,280	1,150	570	265	263	146	264
31	280	-----	1,660	646	-----	2,010	-----	536	-----	245	147	-----
TOTAL	7,419	59,779	18,064	29,684	20,816	75,658	62,198	48,602	14,225	8,785	5,655	7,247
MEAN	239	1,993	583	958	743	2,441	2,073	1,568	474	283	182	242
MAX	458	12,300	1,660	3,040	1,340	19,000	7,090	13,600	924	630	242	505
MIN	142	576	381	404	428	416	998	536	265	212	146	149
CFSM	.43	3.56	1.04	1.71	1.33	4.36	3.70	2.80	.85	.51	.33	.43
IN	.49	3.97	1.20	1.97	1.38	5.03	4.13	3.23	.94	.58	.38	.48
AC-FT	14,720	118,600	35,830	58,880	41,290	150,100	123,400	96,400	28,220	17,430	11,220	14,370
CAL YR 1972	TOTAL 184,547 MEAN 504 MAX 12,300 MIN 105 CFSM .90 IN 12.26 AC-FT 366,000											
WTR YR 1973	TOTAL 358,132 MEAN 981 MAX 19,000 MIN 142 CFSM 1.75 IN 23.79 AC-FT 710,400											

PEAK DISCHARGE (BASE, 6,800 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-2	2200	15.52	16,000	3-20	1515	11.21	7,560
11-14	0945	14.99	14,700	4-23	0545	12.16	9,060
3-11	1545	18.19	23,100	5-8	1080	13.40	15,700

GASCONADE RIVER BASIN

109

06931500 Little Beaver Creek near Rolla, Mo.

LOCATION.--Lat 37°56'06", long 91°50'11", in NW¼NW¼ sec.17, T.37 N., R.8 W., Phelps County, on right bank 1,700 ft (520 m) downstream from Interstate Highway 44, 2.9 mi (4.7 km) upstream from mouth, and 3 mi (4.8 km) west of Rolla.

DRAINAGE AREA.--6.41 mi² (16.6 km²).

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

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 790 ft (240.8 m) from topographic map.

AVERAGE DISCHARGE.--25 years, 5.25 ft³/s (0.149 m³/s), 11.12 in/yr (282 mm/yr), 3,800 acre-ft/yr (4.7 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,070 ft³/s (30.3 m³/s) May 7 (gage height, 4.83 ft or 1.472 m); minimum, 0.2 ft³/s (0.001 m³/s) July 18, 22 (gage height, 1.58 ft or 0.482 m).
 Period of record: Maximum discharge, 7,420 ft³/s (210 m³/s) July 17, 1958 (gage height, 8.57 ft or 2.612 m) from rating curve extended above 1,400 ft³/s (40 m³/s) on basis of slope-area and contracted opening measurements at gage height, 7.57 ft (2.307 m) and logarithmic plotting; no flow Aug. 12, 13, 1964, Aug. 4, 5, 1965, result of construction work on highway upstream.
 Maximum stage known since 1881 or 1882, that of July 17, 1958.

REMARKS.--Records fair. Sewage effluent included in the records since July 1970.

REVISIONS (WATER YEARS)--WSP 1280: Drainage area. WSP 1730: 1957.

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	1.2	243	5.0	5.6	16	3.4	18	4.0	1.0	.30	1.5	.40
2	.80	34	4.6	5.0	12	3.4	12	4.0	1.0	.30	1.4	.50
3	.70	12	4.3	25	8.3	3.1	9.2	3.1	1.2	.30	1.0	5.5
4	.60	7.4	4.0	36	7.4	4.6	9.2	2.5	2.2	.40	.80	1.9
5	.60	5.6	4.0	9.8	6.0	5.0	7.4	2.2	3.7	.30	.80	1.4
6	.60	6.0	3.7	6.4	5.3	22	6.9	3.7	2.2	.30	.80	.80
7	.60	5.3	3.1	5.3	7.4	18	6.4	187	1.6	.30	.80	.70
8	.50	4.3	3.4	5.3	7.4	9.8	6.9	33	1.0	.30	.70	.60
9	.50	4.0	3.4	5.3	5.6	12	44	11	.80	.30	.80	.80
10	.40	4.0	3.1	5.0	5.3	165	16	6.9	.70	.40	.80	.60
11	.40	3.7	3.1	5.0	5.0	30	9.8	5.0	.60	.40	.70	.60
12	.40	22	15	5.0	6.0	18	6.9	4.0	.60	.30	1.5	.50
13	.50	158	12	5.0	16	15	5.6	3.1	.60	.30	2.5	.50
14	4.3	24	8.3	5.0	11	12	5.0	2.8	.50	.30	1.7	.60
15	1.5	15	6.9	5.0	7.4	8.3	5.0	2.2	.50	.30	.80	.60
16	1.4	11	5.3	5.0	5.6	6.9	12	1.9	.50	.30	1.7	.50
17	1.0	9.2	4.3	4.0	4.6	6.0	9.2	1.7	.60	.30	1.0	.50
18	1.0	7.8	6.0	19	4.6	5.3	6.9	1.5	.50	.30	.80	.60
19	.80	9.2	12	16	5.0	12	6.9	1.5	.50	.40	.80	.60
20	.80	10	12	9.2	4.6	18	6.4	1.4	.50	.30	.70	.60
21	3.1	12	9.8	63	4.3	13	6.0	13	.40	.30	.70	.60
22	9.2	12	7.8	35	4.3	7.8	105	7.8	.30	.30	.60	1.0
23	4.0	12	6.9	16	4.0	6.9	18	6.0	.30	75	.60	.60
24	2.8	12	6.0	11	3.7	17	9.8	3.4	.30	5.6	.60	.70
25	1.9	12	5.0	8.3	3.7	34	7.8	2.8	.30	28	.50	.80
26	1.7	11	4.6	7.4	3.4	15	6.0	1.7	.30	7.8	.50	.70
27	1.7	7.8	4.3	6.9	3.1	9.8	5.0	1.5	.30	3.4	.50	.60
28	1.5	6.4	4.0	8.3	3.1	7.4	4.3	1.5	.30	1.9	.40	.80
29	1.4	5.6	4.3	6.4	-----	7.8	3.7	1.4	.30	2.5	.40	1.0
30	1.4	5.3	9.8	6.4	-----	6.4	3.4	1.4	.30	3.1	.40	1.0
31	8.3	-----	7.4	6.9	-----	51	-----	1.2	-----	1.7	.50	-----
TOTAL	55.60	691.6	193.4	362.5	180.1	553.9	378.7	324.2	23.90	136.00	27.30	26.60
MEAN	1.79	23.1	6.24	11.7	6.43	17.9	12.6	10.5	.80	4.39	.88	.89
MAX	9.2	243	15	63	16	165	105	187	3.7	75	2.5	5.5
MIN	.40	3.7	3.1	4.0	3.1	3.1	3.4	1.2	.30	.30	.40	.40
CFSM	.28	3.60	.97	1.83	1.00	2.79	1.97	1.64	.12	.68	.14	.14
IN.	.32	4.01	1.12	2.10	1.05	3.21	2.20	1.88	.14	.79	.16	.15
AC-FT	110	1,370	384	719	357	1,100	751	643	47	270	54	53

CAL YR 1972 TOTAL 2,015.68 MEAN 5.51 MAX 243 MIN .10 CFSM .86 IN 11.70 AC-FT 4,000
 WTR YR 1973 TOTAL 2,953.80 MEAN 8.09 MAX 243 MIN .30 CFSM 1.26 IN 17.14 AC-FT 5,860

PEAK DISCHARGE (BASE, 1,000 FT³/S)--May 7 (0130) 1,070 ft³/s (4.83 ft).

06932000 Little Piney Creek at Newburg, Mo.

LOCATION.--Lat 37°54'35", long 91°54'12", in SE¼ sec.22, T.37 N., R.9 W., Phelps County, on left bank at downstream side of bridge on County Highway P and T at Newburg, and 2 mi (3.2 km) upstream from Mill Creek.

DRAINAGE AREA.--200 mi² (520 km²), approximately.

PERIOD OF RECORD.--October 1928 to current year.

GAGE.--Water-stage recorder. Datum of gage is 693.40 ft (211.348 m) above mean sea level. Prior to Oct. 1, 1951, all gages at datum 3.0 ft (0.914 m) higher. Prior to Nov. 21, 1963, nonrecording gage at site 100 ft (30 m) downstream. Nov. 21, 1963, to May 9, 1966, nonrecording gage at present site.

AVERAGE DISCHARGE.--45 years, 149 ft³/s (4.22 m³/s), 10.12 in/yr (257 mm/yr), 108,000 acre-ft/yr (133 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 7,900 ft³/s (224 m³/s) Mar. 11 (gage height, 10.66 ft or 3.249 m); minimum, 28 ft³/s (0.79 m³/s) Oct. 11-13; minimum gage height, 1.47 ft (0.448 m) Oct. 11.
 Period of record: Maximum discharge, 32,500 ft³/s (920 m³/s) Aug. 14, 1946 (gage height, 16.2 ft or 4.94 m, present datum, from floodmarks), from rating curve extended above 21,000 ft³/s (595 m³/s) on basis of slope-area measurements at gage heights 15.0 ft (4.57 m) and 16.2 ft (4.94 m); maximum gage height, 16.26 ft (4.956 m) June 26, 1935 (from floodmark, present datum); minimum discharge, 24 ft³/s (0.68 m³/s) Aug. 22-31, 1936, Sept. 19, 20, 1954, Oct. 10-16, 1956.
 Maximum stage known, 16.7 ft (5.09 m) Aug. 20, 1915 (from floodmark, present datum); discharge, 30,000 ft³/s (850 m³/s), from rating curve based on discharge measurements made in 1935 and extended above 25,000 ft³/s (708 m³/s).

REMARKS.--Records fair.

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	65	1,160	137	133	178	84	676	260	133	99	92	67
2	57	1,260	129	120	193	86	502	240	130	101	89	68
3	48	364	123	226	181	86	403	220	128	101	86	103
4	43	244	121	270	157	85	382	210	132	103	85	97
5	40	180	114	207	151	86	326	200	135	99	82	110
6	38	158	110	170	141	132	284	200	135	98	78	95
7	38	158	105	148	134	348	268	2,490	132	93	79	90
8	35	151	105	138	143	234	247	1,410	132	90	76	88
9	32	132	96	125	143	207	757	727	132	86	75	84
10	31	121	89	111	140	2,500	603	561	130	91	83	84
11	30	117	85	103	133	3,030	424	459	130	93	77	82
12	28	108	127	100	127	762	362	377	128	95	80	79
13	28	3,210	195	97	150	555	296	318	132	95	99	78
14	57	896	176	91	166	517	264	279	112	97	96	82
15	49	478	157	89	166	429	243	246	95	99	84	81
16	40	373	135	86	160	367	251	224	97	99	84	73
17	38	306	117	84	136	312	260	209	102	99	79	62
18	37	250	114	203	132	262	242	195	105	99	74	62
19	37	242	127	270	124	247	233	178	108	97	72	62
20	36	207	150	199	118	717	230	182	104	97	70	65
21	36	198	150	562	112	451	225	183	99	97	66	63
22	78	197	149	637	106	352	3,250	257	97	95	64	66
23	73	194	139	412	103	329	4,000	170	95	95	63	66
24	65	187	130	299	99	320	1,000	153	94	95	67	68
25	57	182	121	238	95	543	600	150	92	94	65	74
26	51	182	118	208	88	496	500	148	93	94	64	71
27	45	182	110	196	84	401	400	145	94	93	62	69
28	43	174	103	187	84	339	350	143	95	95	60	75
29	42	158	103	162	-----	318	300	140	97	90	62	81
30	37	140	117	150	-----	255	280	138	97	94	62	82
31	52	-----	135	148	-----	737	-----	135	-----	92	65	-----
TOTAL	1,386	11,909	3,887	6,169	3,744	15,587	18,158	10,947	3,385	2,965	2,340	2,327
MEAN	44.7	397	125	199	134	503	605	353	113	95.6	75.5	77.6
MAX	78	3,210	195	637	193	3,030	4,000	2,490	135	103	99	110
MIN	28	108	85	84	84	84	225	135	92	86	60	62
CFSM	.22	1.99	.63	1.00	.67	2.52	3.03	1.77	.57	.48	.38	.39
IN.	.26	2.22	.72	1.15	.70	2.90	3.38	2.04	.63	.55	.44	.43
AC-FT	2,750	23,620	7,710	12,240	7,430	30,920	36,020	21,710	6,710	5,880	4,640	4,620

CAL YR 1972 TOTAL 44,382 MEAN 121 MAX 3,210 MIN 28 CFSM .61 IN 8.26 AC-FT 88,030
 WTR YR 1973 TOTAL 82,804 MEAN 227 MAX 4,000 MIN 28 CFSM 1.14 IN 15.40 AC-FT 164,200

PEAK DISCHARGE (BASE, 4,900 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-13	1700	8.89	5,250	4-22	1515	9.09	5,530
3-11	0215	10.66	7,900				

06933500 Gasconade River at Jerome, Mo.

LOCATION.--Lat 37°55'35", long 91°58'40", in SE¼ sec.13, T.37 N., R.10 W., Phelps County, on left bank at Jerome, 0.5 mi (0.8 km) downstream from Little Piney Creek, and at mile 107 (172.2 km).

DRAINAGE AREA.--2,840 mi² (7,360 km²), approximately.

PERIOD OF RECORD.--April 1903 to July 1906 (published as "at Arlington") and January 1923 to current year. October to December 1922 monthly discharge only, published in WSP 1310. Gage-height records collected intermittently in the vicinity 1885-1926 and at same site since 1938 are contained in reports of National Weather Service.

GAGE.--Water-stage recorder. Datum of gage is 657.64 ft (200.449 m) above mean sea level. Prior to July 26, 1904, nonrecording gage at site 0.8 mi (1.3 km) downstream at different datum. July 26, 1904 to July 21, 1906, nonrecording gage at site 0.5 mi (0.8 km) upstream from present site at datum about 0.85 ft (0.259 m) higher than present gage. Jan. 3, 1923 to Sept. 29, 1928, nonrecording gage at site 400 ft (122 m) downstream from present site at datum 0.14 ft (0.043 m) lower than present datum. Sept. 30, 1928 to Jan. 17, 1939, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--53 years (1903-5, 1922-73), 2,495 ft³/s (70.7 m³/s), 11.93 in/yr (303 mm/yr), 1,808,000 acre-ft/yr (2,230 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 46,900 ft³/s (1,330 m³/s) Mar. 12 (gage height, 21.18 ft or 6.456 m); minimum, 525 ft³/s (14.9 m³/s) Sept. 1, 2 (gage height, 1.75 ft or 0.533 m).
Period of record: Maximum discharge, 101,000 ft³/s (2,860 m³/s) Apr. 15, 1945 (gage height, 27.7 ft or 8.44 m); minimum, 254 ft³/s (7.19 m³/s) Sept. 21, 22, 1956 (gage height, 1.24 ft or 0.378 m).
Maximum stage known about 29.0 ft (8.84 m) Jan. 6, 1897 (discharge, 120,000 ft³/s or 3,400 m³/s). A stage of 28.6 ft (8.72 m) was reached on Aug. 20, 22, 1915 (discharge, 114,000 ft³/s or 3,230 m³/s).

REMARKS.--Records good.

REVISIONS (WATER YEARS).--WSP 172: 1904. WSP 566: Drainage area. WSP 1340: 1903-4, 1928(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	811	6,980	2,820	3,100	3,310	1,670	11,800	5,320	2,170	954	898	525		
2	835	20,600	2,620	2,500	3,380	1,610	12,500	5,020	2,100	934	862	525		
3	755	31,100	2,360	2,760	3,820	1,610	10,300	4,870	2,100	925	819	608		
4	715	23,900	2,240	3,240	4,120	1,670	8,100	4,720	2,300	916	795	638		
5	691	15,000	2,040	4,120	3,820	2,170	8,790	4,270	2,760	889	763	862		
6	699	6,260	1,910	4,270	3,450	3,820	8,970	3,970	3,240	862	747	880		
7	699	4,870	1,790	3,970	3,170	7,930	7,590	11,800	3,100	835	731	731		
8	668	4,270	1,670	3,380	3,030	10,600	6,420	22,700	3,030	827	707	715		
9	645	3,970	1,550	2,890	3,520	10,600	7,080	32,700	2,690	819	691	691		
10	615	3,670	1,480	2,560	3,970	16,000	9,510	32,400	2,430	815	683	683		
11	592	3,170	1,440	2,300	3,820	32,000	10,100	15,000	2,170	810	668	731		
12	570	2,760	1,540	2,170	3,520	44,400	8,790	8,440	2,040	805	675	763		
13	555	9,690	1,790	2,000	3,380	41,300	7,080	6,910	1,910	800	771	715		
14	600	19,600	2,760	1,900	3,600	19,600	5,940	5,780	1,980	800	763	707		
15	615	22,700	3,030	1,800	3,970	10,600	5,320	5,020	1,980	795	723	668		
16	615	17,000	3,100	1,700	3,970	9,150	5,020	4,420	2,360	790	699	638		
17	638	8,610	2,760	1,610	3,520	7,590	4,870	3,970	2,170	785	668	630		
18	675	5,940	2,500	2,300	3,170	6,260	5,020	3,600	1,850	780	645	615		
19	683	4,870	2,360	4,720	2,890	5,470	4,870	3,380	1,670	779	638	600		
20	747	4,120	2,360	8,100	2,690	7,760	4,720	3,100	1,550	755	622	600		
21	747	3,740	2,500	12,000	2,500	11,400	5,170	2,890	1,440	755	592	585		
22	871	3,450	2,620	12,000	2,300	8,790	12,500	2,890	1,360	747	592	622		
23	925	3,380	2,620	12,400	2,240	7,250	20,600	2,820	1,280	1,050	570	652		
24	1,070	3,310	2,560	13,100	2,100	6,100	21,600	3,170	1,220	1,310	570	652		
25	1,250	3,450	2,360	11,400	1,980	7,760	17,700	3,740	1,170	1,310	570	668		
26	1,270	3,670	2,170	8,270	1,910	12,200	11,000	3,520	1,120	1,440	562	683		
27	1,290	3,820	2,040	6,420	1,790	13,300	11,000	3,170	1,080	1,160	555	691		
28	1,180	3,820	1,850	5,320	1,730	10,600	9,330	2,820	1,040	1,120	548	699		
29	1,080	3,600	1,790	4,720	-----	8,100	7,250	2,620	1,010	1,100	540	723		
30	1,000	3,170	1,790	4,120	-----	6,910	6,100	2,500	972	1,010	532	747		
31	992	-----	2,040	3,670	-----	8,270	-----	2,300	-----	972	532	-----		
TOTAL	25,098	254,490	68,460	154,810	86,670	342,490	275,040	219,830	57,292	28,649	20,731	20,247		
MEAN	810	8,483	2,208	4,994	3,095	11,050	9,168	7,091	1,910	924	669	675		
MAX	1,290	31,100	3,100	13,100	4,120	44,400	21,600	32,700	3,240	1,440	898	880		
MIN	555	2,760	1,440	1,610	1,730	1,610	4,720	2,300	972	747	532	525		
CFSM	.29	2.99	.78	1.76	1.09	3.89	3.23	2.50	.67	.33	.24	.24		
IN.	.33	3.33	.90	2.03	1.14	4.49	3.60	2.88	.75	.38	.27	.27		
AC-FT	49,780	504,800	135,800	307,100	171,900	679,300	545,500	436,000	113,600	56,830	41,120	40,160		
CAL YR 1972	TOTAL	758,984	MEAN	2,074	MAX	31,100	MIN	448	CFSM	.73	IN	9.94	AC-FT	1,505,000
WTR YR 1973	TOTAL	1,553,807	MEAN	4,257	MAX	44,400	MIN	525	CFSM	1.50	IN	20.35	AC-FT	3,082,000

PEAK DISCHARGE (BASE, 16,000 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-3	1330	17.10	32,000	4-23	2130	14.54	24,200
11-15	0430	15.16	26,300	5-10	0800	17.74	34,300
3-12	1030	21.18	46,900				

06934500 Missouri River at Hermann, Mo.

LOCATION.--Lat 38°42'36", long 91°26'21", in SW¼ sec.25, T.46 N., R.5 W., Montgomery County, on downstream side of third pier from right abutment of bridge on State Highway 19 at Hermann. River mile, 97.9 (157.5 km).

DRAINAGE AREA.--528,200 mi² (1,368,000 km²), approximately.

PERIOD OF RECORD.--October 1897 to current year. Prior to August 1928 monthly discharge only published in WSP 1310. Gage-height records 1873-99 collected at site 480 ft (146 m) downstream are contained in reports of Missouri River Commission; since 1900 in reports of National Weather Service.

GAGE.--Water-stage recorder. Datum of gage is 481.56 ft (146.779 m) above mean sea level. Prior to Sept. 26, 1930, nonrecording gage at site 480 ft (146 m) downstream at datum 0.07 ft (0.021 m) lower. Sept. 26, 1930 to Mar. 27, 1932, nonrecording gage, Mar. 28, 1932, to June 12, 1945, water-stage recorder, June 13, 1945, to Apr. 2, 1946, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--76 years, 79,190 ft³/s (2,243 m³/s), 57,370,000 acre-ft/yr (70,740 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 500,000 ft³/s (14,160 m³/s) Apr. 25 (gage height, 33.70 ft or 10.272 m); minimum daily, 44,200 ft³/s (1,250 m³/s) Jan. 14.
Period of record: Maximum discharge, 676,000 ft³/s (19,140 m³/s) June 6, 7, 1903 (gage height, 29.5 ft or 8.99 m), discharge computed by Corps of Engineers; maximum gage height, 33.70 ft (10.272 m) Apr. 25, 1973; minimum, about 4,200 ft³/s (119 m³/s) Jan. 10-12, 1940; minimum gage height observed, -0.80 ft (-0.244 m) Jan. 5, 6, 1940.
Maximum stage known, 35.5 ft (10.82 m) in June 1844 (discharge, about 892,000 ft³/s or 25,260 m³/s, computed by Corps of Engineers).

REMARKS.--Records good. Discharge measurements made 3 times a month during winter and 6 or more times monthly during rest of year. Flow partly regulated by many reservoirs above station. Records of chemical analyses 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	75,900	79,700	93,100	154,000	130,000	115,000	386,000	203,000	194,000	67,000	79,000	59,800
2	72,700	122,000	88,900	156,000	142,000	109,000	389,000	181,000	170,000	66,300	72,900	55,700
3	69,200	147,000	82,300	147,000	189,000	110,000	397,000	194,000	140,000	64,700	69,700	53,800
4	67,600	150,000	78,900	148,000	231,000	117,000	402,000	214,000	129,000	66,900	71,600	56,400
5	64,900	154,000	83,000	143,000	232,000	142,000	403,000	218,000	143,000	76,200	72,300	56,700
6	63,200	145,000	82,000	129,000	212,000	192,000	394,000	221,000	158,000	115,000	63,900	59,700
7	62,000	130,000	81,600	112,000	191,000	289,000	346,000	231,000	161,000	122,000	61,000	59,300
8	61,900	113,000	77,900	97,400	182,000	307,000	300,000	249,000	149,000	105,000	60,600	58,500
9	63,000	111,000	72,100	90,200	167,000	299,000	260,000	259,000	138,000	88,400	67,800	62,000
10	63,200	109,000	65,200	80,300	150,000	296,000	245,000	266,000	129,000	79,500	69,700	67,800
11	63,400	111,000	57,300	59,900	138,000	343,000	234,000	275,000	123,000	72,900	90,500	61,400
12	63,000	103,000	55,900	50,500	125,000	350,000	228,000	280,000	110,000	70,700	96,100	63,100
13	63,000	126,000	55,400	48,500	124,000	333,000	228,000	274,000	99,200	67,900	88,300	64,200
14	63,800	183,000	51,100	44,200	141,000	333,000	233,000	255,000	92,900	69,400	91,200	64,500
15	65,100	211,000	58,300	44,400	149,000	338,000	251,000	225,000	98,800	74,500	116,000	66,600
16	65,400	222,000	46,600	44,600	154,000	337,000	270,000	187,000	106,000	68,200	97,500	68,000
17	66,200	211,000	48,500	82,300	143,000	315,000	297,000	166,000	100,000	60,600	82,100	62,300
18	65,900	184,000	45,000	74,600	117,000	299,000	313,000	153,000	94,200	57,900	75,300	62,600
19	65,100	154,000	45,800	164,000	95,300	277,000	323,000	143,000	133,000	57,700	71,300	72,400
20	65,100	139,000	61,300	213,000	82,300	253,000	333,000	130,000	136,000	60,200	66,300	78,400
21	67,200	131,000	64,200	210,000	82,500	230,000	338,000	117,000	104,000	74,200	64,600	77,300
22	66,800	125,000	65,800	221,000	84,600	221,000	381,000	126,000	91,700	113,000	68,500	72,200
23	68,100	118,000	65,400	221,000	83,000	207,000	463,000	135,000	85,600	171,000	64,400	67,800
24	70,400	106,000	59,600	209,000	80,200	194,000	489,000	130,000	83,200	187,000	62,600	74,400
25	73,100	109,000	58,800	185,000	83,300	227,000	449,000	131,000	76,900	169,000	63,200	83,500
26	75,900	118,000	58,200	160,000	80,300	288,000	407,000	132,000	73,300	139,000	65,400	109,000
27	78,300	113,000	57,800	145,000	87,000	323,000	376,000	138,000	76,200	121,000	60,800	173,000
28	77,800	103,000	62,000	139,000	112,000	349,000	345,000	163,000	70,300	108,000	58,300	184,000
29	77,500	97,300	65,800	139,000	-----	368,000	289,000	177,000	69,300	98,200	64,400	207,000
30	73,300	95,500	70,200	146,000	-----	368,000	234,000	187,000	68,400	87,400	63,300	231,000
31	71,900	-----	105,000	142,000	-----	364,000	-----	194,000	-----	82,100	61,600	-----
TOTAL	2,109.9M	4,020.5M	2,063.0M	3,999.9M	3,787.5M	8,293.0M	10,003M	5,954.0M	3,403.0M	2,860.9M	2,260.2M	2,532.4M
MEAN	68,060	134,000	66,550	129,000	135,300	267,500	333,400	192,100	113,400	92,290	72,910	84,410
MAX	78,300	222,000	105,000	221,000	232,000	368,000	489,000	280,000	194,000	187,000	116,000	231,000
MIN	61,900	79,700	45,000	44,200	80,200	109,000	228,000	117,000	68,400	57,700	58,300	53,800
AC-FT	4,185M	7,975M	4,092M	7,934M	7,513M	16,450M	19,840M	11,810M	6,750M	5,675M	4,483M	5,023M
CAL YR 1972	TOTAL 27,594,600.00			MEAN 75,400		MAX 222,000		MIN 20,200		AC-FT 54,730,000		
WTR YR 1973	TOTAL 51,287,300.00			MEAN 140,500		MAX 489,000		MIN 44,200		AC-FT 101,700,000		

M Expressed in thousands.

07010000 Mississippi River at St. Louis, Mo.

LOCATION.--Lat 38°37'44", 90°10'47", on downstream side of west pier of Eads Bridge at St. Louis, 15 mi (24.1 km) downstream from Missouri River, 19.2 mi (30.9 km) upstream from Meramec River, and at mile 180.0 (289.6 km) above the Ohio River.

DRAINAGE AREA.--701,000 mi² (1,816,000 km²), approximately.

PERIOD OF RECORD.--Discharge: January 1861 to current year. Monthly discharge only for some periods, published in WSP 1311.

Gage heights: March 1933 to current year in reports of Geological Survey. Since January 1861 in reports of Mississippi River Commission. Since January 1890 in reports of National Weather Service.

GAGE.--Water-stage recorder. Datum of gage is 379.94 ft (115.806 m) above mean sea level. Prior to May 5, 1934, nonrecording gage 0.4 mi (0.6 km) downstream and May 5, 1934, to Dec. 9, 1952, water-stage recorder at site 20 ft (6 m) downstream at present datum.

AVERAGE DISCHARGE.--112 years, 175,900 ft³/s (4,981 m³/s), 127,400,000 acre-ft/yr (157 km³/yr).

EXTREMES.--Current year: Maximum discharge, 852,000 ft³/s (24,100 m³/s) Apr. 28 (gage height, 43.23 ft or 13.176 m); minimum, 112,000 ft³/s (3,170 m³/s) Sept 3 (gage height, 4.66 ft or 1.420 m).

Period of record: Maximum daily discharge, 1,019,000 ft³/s (28,900 m³/s) June 10, 11, 1903 (gage height, 38.00 ft or 11.582 m); maximum gage height, 43.23 ft (13.176 m) Apr. 28, 1973; minimum daily discharge, 18,000 ft³/s (510 m³/s) Dec. 21-23, 1863; minimum gage height, -6.11 ft (-1.862 m) Jan. 16, 1940.

Flood of June 27, 1844, reached a stage of 41.32 ft (12.594 m), from floodmarks (discharge, 1,300,000 ft³/s or 36,800 m³/s), computed by Corps of Engineers. Flood in April 1785 may have reached a stage of 42.0 ft (12.80 m).

REMARKS.--Records excellent. Natural flow of stream affected by many reservoirs and navigation dams in upper Mississippi River basin and by many reservoirs and diversions for irrigation in Missouri River basin. Records of water temperatures and suspended sediment loads are published in Part 2 of this report.

GAGE HEIGHT, IN FEET, AT 0800, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13.54	13.93	15.80	16.54	20.84	15.34	38.57	41.76	30.89	17.39	13.42	7.50
2	14.43	16.16	15.29	20.73	20.19	15.65	38.91	40.36	31.12	16.58	12.62	7.13
3	15.42	17.93	14.05	20.33	21.27	14.86	39.29	38.61	30.78	15.98	11.48	6.58
4	15.42	19.41	13.30	20.57	23.86	15.07	39.60	37.41	29.54	14.57	10.43	5.16
5	15.29	19.82	13.17	21.28	26.19	16.52	39.77	37.01	29.05	14.27	10.28	5.25
6	15.22	19.86	12.61	21.16	26.69	19.00	39.79	36.92	28.74	16.02	10.55	6.70
7	15.15	19.28	11.08	20.24	26.16	23.59	39.54	37.05	28.91	19.11	9.51	7.21
8	15.01	18.60	9.07	19.65	25.44	27.91	39.01	37.35	28.90	20.37	8.42	7.23
9	15.18	17.61	9.07	18.78	24.82	29.33	38.29	37.54	28.39	18.45	7.77	7.67
10	15.45	17.54	8.03	14.17	23.79	29.97	37.60	37.81	27.71	16.59	9.67	8.28
11	15.73	17.62	6.53	11.78	22.14	31.10	36.37	37.98	27.12	15.32	12.34	8.79
12	15.70	17.70	6.14	12.73	20.39	32.20	35.47	38.12	26.71	14.25	12.61	7.38
13	15.62	18.00	7.40	11.62	18.21	32.95	34.63	38.06	26.07	13.82	13.16	5.97
14	15.31	20.28	6.41	10.69	18.06	33.81	34.00	37.90	25.30	12.80	13.75	6.92
15	14.68	23.29	6.34	10.64	20.16	34.53	33.71	37.47	24.50	11.78	13.45	6.52
16	13.78	24.64	6.62	10.70	21.22	34.96	33.81	36.63	23.92	10.77	14.13	7.14
17	13.03	25.25	6.15	11.02	20.04	35.23	33.88	35.15	24.17	10.72	13.54	6.98
18	11.86	25.08	5.64	14.83	17.74	35.11	33.96	33.71	23.41	9.81	11.15	6.34
19	11.82	23.94	6.35	15.29	15.08	34.66	34.09	32.74	23.28	8.78	9.72	6.56
20	11.16	22.35	7.18	21.52	12.67	34.14	34.41	31.96	24.92	7.77	9.82	7.79
21	10.22	21.27	11.00	24.12	12.89	33.63	34.76	31.27	26.69	8.22	9.40	7.41
22	10.81	20.60	11.01	24.47	13.10	32.90	35.57	30.55	25.92	9.30	8.73	6.95
23	10.93	19.90	11.11	25.00	12.78	32.40	37.00	30.29	25.01	13.70	8.50	6.10
24	10.18	18.72	10.51	25.21	11.68	32.13	38.88	30.38	23.72	20.64	7.95	6.45
25	10.42	17.08	9.76	24.78	11.98	31.72	40.35	30.02	22.51	21.62	7.63	7.79
26	11.96	17.09	8.90	23.78	12.45	32.20	41.51	29.48	21.12	20.16	7.30	9.43
27	12.66	17.25	9.00	22.50	12.73	33.65	42.47	29.01	20.11	16.50	8.35	12.16
28	13.53	16.66	9.37	21.31	13.42	35.22	43.17	28.68	19.95	14.86	8.64	17.39
29	13.46	16.16	9.75	21.26	-----	36.46	43.14	29.10	19.43	14.38	8.39	20.31
30	13.55	15.81	12.32	21.31	-----	37.52	42.69	29.90	18.49	14.29	8.79	22.49
31	14.11	-----	14.69	21.38	-----	38.07	-----	30.41	-----	13.50	8.51	-----
MAX	15.73	25.25	15.80	25.21	26.69	38.07	43.17	41.76	31.12	21.62	14.13	22.49
MIN	10.18	13.93	5.64	10.64	11.68	14.86	33.71	28.68	18.49	7.77	7.30	5.16

MISSISSIPPI RIVER MAIN STEM

07010000 Mississippi River at St. Louis, Mo.--Continued

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	204,000	216,000	238,000	291,000	323,000	244,000	737,000	800,000	463,000	242,000	200,000	139,000
2	219,000	241,000	227,000	346,000	318,000	243,000	745,000	758,000	467,000	233,000	187,000	135,000
3	233,000	276,000	210,000	340,000	344,000	233,000	755,000	707,000	457,000	224,000	173,000	125,000
4	231,000	294,000	200,000	348,000	394,000	238,000	763,000	674,000	436,000	205,000	165,000	117,000
5	230,000	301,000	197,000	359,000	435,000	267,000	768,000	662,000	429,000	204,000	165,000	121,000
6	228,000	300,000	190,000	352,000	442,000	309,000	758,000	662,000	427,000	232,000	164,000	133,000
7	227,000	292,000	166,000	334,000	429,000	406,000	746,000	665,000	431,000	282,000	152,000	138,000
8	225,000	274,000	151,000	325,000	414,000	484,000	722,000	674,000	431,000	292,000	138,000	135,000
9	228,000	260,000	147,000	298,000	400,000	511,000	692,000	680,000	422,000	258,000	139,000	148,000
10	235,000	260,000	138,000	224,000	380,000	528,000	659,000	686,000	412,000	235,000	166,000	152,000
11	236,000	260,000	123,000	190,000	348,000	552,000	627,000	689,000	404,000	217,000	190,000	152,000
12	236,000	260,000	125,000	175,000	312,000	576,000	605,000	692,000	397,000	206,000	197,000	137,000
13	235,000	271,000	134,000	170,000	278,000	594,000	586,000	689,000	387,000	201,000	203,000	127,000
14	228,000	318,000	125,000	175,000	283,000	614,000	570,000	680,000	371,000	191,000	213,000	134,000
15	218,000	365,000	127,000	179,000	319,000	631,000	565,000	665,000	356,000	180,000	209,000	132,000
16	206,000	392,000	130,000	181,000	331,000	641,000	570,000	635,000	346,000	169,000	218,000	137,000
17	193,000	400,000	124,000	191,000	309,000	646,000	576,000	592,000	342,000	169,000	204,000	137,000
18	182,000	394,000	123,000	239,000	269,000	626,000	570,000	552,000	327,000	154,000	173,000	129,000
19	179,000	372,000	130,000	256,000	227,000	598,000	570,000	525,000	327,000	146,000	161,000	135,000
20	168,000	344,000	140,000	369,000	204,000	588,000	592,000	504,000	363,000	137,000	160,000	146,000
21	164,000	327,000	182,000	410,000	203,000	574,000	611,000	484,000	383,000	143,000	154,000	143,000
22	167,000	316,000	184,000	418,000	206,000	559,000	635,000	467,000	371,000	165,000	147,000	137,000
23	169,000	301,000	183,000	427,000	199,000	549,000	680,000	461,000	356,000	232,000	144,000	129,000
24	161,000	280,000	178,000	427,000	193,000	542,000	734,000	459,000	336,000	326,000	136,000	133,000
25	170,000	255,000	167,000	412,000	193,000	537,000	773,000	449,000	317,000	334,000	136,000	148,000
26	183,000	258,000	161,000	388,000	200,000	554,000	806,000	436,000	295,000	302,000	138,000	165,000
27	193,000	260,000	161,000	363,000	204,000	594,000	830,000	429,000	283,000	246,000	148,000	210,000
28	203,000	248,000	165,000	342,000	219,000	638,000	851,000	422,000	281,000	226,000	149,000	276,000
29	203,000	243,000	175,000	338,000	-----	672,000	848,000	429,000	273,000	217,000	147,000	317,000
30	204,000	238,000	211,000	338,000	-----	703,000	830,000	441,000	257,000	207,000	153,000	349,000
31	212,000	-----	241,000	336,000	-----	724,000	-----	453,000	-----	204,000	148,000	-----
TOTAL	6,370.0M	8,816.0M	5,153.0M	9,541.0M	8,376.0M	16,175M	20,774M	18,121M	11,147M	6,779.0M	5,177.0M	4,716.0M
MEAN	205,500	293,900	166,200	307,800	299,100	521,800	692,500	584,500	371,600	218,700	167,000	157,200
MAX	236,000	400,000	241,000	427,000	442,000	724,000	851,000	800,000	467,000	334,000	218,000	349,000
MIN	161,000	216,000	123,000	170,000	193,000	233,000	565,000	422,000	257,000	137,000	136,000	117,000
AC-FT	12,630M	17,490M	10,220M	18,920M	16,610M	32,080M	41,210M	35,940M	22,110M	13,450M	10,270M	9,354M
CAL YR 1972	TOTAL 372,922,500		MEAN 018,900		MAX 404,000		MIN 71,600		AC-FT 739,700,000			
WTR YR 1973	TOTAL 121,145,000		MEAN 331,900		MAX 851,000		MIN 117,000		AC-FT 240,300,000			

NOTE.--Daily discharge computed from daily mean gage height.
M Figure expressed in thousands.

07010350 Meramec River at Cook Station, Mo.

LOCATION.--Lat 37°49'45", long 91°26'15", in NE¼ sec.23, T.36 N., R.5 W., Crawford County, on downstream side of right pier of bridge on County Highway M, 50 ft (15 m) downstream from Frisco Railroad bridge (Salem Branch), 1 mi (1.6 km) north of Cook Station, and 4 mi (6.4 km) upstream from Crooked Creek.

DRAINAGE AREA.--199 mi² (515 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 864.51 ft (263.503 m) above mean sea level.

AVERAGE DISCHARGE.--8 years, 115 ft³/s (3.26 m³/s), 7.85 in/yr (199 mm/yr), 83,300 acre-ft/yr (103 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 6,540 ft³/s (185.2 m³/s) Nov. 13 (gage height, 12.00 ft or 3.658 m); minimum, 18 ft³/s (0.510 m³/s) Oct. 7; minimum gage height, 2.12 ft (0.646 m) Sept. 1, 2.
Period of record: Maximum discharge, 34,900 ft³/s (988 m³/s) Feb. 10, 1966 (gage height, 17.74 ft or 5.407 m), from rating curve extended above 4,000 ft³/s (113 m³/s) on basis of slope-area measurement of peak flow; minimum, 9.1 ft³/s (0.258 m³/s) Sept. 1, 1967; minimum gage height, 2.03 ft (0.619 m) Sept. 15, 16, 1971.

REMARKS.--Records good.

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	37	301	77	345	113	71	732	226	99	50	49	33
2	31	2,030	70	231	145	70	508	222	96	48	44	33
3	27	428	65	215	134	69	431	195	161	45	41	46
4	24	230	61	296	122	70	762	177	208	43	39	58
5	23	156	59	232	114	71	608	166	310	39	37	72
6	22	126	63	185	104	78	457	165	241	38	36	50
7	21	118	65	149	103	244	397	1,990	184	37	34	46
8	21	112	64	120	140	260	364	1,410	146	36	34	46
9	20	108	64	99	140	275	1,310	654	122	36	36	46
10	20	109	62	83	128	1,090	942	425	112	39	40	83
11	20	108	60	70	119	2,580	578	325	99	40	230	65
12	20	108	85	60	112	616	449	272	94	37	90	55
13	20	3,070	403	58	160	389	377	223	128	33	63	50
14	23	1,050	283	56	264	374	333	193	213	31	75	47
15	25	292	206	54	220	332	301	171	146	30	63	46
16	27	173	158	52	177	278	314	153	112	30	72	43
17	24	120	125	51	149	242	308	142	94	30	56	41
18	23	92	105	74	135	214	283	133	84	30	49	40
19	23	87	107	112	120	238	284	126	737	29	45	38
20	22	85	116	108	110	2,850	368	121	273	28	41	38
21	23	85	112	439	100	789	406	121	158	27	40	39
22	26	85	102	733	93	473	3,660	130	119	27	38	38
23	28	85	94	451	88	366	1,280	123	95	271	38	37
24	28	85	86	291	82	331	681	161	84	1,090	37	36
25	26	85	78	221	79	474	513	139	80	385	36	38
26	25	87	72	183	76	584	411	124	75	205	36	40
27	24	88	68	157	74	411	348	129	70	127	34	40
28	24	85	64	139	72	343	300	120	65	90	34	38
29	23	83	65	119	-----	327	268	112	58	69	34	38
30	23	83	606	106	-----	300	240	110	54	61	33	40
31	30	-----	876	97	-----	579	-----	104	-----	56	33	-----
TOTAL	753	9,754	4,521	5,586	3,473	15,388	18,213	8,862	4,517	3,137	1,567	1,360
MEAN	24.3	325	146	180	124	496	607	286	151	101	50.5	45.3
MAX	37	3,070	876	733	264	2,850	3,660	1,990	737	1,090	230	83
MIN	20	83	59	51	72	69	240	104	54	27	33	33
CFSM	.12	1.63	.73	.90	.62	2.49	3.05	1.44	.76	.51	.25	.23
IN.	.14	1.82	.85	1.04	.65	2.88	3.40	1.66	.84	.59	.29	.25
AC-FT	1,490	19,350	8,970	11,080	6,890	30,520	36,130	17,580	8,960	6,220	3,110	2,700

CAL YR 1972 TOTAL 36,587 MEAN 100 MAX 3,240 MIN 15 CFSM .50 IN 6.84 AC-FT 72,570
WTR YR 1973 TOTAL 77,131 MEAN 211 MAX 3,660 MIN 20 CFSM 1.06 IN 14.42 AC-FT 153,000

PEAK DISCHARGE (BASE, 2,000 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-2	1030	10.21	3,830	4-22	1745	11.43	6,500
11-13	2100	12.00	6,540	5-7	1930	9.77	3,720
3-11	0500	11.37	5,660	7-24	1500	8.82	2,530
3-20	0845	10.98	5,210				

MERAMEC RIVER BASIN

07010500 Maramec Spring near St. James, Mo.

LOCATION.--Lat 37°57'20", long 91°32'57", in NW¼SE¼ sec.1, T.37 N., R.6 W., Phelps County, 650 ft (198 m) downstream from spring outlet, 1 mi (1.6 km) upstream from Meramec River, and 6 mi (9.7 km) southeast of St. James.

PERIOD OF RECORD.--March 1903 to July 1906, November 1921 to October 1929, October 1965 to current year. Monthly discharge only for some months prior to October 1905 published in WSP 1311. Occasional discharge measurements 1930, 1932, 1934, 1939-40, 1946, 1953-55, 1957, 1961-65.

GAGE.--Nonrecording gage. Datum of gage is 773.97 ft (235.906 m) above mean sea level. Prior to Nov. 11, 1921, gage at site 150 ft (45.7 m) upstream at different datum. Nov. 11, 1921, to June 4, 1928, at site 50 ft (15.2 m) upstream at datum 0.21 ft (0.064 m) higher.

AVERAGE DISCHARGE.--17 years (1903-05, 1922-29, 1965-73), 148 ft³/s (4.19 m³/s), 107,200 acre-ft/yr (132 hm³/yr).

EXTREMES.--Current year: Maximum daily discharge, 524 ft³/s (14.8 m³/s) Nov. 14; minimum daily, 74 ft³/s (2.10 m³/s) Oct. 13, 29-31 (gage height, 0.86 ft or 0.262 m).

Period of record: Maximum discharge, 650 ft³/s (18.4 m³/s), estimated, several days during 1927 and 1928, backwater from Meramec River; minimum measured, 56 ft³/s (1.59 m³/s) Aug. 1, 1934.

REMARKS.--Records poor. Occasional backwater from Meramec River. Records of chemical analyses 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	86	86	150	227	155	150	472	350	250	140	110	90
2	90	398	140	196	227	150	460	350	250	140	110	85
3	94	340	140	185	238	150	472	350	250	130	100	85
4	82	260	130	227	227	150	410	350	270	130	100	85
5	82	249	130	227	227	150	410	350	320	120	95	150
6	82	180	122	227	206	150	398	320	350	120	90	140
7	82	165	122	185	196	375	352	470	320	120	90	130
8	82	160	112	185	196	375	352	500	300	110	90	120
9	82	145	112	155	206	352	410	480	270	110	90	120
10	82	135	112	145	206	375	504	470	260	110	110	110
11	82	126	112	145	206	450	460	440	250	100	110	110
12	82	122	112	135	206	500	410	400	240	100	110	100
13	74	450	160	135	227	472	398	350	240	100	110	100
14	82	524	201	126	283	472	387	350	230	95	110	100
15	82	364	201	126	272	441	375	320	240	95	110	100
16	82	317	190	126	249	410	364	320	250	90	110	100
17	82	260	150	126	238	387	364	300	250	90	110	95
18	82	227	150	126	227	352	364	300	270	90	110	95
19	82	227	160	249	227	352	375	300	300	85	110	90
20	82	185	190	249	206	381	381	300	300	85	110	90
21	86	175	190	283	200	410	381	270	280	85	100	90
22	99	175	190	398	190	410	400	300	270	85	100	90
23	94	175	190	375	180	381	450	300	270	90	100	85
24	82	175	180	340	180	352	450	300	260	120	100	85
25	82	175	160	306	170	381	440	300	230	150	100	85
26	82	185	160	272	170	410	430	300	200	150	95	85
27	82	180	150	260	160	410	410	300	190	140	95	80
28	82	175	150	227	150	352	410	300	180	130	90	80
29	74	155	140	227	-----	364	350	300	170	130	90	80
30	74	160	140	227	-----	352	350	270	150	120	90	80
31	74	-----	244	155	-----	375	-----	270	-----	110	90	-----
TOTAL	2,567	6,650	4,790	6,572	5,825	10,791	12,189	10,580	7,610	3,470	3,135	2,935
MEAN	82.8	222	155	212	208	348	406	341	254	112	101	97.8
MAX	99	524	244	398	283	500	504	500	350	150	110	150
MIN	74	86	112	126	150	150	350	270	150	85	90	80
AC-FT	5,090	13,190	9,500	13,040	11,550	21,400	24,180	20,990	15,090	6,880	6,220	5,820

CAL YR 1972 TOTAL 44,227 MEAN 121 MAX 524 MIN 73 AC-FT 87,720
WTR YR 1973 TOTAL 77,114 MEAN 211 MAX 524 MIN 74 AC-FT 153,000

07011500 Green Acre Branch near Rolla, Mo.

LOCATION.--Lat 37°54'50", long 91°43'37", in NW¼SW¼ sec.20, T.37 N., R.7 W., Phelps County, on left bank 35 ft (10.7 m) upstream from double concrete box culvert under State Highway 72, 0.4 mi (0.6 km) upstream from mouth, and 3 mi (4.8 km) southeast of Rolla.

DRAINAGE AREA.--0.62 mi² (1.606 km²).

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 958.82 ft (292.248 m) above mean sea level.

AVERAGE DISCHARGE.--25 years, 0.384 ft³/s (0.011 m³/s), 8.41 in/yr (214 mm/yr), 278 acre-ft/yr (343,000 m³/yr).

EXTREMES.--Current year: Maximum discharge, 177 ft³/s (5.01 m³/s) May 7 (gage height, 3.40 ft or 1.036 m); no flow on many days.

Period of record: Maximum discharge, 1,900 ft³/s (53.8 m³/s) June 9, 1950 (gage height, 6.85 ft or 2.088 m), from rating curve extended above 520 ft³/s (14.7 m³/s) on basis of slope-area measurement of peak flow; no flow on many days each year.

REMARKS.--Records fair except period of no gage-height record, 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	0	21	.17	.17	1.6	.09	.50	.22	.05	0	0	0
2	0	2.1	.15	.15	.50	.11	.42	.22	.05	.03	0	0
3	0	.50	.15	2.3	.35	.11	.42	.15	.07	.03	0	.29
4	0	.29	.13	.17	.25	.19	.42	.09	.15	.01	0	.06
5	0	.19	.15	.08	.22	.19	.42	.08	.09	.01	0	.01
6	0	.35	.11	.05	.19	1.0	.25	.42	.07	0	0	0
7	0	.19	.08	.04	.83	.50	.22	.40	.05	0	0	0
8	0	.15	.11	.03	.22	.30	.22	1.7	.02	0	0	0
9	0	.13	.09	.02	.19	.40	.42	.25	.01	.04	.75	0
10	0	.13	.07	.01	.17	30	.42	.17	0	.03	0	0
11	0	.09	.11	.01	.15	5.0	.42	.13	0	.01	0	0
12	0	6.4	3.3	.01	.48	1.0	.29	.08	0	0	.01	0
13	0	18	.50	.01	1.0	.80	.25	.05	.01	0	.24	0
14	.07	1.4	.09	.01	.50	.70	.22	.03	.01	0	.01	0
15	0	.50	.05	.01	.22	.60	.22	.02	.02	0	0	0
16	0	.35	.03	.01	.17	.50	.42	.01	.01	0	.01	0
17	0	.29	.02	.01	.15	.40	.35	.01	.02	0	0	0
18	0	.25	1.4	2.8	.15	.30	.25	.01	.01	0	0	0
19	0	.35	2.0	.15	.13	.50	.42	.01	.04	0	0	0
20	0	.60	.35	.11	.13	1.0	.42	.01	.03	0	0	0
21	.08	.60	.29	6.5	.13	.50	.35	3.5	.01	0	0	0
22	.15	.60	.22	2.1	.13	.25	.60	.05	.01	0	0	0
23	.03	.60	.19	.60	.11	.29	.60	.02	.01	3.0	0	0
24	.01	.86	.17	.42	.09	1.8	.50	.02	.01	.03	0	.13
25	0	1.1	.15	.35	.11	2.6	.50	.01	.01	.01	0	0
26	0	.60	.15	.29	.11	.86	.29	.02	.01	.01	0	0
27	0	.29	.15	.25	.09	.42	.19	.03	.01	0	0	0
28	0	.22	.13	.35	.09	.35	.19	.04	0	0	0	.16
29	0	.19	.22	.25	-----	.42	.15	.04	0	0	0	.01
30	.01	.19	1.7	.25	-----	.29	.15	.05	0	0	0	.02
31	.43	-----	.25	.25	-----	.50	-----	.04	-----	0	0	-----
TOTAL	.78	58.51	12.68	17.76	8.46	51.97	10.49	47.48	.78	3.21	1.02	.68
MEAN	.025	1.95	.41	.57	.30	1.68	.35	1.53	.026	.10	.033	.023
MAX	.43	21	3.3	6.5	1.6	30	.60	40	.15	3.0	.75	.29
MIN	0	.09	.02	.01	.09	.09	.15	.01	0	0	0	0
CFSM	.04	3.15	.66	.92	.48	2.71	.56	2.47	.04	.16	.05	.04
IN.	.05	3.51	.76	1.07	.51	3.12	.63	2.85	.05	.19	.06	.04
AC-FT	1.5	116	25	35	17	103	21	94	1.5	6.4	2.0	1.3

CAL YR 1972 TOTAL 132.92 MEAN .36 MAX 21 MIN 0 CFSM .58 IN 7.98 AC-FT 264
WTR YR 1973 TOTAL 213.82 MEAN .59 MAX 40 MIN 0 CFSM .95 IN 12.83 AC-FT 424

PEAK DISCHARGE (BASE, 100 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-1	1645	2.88	113	5-7	0100*	3.40	177
11-13	0400	3.05	134	5-21	2000*	2.74	100
3-10	*	3.35	170		*About		

*Time unknown

07013000 Meramec River near Steelville, Mo.

LOCATION.--Lat 37°59'58", long 91°21'39", in NE¼ sec.21, T.38 N., R.4 W., Crawford County, on left bank 20 ft (6 m) downstream from railroad bridge, 400 ft (123 m) upstream from highway bridge, 0.8 mi (1.3 km) upstream from Whittenburg Creek, 1.5 mi (2.4 km) north of Steelville, and at mile 146.45 (235.6 km).

DRAINAGE AREA.--781 mi² (2,023 km²).

PERIOD OF RECORD.--October 1922 to current year. Prior to January 1923 monthly discharges only, published in WSP 1311. Gage-height records for 1916-33 at site 1 mi (1.6 km) upstream in reports of National Weather Service.

GAGE.--Water-stage recorder. Datum of gage is 681.68 ft (207.776 m) above mean sea level. Prior to May 24, 1934, July 20, 1966 to July 20, 1967, nonrecording gage, and May 24, 1934 to Oct. 10, 1942, water-stage recorder at site 400 ft (122 m) downstream. July 21, 1967 to Feb. 13, 1973 at site 1,900 ft (579 m) downstream and at datum 2.0 ft (0.61 m) lower.

AVERAGE DISCHARGE.--51 years, 559 ft³/s (15.83 m³/s), 9.73 in/yr (247 mm/yr), 405,000 acre-ft/yr (499 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 13,500 ft³/s (382.3 m³/s) Apr. 23 (gage height, 13.23 ft or 4.033 m); minimum, 130 ft³/s (3.68 m³/s) Oct. 12 (gage height, 1.90 ft or 0.579 m), at site and datum then in use.

Period of Record.--Maximum discharge, 47,800 ft³/s (1,350 m³/s) June 26, 1935 (gage height, 23.39 ft or 7.129 m); maximum gage height, 24.30 ft (7.407 m) June 9, 1945; minimum discharge, 74 ft³/s (2.10 m³/s) July 22, 1934.

Maximum stage known, 26.5 ft (8.08 m) Aug. 20, 1915 (discharge, 60,000 ft³/s or 1,700 m³/s).

REMARKS.--Records good.

REVISIONS (WATER YEARS).--WSP 897: 1939. WSP 1007: 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	237	743	384	1,290	606	233	2,790	832	476	334	323	232
2	224	5,050	371	875	740	229	2,190	826	467	325	289	229
3	200	3,980	347	710	761	224	1,610	769	550	302	265	292
4	178	1,290	327	984	711	219	1,540	711	789	288	244	536
5	166	855	311	915	672	231	1,870	621	1,470	275	230	632
6	158	658	305	758	629	298	1,490	574	1,420	261	219	672
7	154	560	302	633	595	1,180	1,210	3,530	1,080	251	210	446
8	149	498	302	558	614	1,450	1,040	9,920	822	241	202	320
9	145	430	299	499	681	1,130	2,120	4,380	698	247	227	357
10	138	391	296	436	669	2,260	3,850	2,340	600	258	223	335
11	136	361	284	391	631	10,700	2,380	1,770	532	261	220	300
12	133	333	293	367	610	7,050	1,710	1,440	489	256	416	283
13	135	3,510	600	367	628	2,410	1,400	1,210	466	238	336	248
14	146	11,200	925	347	984	2,000	1,200	1,060	702	226	319	238
15	150	3,390	785	337	982	1,900	1,040	891	805	218	297	223
16	175	1,440	622	328	777	1,490	990	795	652	211	324	206
17	168	1,040	512	325	632	1,220	1,120	721	572	205	394	195
18	161	830	452	348	557	999	999	642	505	202	337	186
19	155	705	444	718	497	864	927	612	2,420	203	274	180
20	148	622	560	687	439	2,630	981	575	2,880	197	244	186
21	148	572	588	1,170	397	6,530	1,200	544	1,250	191	240	176
22	164	552	556	2,730	359	2,220	3,700	736	877	187	241	178
23	185	532	505	2,320	329	1,550	11,800	705	697	562	238	174
24	201	493	471	1,520	314	1,280	3,400	613	589	1,290	241	170
25	186	486	430	1,120	294	1,580	2,270	643	518	2,200	246	178
26	175	510	398	930	273	2,010	1,820	609	471	1,150	252	167
27	168	532	374	817	256	1,710	1,500	581	432	789	244	167
28	163	486	347	744	244	1,320	1,250	578	391	574	233	170
29	157	433	340	693	-----	1,150	1,070	531	360	466	232	171
30	152	401	398	628	-----	1,060	928	509	339	394	233	175
31	168	-----	1,740	598	-----	1,450	-----	490	-----	345	234	-----
TOTAL	5,123	42,883	14,868	25,143	15,881	60,577	61,395	40,758	24,319	13,152	8,227	8,022
MEAN	165	1,429	480	811	567	1,954	2,047	1,315	811	424	265	267
MAX	237	11,200	1,740	2,730	984	10,700	11,800	9,920	2,880	2,200	416	672
MIN	133	333	284	325	244	219	927	490	339	187	202	167
CFSM	.21	1.83	.61	1.04	.73	2.50	2.62	1.68	1.04	.54	.34	.34
IN.	.24	2.04	.71	1.20	.76	2.89	2.92	1.94	1.16	.63	.39	.38
AC-FT	10,160	85,060	29,490	49,870	31,500	120,200	121,800	80,840	48,240	26,090	16,320	15,910
CAL YR 1972	TOTAL 172,853	MEAN 472	MAX 11,200	MIN 126	CFSM .60	IN 8.23	AC-FT 342,900					
WTR YR 1973	TOTAL 320,348	MEAN 878	MAX 11,800	MIN 133	CFSM 1.12	IN 15.26	AC-FT 635,400					

PEAK DISCHARGE (BASE, 6,500 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-3	0400	10.36	6,620	3-21	0915	10.68	9,550
11-14	1800	14.25	12,300	4-23	1500	13.23	13,500
3-11	2345	13.00	13,300	5-8	1700	11.92	11,400

07014500 Meramec River near Sullivan, Mo.

LOCATION.--Lat 38°09'30", long 91°06'30", in SE¼NE¼ sec.35, T.40 N., R.2 W., Crawford County, on right bank at upstream side of Sappington Bridge, 3.8 mi (6.1 km) downstream from Brazil Creek, 4.0 mi (6.4 km) southeast of Sullivan, and at mile 113.2 (182.1 km).

DRAINAGE AREA.--1,475 mi² (3,820 km²).

PERIOD OF RECORD.--September 1921 to September 1933, October 1943 to current year. Monthly discharge only for October 1943, published in WSP 1311.

GAGE.--Water-stage recorder. Datum of gage is 581.82 ft (177.339 m) above mean sea level (levels by Corps of Engineers). Prior to Oct. 21, 1952, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--42 years, 1,154 ft³/s (32.68 m³/s), 10.62 in/yr (270 mm/yr), 836,100 acre-ft/yr (1,031 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 17,900 ft³/s (507 m³/s) Apr. 23 (gage height, 16.44 ft or 5.011 m); maximum gage height, 16.73 ft (5.099 m) Nov. 14; minimum discharge, 294 ft³/s (8.33 m³/s) Oct. 13 (gage height, 1.50 ft or 0.457 m).

Period of record: Maximum discharge, 77,300 ft³/s (2,190 m³/s) June 9, 1945 (gage height, 32.0 ft or 9.75 m); minimum, 131 ft³/s (3.71 m³/s) Sept. 20, 22, 1956 (gage height, 1.27 ft or 0.387 m).

Flood in August 1915, reached a stage of 33.5 ft (10.21 m), from information by local residents, (discharge, 90,000 ft³/s or 2,550 m³/s).

REMARKS.--Records good. Water diverted from river 0.5 mi (0.8 km) above gage by mining company. Records of chemical analyses are published in part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1007: 1922, 1923(M), 1924-30, 1933, 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	556	1,630	1,030	4,090	1,230	627	3,890	1,820	1,120	747	671	356
2	548	6,650	948	2,530	1,380	617	3,830	1,750	1,060	753	621	350
3	472	10,400	872	2,110	1,510	609	2,920	1,680	1,170	688	574	359
4	424	3,830	808	2,310	1,430	629	2,820	1,560	1,420	655	539	452
5	385	2,160	761	2,320	1,320	734	3,520	1,460	4,270	626	512	710
6	364	1,630	792	1,930	1,240	941	3,020	1,410	2,820	597	488	713
7	357	1,350	901	1,660	1,160	2,560	2,500	4,790	2,100	571	469	664
8	336	1,170	885	1,470	1,160	3,430	2,200	12,700	1,700	550	452	570
9	322	1,020	853	1,310	1,260	2,690	5,240	12,200	1,450	539	483	719
10	309	907	814	1,180	1,240	4,350	9,410	4,990	1,280	651	564	822
11	303	800	761	1,060	1,170	13,000	5,650	3,340	1,150	586	525	737
12	297	726	822	957	1,120	15,500	3,490	2,690	1,060	558	539	629
13	294	5,310	1,760	876	1,320	6,070	2,740	2,300	1,100	533	701	556
14	300	14,900	2,510	837	1,770	3,630	2,320	1,990	1,290	507	633	512
15	312	12,400	2,100	788	2,010	3,930	2,050	1,790	2,430	486	624	480
16	326	3,940	1,710	748	1,780	3,170	1,940	1,640	1,570	470	590	464
17	364	2,650	1,410	722	1,530	2,560	2,020	1,520	1,670	455	1,200	452
18	346	2,110	1,210	731	1,350	2,170	1,950	1,420	1,290	444	874	443
19	334	1,830	1,150	946	1,230	1,940	1,880	1,350	5,090	437	693	432
20	318	1,640	1,270	1,370	1,130	3,020	2,200	1,280	6,170	434	588	436
21	317	1,500	1,430	1,900	1,030	8,190	2,790	1,220	2,770	422	529	443
22	340	1,430	1,370	4,590	945	5,570	7,310	1,220	1,900	411	487	443
23	345	1,380	1,270	5,220	884	2,990	16,300	1,380	1,550	824	461	432
24	369	1,340	1,180	3,420	833	2,440	12,700	1,270	1,330	2,020	443	420
25	379	1,320	1,080	2,490	783	2,360	4,710	1,250	1,180	2,330	430	420
26	364	1,350	987	2,030	733	2,830	3,480	1,200	1,070	1,910	414	426
27	352	1,400	903	1,760	689	2,760	2,860	1,310	977	1,470	400	432
28	345	1,370	839	1,610	655	2,330	2,470	1,680	894	1,150	387	430
29	336	1,250	821	1,460	-----	2,070	2,170	1,440	824	920	377	420
30	328	1,130	1,490	1,330	-----	1,930	1,960	1,280	776	789	370	410
31	345	-----	5,280	1,240	-----	2,280	-----	1,180	-----	728	362	-----
TOTAL	11,087	90,523	40,017	56,995	33,892	107,927	122,340	78,110	54,481	24,261	17,000	15,132
MEAN	358	3,017	1,291	1,839	1,210	3,482	4,078	2,520	1,816	783	548	504
MAX	556	14,900	5,280	5,220	2,010	15,500	16,300	12,700	6,170	2,330	1,200	822
MIN	294	726	761	722	655	609	1,880	1,180	776	411	362	350
CFSM	.24	2.05	.88	1.25	.82	2.36	2.76	1.71	1.23	.53	.37	.34
IN.	.28	2.28	1.01	1.44	.85	2.72	3.09	1.97	1.37	.61	.43	.38
AC-FT	21,990	179,600	79,370	113,000	67,220	214,100	242,700	154,900	108,100	48,120	33,720	30,010

CAL YR 1972 TOTAL 379,753 MEAN 1,038 MAX 15,200 MIN 248 CFSM .70 IN 9.58 AC-FT 753,200
WTR YR 1973 TOTAL 651,765 MEAN 1,786 MAX 16,300 MIN 294 CFSM 1.21 IN 16.44 AC-FT 1,293,000

PEAK DISCHARGE (BASE, 8,500 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-3	0330	14.74	13,500	4-10	0915	12.69	10,500
11-14	1400	16.73	16,800	4-23	1215	16.44	17,900
3-11	2200	15.99	16,900	5-8	2015	14.76	14,300
3-21	2300	12.39	10,000				

07015000 Bourbeuse River near St. James, Mo.

LOCATION.--Lat 38°02'00", long 91°38'53", in NW¼NW¼ sec.12, T.38 N., R.7 W., Phelps County, on left bank 650 ft (198 m) upstream from bridge on State Highway 68, 3 mi (4.8 km) northwest of St. James, and at mile 138.8 (223.3 km).

DRAINAGE AREA.--21.3 mi² (55.2 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 899.46 ft (274.155 m) above mean sea level.

AVERAGE DISCHARGE.--25 years (1948-73), 16.1 ft³/s (0.456 m³/s), 10.27 in/yr (261 mm/yr), 11,660 acre-ft/yr (14.4 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,080 ft³/s (115.5 m³/s) May 7 (gage height, 8.76 ft or 2.670 m); no flow Aug. 31 to Sept. 2.

Period of record: Maximum discharge, 8,250 ft³/s (233.6 m³/s) Oct. 11, 1949 (gage height, 11.08 ft or 3.377 m); no flow at times in 1953-57, 59-64, 66-73.

Maximum stage known, 14.0 ft (4.267 m) June 8, 1945; flood of June 8, 1947 reached a stage of 12.04 ft (3.670 m), from floodmark and information by local resident.

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	.68	900	7.1	21	39	5.0	64	8.5	1.9	.25	.09	0
2	.50	81	6.5	14	35	5.6	34	12	1.7	.30	.08	0
3	.40	25	5.8	107	25	5.6	24	8.5	2.7	.29	.07	5.9
4	.34	17	5.6	53	19	7.7	26	6.6	5.2	.34	.07	2.6
5	.28	11	5.3	25	15	11	19	5.8	11	.27	.07	1.7
6	.26	11	5.5	15	13	120	14	11	6.6	.26	.04	.55
7	.29	10	4.1	11	18	129	12	856	3.9	.20	.03	.27
8	.26	7.7	4.3	9.2	21	41	14	138	2.6	.20	.03	.22
9	.24	6.6	4.0	7.4	13	48	200	46	1.9	.20	.03	2.8
10	.21	6.8	3.2	6.3	12	960	61	26	1.5	.20	.04	.88
11	.18	5.9	3.1	5.5	11	171	31	18	1.3	.16	.04	.39
12	.22	25	57	4.6	13	47	22	13	1.1	.13	.03	.27
13	.30	891	38	5.0	63	27	15	9.9	1.7	.12	.10	.31
14	1.0	88	24	5.4	48	46	13	7.7	2.4	.11	.17	.82
15	.80	30	15	5.6	27	21	12	6.2	2.0	.10	.11	.69
16	.67	18	10	5.6	17	15	66	5.5	1.6	.10	.12	.66
17	.62	13	7.3	7.6	13	12	35	4.8	1.1	.08	.53	.65
18	.59	10	13	100	11	8.3	24	4.2	.73	.10	.29	.59
19	.56	13	35	56	9.7	49	23	3.8	4.9	.07	.18	.49
20	.47	15	31	30	9.6	125	26	3.4	1.6	.06	.15	.55
21	.57	19	25	303	9.1	41	24	3.3	.72	.04	.12	.51
22	10	21	20	150	8.4	23	547	7.1	.53	.03	.10	.46
23	5.0	20	17	51	7.8	17	71	4.4	.41	.37	.07	.39
24	3.0	23	14	29	6.4	44	34	3.3	.34	3.2	.05	.61
25	2.0	27	12	21	6.1	159	24	2.5	.30	.60	.04	2.1
26	1.7	30	11	18	5.9	48	18	2.3	.30	1.9	.03	.96
27	1.4	18	9.2	14	5.6	27	13	2.6	.28	.46	.02	.67
28	1.2	12	8.6	21	5.2	19	9.9	2.7	.25	.23	.02	.73
29	1.0	9.4	13	16	-----	20	8.3	3.0	.23	.16	.01	1.9
30	1.0	8.1	70	15	-----	16	8.0	3.9	.24	.14	.01	5.0
31	2.0	-----	33	16	-----	193	-----	2.3	-----	.11	0	-----
TOTAL	37.74	2,372.5	517.6	1,148.2	486.8	2,461.2	1,492.2	1,232.3	61.03	10.78	2.74	33.67
MEAN	1.22	79.1	16.7	37.0	17.4	79.4	49.7	39.8	2.03	.35	.088	1.12
MAX	10	900	70	303	63	960	547	856	11	3.2	.53	5.9
MIN	.18	5.9	3.1	4.6	5.2	5.0	8.0	2.3	.23	.03	0	0
CFSM	.06	3.71	.78	1.74	.82	3.73	2.33	1.87	.10	.02	.004	.05
IN-	.07	4.14	.90	2.01	.85	4.30	2.61	2.15	.11	.02	.004	.06
AC-FT	75	4,710	1,030	2,280	966	4,880	2,960	2,440	121	21	5.4	67

CAL YR 1972 TOTAL 5,857.41 MEAN 16.0 MAX 900 MIN 0 CFSM .75 IN 10.23 AC-FT 11,620
WTR YR 1973 TOTAL 9,856.76 MEAN 27.0 MAX 960 MIN 0 CFSM 1.27 IN 17.21 AC-FT 19,550

PEAK DISCHARGE (BASE, 1,500 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-1	1500	7.75	2,300	4-22	0500	7.96	2,730
11-13	0615	8.59	3,690	5-7	0345	8.76	4,080
3-10	1715	8.56	3,690				

07015720 Bourbeuse River near High Gate, Mo.

LOCATION.--Lat 38°04'49", long 91°34'50", in SE¼NE¼ sec.4, T.39 N., R.6 W., Phelps County, on downstream side of right bridge pier on County Highway B, 1.8 mi (2.9 m) downstream from Lanes Fork, 5 mi (8.0 km) east of High Gate, and 11 mi (17.7 km) north of St. James.

DRAINAGE AREA.--135 mi² (350 km²).

PERIOD OF RECORD.--July 1965 to current year. Occasional low-flow measurements 1963, 1964.

GAGE.--Water-stage recorder. Datum of gage is 804.1 ft (245.09 m) above mean sea level (levels by Missouri State Highway Commission). Prior to Aug. 17, 1966, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--8 years, 119 ft³/s (3.370 m³/s), 11.97 in/yr (304 mm/yr), 86,200 acre-ft/yr (106 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 15,900 ft³/s (450 m³/s) Nov. 1 (gage height, 17.97 ft or 5.477 m); minimum discharge, 0.36 ft³/s (0.009 m³/s) Aug. 28 to Sept. 2; minimum gage height, 0.73 ft (0.222 m) Oct. 11, 12.

Period of record: Maximum discharge, 16,300 ft³/s (462 m³/s) Feb. 9, 1966 (gage height, 17.25 ft or 5.258 m); maximum gage height, 17.97 ft (5.477 m) Nov. 1, 1972; no flow Aug. 27 to Sept. 15, 1971. Flood of June 1957 reached a stage of about 23 ft (7.0 m), from information by local resident.

REMARKS.--Records fair.

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	27	7,100	51	120	195	49	448	56	12	7.9	1.7	.36
2	13	2,220	43	100	196	51	229	61	11	13	1.2	.38
3	6.7	214	38	300	149	54	161	55	12	9.4	.92	35
4	4.1	124	34	200	120	62	158	47	273	6.8	.85	62
5	2.5	88	32	146	101	99	134	43	1,520	5.2	.74	31
6	2.0	66	28	100	86	500	109	57	164	4.3	.74	16
7	1.8	69	26	80	86	1,000	91	4,840	90	3.6	.71	6.8
8	1.5	52	24	60	121	500	83	921	61	2.9	.54	4.2
9	1.3	40	22	50	104	300	999	265	44	3.0	.54	79
10	1.1	34	21	45	93	4,000	379	158	34	7.6	.54	115
11	.97	29	20	43	84	2,000	198	110	27	2.4	.54	40
12	1.0	37	100	42	77	500	141	84	21	2.0	.63	18
13	1.1	6,430	150	40	400	222	106	64	156	1.8	1.1	9.3
14	1.6	625	100	39	269	200	89	50	115	1.7	1.3	76
15	8.9	230	70	38	176	226	85	43	89	1.6	.75	35
16	13	151	50	38	135	167	473	38	65	1.4	.79	15
17	6.3	111	40	38	110	136	252	32	45	1.4	5.0	8.5
18	4.6	86	60	150	90	112	160	28	30	1.3	4.4	5.1
19	3.9	90	150	200	78	146	137	26	1,090	1.6	2.1	3.4
20	3.6	97	192	174	75	1,040	153	23	126	1.3	1.3	2.7
21	3.8	133	150	500	73	315	148	21	70	1.2	.80	4.7
22	28	143	120	400	67	191	3,300	38	45	.98	.56	5.1
23	66	137	100	249	64	147	405	35	32	1.3	.52	16
24	40	149	90	173	61	178	204	27	25	9.4	.48	12
25	25	173	80	130	57	1,010	152	20	20	41	.48	12
26	18	185	70	107	54	370	122	16	16	30	.42	12
27	14	125	60	93	51	212	96	15	14	16	.42	7.0
28	12	87	50	112	50	159	79	16	11	7.5	.38	5.4
29	12	68	100	103	-----	150	68	16	8.4	3.9	.36	6.3
30	9.5	59	250	93	-----	131	61	16	7.3	3.4	.36	28
31	14	-----	206	101	-----	1,190	-----	16	-----	3.0	.36	-----
TOTAL	348.27	19,152	2,527	4,064	3,222	15,417	9,220	7,237	4,233.7	197.88	31.53	671.24
MEAN	11.2	638	81.5	131	115	497	307	233	141	6.38	1.02	22.4
MAX	66	7,100	250	500	400	4,000	3,300	4,840	1,520	41	5.0	115
MIN	.97	29	20	38	50	49	61	15	7.3	.98	.36	.36
CFSM	.08	4.73	.60	.97	.85	3.68	2.27	1.73	1.04	.05	.008	.17
IN.	.10	5.28	.70	1.12	.89	4.25	2.54	1.99	1.17	.05	.008	.18
AC-FT	691	37,990	5,010	8,060	6,390	30,580	18,290	14,350	8,400	392	63	1,330

CAL YR 1972 TOTAL 42,379.76 MEAN 116 MAX 7,100 MIN .14 CFSM .86 IN 11.68 AC-FT 84,060
WTR YR 1973 TOTAL 66,321.62 MEAN 182 MAX 7,100 MIN .36 CFSM 1.35 IN 18.28 AC-FT 131,500

PEAK DISCHARGE (BASE, 3,500 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-1	1615	17.97	15,900	5-7	0845	15.55	11,400
11-13	0930	16.14	12,400	6-5	0145	11.35	5,500
3-10	2000	13.85	8,790	6-19	0545	10.60	4,700
4-22	0915	13.92	8,890				

MERAMEC RIVER BASIN

07016000 Bourbeuse River near Spring Bluff, Mo.

LOCATION.--Lat 38°18'40", long 91°16'45", in NE¼ sec.8, T.41 N., R.3 W., Franklin County, on downstream side of highway bridge, 1.0 mi (1.6 km) downstream from Boone Creek, 3.5 mi (5.6 km) northwest of Spring Bluff, 9.5 mi (15.3 km) northwest of Sullivan, and at mile 75.3 (121.2 km).

DRAINAGE AREA.--608 mi² (1,575 km²).

PERIOD OF RECORD.--November 1943 to current year (discharge above 1,000 ft³/s or 28.3 m³/s only).

GAGE.--Nonrecording gage read once-daily between 5.5 and 7.5 ft (1.68 and 2.29 m), twice-daily between 7.5 and 15.0 ft (2.29 and 4.57 m), and bihourly above. Datum of gage is 626.34 ft (190.908 m) above mean sea level (levels by Corps of Engineers).

EXTREMES.--Current year: Maximum discharge, 16,100 ft³/s (456 m³/s) Nov. 14 (gage height, 25.23 ft or 7.690 m).

Period of record: Maximum discharge, 50,700 ft³/s (1,440 m³/s) June 30, 1957 (gage height, 34.71 ft or 10.580 m).

Flood in August 1915 reached a stage of 35.7 ft (10.88 m) from information by local residents.

REMARKS.--Records fair. Discharge below 1,000 ft³/s (28.3 m³/s) not computed.

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		6,300					4,130					
2		12,200					2,050					
3		10,200					1,750					
4				2,710			1,300					
5							1,020		7,960			
6						2,650			6,160			
7						6,880		6,240				
8						2,890		11,500				
9						1,600	3,820	4,230				
10						5,260	3,610	1,100				
11						13,400	1,260					
12						9,340						
13		9,310				1,550						
14		15,200			2,050	1,650						
15		5,820				1,600			8,770			
16						1,020	2,230		3,810			
17							2,050					
18												
19												
20						3,490			6,480			
21				4,760		2,530	1,160					
22				6,640			6,700					
23				2,530			8,070					
24				1,020			1,450					
25						2,290						
26						3,670						
27						1,800						
28												
29												
30												
31		-----	1,950		-----	3,250	-----		-----			-----

PEAK DISCHARGE (BASE, 8,000 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-3	0200	24.81	15,400	4-23	0700	20.69	10,100
11-14	1800	25.23	16,100	5-8	1100	22.50	12,100
1-22	0600	18.75	8,320	6-6	0400	19.72	9,130
3-11	2300	25.14	15,900	6-15	1700	22.03	11,500

07016500 Bourbeuse River at Union, Mo.

LOCATION.--Lat 38°26'45", long 90°59'30", in SE¼ sec.26, T.43 N., R.1 W., Franklin County, on right bank downstream side of pier of bridge on U.S. Highway 50, 800 ft (244 m) upstream from Flat Creek, 0.5 mi (0.8 km) east of Union, 7.0 mi (11.3 km) upstream from Birch Creek, and at mile 13.4 (21.6 km). Records include flow of Flat Creek.

DRAINAGE AREA.--808 mi² (2,093 km²), includes that of Flat Creek.

PERIOD OF RECORD.--June 1921 to current year. Gage-height record collected at same site since 1916 are contained in reports of National Weather Service.

GAGE.--Water-stage recorder. Datum of gage is 488.58 ft (148.919 m) above mean sea level. Prior to Oct. 1, 1948, datum of all gages 3.00 ft (0.914 m) higher. Prior to Oct. 21, 1933, nonrecording gage, at site 30 ft (9.1 m) upstream. Oct. 21, 1933, to June 11, 1944, nonrecording gage, at present site.

AVERAGE DISCHARGE.--52 years, 625 ft³/s (17.70 m³/s), 10.50 in/yr (267 mm/yr), 452,800 acre-ft/yr (558 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 14,800 ft³/s (419 m³/s) Mar 13 (gage height, 17.07 ft or 5.203 m); minimum, 35 ft³/s (0.99 m³/s) Oct. 21 (gage height, 0.62 ft or 0.189 m).

Period of record: Maximum discharge, 33,100 ft³/s (937 m³/s) July 1, 1957 (gage height, 24.44 ft or 7.449 m); minimum, 11 ft³/s (0.31 m³/s) Oct. 10, 1956.

Flood of Aug. 22, 1915 reached a stage of 28.5 ft (8.69 m), present datum, from floodmarks (discharge, about 50,000 ft³/s or 1,420 m³/s, determined from extension of rating curve for main channel based on measurements made since 1921 and study of overflow areas in vicinity of gaging station).

REMARKS.--Records good.

REVISIONS (WATER YEARS).--WSP 957: 1941. WSP 1147: Drainage area. WSP 1281: 1924.

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	856	452	1,670	527	249	3,310	432	193	175	102	44
2	53	5,210	397	1,020	626	242	4,650	391	183	173	96	42
3	48	8,540	360	746	903	236	1,730	356	182	164	88	45
4	46	12,200	331	1,090	863	281	1,080	333	209	154	91	61
5	47	4,170	311	2,580	686	385	857	312	1,640	163	85	1,850
6	48	680	295	1,390	572	1,130	787	309	5,900	141	77	855
7	48	520	262	710	497	4,280	687	1,000	6,300	127	71	391
8	47	426	249	563	444	6,770	591	5,670	1,010	121	67	269
9	54	365	234	486	412	3,730	1,850	9,280	620	131	110	860
10	58	334	217	434	410	3,280	4,510	7,090	473	120	92	571
11	54	306	212	375	403	7,140	4,120	1,240	384	160	111	559
12	51	279	272	325	367	10,400	1,780	832	340	147	81	364
13	48	2,280	405	275	523	13,700	1,200	636	295	132	66	281
14	46	7,120	810	250	1,060	2,720	944	531	400	108	62	266
15	45	10,900	1,010	240	1,770	1,940	800	452	447	99	67	210
16	41	12,200	760	238	1,140	1,760	837	397	4,250	95	66	170
17	39	1,370	580	236	732	1,010	1,750	355	5,360	101	72	150
18	40	812	484	267	547	761	2,260	325	771	95	72	140
19	37	660	467	403	467	682	1,210	302	557	92	75	131
20	37	580	632	1,980	418	1,790	915	280	2,290	91	68	127
21	38	560	978	1,860	387	3,750	903	265	4,460	94	62	122
22	46	589	958	4,320	366	2,740	2,610	269	849	83	59	113
23	44	650	768	7,170	345	1,280	6,270	337	550	103	57	108
24	40	697	633	3,390	327	881	8,650	456	426	120	55	95
25	40	700	548	1,300	309	870	2,270	363	353	144	54	87
26	41	712	482	878	292	2,510	1,040	323	307	121	52	83
27	43	824	428	696	278	3,760	791	290	270	100	50	79
28	57	846	382	615	263	1,590	650	261	240	90	49	77
29	55	672	367	557	-----	1,010	554	235	213	97	48	76
30	69	537	447	520	-----	784	484	222	193	101	46	74
31	90	-----	900	509	-----	1,060	-----	205	-----	93	44	-----
TOTAL	1,504	76,595	15,631	37,093	15,934	82,721	60,090	33,749	39,665	3,735	2,195	8,300
MEAN	48.5	2,553	504	1,197	569	2,668	2,003	1,089	1,322	120	70.8	277
MAX	90	12,200	1,010	7,170	1,770	13,700	8,650	9,280	6,300	175	111	1,850
MIN	37	279	212	236	263	236	484	205	182	83	44	42
CFSM	.06	3.16	.62	1.48	.70	3.30	2.48	1.35	1.64	.15	.09	.34
IN.	.07	3.53	.72	1.71	.73	3.81	2.77	1.55	1.83	.17	.10	.38
AC-FT	2,980	151,900	31,000	73,570	31,610	164,100	119,200	66,940	78,680	7,410	4,350	16,460

CAL YR 1972 TOTAL 209,373 MEAN 572 MAX 12,500 MIN 31 CFSM .71 IN 9.64 AC-FT 415,300
WTR YR 1973 TOTAL 377,212 MEAN 1,033 MAX 13,700 MIN 37 CFSM 1.28 IN 17.37 AC-FT 748,200

PEAK DISCHARGE (BASE, 7,500 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-4	2045	16.37	13,600	4-24	1615	13.30	9,300
11-16	1030	16.77	14,300	5-10	0530	14.81	11,300
1-23	1615	11.79	7,590	6-7	0845	12.38	8,230
3-13	1445	17.07	14,800	6-17	0715	12.25	8,080

07017200 Big River at Irondale, Mo.

LOCATION.--Lat 37°49'48", long 90°41'27", in SE¼SW¼ sec.15, T.36 N., R.3 E., Washington County, on right bank 50 ft (15 m) upstream from bridge on County Highway U, 0.2 mi (0.3 km) upstream from Mill Creek, and 0.8 mi (1.3 km) west of Irondale.

DRAINAGE AREA.--175 mi² (453 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 753.28 ft (229.600 m) above mean sea level (Missouri State Highway Commission benchmark). July 1-15, 1965, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--8 years, 185 ft³/s (5.239 m³/s), 14.36 in/yr (365 mm/yr), 134,000 acre-ft/yr (165 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 43,200 ft³/s (1,220 m³/s) Nov. 1 (gage height, 27.92 ft or 8.510 m, from floodmarks); minimum discharge, 11 ft³/s (0.31 m³/s) Aug. 29 to Sept. 2.

Period of record: Maximum discharge, 43,200 ft³/s (1,220 m³/s) Nov. 1, 1972 (gage height, 27.92 ft or 8.510 m, from floodmarks), from rating extended above 13,000 ft³/s (368 m³/s) on basis of step-backwater computations and indirect measurement of peak flow of February 1966 flood; minimum 2.2 ft³/s (0.062 m³/s) Sept. 16, 1971.

REMARKS.--Records fair.

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	22	7,450	122	700	399	93	574	181	157	42	48	12
2	17	4,940	111	400	334	91	368	174	135	44	42	12
3	15	508	104	300	250	91	480	151	293	50	36	13
4	13	205	99	500	209	99	1,330	135	935	42	32	17
5	13	125	142	400	185	163	634	122	962	39	29	19
6	12	90	464	300	167	394	404	122	479	36	25	19
7	13	108	208	200	164	2,280	325	1,880	280	33	21	17
8	14	92	210	180	294	628	313	1,520	203	33	21	24
9	13	71	228	160	202	570	3,170	604	162	36	21	500
10	15	63	180	150	172	3,360	920	379	135	38	68	184
11	15	54	143	146	158	2,200	521	275	116	35	28	87
12	16	45	648	139	148	722	373	222	105	32	22	50
13	16	6,020	1,000	116	426	454	294	177	560	26	37	34
14	15	1,140	500	110	465	817	253	152	347	22	39	29
15	15	508	350	109	308	524	227	132	177	21	29	23
16	15	320	250	107	229	351	468	118	136	21	25	19
17	15	245	200	111	180	283	390	108	135	19	37	17
18	14	200	150	228	167	236	306	99	112	19	34	16
19	15	190	180	387	152	205	689	93	449	19	28	15
20	15	186	220	226	145	784	999	86	230	20	23	26
21	15	184	200	960	136	467	1,130	80	150	21	20	34
22	16	186	180	1,160	126	313	6,280	102	119	20	18	20
23	16	176	170	551	120	255	1,640	107	99	118	17	14
24	16	166	160	343	113	222	754	139	85	1,640	15	12
25	15	178	150	268	108	261	548	98	74	290	15	14
26	16	218	130	231	104	284	421	128	67	380	13	14
27	17	190	120	210	100	240	332	1,710	60	190	13	13
28	19	161	110	231	97	209	269	504	54	130	12	12
29	19	143	150	201	-----	193	229	287	48	94	12	28
30	17	132	2,500	176	-----	176	199	225	47	71	12	21
31	195	-----	1,000	169	-----	994	-----	180	-----	58	12	-----
TOTAL	659	24,294	10,379	9,469	5,658	17,959	24,840	10,290	6,911	3,639	804	1,315
MEAN	21.3	810	335	305	202	579	828	332	230	117	25.9	43.8
MAX	195	7,450	2,500	1,160	465	3,360	6,280	1,880	962	1,640	68	500
MIN	12	45	99	107	97	91	199	80	47	19	12	12
CFSM	.12	4.63	1.91	1.74	1.15	3.31	4.73	1.90	1.31	.67	.15	.25
IN.	.14	5.16	2.21	2.01	1.20	3.82	5.28	2.19	1.47	.77	.17	.28
AC-FT	1,310	48,190	20,590	18,780	11,220	35,620	49,270	20,410	13,710	7,220	1,590	2,610

CAL YR 1972 TOTAL 80,836.4 MEAN 221 MAX 7,450 MIN 3.5 CFSM 1.26 IN 17.18 AC-FT 160,300
WTR YR 1973 TOTAL 116,217.0 MEAN 318 MAX 7,450 MIN 12 CFSM 1.82 IN 24.70 AC-FT 230,500

PEAK DISCHARGE (BASE, 3,000 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-1	2345	27.92	43,200	4-9	0745	12.85	6,720	6-4	1900	9.19	3,020
11-13	1100	17.84	14,700	4-22	1015	19.69	18,500	7-24	0200	11.11	4,810
3-7	0130	12.07	5,780	5-7	2300	10.44	4,140				
3-10	2015	15.18	9,950	5-27	0300	10.66	4,360				

07017500 Dry Branch near Bonne Terre, Mo.

LOCATION.--Lat 37°55'46", long 90°27'40", at west-central edge of Survey 3062, T.37 N., R.5 E., St. Francois County, on downstream side of bridge on County Highway K, 0.5 mi (0.8 km) upstream from Terre Bleue Creek, and 4.5 mi (7.2 km) east of junction of State Highway 47 and U.S. Highway 67 at Bonne Terre.

DRAINAGE AREA.--3.35 mi² (8.68 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 710 ft (216.4 m), from topographic map.

AVERAGE DISCHARGE.--18 years, 2.65 ft³/s (0.075 m³/s), 10.74 in/yr (273 mm/yr), 1,920 acre-ft/yr (2.37 hm³/s).

EXTREME.--Current year: Maximum discharge, 874 ft³/s (24.75 m³/s) July 25 (gage height, 4.16 ft or 1.268 m); no flow on many days.

Period of record: Maximum discharge, 1,520 ft³/s (43.05 m³/s) June 30, 1957 (gage height, 5.55 ft or 1.692 m), from rating curve extended above 300 ft³/s (8.50 m³/s) on basis of contracted-opening measurement of peak flow; no flow for many days each year.

REMARKS.--Records good.

REVISIONS.--WRD Mo. 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	.26	123	1.3	4.9	7.0	1.2	5.8	2.0	1.0	.12	.12	.02
2	.16	10	1.0	3.7	4.0	1.7	4.3	2.1	1.0	.14	.10	0
3	.10	3.1	1.0	11	3.0	1.6	18	1.8	1.8	.11	.07	.04
4	.07	2.0	1.0	6.3	2.8	3.5	15	1.5	7.5	.10	.07	.05
5	.07	1.3	12	4.0	2.5	4.0	6.0	1.5	6.9	.09	.06	.05
6	.07	1.0	5.6	2.9	2.2	63	4.5	1.8	3.6	.06	.05	.04
7	.07	3.9	2.6	2.5	3.8	17	4.4	31	2.4	.05	.04	.03
8	.07	2.6	4.2	2.3	3.9	5.3	5.2	7.8	1.9	.07	.03	.03
9	.01	2.0	3.4	2.0	2.3	11	69	3.8	1.5	.07	.06	.20
10	0	1.7	2.5	1.8	2.3	108	6.2	2.8	1.4	.06	.07	.10
11	0	1.2	2.0	1.6	2.0	17	4.4	2.5	1.0	.04	.05	.06
12	0	1.1	27	1.4	2.1	6.1	3.8	1.9	1.0	.01	.02	.03
13	0	142	7.5	1.2	6.2	4.9	3.2	1.6	1.3	.01	20	.02
14	.01	6.0	4.3	1.4	5.9	21	3.4	1.5	1.1	0	.82	.02
15	0	3.6	3.2	1.6	3.8	5.8	3.1	1.5	2.1	0	.23	.02
16	0	2.8	2.1	1.9	2.5	4.8	4.2	1.0	1.5	0	.24	0
17	0	2.3	1.9	2.4	1.9	4.4	3.4	.84	2.4	0	.57	0
18	0	2.0	1.9	9.6	2.0	3.6	3.2	.60	1.2	0	.29	0
19	0	3.0	4.9	5.5	2.0	3.9	19	.60	8.5	.13	.22	0
20	0	3.3	3.9	3.8	2.0	9.9	6.6	.60	1.6	.04	.18	.02
21	.01	3.2	3.2	28	2.0	4.9	23	.62	1.0	0	.12	.03
22	.02	2.6	2.7	11	1.8	4.0	121	1.2	.86	0	.12	.01
23	0	2.1	2.5	5.4	1.6	3.5	10	.67	.35	.05	.10	0
24	0	2.0	2.5	4.3	1.5	3.2	5.3	.60	.35	.26	.07	.01
25	0	2.9	2.5	3.6	1.5	5.9	4.6	.49	.30	62	.06	.03
26	0	3.1	2.5	3.6	1.5	5.0	3.8	14	.22	4.1	.04	.02
27	0	2.1	2.3	3.4	1.5	3.9	3.3	16	.22	.93	.02	0
28	0	1.6	2.3	3.8	1.2	3.5	2.8	2.3	.20	.51	.01	.01
29	0	1.5	28	3.3	-----	3.6	2.5	1.5	.19	.34	.06	.02
30	0	1.5	56	3.1	-----	3.1	2.2	1.4	.18	.31	.06	.02
31	5.6	-----	7.9	3.3	-----	40	-----	1.0	-----	.26	.03	-----
TOTAL	6.52	340.5	205.7	144.6	76.8	378.3	371.2	108.52	54.57	69.86	23.98	.88
MEAN	.21	11.4	6.64	4.66	2.74	12.2	12.4	3.50	1.82	2.25	.77	.029
MAX	5.6	142	56	28	7.0	108	121	31	8.5	62	20	.20
MIN	0	1.0	1.0	1.2	1.2	1.2	2.2	.49	.18	0	.01	0
CFSM	.06	3.12	1.82	1.28	.75	3.34	3.40	.96	.50	.62	.21	.008
IN-	.07	3.47	2.10	1.47	.78	3.86	3.78	1.11	.56	.71	.24	.008
AC-FT	13	675	408	287	152	750	736	215	108	139	48	1.7

CAL YR 1972 TOTAL 1,154.14 MEAN 3.15 MAX 142 MIN 0 CFSM .86 IN 11.76 AC-FT 2,290
WTR YR 1973 TOTAL 1,781.43 MEAN 4.88 MAX 142 MIN 0 CFSM 1.34 IN 18.16 AC-FT 3,530

PEAK DISCHARGE (BASE, 300 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-1	2015	3.91	774	3-10	1600	2.95	394
11-13	0630	3.31	534	4-22	0500	3.96	794
12-30	1100	2.77	328	7-25	1815	4.16	874
3-6	2115	3.40	570	8-13	1600	2.77	324

MERAMEC RIVER BASIN

07018000 Big River near De Soto, Mo.

LOCATION.--Lat 38°07'20", long 90°40'33", in SW¼NW¼ sec.11, T.39 N., R.3 E., Jefferson County, near right bank on downstream side of pier of Mammoth Bridge, 300 ft (91 m) upstream from Mammoth Creek, 1.5 mi (2.4 km) downstream from Mineral Fork, 6.5 mi (10.5 km) west of De Soto, and at mile 59.2 (95.3 km). Records include flow from Mammoth Creek.

DRAINAGE AREA.--718 mi² (1,860 km²), includes that of Mammoth Creek.

PERIOD OF RECORD.--October 1948 to current year. Prior to May 1949 monthly discharge only, published in WSP 1311.

GAGE.--Water-stage recorder. Datum of gage is 538.79 ft (164.223 m) above mean sea level.

AVERAGE DISCHARGE.--25 years, 661 ft³/s (18.72 m³/s), 12.50 in/yr (318 mm/yr), 478,900 acre-ft/yr (590 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 25,800 ft³/s (731 m³/s) Nov. 2 (gage height, 21.04 ft or 6.413 m); minimum discharge, 103 ft³/s (2.92 m³/s) Oct. 12, 13; minimum gage height, 2.85 ft (0.869 m) Aug. 27, 29.

Period of record: Maximum discharge, 55,800 ft³/s (1,580 m³/s) June 30, 1957 (gage height, 27.15 ft or 8.275 m); minimum discharge, 20 ft³/s (0.57 m³/s) Sept. 19, 1954; minimum gage height, 1.89 ft (0.576 m) Sept. 15, 1956.

Flood of August 1915 reached a stage of about 29.4 ft (8.96 m), from floodmark, 1.0 mi (1.6 km) downstream, adjusted to gage site by comparison with recorded flood 5.5 ft (1.68 m) lower (discharge, 70,500 ft³/s or 2,000 m³/s, from rating curve extended above 37,000 ft³/s or 1,050 m³/s).

REMARKS.--Records good. Records of chemical analyses 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	390	3,200	546	2,570	902	412	2,840	773	629	273	206	130
2	278	22,100	520	1,430	1,130	412	1,510	730	580	263	187	119
3	221	15,600	497	1,260	903	412	1,200	683	615	252	170	117
4	183	1,960	479	1,970	770	456	3,580	621	851	247	158	130
5	161	1,160	524	1,360	703	605	2,570	582	2,630	249	146	248
6	146	892	1,350	1,020	651	901	1,550	578	2,220	233	138	178
7	140	766	1,200	880	633	7,880	1,210	3,150	1,100	221	129	168
8	132	772	940	780	786	3,260	1,130	6,890	804	213	123	147
9	129	695	862	680	757	1,980	6,930	2,710	666	210	224	198
10	118	625	808	620	658	4,890	6,340	1,420	583	212	294	295
11	112	565	796	580	606	13,300	2,200	1,050	526	207	370	375
12	106	524	1,350	540	734	4,390	1,580	883	487	202	186	261
13	109	11,600	4,360	500	1,470	1,880	1,330	755	1,230	193	183	206
14	115	13,800	2,220	480	1,370	2,660	1,160	668	1,070	185	411	191
15	122	2,820	1,340	460	1,010	2,360	1,070	601	3,980	179	261	167
16	132	1,450	1,010	470	761	1,460	1,080	556	1,370	175	211	155
17	124	1,070	862	500	660	1,190	1,290	516	916	168	186	149
18	122	880	715	575	640	1,020	1,170	486	677	164	170	142
19	118	814	750	1,130	600	940	1,270	463	2,590	169	187	136
20	119	808	952	895	580	2,030	3,180	444	1,470	183	159	138
21	122	772	940	2,090	550	1,940	3,360	416	851	193	146	140
22	138	755	832	4,090	520	1,280	9,930	439	642	166	137	137
23	148	730	755	2,010	500	1,050	14,100	457	532	180	129	139
24	145	690	705	1,270	470	940	3,680	461	464	443	127	142
25	135	680	665	1,010	460	994	1,990	492	412	1,410	123	142
26	130	766	630	877	450	1,100	1,510	466	370	1,070	117	138
27	127	760	600	808	434	994	1,240	3,170	338	600	112	133
28	136	680	565	798	420	874	1,050	2,360	313	433	109	134
29	138	610	740	788	-----	820	930	1,090	295	324	119	157
30	136	575	5,430	708	-----	766	842	822	286	272	201	147
31	173	-----	8,580	686	-----	2,860	-----	700	-----	240	138	-----
TOTAL	4,605	89,119	42,523	33,835	20,128	66,056	82,822	35,432	29,497	9,529	5,557	5,059
MEAN	149	2,971	1,372	1,091	719	2,131	2,761	1,143	983	307	179	169
MAX	390	22,100	8,580	4,090	1,470	13,300	14,100	6,890	3,980	1,410	411	375
MIN	106	524	479	460	420	412	842	416	286	164	109	117
CFSM	.21	4.14	1.91	1.52	1.00	2.97	3.85	1.59	1.37	.43	.25	.24
IN.	.24	4.62	2.20	1.75	1.04	3.42	4.29	1.84	1.53	.49	.29	.26
AC-FT	9,130	176,800	84,340	67,110	39,920	131,000	164,300	70,280	58,510	18,900	11,020	10,030

CAL YR 1972 TOTAL 296,547 MEAN 810 MAX 22,100 MIN 80 CFSM 1.13 IN 15.36 AC-FT 588,200
WTR YR 1973 TOTAL 424,162 MEAN 1,162 MAX 22,100 MIN 106 CFSM 1.62 IN 21.98 AC-FT 841,300

PEAK DISCHARGE (BASE, 8,000 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-2	0800	21.04	25,800	3-11	0430	16.99	13,900
11-13	1900	18.97	19,100	4-9	1545	14.43	9,830
12-31	0500	14.72	10,200	4-22	1945	17.98	16,400
3-7	1130	14.08	9,410	6-15	2000	14.06	9,380

07018500 Big River at Byrnesville, Mo.

LOCATION.--Lat 38°21'45", long 90°39'05", in SE¼ sec.12, T.42 N., R.3 E., Jefferson County, on right bank on downstream side of pier of highway bridge at Byrnesville, 4.0 mi (6.4 km) upstream from Heads Creek, and at mile 14.1 (22.7 km).

DRAINAGE AREA.--917 mi² (2,375 km²).

PERIOD OF RECORD.--October 1921 to current year. Prior to June 1922 monthly discharge only, published in WSP 1311.

GAGE.--Water-stage recorder. Datum of gage is 433.69 ft (132.189 m) above mean sea level. Prior to Mar. 9, 1940, nonrecording gage at present site and datum.
Auxiliary water-stage recorder 4.0 mi (6.4 km) downstream at datum 433.83 ft (132.231 m) above mean sea level. Prior to Dec. 9, 1969, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--52 years, 837 ft³/s (23.70 m³/s), 12.40 in/yr (315 mm/yr), 606,400 acre-ft/yr (748 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 28,000 ft³/s (793 m³/s) Nov. 4 (gage height, 23.23 ft or 7.081 m); minimum discharge, 127 ft³/s (3.60 m³/s) Aug. 29 (gage height, 2.60 ft or 0.792 m).

Period of record: Maximum discharge, 42,100 ft³/s (1,190 m³/s) July 1, 1957 (gage height, 26.41 ft or 8.050 m); minimum discharge, 25 ft³/s (0.708 m³/s) Aug. 30, 1936, minimum gage height, 1.50 ft (0.457 m) Aug 14, 1934.

Flood of Aug. 21, 1915 reached a stage of 30.2 ft (9.20 m) from floodmarks (discharge, 80,000 ft³/s or 2,270 m³/s, by slope-area measurement of peak flow).

REMARKS: Records good.

REVISIONS.--WSP 667: 1927. WSP 877: 1938. WSP 1007: 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	658	3,090	619	7,580	1,050	521	4,260	1,180	930	354	305	191
2	491	8,900	577	2,640	1,340	524	2,940	1,100	817	345	260	153
3	364	20,100	561	2,040	1,500	524	2,020	1,010	804	310	231	147
4	288	20,800	553	2,310	1,210	668	2,360	935	856	293	215	153
5	237	2,650	568	2,320	1,050	1,050	4,330	848	2,430	279	201	163
6	210	1,530	1,070	1,630	950	1,180	2,910	814	3,410	272	189	231
7	190	1,190	1,690	1,250	878	4,450	2,150	2,550	2,310	256	177	235
8	172	1,040	1,250	1,040	854	7,590	1,870	6,340	1,400	239	169	203
9	161	1,000	1,090	894	1,010	3,380	4,270	6,250	1,050	229	455	1,680
10	152	892	1,090	764	978	4,410	8,590	2,770	872	222	260	604
11	145	786	974	698	858	8,670	5,700	1,880	754	221	428	356
12	140	698	1,160	648	802	13,200	2,540	1,480	669	213	494	476
13	136	4,450	3,320	606	1,100	5,590	1,940	1,230	1,890	206	302	356
14	132	12,200	4,130	582	1,800	3,130	1,610	1,060	1,620	197	252	292
15	133	15,900	2,330	534	1,970	3,740	1,390	932	1,530	188	383	250
16	137	3,350	1,680	511	1,560	2,750	1,260	832	4,160	179	604	219
17	141	1,910	1,280	499	1,210	2,010	1,330	755	1,630	171	323	197
18	145	1,490	1,080	523	1,030	1,700	1,530	687	1,290	165	248	181
19	140	1,250	1,060	633	942	1,490	1,450	631	4,660	165	219	170
20	137	1,150	1,240	1,200	871	3,130	2,710	585	3,310	158	217	171
21	139	1,110	1,390	1,250	818	3,130	4,150	548	1,800	167	201	164
22	149	1,040	1,270	3,280	762	2,430	7,500	638	1,170	179	179	168
23	152	982	1,120	4,110	714	1,840	11,700	673	917	226	167	168
24	160	907	1,020	2,360	674	1,560	15,000	619	754	226	159	158
25	168	838	940	1,710	638	1,580	4,260	581	635	840	151	160
26	164	819	876	1,380	606	1,720	2,520	625	548	1,200	142	162
27	159	897	814	1,190	570	1,690	2,060	2,840	493	1,110	138	160
28	157	856	763	1,140	542	1,500	1,730	4,350	444	711	132	156
29	154	754	892	1,120	-----	1,330	1,490	2,200	404	527	142	163
30	158	678	3,170	1,070	-----	1,230	1,310	1,400	372	431	139	167
31	185	-----	7,270	986	-----	1,820	-----	1,080	-----	350	181	-----
TOTAL	6,054	113,257	46,847	48,498	28,287	89,537	108,880	49,423	43,929	10,629	7,663	8,054
MEAN	195	3,775	1,511	1,564	1,010	2,888	3,629	1,594	1,464	343	247	268
MAX	658	20,800	7,270	7,580	1,970	13,200	15,000	6,340	4,660	1,200	604	1,680
MIN	132	678	553	499	542	521	1,260	548	372	158	132	147
CFSM	.21	4.12	1.65	1.71	1.10	3.15	3.96	1.74	1.60	.37	.27	.29
IN.	.25	4.59	1.90	1.97	1.15	3.63	4.42	2.00	1.78	.43	.31	.33
AC-FT	12,010	224,600	92,920	96,200	56,110	177,600	216,000	98,030	87,130	21,080	15,200	15,980

CAL YR 1972 TOTAL 363,822 MEAN 994 MAX 20,800 MIN 90 CFSM 1.08 IN 14.76 AC-FT 721,600
WTR YR 1973 TOTAL 561,058 MEAN 1,537 MAX 20,800 MIN 132 CFSM 1.68 IN 22.76 AC-FT 1,113,000

PEAK DISCHARGE (BASE, 7,000 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-4	0300	23.23	28,000	3-12	1815	19.03	14,200
11-15	0730	20.59	18,300	4-10	2130	16.75	9,880
1-1	0630	16.88	9,770	4-24	1000	19.98	16,600
3-8	1245	15.94	8,440	5-9	0300	14.91	7,410

MERAMEC RIVER BASIN

07019000 Meramec River near Eureka, Mo.

LOCATION.--Lat 38°30'20", long 90°35'27", in SE¼ sec.32, T.44 N., R.4 E., St. Louis County, on right bank 44 ft (13 m) upstream from bridge on north access roadway of I-44, 2.0 mi (3.2 km) east of Eureka, 3.0 mi (4.8 km) downstream from Big River, and at mile 34.6 (55.7 km).

DRAINAGE AREA.--3,788 mi² (9,811 km²).

PERIOD OF RECORD.--August 1903 to July 1906, October 1921 to current year. Monthly discharge only for January, February, and March 1904, published in WSP 1311.

GAGE.--Water-stage recorder. Datum of gage is 404.18 ft (123.194 m) above mean sea level. Prior to Jan. 17, 1933, nonrecording gage at site 200 ft (61 m) upstream at different datum. Jan. 17, 1933, to Sept. 22, 1937, nonrecording gage, and Sept. 23, 1937, to Sept. 30, 1971, water-stage recorder at present site at datum 2.00 ft (0.610 m) higher.

AVERAGE DISCHARGE.--54 years, 3,010 ft³/s (85.24 m³/s), 10.79 in/yr (274 mm/yr), 2,181,000 acre-ft/yr (2.69 km³/s).

EXTREMES.--Current year: Maximum discharge, 39,000 ft³/s (1,100 m³/s) Nov. 4 (gage height, 22.33 ft or 6.806 m); minimum daily discharge, 508 ft³/s (14.4 m³/s) Oct. 18.

Period of record: Maximum discharge 120,000 ft³/s (3,400 m³/s) June 11, 1945 (gage height, 38.94 ft or 11.869 m, present datum); minimum, 196 ft³/s (5.55 m³/s) Aug. 27, 31, Sept. 1, 1936.

Flood of Aug. 22, 1915 reached a stage of 42.2 ft (12.86 m), from floodmarks, present site and datum (discharge, 175,000 ft³/s or 4,960 m³/s, by slope-area measurement of peak flow).

REMARKS.--Records good.

REVISIONS (WATER YEARS).--WSP 877: 1938(M). WSP 977: 1942. WSP 1007: Drainage area. WSP 1281: 1924-25.

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	3,260	2,510	13,500	3,340	1,760	10,200	8,380	2,740	1,550	1,260	656
2	1,230	15,900	2,290	9,830	3,750	1,740	13,500	6,800	2,500	1,520	1,130	610
3	1,110	22,300	2,130	6,690	4,070	1,700	12,900	5,300	2,430	1,450	1,060	601
4	1,030	36,500	1,990	6,470	4,220	1,810	9,940	4,250	2,520	1,390	993	631
5	923	27,800	1,910	6,990	3,890	3,110	10,900	3,750	6,770	1,300	937	768
6	828	9,470	2,300	7,150	3,450	2,940	10,300	3,520	12,300	1,230	885	2,510
7	763	4,300	2,910	5,290	3,090	8,900	9,000	6,350	12,900	1,160	834	1,760
8	703	3,390	2,650	4,170	2,890	16,000	7,590	15,400	9,420	1,100	794	1,300
9	661	2,970	2,410	3,590	2,840	15,200	10,800	23,600	4,760	1,060	961	7,720
10	618	2,650	2,350	3,100	2,850	12,500	18,900	25,500	3,600	1,240	1,320	5,100
11	593	2,320	2,200	2,750	2,750	22,700	22,900	22,600	3,010	1,040	1,170	2,310
12	571	2,090	2,300	2,500	2,630	29,800	16,700	9,870	2,640	1,070	1,140	2,000
13	546	7,140	4,680	2,350	3,220	32,800	9,580	7,090	3,360	1,020	1,020	1,630
14	522	19,400	6,550	2,200	4,640	31,400	7,010	5,940	3,630	988	966	1,390
15	513	31,300	6,200	2,050	5,780	18,200	5,970	5,110	3,570	931	1,060	1,240
16	509	30,600	5,300	1,980	5,910	11,000	5,490	4,340	8,670	883	1,690	1,130
17	508	26,200	4,150	1,910	4,780	8,910	5,410	3,800	10,400	849	1,380	1,050
18	520	9,000	3,460	1,930	3,910	6,990	6,600	3,370	7,640	834	1,090	975
19	540	5,100	3,310	2,340	3,370	5,850	6,500	3,080	9,280	840	1,280	930
20	547	4,310	3,560	3,030	3,040	9,510	6,780	2,840	10,000	834	1,130	912
21	547	3,910	3,890	5,410	2,800	11,100	9,910	2,660	11,800	808	1,000	903
22	568	3,650	4,260	7,950	2,580	13,700	16,600	2,690	9,200	807	888	885
23	575	3,450	3,990	13,300	2,420	13,100	25,200	2,810	4,730	1,050	812	876
24	575	3,310	3,550	14,600	2,260	7,960	33,600	2,850	3,550	2,130	770	858
25	582	3,210	3,170	9,440	2,140	6,630	34,400	2,880	2,910	2,080	734	821
26	589	3,130	2,890	6,200	2,030	6,720	23,000	2,710	2,490	3,400	703	804
27	603	3,200	2,620	4,940	1,930	8,600	12,600	4,430	2,210	3,510	679	795
28	603	3,320	2,430	4,340	1,840	8,750	11,200	6,170	1,980	2,540	654	790
29	596	3,170	2,380	3,990	-----	6,810	10,600	5,030	1,800	1,530	639	791
30	596	2,810	4,700	3,640	-----	6,070	9,650	3,730	1,660	1,400	656	788
31	632	-----	9,060	3,350	-----	6,770	-----	3,090	-----	1,470	620	-----
TOTAL	21,001	299,160	108,100	166,980	92,420	339,030	393,730	209,940	164,470	43,014	30,255	43,534
MEAN	677	9,972	3,487	5,386	3,301	10,940	13,120	6,772	5,482	1,388	976	1,451
MAX	1,300	36,500	9,060	14,600	5,910	32,800	34,400	25,500	12,900	3,510	1,690	7,720
MIN	508	2,090	1,910	1,910	1,840	1,700	5,410	2,660	1,660	807	620	601
CFSM	.18	2.63	.92	1.42	.87	2.89	3.46	1.79	1.45	.37	.26	.38
IN.	.21	2.94	1.06	1.64	.91	3.33	3.87	2.06	1.62	.42	.30	.43
AC-FT	41,660	593,400	214,400	331,200	183,300	672,500	781,000	416,400	326,200	85,320	60,010	86,350

CAL YR 1972 TOTAL 1,090,345 MEAN 2,979 MAX 36,500 MIN 486 CFSM .79 IN 10.71 AC-FT 2,163,000
WTR YR 1973 TOTAL 1,911,634 MEAN 5,237 MAX 36,500 MIN 508 CFSM 1.38 IN 18.77 AC-FT 3,792,000

PEAK DISCHARGE (BASE, 17,000 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-4	1800	22.33	39,000	4-11	0930	16.34	24,200
11-15	2345	20.69	34,900	4-25	0200	21.64	37,300
3-13	0645	20.58	34,600	5-11	0315	17.41	26,800

07020500 Mississippi River at Chester, Ill.

LOCATION.--Lat 37°54'10", long 89°51'10", in SW¼ sec.24, T.7 S., R.7 W., third principal meridian, Randolph County, on downstream side of left pier of main truss of highway bridge at Chester, 8.1 mi (13.0 km) downstream from Kaskaskia River, and at mile 109.9 (176.8 km) above Ohio River.

DRAINAGE AREA.--712,600 mi² (1,846,000 km²), approximately.

PERIOD OF RECORD.--Discharge: October 1927 to current year in reports of Geological Survey. Monthly discharge only for some periods, published in WSP 1311. Since August 1873, results of discharge measurements in reports of Mississippi River Commission.

Gage heights: July 1942 to current year in reports of Geological Survey. Since May 1891, in reports of Mississippi River Commission and National Weather Service.

GAGE.--Water-stage recorder. Datum of gage is 341.05 ft (103.952 m) above mean sea level. Prior to February 1, 1962, nonrecording gage 0.4 mi (0.6 km) downstream at present datum.

AVERAGE DISCHARGE.--46 years, 180,600 ft³/s (5,115 m³/s), 130,800,000 acre-ft/yr (161 km³/yr).

EXTREMES.--Current year: Maximum discharge, 886,000 ft³/s (25,100 m³/s) Apr. 30 (gage height, 43.32 ft or 13.204 m); minimum discharge, 116,000 ft³/s (3,290 m³/s) Sept. 5 (gage height, 7.49 ft or 2.283 m).
Period of record: Maximum discharge determined, 886,000 ft³/s (25,100 m³/s) July 3, 1947, Apr. 30, 1973 (discharge, including unmeasured overflow, was greater May 24, 1943); maximum gage height, 43.32 ft (13.204 m) Apr. 30, 1973; minimum daily discharge, 30,000 ft³/s (850 m³/s) Dec. 12, 1937; minimum gage height, -4.10 ft (-1.250 m) Jan. 2, 1964.
Flood of June 30, 1844, reached a stage of 39.8 ft (12.13 m) and a discharge of 1,350,000 ft³/s (38,200 m³/s), computed by Corps of Engineers.

REMARKS.--Records excellent. Natural flow of stream affected by many reservoirs and navigation dams in upper Mississippi River basin and by many reservoirs and diversions for irrigation in Missouri River basin.

GAGE HEIGHT, IN FEET, AT 0800, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14.06	15.50	17.01	17.56	22.67	15.78	38.10	43.08	29.93	19.58	15.60	10.51
2	14.71	19.02	16.96	20.86	22.05	17.12	38.44	42.55	30.32	18.72	15.14	9.70
3	15.67	19.97	16.17	22.51	21.90	17.00	38.80	41.22	30.65	18.16	14.23	9.28
4	16.41	21.24	15.23	22.61	23.20	16.67	39.28	39.75	30.47	17.62	13.28	8.38
5	16.31	21.81	14.70	23.00	25.40	17.15	39.60	38.51	30.09	16.62	12.65	7.62
6	16.23	21.97	14.56	23.23	26.87	18.85	39.83	37.61	29.87	16.65	12.67	7.92
7	16.15	21.21	13.96	22.76	27.07	22.14	39.85	37.35	29.59	18.12	12.43	8.88
8	16.00	20.50	12.25	21.97	26.50	26.33	39.59	29.47	20.59	11.66	9.50	9.50
9	16.07	19.48	11.42	21.31	25.80	28.57	39.17	38.13	29.27	20.71	10.53	9.35
10	16.17	18.79	10.90	19.04	25.23	29.92	38.59	37.86	28.83	19.11	10.67	11.37
11	16.50	18.70	9.89	15.49	24.20	31.68	37.98		28.23	17.92	12.76	11.64
12	16.65	18.70	8.66	13.87	22.86	32.33	37.20		27.69	16.73	14.04	11.08
13	16.57	19.60	9.64	14.41	21.15	32.93	36.26		27.19	16.06	14.70	9.73
14	16.42	21.49	9.87	13.22	19.83	33.67	35.39		26.73	15.52	15.00	8.89
15	16.00	23.29	9.32	12.65	20.27	34.43	34.69		26.00	14.80	15.55	9.10
16	15.34	24.94	9.12	12.65	21.83	35.00	34.23	37.81	25.30	14.01	15.30	8.94
17	14.67	26.00	9.21	12.85	22.11	35.18	33.99	37.08	25.04	13.20	15.99	9.28
18	13.85	26.37	8.71	13.88	20.68	35.30	33.99	35.83	24.87	13.04	15.10	9.23
19	13.12	25.74	8.46	16.92	18.52	35.34	33.99	34.60	24.61	11.97	13.18	8.63
20	12.80	24.50	8.90	18.79	16.30	34.88	34.56	33.50	25.04	11.37	12.23	8.94
21	12.02	23.18	9.70	23.89	15.25	34.41	34.80	32.55	26.24	10.62	12.06	9.78
22	11.75	22.21	12.59	25.72	14.88	33.91	35.35	31.76	26.81	10.91	11.52	9.64
23	11.91	21.46	13.00	26.08	15.00	33.31	36.83	31.00	26.48	12.55	10.94	9.18
24	11.92	20.53	12.89	26.29	14.49	32.95	37.85	30.60	25.56	17.44	10.59	8.50
25	11.50	19.24	12.43	26.35	14.22	32.61	39.22	30.40	24.53	21.41	10.00	8.66
26	12.17	18.22	11.56	25.80	14.12	32.29	40.57	30.08	23.37	21.85	9.89	9.88
27	13.16	18.40	11.05	24.74	14.41	32.48	41.72	30.14	22.16	20.22	9.94	11.45
28	14.00	18.31	11.02	23.65	14.74	33.28	41.84	29.95	21.34	17.84	10.71	15.20
29	14.63	17.55	11.24	22.77	-----	34.74	43.06	29.44	20.96	16.83	10.84	18.85
30	14.61	17.30	12.94	22.65	-----	36.05	43.27	29.36	20.40	16.41	10.57	21.08
31	14.94	-----	16.44	22.70	-----	37.31	-----	29.63	-----	15.63	10.95	-----
MAX	16.65	26.37	17.01	26.35	27.07	37.31	43.27		30.65	21.85	15.99	21.08
MIN	11.50	15.50	8.46	12.65	14.12	15.78	33.99		20.40	10.62	9.89	7.62

MISSISSIPPI RIVER NAIN STEM

07020500 Mississippi River at Chester, Ill.--Continued

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	199,000	230,000	250,000	272,000	360,000	237,000	744,000	864,000	468,000	269,000	214,000	149,000
2	210,000	285,000	245,000	334,000	344,000	254,000	762,000	833,000	476,000	257,000	206,000	140,000
3	224,000	304,000	231,000	361,000	349,000	249,000	779,000	788,000	482,000	249,000	193,000	135,000
4	232,000	327,000	215,000	365,000	382,000	244,000	804,000	738,000	476,000	239,000	180,000	124,000
5	231,000	338,000	207,000	373,000	430,000	254,000	796,000	704,000	470,000	225,000	173,000	118,000
6	231,000	337,000	202,000	376,000	461,000	284,000	784,000	683,000	464,000	230,000	173,000	124,000
7	230,000	322,000	189,000	364,000	461,000	358,000	784,000	683,000	458,000	257,000	169,000	132,000
8	229,000	307,000	167,000	347,000	446,000	444,000	774,000	695,000	454,000	295,000	158,000	138,000
9	229,000	287,000	159,000	331,000	427,000	499,000	756,000	710,000	448,000	291,000	147,000	139,000
10	233,000	277,000	152,000	279,000	410,000	533,000	732,000	710,000	436,000	264,000	152,000	161,000
11	239,000	275,000	141,000	225,000	384,000	569,000	704,000	707,000	422,000	242,000	179,000	163,000
12	239,000	274,000	131,000	209,000	351,000	586,000	680,000	721,000	412,000	225,000	193,000	155,000
13	236,000	299,000	143,000	212,000	314,000	603,000	650,000	718,000	406,000	216,000	204,000	140,000
14	232,000	332,000	144,000	196,000	293,000	623,000	626,000	710,000	398,000	207,000	208,000	135,000
15	223,000	370,000	140,000	190,000	306,000	644,000	609,000	701,000	386,000	197,000	214,000	136,000
16	211,000	404,000	139,000	191,000	334,000	659,000	596,000	683,000	374,000	186,000	213,000	136,000
17	201,000	422,000	140,000	193,000	334,000	662,000	591,000	656,000	374,000	178,000	220,000	139,000
18	187,000	427,000	135,000	215,000	302,000	668,000	591,000	618,000	370,000	174,000	202,000	139,000
19	181,000	406,000	134,000	252,000	262,000	662,000	596,000	586,000	372,000	164,000	178,000	134,000
20	178,000	373,000	141,000	302,000	226,000	647,000	611,000	557,000	380,000	158,000	168,000	139,000
21	171,000	343,000	156,000	394,000	216,000	629,000	614,000	535,000	400,000	154,000	166,000	146,000
22	171,000	327,000	186,000	429,000	214,000	610,000	628,000	513,000	406,000	161,000	158,000	143,000
23	174,000	315,000	192,000	436,000	216,000	593,000	671,000	498,000	394,000	190,000	152,000	138,000
24	174,000	298,000	190,000	443,000	208,000	581,000	704,000	490,000	374,000	275,000	150,000	132,000
25	173,000	277,000	183,000	442,000	207,000	566,000	756,000	482,000	350,000	334,000	144,000	136,000
26	185,000	265,000	173,000	426,000	210,000	557,000	801,000	474,000	328,000	336,000	143,000	150,000
27	197,000	270,000	169,000	402,000	214,000	562,000	822,000	476,000	308,000	295,000	148,000	172,000
28	208,000	268,000	169,000	376,000	220,000	588,000	843,000	468,000	296,000	256,000	156,000	225,000
29	215,000	259,000	173,000	362,000	-----	629,000	879,000	456,000	291,000	239,000	156,000	282,000
30	213,000	256,000	204,000	360,000	-----	674,000	885,000	456,000	282,000	231,000	154,000	322,000
31	219,000	-----	249,000	362,000	-----	713,000	-----	462,000	-----	218,000	156,000	-----
TOTAL	6,475.0M	9,474.0M	5,449.0M	10,019M	8,881.0M	16,381M	21,572M	19,375M	11,955M	7,212.0M	5,427.0M	4,622.0M
MEAN	208,900	315,800	175,800	323,200	317,200	528,400	719,100	625,000	398,500	232,600	175,100	154,100
MAX	239,000	427,000	250,000	443,000	461,000	713,000	885,000	864,000	482,000	336,000	220,000	322,000
MIN	171,000	230,000	131,000	190,000	207,000	237,000	591,000	456,000	282,000	154,000	143,000	118,000
AC-FT	12,840M	18,790M	10,810M	19,870M	17,620M	32,490M	42,790M	38,430M	23,710M	14,310M	10,760M	9,168M
CAL YR 1972 TOTAL	75,531,400	MEAN 206,400		MAX 427,000		MIN 80,400		AC-FT 149,800,000				
WTR YR 1973 TOTAL	126,842,000	MEAN 347,500		MAX 885,000		MIN 118,000		AC-FT 251,600,000				

NOTE.--Daily discharge computed from daily mean gage heights.
M Figure expressed in thousands.

07021000 Castor River at Zalma, Mo.

LOCATION.--Lat 37°08'48", long 90°04'32", in SE¼ sec.29 N., R.9 E., Bollinger County, on downstream side of left bridge pier on State Highway 51 in Zalma, and 2.5 mi (4.0 km) downstream from Perkins Creek.

DRAINAGE AREA.--423 mi² (1,096 km²).

PERIOD OF RECORD.--January 1920 to current year. Prior to October 1921 monthly discharge only published in WSP 1931.

GAGE.--Water-stage recorder. Datum of gage is 350.38 ft (106.796 m) above mean sea level. Prior to June 9, 1953, nonrecording gage. Prior to Oct. 1, 1925, at site 500 ft (152 m) upstream at datum 49.82 ft (15.185 m) lower, Oct. 1, 1925 to Nov. 12, 1930, at site 500 ft (152 m) upstream at datum 0.18 ft (0.055 m) higher than present gage, Nov. 13, 1930 to June 8, 1953, at present site and datum. Since Dec. 18, 1949, auxiliary nonrecording gage, 6 mi (9.7 km) downstream.

AVERAGE DISCHARGE.--53 years, 503 ft³/s (14.2 m³/s), 16.15 in/yr (410 mm/yr), 364,400 acre-ft/yr (449.3 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 28,300 ft³/s (801.5 m³/s) Mar. 11 (gage height, 26.15 ft or 7.971 m); minimum, 63 ft³/s (1.78 m³/s) Aug. 29 (gage height, 1.32 ft or 0.402 m).

Period of record: Maximum discharge, 40,400 ft³/s (1,144 m³/s) Jan. 14, 1937 (gage height, 27.67 ft or 8.434 m), from rating curve extended above 25,000 ft³/s (708 m³/s); maximum gage height, 28.20 ft (8.595 m) Mar. 11, 1935; minimum discharge, 16 ft³/s (0.453 m³/s) Aug. 31, 1936 (gage height, 0.81 ft or 0.247 m). Flood of August 1915 reached a stage of 28.0 ft (8.53 m), present datum, from floodmark by local residents.

REMARKS.--Records fair.

REVISIONS (WATER YEARS).--WSP 1147: 1922-23(M). WSP 1281: 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	226	2,740	354	3,400	729	275	2,390	1,070	792	200	99	71
2	198	5,380	333	1,780	912	272	1,720	4,510	720	190	92	70
3	178	6,170	315	1,270	822	273	1,260	2,980	2,150	180	88	69
4	165	3,340	299	1,690	723	265	1,020	1,580	5,060	169	84	68
5	151	1,350	287	1,460	658	266	905	1,210	4,010	164	82	70
6	140	878	366	1,110	609	275	806	981	3,970	161	79	73
7	133	1,460	307	911	587	1,270	719	2,820	2,010	155	77	75
8	126	2,180	1,320	760	1,160	2,500	702	7,310	1,040	147	75	79
9	118	1,460	2,380	662	1,210	1,550	881	6,680	1,030	141	75	80
10	112	1,090	1,570	584	965	2,810	1,250	2,760	801	137	81	83
11	108	844	1,110	524	814	20,300	1,120	1,260	624	131	83	84
12	105	693	1,020	473	721	12,800	896	993	547	125	86	84
13	103	1,560	2,290	433	682	4,420	755	986	601	119	87	83
14	105	5,400	2,180	402	666	2,340	656	921	714	113	94	80
15	110	4,040	1,460	379	621	2,470	588	714	574	108	94	78
16	109	1,930	1,070	358	563	1,830	638	605	468	104	91	76
17	105	1,310	828	342	512	1,430	862	540	407	101	89	75
18	113	985	697	357	477	1,410	991	474	379	97	86	73
19	121	790	717	439	451	1,180	2,400	426	433	94	84	72
20	115	744	930	541	427	1,640	7,830	389	685	91	83	73
21	113	657	869	2,380	403	1,630	9,540	352	479	88	81	89
22	129	603	760	6,540	380	1,280	5,450	363	396	84	78	91
23	143	550	679	5,900	361	1,020	12,600	565	354	81	75	90
24	132	499	612	2,700	343	868	7,430	1,230	325	150	72	87
25	132	481	555	1,610	327	900	3,750	969	300	147	71	86
26	130	477	507	1,270	313	1,190	1,960	636	281	156	69	86
27	139	449	464	1,050	298	1,160	1,370	5,720	266	132	67	85
28	152	424	433	864	286	979	1,120	8,840	252	123	64	88
29	151	397	407	785	-----	875	973	4,150	233	122	66	109
30	151	374	541	693	-----	791	974	1,470	215	114	76	104
31	456	-----	3,260	632	-----	1,580	-----	911	-----	107	70	-----
TOTAL	4,469	49,255	28,920	42,299	17,020	71,849	73,556	64,415	30,116	4,031	2,498	2,431
MEAN	144	1,642	933	1,364	608	2,318	2,452	2,078	1,004	130	80.6	81.0
MAX	456	6,170	3,260	6,540	1,210	20,300	12,600	8,840	5,060	200	99	109
MIN	103	374	287	342	286	265	588	352	215	81	64	68
CFSM	.34	3.88	2.21	3.22	1.44	5.48	5.80	4.91	2.37	.31	.19	.19
IN.	.39	4.33	2.54	3.72	1.50	6.32	6.47	5.66	2.65	.35	.22	.21
AC-FT	8,860	97,700	57,360	83,900	33,760	142,500	145,900	127,800	59,740	8,000	4,950	4,820

CAL YR 1972 TOTAL 206,131 MEAN 563 MAX 10,200 MIN 66 CFSM 1.33 IN 18.13 AC-FT 408,900
WTR YR 1973 TOTAL 390,859 MEAN 1,071 MAX 20,300 MIN 64 CFSM 2.53 IN 34.37 AC-FT 775,300

PEAK DISCHARGE (BASE, 8,000 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-11	1600	26.15	28,300	5-9	0100	22.54	8,730
4-23	1230	24.88	15,600	5-28	1145	23.22	9,880

07022000 Mississippi River at Thebes, Ill.

LOCATION.--Lat 37°13'00", long 89°27'50", in NW¼ sec.17, T.15 S., R.3 W., Alexander County, near center span on downstream side of railroad bridge at Thebes, 5.0 mi (8.0 km) downstream from Headwater Diversion Channel, and at mile 43.7 (70.3 km) above Ohio River.

DRAINAGE AREA.--717,200 mi² (1,858,000 km²), approximately.

PERIOD OF RECORD.--Discharge: October 1932 to current year. Monthly discharge only for some periods, published in WSP 1311. Prior to April 1941, published as "at Cape Girardeau, Mo.".

Gage heights: March 1933 to February 1938 and October 1939 to current year in reports of Geological Survey (prior to April 1941, published as "at Cape Girardeau, Mo."). Since November 1878, under name of "at Grays Point" in files of St. Louis District office of Corps of Engineers. January 1879 to May 1896, published as "at Grays Point" and since May 1896, published as "at Cape Girardeau" in reports of Mississippi River Commission. February 1891 to February 1894 and since 1904, published as "at Cape Girardeau" in reports of National Weather Service.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level. Mar. 17, 1933, to Dec. 21, 1934, nonrecording gage and Dec. 22, 1934, to Apr. 4, 1941, water-stage recorder, at site 8.2 mi (13.2 km) upstream at datum 4.65 ft (1.417 m) higher. Apr. 5, 1941, to Sept. 30, 1941, nonrecording gage at present site and datum and Oct. 1, 1941, to Oct. 11, 1943, at datum 0.07 ft (0.021 m) higher. Prior to Apr. 5, 1941, various auxiliary gages used. Since Oct. 1, 1943, former gage at Cape Girardeau used as auxiliary gage.

AVERAGE DISCHARGE.--41 years, 185,100 ft³/s (5,242 m³/s), 134,100,000 acre-ft/yr (165 km³/yr).

EXTREMES.--Current year: Maximum discharge, 886,000 ft³/s (25,100 m³/s) Apr. 30 (elevation, 343.43 ft or 104.678 m); minimum discharge, 120,000 ft³/s (3,400 m³/s) Sept. 6 (elevation, 311.31 ft or 94.887 m).

Period of record: Maximum discharge, 893,000 ft³/s (25,300 m³/s) May 27, 1943 (elevation, 340.33 ft or 103.733 m, present datum); maximum elevation, 343.43 ft (104.678 m) Apr. 30, 1973; minimum discharge, 23,400 ft³/s (663 m³/s) Dec. 13, 1937, at site then in use; minimum elevation, 301.67 ft (91.949 m) Jan. 2, 1964.

Flood of July 4, 1844, reached an elevation of 345.14 ft (105.199 m), present datum, at Grays Point, from floodmarks (discharge, 1,375,000 ft³/s or 38,900 m³/s, computed by Corps of Engineers).

REMARKS.--Records good. Natural flow of stream affected by many reservoirs and navigation dams in upper Mississippi River basin and by many reservoirs and diversions for irrigation in Missouri River basin.

REVISIONS (WATER YEARS).--WSP 1341: 1844(M).

GAGE HEIGHT, IN FEET, AT 0800, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17.82	20.48	22.40	24.75	27.87	19.40	40.96	43.26	34.54	24.65	20.16	14.74
2	18.44	21.87	22.12	26.26	27.56	20.52	41.05	43.34	34.71	23.90	19.95	14.16
3	19.12	24.27	21.87	28.68	26.95	21.21	40.98	42.87	34.96	23.22	19.33	13.41
4	20.05	24.78	21.10	29.63	27.36	20.85	41.25	42.10	35.31	22.69	18.33	12.95
5	20.44	25.75	20.30	29.65	28.84	20.89	41.45	41.30	35.32	21.89	17.35	11.86
6	20.34	26.15	20.09	29.81	30.60	21.74	41.48	40.70	35.12	21.15	16.81	11.32
7	20.32	26.38	19.72	29.63	31.60	24.12	41.51	40.30	34.76	21.72	16.83	11.98
8	20.26	25.79	19.18	28.83	31.95	27.64	41.44	40.52	34.49	23.59	16.30	12.78
9	20.13	24.95	18.59	28.00	31.62	30.39	41.24	40.62	34.34	25.11	15.42	13.31
10	20.12	24.08	17.92	27.00	31.24	32.34	40.93	40.50	34.12	24.47	14.55	13.63
11	20.30	23.65	17.64	24.12	30.77	34.86	40.63	40.50	33.73	23.07	15.07	15.25
12	20.56	23.54	17.28	21.51	29.68	36.54	40.16	40.49	33.27	21.88	17.37	15.45
13	20.65	23.84	17.79	20.51	28.36	37.14	39.69	40.36	32.81	20.84	18.44	14.62
14	20.46	26.15	18.74	20.07	26.78	37.75	39.03	40.33	32.43	20.25	19.22	13.35
15	20.18	27.30	18.88	18.72	26.21	38.46	38.50	40.13	31.78	19.60	19.42	12.85
16	19.69	28.89	19.10	17.88	27.05	38.87	38.08	39.96	30.93	18.85	19.75	12.80
17	19.04	30.17	19.49	17.58	27.93	39.14	37.88	39.60	30.26	18.01	19.80	12.80
18	18.46	30.83	19.91	17.61	27.62	39.40	37.83	39.03	29.99	17.38	20.14	12.94
19	17.58	30.90	20.21	19.67	26.02	39.65	37.77	38.30	29.62	16.93	18.72	12.83
20	17.13	30.08	20.28	21.33	24.04	39.60	38.38	37.50	29.58	16.07	17.05	12.43
21	16.73	28.98	20.28	25.26	22.12	39.60	38.61	36.80	29.91	15.20	16.33	12.91
22	16.05	27.98	21.06	28.87	21.13	39.37	38.75	36.17	30.75	14.75	16.00	13.50
23	16.09	27.16	22.27	29.90	20.67	38.96	39.55	35.59	31.02	15.27	15.38	13.30
24	16.12	26.47	22.54	30.48	20.15	38.69	40.27	35.02	30.65	18.14	14.83	12.74
25	15.88	25.55	22.32	30.94	19.25	38.55	40.71	34.57	29.82	23.90	14.38	12.33
26	15.69	24.31	21.73	31.02	18.86	38.33	41.55	34.21	28.81	26.11	13.86	12.69
27	16.51	23.80	20.93	30.43	18.79	38.15	42.20	35.40	27.57	25.76	13.67	14.05
28	17.48	23.75	20.46	29.49	18.98	38.30	42.50	35.26	26.45	23.67	14.03	16.18
29	18.27	23.37	20.27	28.46	-----	38.98	42.87	34.77	25.78	22.07	14.57	20.75
30	18.63	22.75	20.45	28.03	-----	39.80	43.28	34.29	25.28	21.34	14.71	23.78
31	18.89	-----	22.74	27.77	-----	40.47	-----	34.36	-----	20.98	14.61	-----
MAX	20.65	30.90	22.74	31.02	31.95	40.47	43.28	43.34	35.32	26.11	20.16	23.78
MIN	15.69	20.48	17.28	17.58	18.79	19.40	37.77	34.21	25.28	14.75	13.67	11.32

NOTE.--Add 300.00 ft to obtain elevation above mean sea level.

07022000 Mississippi River at Thebes, Ill.--Continued

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	201,000	242,000	259,000	285,000	371,000	230,000	750,000	876,000	492,000	285,000	221,000	154,000
2	210,000	275,000	253,000	333,000	366,000	251,000	765,000	838,000	502,000	273,000	216,000	146,000
3	222,000	307,000	245,000	377,000	359,000	259,000	768,000	829,000	514,000	264,000	206,000	140,000
4	236,000	323,000	228,000	373,000	379,000	255,000	777,000	798,000	520,000	256,000	191,000	134,000
5	239,000	336,000	215,000	375,000	419,000	260,000	801,000	753,000	518,000	244,000	181,000	124,000
6	238,000	344,000	211,000	381,000	455,000	283,000	813,000	720,000	508,000	237,000	175,000	122,000
7	238,000	343,000	203,000	375,000	472,000	339,000	799,000	708,000	495,000	250,000	175,000	129,000
8	236,000	333,000	194,000	363,000	474,000	416,000	807,000	724,000	487,000	282,000	167,000	138,000
9	233,000	315,000	181,000	349,000	457,000	471,000	765,000	726,000	481,000	298,000	156,000	143,000
10	234,000	297,000	170,000	320,000	438,000	513,000	765,000	724,000	473,000	284,000	151,000	152,000
11	239,000	290,000	159,000	269,000	416,000	572,000	739,000	725,000	461,000	266,000	161,000	167,000
12	242,000	287,000	148,000	230,000	387,000	600,000	707,000	728,000	448,000	249,000	185,000	167,000
13	243,000	299,000	155,000	226,000	356,000	608,000	679,000	729,000	441,000	232,000	199,000	154,000
14	240,000	334,000	163,000	220,000	332,000	630,000	655,000	725,000	435,000	223,000	208,000	143,000
15	234,000	359,000	159,000	203,000	324,000	649,000	632,000	717,000	424,000	212,000	213,000	140,000
16	225,000	386,000	155,000	197,000	344,000	674,000	619,000	708,000	412,000	199,000	215,000	139,000
17	213,000	411,000	156,000	197,000	356,000	681,000	610,000	694,000	405,000	186,000	220,000	140,000
18	203,000	431,000	151,000	207,000	339,000	675,000	606,000	663,000	401,000	179,000	219,000	141,000
19	192,000	428,000	147,000	247,000	303,000	669,000	615,000	635,000	396,000	171,000	195,000	138,000
20	187,000	410,000	153,000	281,000	266,000	668,000	631,000	603,000	399,000	162,000	175,000	136,000
21	180,000	387,000	162,000	368,000	237,000	654,000	639,000	573,000	408,000	153,000	169,000	143,000
22	173,000	368,000	190,000	426,000	228,000	642,000	653,000	550,000	420,000	151,000	164,000	147,000
23	177,000	347,000	211,000	445,000	226,000	630,000	693,000	535,000	419,000	161,000	158,000	145,000
24	178,000	334,000	211,000	453,000	221,000	616,000	718,000	521,000	402,000	211,000	153,000	139,000
25	175,000	315,000	203,000	455,000	213,000	604,000	752,000	509,000	378,000	290,000	149,000	136,000
26	174,000	295,000	190,000	443,000	211,000	596,000	788,000	499,000	355,000	316,000	145,000	143,000
27	187,000	285,000	180,000	421,000	213,000	598,000	800,000	526,000	334,000	298,000	144,000	157,000
28	199,000	286,000	177,000	397,000	216,000	614,000	856,000	519,000	315,000	266,000	149,000	190,000
29	210,000	275,000	179,000	379,000	-----	641,000	851,000	501,000	305,000	247,000	154,000	260,000
30	212,000	265,000	197,000	369,000	-----	693,000	878,000	488,000	297,000	238,000	154,000	303,000
31	218,000	-----	252,000	369,000	-----	717,000	-----	486,000	-----	229,000	154,000	-----
TOTAL	6,588.0M	9,907.0M	5,857.0M	10,333M	9,378.0M	16,708M	21,931M	20,330M	12,845M	7,312.0M	5,522.0M	4,610.0M
MEAN	212,500	330,200	188,900	333,300	334,900	539,000	731,000	655,800	428,200	235,900	178,100	153,700
MAX	243,000	431,000	259,000	455,000	474,000	717,000	878,000	876,000	520,000	316,000	221,000	303,000
MIN	173,000	242,000	147,000	197,000	211,000	230,000	606,000	486,000	297,000	151,000	144,000	122,000
AC-FT	13,070M	19,650M	11,620M	20,500M	18,600M	33,140M	43,500M	40,320M	25,480M	14,500M	10,950M	9,144M

CAL YR 1972 TOTAL 78,244,200 MEAN 213,800 MAX 431,000 MIN 85,000 AC-FT 155,200,000
WTR YR 1973 TOTAL 131,321,000 MEAN 359,800 MAX 878,000 MIN 122,000 AC-FT 260,500,000

NOTE.--Daily discharge computed from daily mean gage heights.
M Figure expressed in thousands.

ST. FRANCIS RIVER BASIN

07035500 Barnes Creek near Fredericktown, Mo.

LOCATION.--Lat 37°34'20", long 90°23'00", in SW¼SE¼ sec.4, T.33 N., R.6 E., Madison County, on right down-stream side of bridge on State Highway 72, 1.1 mi (1.8 km) upstream from mouth, and 5.3 mi (8.5 km) west of Fredericktown.

DRAINAGE AREA.--4.03 mi² (10.4 km²).

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

GAGE.--Water-stage recorder. Altitude of gage 660 ft (201.2 m) from topographic map.

AVERAGE DISCHARGE.--18 years, 4.31 ft³/s (0.122 m³/s), 14.52 in/yr (369 mm/yr), 3,120 acre-ft/yr (3.85 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,180 ft³/s (118 m³/s) Apr. 22 (gage height, 9.17 ft or 2.795 m), from rating curve extended as explained below; no flow for many days.
Period of record: Maximum discharge, 5,550 ft³/s (157 m³/s) May 21, 1957 (gage height, 9.62 ft or 2.932 m), from rating curve extended above 800 ft³/s (22.7 m³/s) on basis of contracted opening measurement of peak flow; no flow for many days each year.

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	.05	125	2.2	5.7	11	1.9	11	2.8	1.0	.02	.40	0
2	.04	37	2.1	18	6.7	1.9	6.7	3.2	1.0	.01	.20	0
3	.03	8.3	2.0	9.5	5.0	1.9	9.5	3.0	2.0	.01	.10	0
4	.02	5.2	1.9	6.2	4.0	2.3	12	2.6	20	5.0	.07	.05
5	.01	3.8	3.5	4.2	3.5	2.4	7.3	2.3	10	2.0	.05	2.4
6	0	3.3	4.7	3.5	3.2	128	5.4	2.3	5.0	1.5	.05	3.7
7	0	12	3.3	3.0	16	53	5.4	247	3.0	.90	.05	7.0
8	0	7.0	36	2.5	13	10	5.4	32	2.0	.50	.05	19
9	0	5.2	14	2.3	6.4	9.5	41	7.6	1.5	.30	5.8	63
10	0	4.7	7.0	2.2	4.5	241	10	4.7	1.2	.15	2.2	.28
11	0	3.8	5.0	2.2	3.8	52	6.4	4.5	1.0	.05	.46	0
12	0	3.7	41	2.2	3.5	9.8	5.0	3.8	1.0	.02	.01	0
13	0	267	18	2.1	4.5	6.4	3.8	3.7	1.2	0	.34	0
14	0	17	8.0	2.0	5.0	60	3.5	3.2	1.2	0	.22	0
15	.01	7.3	5.7	2.0	4.0	12	3.7	2.1	2.0	0	0	0
16	.03	5.0	4.0	2.0	3.5	7.0	18	1.2	2.0	0	0	0
17	.02	3.8	3.3	2.2	3.0	5.2	10	1.1	3.5	0	0	0
18	.05	3.2	3.2	8.0	2.8	4.0	7.6	.92	2.0	0	0	0
19	.10	9.2	7.0	5.9	2.8	9.8	86	.92	20	0	0	0
20	.05	7.3	6.2	4.5	2.6	45	27	.74	10	0	0	1.1
21	.05	5.4	5.2	153	2.4	9.5	84	.83	4.0	0	0	0
22	.05	4.7	4.5	36	2.3	5.9	514	1.3	2.5	5.0	0	0
23	.10	3.8	4.0	9.5	2.3	4.5	68	2.1	2.0	.50	0	0
24	.05	3.3	3.7	5.9	2.2	4.0	11	1.9	1.5	23	0	9.2
25	.05	5.9	3.5	4.7	2.1	28	8.0	1.5	1.0	6.0	0	46
26	.05	6.2	3.2	4.2	2.1	14	5.4	58	.60	8.0	0	11
27	.22	4.2	3.0	4.0	2.0	8.0	4.5	48	.40	5.0	0	3.5
28	.22	3.3	34	4.0	1.9	5.7	3.5	1.9	.20	2.0	0	5.4
29	.16	2.8	224	3.5	-----	5.9	2.4	1.5	.10	1.2	0	11
30	.22	2.4	20	3.3	-----	4.7	2.3	1.3	.05	.70	0	3.8
31	18	-----	8.3	3.2	-----	60	-----	1.1	-----	.90	0	-----
TOTAL	19.58	580.8	491.5	321.5	126.1	813.3	987.8	449.11	102.95	62.76	10.00	186.43
MEAN	.63	19.4	15.9	10.4	4.50	26.2	32.9	14.5	3.43	2.02	.32	6.21
MAX	18	267	224	153	16	241	514	247	20	23	5.8	63
MIN	0	2.4	1.9	2.0	1.9	1.9	2.3	.74	.05	0	0	0
CFSM	.16	4.81	3.95	2.58	1.12	6.50	8.16	3.60	.85	.50	.08	1.54
IN.	.18	5.36	4.54	2.97	1.16	7.51	9.12	4.15	.95	.58	.09	1.72
AC-FT	39	1,150	975	638	250	1,610	1,960	891	204	124	20	370

CAL YR 1972 TOTAL 2,577.66 MEAN 7.04 MAX 403 MIN 0 CFSM 1.75 IN 23.79 AC-FT 5,110
WTR YR 1973 TOTAL 4,151.83 MEAN 11.4 MAX 514 MIN 0 CFSM 2.83 IN 38.32 AC-FT 8,240

PEAK DISCHARGE (BASE, 300 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-1	2045	7.38	1,170	3-6	2115	7.65	1,380	5-7	1800	7.71	1,440
11-13	0445	6.97	902	3-10	1545	6.97	902	5-26	2145	7.02	932
12-29	0915	7.56	1,310	4-19	1445	6.20	540	9-9	0800	6.12	337
1-21	1930	5.88	427	4-22	0530	9.17	4,180				

07037500 St. Francis River near Patterson, Mo.

LOCATION.--Lat 37°11'40", long 90°30'12", in NE¼ sec.16, T.29 N., R.5 E., Wayne County, near left bank on downstream side of pier of bridge on State Highway 34, 1 mi (1.6 km) upstream from Clark Creek, and 3 mi (4.8 km) east of Patterson.

DRAINAGE AREA.--956 mi² (2,476 km²).

PERIOD OF RECORD.--October 1920 to current year. Prior to June 1921, monthly discharge only, published in WSP 1311.

GAGE.--Water-stage recorder. Datum of gage is 370.45 ft (112.913 m) above mean sea level. Prior to Oct. 1, 1938, nonrecording gage at site 50 ft (15 m) upstream at datum 2.00 ft (0.610 m) higher. Oct. 1, 1938 to Apr. 12, 1939, nonrecording gage and Apr. 13, 1939 to Sept. 5, 1956, water-stage recorder at site 50 ft (15 m) upstream at present datum. Sept. 6, 1956 to Sept. 26, 1958, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--53 years, 1,085 ft³/s (30.72 m³/s), 15.42 in/yr (392 mm/yr), 786,100 acre-ft/yr (969 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 47,800 ft³/s (1,350 m³/s) Mar. 11 (gage height, 25.33 ft or 7.721 m); minimum, 43 ft³/s (1.21 m³/s) Sept. 3 (gage height, 2.88 ft or 0.878 m).

Period of record: Maximum discharge, 79,200 ft³/s (2,240 m³/s) Mar. 11, 1935 (gage height, 30.70 ft or 9.357 m), from rating curve extended above 55,000 ft³/s (1,560 m³/s); maximum gage height, 31.0 ft or 9.499 m Apr. 14, 1945 (backwater from Wappapello Dam); minimum discharge, 8 ft³/s (0.23 m³/s) Aug. 28 to Sept. 1, 1936; minimum gage height, 1.32 ft or 0.402 m Aug. 16, 1941.

Maximum stage known, 33.8 ft or 10.302 m (present datum) in August 1915, from floodmarks (discharge, 100,000 ft³/s or 2,830 m³/s, from rating curve extended above 55,000 ft³/s or 1,560 m³/s).

REMARKS.--Records poor.

REVISIONS (WATER YEARS).--WSP 732: 1922-23.

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	422	9,370	430	3,000	1,350	475	10,300	1,100	1,200	196	207	47
2	429	29,600	420	2,000	2,140	454	4,550	1,500	1,000	188	176	45
3	393	19,400	410	3,000	2,320	454	2,500	1,730	3,000	178	159	44
4	339	3,000	400	2,000	1,830	428	3,000	1,410	6,000	178	145	46
5	280	2,000	400	1,600	1,510	475	3,500	1,240	5,000	171	136	50
6	236	1,000	400	1,400	1,320	822	2,500	1,120	4,000	163	125	57
7	206	1,500	700	1,200	1,190	11,800	2,000	4,000	3,000	157	110	56
8	179	2,000	800	1,000	1,870	12,800	1,500	11,000	2,000	145	98	63
9	159	1,500	1,500	800	2,710	2,000	2,000	7,000	1,500	153	92	97
10	143	1,000	2,000	700	2,160	4,000	5,000	4,000	1,000	161	124	251
11	131	900	1,500	600	1,740	25,000	3,000	3,000	800	141	125	385
12	120	800	1,200	550	1,470	10,000	2,000	2,000	700	127	182	308
13	111	4,000	4,740	500	1,340	7,000	1,000	1,500	600	117	190	224
14	116	18,000	5,140	480	1,410	5,000	900	1,000	700	108	157	186
15	137	4,000	2,500	462	1,860	4,000	800	800	700	104	134	151
16	131	3,000	1,500	423	1,760	3,000	700	700	500	102	118	124
17	123	2,000	1,000	406	1,410	2,000	800	600	450	95	110	107
18	128	1,500	900	561	1,150	1,700	1,000	500	400	91	102	100
19	133	1,000	800	929	1,030	1,500	2,000	450	500	85	95	91
20	132	900	900	1,520	939	2,000	7,000	400	450	81	89	92
21	129	800	1,000	3,990	864	5,450	6,000	400	400	74	85	107
22	128	700	900	15,400	805	3,480	13,000	500	380	69	81	98
23	132	650	800	8,170	756	2,690	25,000	700	360	67	76	92
24	130	600	700	3,740	686	2,260	7,000	1,200	340	370	74	94
25	128	550	600	2,610	638	2,310	5,000	1,000	320	924	69	98
26	125	500	550	2,110	582	3,630	2,500	800	311	730	63	95
27	129	480	500	1,810	542	3,390	2,000	3,000	280	671	58	104
28	138	460	500	1,660	510	2,690	1,500	5,000	256	483	54	159
29	140	450	8,000	1,540	-----	2,380	1,100	3,500	230	355	50	157
30	143	440	13,000	1,440	-----	2,380	1,100	2,500	211	290	53	138
31	294	-----	4,000	1,260	-----	4,870	-----	1,940	-----	241	55	-----
TOTAL	5,664	112,100	58,190	66,861	37,892	130,438	120,250	65,590	36,588	7,015	3,392	3,666
MEAN	183	3,737	1,877	2,157	1,353	4,208	4,008	2,116	1,220	226	109	122
MAX	429	29,600	13,000	15,400	2,710	25,000	25,000	11,000	6,000	924	207	385
MIN	111	440	400	406	510	428	700	400	211	67	50	44
CFSM	.19	3.91	1.96	2.26	1.42	4.40	4.19	2.21	1.28	.24	.11	.13
IN.	.22	4.36	2.26	2.60	1.47	5.08	4.68	2.55	1.42	.27	.13	.14
AC-FT	11,230	222,400	115,400	132,600	75,160	258,700	238,500	130,100	72,570	13,910	6,730	7,270

CAL YR 1972 TOTAL 409,708 MEAN 1,119 MAX 29,600 MIN 33 CFSM 1.17 IN 15.94 AC-FT 812,700
WTR YR 1973 TOTAL 647,646 MEAN 1,774 MAX 29,600 MIN 44 CFSM 1.86 IN 25.20 AC-FT 1,285,000

PEAK DISCHARGE (BASE, 21,000 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-2	2100	23.09	37,000	3-11	*	25.33	47,800
11-14	0645	22.54	23,200	4-23	1300	25.40	26,400
12-29	2345	22.00	21,400				*Unknown

ST. FRANCIS RIVER BASIN

07037700 Clark Creek near Piedmont, Mo.

LOCATION.--Lat 37°11'09", long 90°37'47", in SE¼NE¼ sec.17, T.29 N., R.4 E., Wayne County, at downstream right abutment of bridge on State Highway 34, and 3.5 mi (5.6 km) northeast of Piedmont.

DRAINAGE AREA.--4.39 mi² (11.37 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 530 ft (161.5 m) from topographic map.

AVERAGE DISCHARGE.--17 years, 4.12 ft³/s (0.117 m³/s), 12.74 in/yr (324 mm/yr), 2,985 acre-ft/yr (3.68 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 810 ft³/s (22.9 m³/s) Apr. 22 (gage height, 5.10 ft or 1.554 m); minimum daily discharge, 0.3 ft³/s (0.008 m³/s) Oct. 11-13, 16, 17.
Period of record: Maximum discharge, 1,400 ft³/s (39.6 m³/s) May 22, 1957 (gage height, 6.10 ft or 1.859 m) from rating curve extended above 360 ft³/s (10.2 m³/s) on basis of slope-area measurements at gage heights 5.45 ft (1.661 m) and 6.25 ft (1.905 m); maximum gage height, 6.25 ft (1.905 m) Sept. 22, 1965; minimum, 0.2 ft³/s (0.006 m³/s) Feb. 21, 1958 and Jan. 29, 30, 1963.

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	.60	37	3.3	4.4	9.3	1.6	12	9.3	2.4	.80	.80	.90		
2	.50	44	3.2	3.7	6.6	1.7	6.2	9.3	2.6	.80	.80	.80		
3	.50	11	3.2	5.8	5.8	1.6	4.6	7.0	75	.80	.80	.90		
4	.50	8.4	2.8	3.2	5.0	1.8	5.4	6.6	15	.70	.80	1.1		
5	.50	7.3	2.8	3.0	4.6	1.8	4.4	5.8	12	.70	.80	.90		
6	.40	7.9	2.8	2.8	4.4	62	4.4	5.8	5.4	.70	.80	.90		
7	.40	21	6.6	2.6	12	68	6.2	156	3.8	.70	.80	.90		
8	.40	9.0	13	2.5	8.2	6.2	6.2	30	3.1	.70	.80	4.3		
9	.40	7.3	7.3	2.3	5.8	7.0	24	10	2.6	.90	1.1	1.6		
10	.40	7.0	6.0	2.3	4.6	200	10	5.8	2.4	.80	1.1	1.3		
11	.30	6.5	9.6	2.3	4.1	132	7.4	5.4	2.1	.80	1.1	1.3		
12	.30	6.2	29	2.3	3.8	14	6.2	5.4	2.4	.80	10	1.2		
13	.30	94	8.7	2.3	4.6	6.2	6.2	3.6	3.1	1.1	12	1.1		
14	.40	13	8.4	2.3	4.4	32	5.4	3.4	2.8	1.1	2.0	.90		
15	.40	7.6	7.0	2.2	3.6	8.6	5.4	3.1	2.4	1.2	1.7	.90		
16	.30	6.2	6.0	2.0	3.4	5.0	15	2.8	2.1	1.2	1.6	.90		
17	.30	5.5	5.3	2.0	3.1	3.6	7.8	2.6	2.0	1.2	2.1	.80		
18	.40	5.1	5.1	2.8	2.8	2.6	13	2.4	1.8	1.2	1.7	.80		
19	.40	6.2	8.1	2.0	2.8	3.1	97	2.1	2.1	1.2	1.6	.80		
20	.40	5.1	6.8	2.1	2.6	7.0	24	2.0	1.8	1.2	1.6	.90		
21	.40	4.9	6.0	142	2.4	6.2	24	1.8	1.6	1.1	1.4	.80		
22	.40	4.4	5.3	63	2.1	5.0	182	2.6	1.4	.90	1.3	.80		
23	.40	4.2	5.1	19	2.1	4.6	78	10	1.4	5.4	1.3	.70		
24	.40	4.0	4.7	11	2.1	4.6	26	3.6	1.3	39	1.3	.70		
25	.40	4.4	4.2	7.8	2.0	7.4	17	2.6	1.2	1.7	1.3	.70		
26	.40	4.2	4.0	7.4	1.8	5.8	12	2.4	1.3	1.4	1.3	.70		
27	.40	4.0	4.0	7.0	1.8	4.6	8.6	4.6	1.2	1.2	1.3	.60		
28	.40	4.0	3.8	7.4	1.7	4.6	7.4	2.8	1.1	1.1	1.3	.70		
29	.40	3.8	5.6	6.2	-----	5.0	7.0	2.6	.90	.90	15	.70		
30	.40	3.7	100	5.8	-----	4.6	6.6	2.6	.90	.90	1.4	.70		
31	2.8	-----	14	5.8	-----	35	-----	2.4	-----	.90	1.1	-----		
TOTAL	14.90	356.9	301.7	337.3	117.5	653.2	639.4	316.4	159.20	73.10	72.00	30.30		
MEAN	.48	11.9	9.73	10.9	4.20	21.1	21.3	10.2	5.31	2.36	2.32	1.01		
MAX	2.8	94	100	142	12	200	182	156	75	39	15	4.3		
MIN	.30	3.7	2.8	2.0	1.7	1.6	4.4	1.8	.90	.70	.80	.60		
CFSM	.11	2.71	2.22	2.48	.96	4.81	4.85	2.32	1.21	.54	.53	.23		
IN.	.13	3.02	2.56	2.86	1.00	5.54	5.42	2.68	1.35	.62	.61	.26		
AC-FT	30	708	598	669	233	1,300	1,270	628	316	145	143	60		
CAL YR 1972	TOTAL	1,595.20	MEAN	4.36	MAX	204	MIN	.30	CFSM	.99	IN	13.52	AC-FT	3,160
WTR YR 1973	TOTAL	3,071.90	MEAN	8.42	MAX	200	MIN	.30	CFSM	1.92	IN	26.03	AC-FT	6,090

PEAK DISCHARGE (BASE, 250 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-1	2130	4.73	431	4-19	1400	4.60	538	7-24	0430	4.38	574
12-30	0830	4.40	356	4-22	0700	5.10	810	8-29	1800	3.86	400
3-6	2100	4.13	414	5-7	0500	4.08	451				
3-10	1545	5.00	730	6-3	0300	4.30	503				

07039000 Wappapello Lake at Wappapello, Mo.

LOCATION.--Lat 36°55'42", long 90°17'04", in NW¼SE¼ sec.3, T.26 N., R.7 E., Wayne County, at intake tower at dam on St. Francis River, 0.8 mi (1.2 km) southwest of Wappapello, and at mile 309 (497 km).

DRAINAGE AREA.--1,310 mi² (3,390 km²), approximately.

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

GAGE.--Water-stage recorder. Datum of gage is 347.74 ft (105.991 m) above mean sea level. Prior to June 19, 1941, nonrecording gage at same site and datum.

EXTREMES.--Current year: Maximum contents, 284,000 acre-ft (350 hm³) June 7 (gage height, 30.09 ft or 9.171 m); minimum, 23,500 acre-ft (29.0 hm³) Mar 1 (gage height, 4.86 ft or 1.481 m).

Period of record: Maximum contents, 729,800 acre-ft (900 hm³) Apr. 16, 1945 (gage height, 51.35 ft or 15.651 m); minimum, since initial filling to conservation pool level, 23,340 acre-ft (28.8 hm³) Mar. 1, 2, 3, 1970; minimum gage height, 4.20 ft (1.280 m) Sept. 26, 27, 1967.

REMARKS.--Lake is formed by earth-fill dam. Closure of channel at dam began July 10, 1940; river began to flow through outlet structure July 24, 1940. Stop logs placed in outlet structure and storage began Apr. 1, 1941; conservation pool level reached Apr. 20, 1941. Capacity at bottom of outlet tunnels (gage height, -9.0 ft or -2.743 m), 2,600 acre-ft (3.21 km³); at conservation pool level (gage height, 7.0 ft or 2.134 m), 30,900 acre-ft (38.1 hm³); at spillway crest (gage height, 47.0 ft or 14.326 m), 613,200 acre-ft (756 hm³); at maximum pool level (gage height, 62.4 ft or 19.020 m), uncontrollable above spillway crest, 1,022,000 acre-ft (1.26 km³). Figures given herein represent total contents. Under normal operating conditions lake surface will not be drawn below conservation pool level, which is maintained for purposes of conservation and recreation. Storage above this level used for flood control. Contents computed from daily readings at 0800.

COOPERATION.--Records furnished by Corps of Engineers.

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

4.9	23,600	16.0	99,600
6.0	27,100	20.0	142,300
8.0	35,900	24.0	192,000
10.0	48,300	30.0	283,000
13.0	71,400		

CONTENTS, IN HUNDREDS OF ACRE-FEET, AT 0800, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

CONTENTS, IN ACRE-FEET, AT 0800, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	635	732	2,140	2,360	526	236	753	2,110	2,520	1,310	631	628
2	632	951	2,100	2,390	543	236	843	2,080	2,480	1,240	628	628
3	631	1,400	2,060	2,310	531	241	849	2,100	2,440	1,180	628	629
4	633	1,680	2,030	2,210	507	244	826	2,080	2,560	1,120	632	631
5	631	1,710	1,990	2,120	476	245	795	2,050	2,670	1,050	634	631
6	628	1,720	1,950	2,030	446	242	776	2,010	2,780	989	635	629
7	628	1,730	1,910	1,910	410	255	741	1,970	2,830	927	633	630
8	628	1,760	1,880	1,770	387	434	696	2,290	2,830	863	631	635
9	629	1,770	1,900	1,640	373	593	657	2,660	2,790	810	629	631
10	628	1,770	1,920	1,500	370	613	651	2,720	2,730	757	637	630
11	628	1,770	1,930	1,360	362	1,100	723	2,730	2,660	710	637	629
12	629	1,750	1,930	1,220	348	1,680	720	2,720	2,600	656	631	632
13	631	1,730	1,940	1,090	331	1,830	691	2,680	2,540	621	634	631
14	629	1,940	2,000	964	317	1,800	642	2,630	2,480	618	639	629
15	631	2,350	2,050	850	308	1,760	591	2,590	2,420	621	628	629
16	628	2,420	2,070	750	303	1,760	540	2,540	2,360	624	627	629
17	628	2,440	2,070	660	298	1,730	510	2,480	2,300	627	629	629
18	633	2,440	2,060	588	292	1,630	491	2,420	2,230	630	633	629
19	645	2,430	2,040	531	283	1,510	501	2,360	2,160	631	636	626
20	635	2,420	2,020	481	270	1,400	803	2,300	2,100	633	632	623
21	628	2,400	2,000	451	260	1,350	1,070	2,230	2,030	630	629	624
22	629	2,380	1,990	596	248	1,310	1,190	2,170	1,970	631	629	624
23	637	2,350	1,970	803	240	1,240	1,760	2,120	1,900	632	629	627
24	632	2,330	1,940	851	238	1,160	2,540	2,080	1,820	638	630	631
25	630	2,300	1,920	839	240	1,070	2,720	2,050	1,750	650	631	635
26	627	2,280	1,890	793	242	994	2,700	2,000	1,680	650	631	638
27	629	2,250	1,860	731	241	938	2,640	2,240	1,610	631	630	642
28	636	2,230	1,820	670	238	889	2,530	2,430	1,530	631	628	638
29	633	2,200	1,790	615	-----	836	2,390	2,560	1,460	638	630	636
30	630	2,170	1,750	561	-----	783	2,240	2,570	1,390	637	631	631
31	639	-----	1,940	526	-----	735	-----	2,560	-----	635	631	-----
(†)	12.17	25.79	24.12	10.61	4.95	13.23	26.26	28.32	19.67	12.08	12.03	12.04
(‡)	-3	+1,531	-230	-1,414	-288	+497	+320	-1,170	-755	-4	0	0
MAX	645	2,440	2,140	2,390	543	1,830	2,720	2,730	2,830	1,310	639	642
MIN	627	732	1,750	451	238	236	491	1,970	1,390	618	627	623
CAL YR 1972.....‡	+1,671											
WTR YR 1973.....‡	-11											

† Gage height, in feet, at end of month.

‡ Change in contents, in hundreds of acre-feet.

07039500 St. Francis River at Wappapello, Mo.

LOCATION.--Lat 36°55'41", long 90°15'55", in NW¼SE¼ sec.2, T.26 N., R.7 E., Wayne County, on right bank at downstream side of highway bridge, 0.5 mi (0.8 km) southeast of Wappapello and 1.25 mi (2.0 km) downstream from Wappapello Dam.

DRAINAGE AREA.--1,311 mi² (2,929 km²).

PERIOD OF RECORD.--October 1940 to current year. Since January 1939 in reports of Mississippi River Commission. Gage-height records collected in this vicinity since April 1920 are contained in reports of the Corps of Engineers.

GAGE.--Water-stage recorder. Datum of gage is 325.15 ft (99.106 m) above mean sea level. Prior to Oct. 14, 1940, nonrecording gages in the vicinity at same datum.

AVERAGE DISCHARGE.--33 years, 1,511 ft³/s (42.79 m³/s), 1,095,000 acre-ft/yr (1.35 km³/yr).

EXTREMES.--Current year: Maximum daily discharge, 10,100 ft³/s (286 m³/s) Apr. 28, 29; maximum gage height, 22.76 ft (6.937 m) Apr. 30; minimum daily discharge, 40 ft³/s (1.13 m³/s) July 14-17, Aug. 3, 16, 17, 22-24, 28, 29, Sept. 1-3, 22-26.

Period of record: Maximum discharge 22,300 ft³/s (632 m³/s) Apr. 16, 1945 (gage height, 25.60 ft or 7.803 m); no flow July 20-24, 1940, June 2, 1952, and part of a few days in some years.

Maximum stage known since 1920, 30.7 ft (9.36 m) May 15, 1933 (discharge, 82,500 ft³/s or 2,340 m³/s, determined by Corps of Engineers).

Maximum discharge, 85,000 ft³/s or 2,410 m³/s (determined by Corps of Engineers) Aug. 1915 (stage unknown).

REMARKS.--Records good above 500 ft³/s (14.2 m³/s), fair below. Discharge computed using gate openings and pool elevation at Wappapello Lake. Flow regulated by Wappapello Lake.

COOPERATION.--Gage height record, discharge measurements, and computations of daily discharge furnished by Corps of Engineers; reviewed by Geological Survey.

REVISIONS.--WSP 1211: 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	1,660	2,940	5,800	1,720	481	5,560	6,490	4,000	3,600	400	40
2	530	2,520	2,930	9,960	3,520	330	6,120	4,130	3,990	3,500	140	40
3	410	2,450	2,920	9,810	4,270	493	5,960	3,840	3,990	3,530	40	40
4	530	2,350	2,900	9,670	4,160	654	5,720	3,820	4,040	3,520	160	160
5	530	2,360	2,890	9,520	3,990	809	6,010	3,820	4,600	3,510	220	220
6	410	2,630	2,870	9,570	4,070	950	6,180	3,800	4,950	3,530	220	100
7	350	2,790	2,860	9,670	4,040	1,980	6,100	3,900	4,980	3,510	220	85
8	220	2,800	2,850	9,480	3,580	3,800	5,300	4,000	4,960	3,280	220	330
9	220	2,800	2,860	9,100	3,590	4,580	4,740	4,530	4,940	3,030	220	370
10	220	2,810	2,870	8,630	3,580	4,760	5,360	4,920	4,920	3,070	320	220
11	180	2,800	2,870	8,730	3,510	7,370	5,910	4,920	4,390	3,030	290	220
12	110	2,790	2,870	8,500	3,410	9,850	5,840	4,920	4,040	2,410	220	340
13	320	2,800	2,880	7,900	3,020	9,990	5,540	4,560	4,010	360	410	400
14	470	2,900	2,900	7,400	2,650	9,930	5,370	3,900	3,990	40	730	280
15	410	2,900	2,910	6,540	2,560	9,880	5,030	3,890	4,020	40	330	220
16	220	2,860	2,920	5,550	2,560	9,880	4,800	3,960	4,090	40	40	220
17	220	2,870	2,920	4,850	2,500	9,880	4,650	4,000	4,060	40	40	220
18	430	2,870	2,910	4,050	2,310	9,710	4,570	3,980	4,030	170	160	320
19	690	2,860	2,900	3,800	2,280	9,450	4,670	3,940	3,990	290	350	330
20	540	2,860	2,890	3,270	2,260	9,130	6,170	4,070	3,980	410	350	220
21	220	2,850	2,890	3,300	2,120	8,940	7,370	4,030	3,940	220	120	100
22	240	2,850	2,890	4,700	1,710	8,790	8,360	4,010	3,960	220	40	40
23	700	2,850	2,880	6,260	1,060	8,520	9,740	3,990	4,000	290	40	40
24	410	2,840	2,870	6,490	590	8,100	9,970	4,040	3,970	720	40	40
25	410	2,830	2,850	6,400	700	7,700	9,920	4,080	3,930	1,240	160	40
26	220	2,820	2,850	6,190	915	7,380	9,890	4,070	3,940	1,720	220	40
27	220	2,810	2,940	5,690	1,010	6,950	9,970	4,090	4,000	800	150	350
28	410	2,800	2,980	5,340	823	6,660	10,100	4,080	3,950	220	40	530
29	410	2,800	2,970	4,950	-----	6,120	10,100	4,030	3,900	530	40	410
30	290	2,900	2,980	4,060	-----	5,300	9,430	4,030	3,850	590	160	350
31	550	-----	3,070	1,640	-----	4,990	-----	4,020	-----	590	200	-----
TOTAL	11,680	82,030	90,030	206,820	72,508	193,357	204,450	129,860	125,410	48,050	6,290	6,315
MEAN	377	2,734	2,904	6,672	2,590	6,237	6,815	4,189	4,180	1,550	203	211
MAX	700	2,900	3,070	9,960	4,270	9,990	10,100	6,490	4,980	3,600	730	530
MIN	110	1,660	2,850	1,640	590	330	4,570	3,800	3,850	40	40	40
AC-FT	23,170	162,700	178,600	410,200	143,800	383,500	405,500	257,600	248,800	95,310	12,480	12,530
CAL YR 1972	TOTAL	516,140	MEAN	1,410	MAX	9,910	MIN	40	AC-FT	1,024,000		
WTR YR 1973	TOTAL	1,176,800	MEAN	3,224	MAX	10,100	MIN	40	AC-FT	2,334,000		

07041000 Little River ditch 81 near Kennett, Mo.

LOCATION.--Lat 36°14'10", long 89°58'58", in NE¼ sec.4, T.18 N., R.10 E., Dunklin County, on downstream side of bridge on State Highway 84, about 4 mi (6.4 km) east of Kennett.

DRAINAGE AREA.--111 mi² (287 km²).

PERIOD OF RECORD.--October 1926 to current year.

GAGE.--Nonrecording gage. Datum of gage is 241.00 ft (73.457 m) above mean sea level (Corps of Engineers bench mark). Prior to Oct. 19, 1966, at site 100 ft (30.5 m) upstream at present datum.

AVERAGE DISCHARGE.--47 years, 199 ft³/s (5.64 m³/s), 144,200 acre-ft/yr (178 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,090 ft³/s (87.5 m³/s) Apr. 23 (gage height, 9.83 ft or 2.996 m); minimum, 51 ft³/s (1.44 m³/s) Sept. 27 (gage height, 1.08 ft or 0.329 m).
Period of record: Maximum discharge, 3,090 ft³/s (87.5 m³/s) Apr. 23, 1973 (gage height, 9.83 ft or 2.996 m); maximum gage height, 15.1 ft (4.60 m), including some overflow from levee breaks on St. Francis River Apr. 21, 1927; minimum discharge observed, 8 ft³/s (0.227 m³/s) Sept. 1, 1943, Sept. 18, 1954; minimum, gage height, 0.87 ft (0.265 m) Sept. 13-15, 1968.

REMARKS.--Records fair.

REVISIONS (WATER YEARS).--WSP 877: 1938.

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	108	1,390	155	357	505	155	1,420	750	328	122	74	62
2	96	1,500	146	250	505	146	783	2,310	227	115	74	61
3	78	1,110	146	205	314	146	445	1,840	262	115	72	60
4	71	750	138	595	250	146	386	1,280	216	108	71	61
5	66	505	138	445	238	146	275	882	535	108	68	65
6	62	386	155	288	216	138	238	626	750	108	68	62
7	60	1,150	155	227	205	184	227	750	300	100	67	74
8	60	1,390	1,170	227	1,010	184	288	1,150	227	97	65	72
9	59	1,010	1,930	205	565	155	505	882	205	108	63	63
10	58	688	1,280	194	328	229	386	626	194	100	275	60
11	56	505	783	184	250	2,310	275	505	184	100	122	60
12	54	357	505	184	227	1,930	238	657	184	86	82	59
13	54	565	882	174	250	1,010	205	535	184	83	445	57
14	56	719	626	174	328	688	194	357	595	81	626	58
15	57	475	505	164	300	882	184	300	505	77	174	59
16	63	328	445	164	238	657	174	288	238	76	108	58
17	58	250	314	164	216	535	250	275	194	73	90	56
18	90	205	262	184	205	372	816	250	174	71	83	57
19	300	227	250	505	194	300	1,350	238	164	67	77	57
20	445	415	445	505	184	314	2,880	238	275	83	74	60
21	250	262	415	1,690	174	626	2,780	227	184	100	71	74
22	138	216	314	1,690	174	372	2,360	216	164	99	74	59
23	227	194	262	1,080	174	262	3,090	238	174	87	72	53
24	184	184	238	688	164	238	2,980	1,220	155	130	69	52
25	130	174	227	415	155	238	2,310	505	146	122	72	53
26	100	216	216	314	155	250	1,800	441	146	76	66	52
27	108	205	205	300	146	216	1,500	1,220	146	63	65	51
28	174	174	205	275	155	205	1,050	505	146	61	63	52
29	146	155	194	750	-----	194	783	275	130	57	61	56
30	108	155	184	386	-----	238	565	227	130	53	68	53
31	1,150	-----	372	300	-----	1,350	-----	205	-----	78	68	-----
TOTAL	4,666	15,860	13,262	13,283	7,825	14,816	30,737	20,018	7,462	2,804	3,527	1,776
MEAN	151	529	428	428	279	478	1,025	646	249	90.5	114	59.2
MAX	1,150	1,500	1,930	1,690	1,010	2,310	3,090	2,310	750	130	626	74
MIN	54	155	138	164	146	138	174	205	130	53	61	51
AC-FT	9,260	31,460	26,310	26,350	15,520	29,390	60,970	39,710	14,800	5,560	7,000	3,520
CAL YR 1972	TOTAL	71,491	MEAN	195	MAX	1,930	MIN	46	AC-FT	141,800		
WTR YR 1973	TOTAL	136,036	MEAN	373	MAX	3,090	MIN	51	AC-FT	269,800		

ST. FRANCIS RIVER BASIN

07042000 Little River ditch 1 near Kennett, Mo.

LOCATION.--Lat 36°14'09", long 89°58'53", in NE¼ sec.4, T.18 N., R.10 E., Dunklin County, on downstream side of bridge on State Highway 84, and 4 mi (6.4 km) east of Kennett.

DRAINAGE AREA. -- 235 mi² (608 km²).

PERIOD OF RECORD.--October 1926 to current year.

GAGE.--Nonrecording gage. Datum of gage is 241.00 ft (73.457 m) above mean sea level (Corps of Engineers bench mark). Prior to Oct. 20, 1966, at site 100 ft (30.5 m) upstream at present datum.

AVERAGE DISCHARGE.--47 years, 417 ft³/s (11.8 m³/s), 302,100 acre-ft/yr (372.5 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 7,900 ft³/s (223.7 m³/s), Apr. 23 (gage height, 14.55 ft or 4.435 m); minimum, 66 ft³/s (1.87 m³/s) Sept. 13 (gage height, 1.10 ft or 0.335 m).

Period of record: Maximum discharge, 7,900 ft³/s (225.7 m³/s) Apr. 23, 1933 (gage height, 14.55 ft or 4.435 m); maximum gage height, 16.80 ft (5.121 m) Jan. 25, 1937; minimum discharge, 8 ft³/s (0.227 m³/s) Sept. 13-18, 1932; minimum gage height observed, 0.71 ft (0.216 m) Sept. 15, 1956.

REMARKS. - - Records fair.

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	211	3,640	345	885	845	270	4,330	1,130	705	209	128	86
2	205	4,190	345	540	1,110	275	2,660	5,250	610	213	124	76
3	155	3,310	332	505	785	272	1,360	4,680	665	183	122	74
4	125	2,180	320	1,400	592	262	865	3,310	685	179	120	74
5	112	1,600	312	1,220	522	258	610	2,180	765	175	118	76
6	104	1,140	332	685	470	252	505	1,180	925	171	118	74
7	103	2,560	420	470	470	298	452	1,020	610	167	112	85
8	92	4,120	1,510	452	1,650	345	575	2,480	435	163	114	112
9	91	2,920	5,180	420	1,550	302	645	1,650	375	171	112	76
10	88	2,070	4,050	375	825	758	1,180	965	320	159	181	69
11	85	1,360	2,720	345	558	5,620	665	1,070	295	177	128	69
12	80	1,000	1,700	332	488	5,480	540	1,750	282	155	112	68
13	79	965	2,360	320	452	3,770	390	1,320	345	128	114	66
14	82	2,070	1,960	310	628	2,540	345	725	1,320	149	278	68
15	92	1,400	1,270	302	825	2,420	320	558	1,550	157	161	69
16	88	865	1,270	292	575	1,700	312	505	885	151	121	68
17	85	628	865	285	452	1,360	505	470	470	139	106	69
18	149	505	645	275	420	1,000	1,180	420	332	132	97	69
19	940	420	558	1,090	390	725	4,000	405	302	132	91	69
20	1,220	375	1,220	1,320	375	725	7,030	375	885	151	86	78
21	685	705	1,270	2,790	345	1,450	6,220	332	320	144	84	104
22	345	575	865	4,610	320	905	5,400	315	290	134	80	76
23	420	488	665	3,050	332	575	7,800	360	270	127	80	72
24	488	452	558	1,850	315	488	7,120	1,180	252	332	79	70
25	345	435	505	1,000	302	470	4,960	1,270	250	305	90	70
26	225	540	452	725	290	522	3,570	575	241	167	88	72
27	211	558	420	665	285	452	2,600	1,220	245	142	84	69
28	360	470	405	705	280	390	1,550	945	237	139	80	70
29	420	390	375	1,850	-----	375	1,270	610	213	127	79	72
30	435	360	390	1,070	-----	435	1,070	505	215	127	88	68
31	1,150	-----	945	685	-----	2,540	-----	505	-----	181	80	-----
TOTAL	9,270	42,291	34,564	30,823	16,451	37,234	70,029	39,260	15,294	5,186	3,455	2,238
MEAN	299	1,410	1,115	994	588	1,201	2,334	1,266	510	167	111	74.6
MAX	1,220	4,190	5,180	4,610	1,650	5,620	7,800	5,250	1,550	332	278	112
MIN	79	360	312	275	280	252	312	315	213	127	79	66
AC-FT	18,390	83,880	68,560	61,140	32,630	73,850	138,900	77,870	30,340	10,290	6,850	4,440
CAL YR 1972	TOTAL 183,154											
WTR YR 1973	TOTAL 306,095											
	MEAN 500			MAX 5,180			MIN 69			AC-FT 363,300		
	MEAN 839			MAX 7,800			MIN 66			AC-FT 607,100		

07042500 Little River ditch 251 near Lilbourn, Mo.

LOCATION.--Lat 36°33'20", long 89°40'12", SW¼SE¼ sec.8, T.22 N., R.13 E., New Madrid County, on right bank 150 ft (45.7 m) upstream from bridge on U.S. Highway 62, 3.7 mi (5.95 km) southwest of Lilbourn, and 4 mi (6.4 km) northwest of Marston.

DRAINAGE AREA.--235 mi² (609 km²).

PERIOD OF RECORD.--October 1945 to current year. Prior to January 1946 monthly discharge only, published in WSP 1311.

GAGE.--Water-stage recorder. Datum of gage is 263.46 ft (80.303 m) above mean sea level (levels by Missouri State Highway Commission). Prior to Oct. 27, 1967, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--28 years, 322 ft³/s (9.12 m³/s), 18.61 in/yr (473 mm/yr), 233,300 acre-ft/yr (287.7 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 5,200 ft³/s (147 m³/s) Apr. 20 (gage height, 13.00 ft or 3.962 m); maximum gage height, 13.07 ft (3.984 m) Apr. 23; minimum, 114 ft³/s (3.23 m³/s) Sept. 25 (gage height, 2.08 ft or 0.633 m).
Period of record: Maximum discharge, 5,200 ft³/s (147 m³/s) Apr. 20, 1973 (gage height, 13.00 ft or 3.962 m); maximum gage height, 15.16 ft (4.621 m) Feb. 15, 1950; minimum discharge, 29 ft³/s (0.82 m³/s) Sept. 20, 1954; minimum gage height, 2.00 ft (0.610 m) Sept. 30, Oct. 2, 3, 4, 5, 6, 9, Nov. 11, 13, 21, 22, 1971.
Flood in June 1945 reached a stage of 15.6 ft (4.755 m) from floodmark (discharge, 3,200 ft³/s or 90.6 m³/s).

REMARKS.--Records fair.

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	227	1,770	405	566	723	280	963	1,080	766	311	234	145
2	201	2,100	391	462	681	270	889	3,760	770	302	227	145
3	184	1,690	370	642	532	260	743	2,670	930	289	217	143
4	173	1,250	354	925	471	260	786	1,710	884	295	213	143
5	162	957	345	679	443	250	605	1,050	852	292	208	143
6	158	812	403	535	408	250	535	856	878	287	205	143
7	153	1,710	361	469	445	500	605	1,270	836	281	204	138
8	153	2,230	1,630	434	1,160	374	723	1,370	672	279	201	137
9	149	1,540	2,690	403	725	300	740	964	582	282	198	137
10	146	1,080	1,990	380	523	400	696	814	523	280	196	137
11	145	876	1,140	368	459	3,000	563	1,280	592	283	195	129
12	146	752	971	351	429	2,500	509	955	974	273	188	130
13	145	977	1,560	341	503	2,040	464	703	849	269	198	125
14	146	1,340	1,090	335	802	1,260	433	618	1,130	268	224	124
15	145	940	932	322	603	1,180	422	574	906	263	205	124
16	147	738	823	309	462	942	426	560	646	260	190	124
17	147	640	630	306	415	887	425	528	541	253	182	124
18	387	574	565	321	397	795	1,090	510	495	252	179	120
19	881	686	668	574	380	680	2,100	499	478	255	175	120
20	605	741	903	551	365	719	4,410	480	477	248	174	122
21	400	618	760	1,730	349	817	3,150	455	445	250	171	126
22	361	554	639	2,300	342	703	2,930	450	413	242	167	128
23	578	513	568	1,440	338	603	3,980	582	391	243	165	123
24	408	486	516	870	323	556	3,110	1,020	381	263	165	119
25	328	508	478	682	311	575	2,080	639	366	294	167	115
26	295	558	453	609	301	564	1,290	499	358	287	164	116
27	394	502	437	602	294	507	1,070	1,080	353	255	155	120
28	482	448	417	948	293	482	906	1,010	329	243	152	123
29	373	415	398	946	-----	475	820	1,010	324	235	153	127
30	326	403	532	628	-----	483	736	1,020	316	248	158	119
31	1,230	-----	766	540	-----	1,810	-----	918	-----	245	148	-----
TOTAL	9,775	28,408	24,185	20,568	13,477	24,722	38,199	30,934	18,457	8,327	5,778	3,869
MEAN	315	947	780	663	481	797	1,273	998	615	269	186	129
MAX	1,230	2,230	2,690	2,300	1,160	3,000	4,410	3,760	1,130	311	234	145
MIN	145	403	345	306	293	250	422	450	316	235	148	115
CFSM	1.34	4.03	3.32	2.82	2.05	3.39	5.42	4.25	2.62	1.14	.79	.55
IN.	1.55	4.50	3.83	3.26	2.13	3.91	6.05	4.90	2.92	1.32	.91	.61
AC-FT	19,390	56,350	47,970	40,800	26,730	49,040	75,770	61,360	36,610	16,520	11,460	7,670
CAL YR 1972	TOTAL 149,148	MEAN 408	MAX 2,690	MIN 128	CFSM 1.74	IN 23.61	AC-FT 295,800					
WTR YR 1973	TOTAL 226,699	MEAN 621	MAX 4,410	MIN 115	CFSM 2.64	IN 35.89	AC-FT 449,700					

ST. FRANCIS RIVER BASIN

07043000 Castor River at Aquilla, Mo.

LOCATION.--Lat 36°57'08", long 89°54'25", in NE¼SE¼ sec.25, T.27 N., R.10 E., Stoddard County, on downstream side of right pier of bridge on State Highway 25, 0.5 mi (0.8 km) north of Aquilla, and 4 mi (6.4 km) north of Bloomfield.

DRAINAGE AREA.--175 mi² (453 km²).

PERIOD OF RECORD.--October 1945 to current year. Prior to January 1946 monthly discharge only, published in WSP 1311.

GAGE.--Water-stage recorder. Datum of gage is 317.11 ft (96.655 m) above mean sea level (levels by Missouri State Highway Commission). Prior to Apr. 11, 1948, nonrecording gage at site 50 ft (15.24 m) downstream at same datum, Apr. 12, 1948, to July 31, 1968, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--28 years, 162 ft³/s (4.59 m³/s), 12.57 in/yr (319 mm/yr), 117,400 acre-ft/yr (145 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,180 ft³/s (118 m³/s) Apr. 23 (gage height, 14.73 ft or 4.490 m); minimum, 0.16 ft³/s (0.005 m³/s) Aug. 28 (gage height, 4.44 ft or 1.353 m).
Period of record: Maximum discharge, 5,900 ft³/s (167 m³/s) Mar. 9, 1964 (gage height, 15.7 ft or 4.79 m, from floodmark); no flow Sept. 4-7, 1946, Sept. 22 to Oct. 4, Oct. 8-11, 1953, Sept. 18-20, 1955, Oct. 27 to Nov. 4, 1964.

Flood in June 1945 reached a stage of 14.2 ft (4.33 m), from floodmark.

REMARKS.--Records poor. Entire flow from headwaters of Castor River is diverted 22 mi (35.4 km) above station to Headwater diversion channel. See Castor River at Zalma for records of flow above diversion.

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	1,260	1,960	111	480	394	17	1,140	846	1,880	18	11	22
2	1,010	1,960	96	344	463	16	1,030	1,890	1,730	16	8.1	15
3	656	1,710	87	460	377	19	683	1,750	1,590	14	5.0	11
4	378	1,580	80	787	281	24	359	1,600	1,430	14	3.5	7.8
5	231	1,480	69	766	215	28	226	1,450	1,330	13	2.9	5.5
6	144	1,400	73	583	170	53	174	1,180	1,210	13	2.5	4.1
7	90	1,600	111	380	227	504	149	1,380	941	13	2.3	3.0
8	59	1,630	1,100	295	698	558	144	1,580	557	12	2.0	3.3
9	42	1,510	1,380	256	707	432	286	1,540	321	11	2.6	7.2
10	32	1,400	1,400	201	536	722	327	1,450	226	11	4.8	58
11	25	1,290	1,300	129	348	2,220	261	1,390	177	10	4.7	34
12	19	1,150	1,250	72	239	2,260	199	1,130	195	9.3	4.5	18
13	15	1,090	1,300	50	209	1,990	155	660	318	9.1	6.3	14
14	19	1,060	1,150	37	279	1,890	125	333	463	8.3	17	12
15	20	933	895	32	296	1,790	104	213	318	7.9	23	10
16	20	748	675	30	251	1,580	105	163	170	7.5	21	8.8
17	18	543	491	30	196	1,340	129	138	150	7.6	14	7.2
18	405	378	339	73	154	898	603	122	123	7.6	9.2	6.0
19	892	354	440	204	120	423	1,350	105	116	7.8	6.4	5.7
20	758	420	732	228	86	476	2,350	97	382	8.6	4.5	5.1
21	505	363	743	1,080	62	521	2,260	88	505	9.6	3.1	5.4
22	397	314	619	1,490	48	392	2,760	128	409	10	1.8	9.6
23	760	282	453	1,480	38	257	4,180	492	201	11	.75	6.0
24	730	270	329	1,420	32	177	3,000	626	99	12	.28	5.4
25	542	247	258	1,320	28	139	2,280	445	59	27	.24	4.8
26	319	247	205	1,130	25	134	2,090	261	40	71	.22	3.6
27	152	245	165	755	21	128	1,870	2,370	31	83	.19	2.5
28	165	206	132	508	19	111	1,620	3,330	26	60	.18	1.4
29	172	175	107	433	-----	171	1,370	2,650	22	36	1.3	1.4
30	102	138	193	331	-----	155	931	2,320	19	22	19	3.9
31	660	-----	490	253	-----	1,010	-----	2,090	-----	15	32	-----
TOTAL	10,597	26,683	16,773	15,637	6,519	20,435	32,260	33,817	15,038	575.3	214.36	301.7
MEAN	342	889	541	504	233	659	1,075	1,091	501	18.6	6.91	10.1
MAX	1,260	1,960	1,400	1,490	707	2,260	4,180	3,330	1,880	83	32	58
MIN	15	138	69	30	19	16	104	88	19	7.5	.18	1.4
CFSM	1.95	5.08	3.09	2.88	1.33	3.77	6.14	6.23	2.86	.11	.04	.06
IN.	2.25	5.67	3.57	3.32	1.39	4.34	6.86	7.19	3.20	.12	.05	.06
AC-FT	21,020	52,930	33,270	31,020	12,930	40,530	63,990	67,080	29,830	1,140	425	598
CAL YR 1972	TOTAL 105,529.70	MEAN 288	MAX 1,960	MIN 2.5	CFSM 1.65	IN 22.43	AC-FT 209,300					
WTR YR 1973	TOTAL 178,850.36	MEAN 490	MAX 4,180	MIN .18	CFSM 2.80	IN 38.02	AC-FT 354,700					

07043500 Little River ditch 1 near Morehouse, Mo.

LOCATION.--Lat 36°50'03", long 89°43'48", in SW¼SE¼ sec.2, T.25 N., R.12 E., Stoddard County, on downstream side of second pier right of left abutment of bridge on State Highway 114, 1.5 mi (2.4 km) downstream from Little River ditch 39, and 2 mi (3.2 km) west of Morehouse.

DRAINAGE AREA.--450 mi² (1,166 km²).

PERIOD OF RECORD.--October 1945 to current year. Prior to January 1946 monthly discharge only, published in WSP 1311.

GAGE.--Water-stage recorder. Datum of gage is 280.76 ft (85.576 m) above mean sea level. Prior to Nov. 17, 1949, June 11, 1951 to Feb. 22, 1962, nonrecording gage at same site and datum. Nov. 17, 1949, to June 10, 1951, nonrecording gage at site 50 ft (15.2 m) downstream at present datum.

AVERAGE DISCHARGE.--28 years, 514 ft³/s (14.6 m³/s), 15.51 in/yr (394 mm/yr), 372,400 acre-ft/yr (459.2 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 5,870 ft³/s (166.2 m³/s) Apr. 24 (gage height, 17.67 ft or 5.386 m); minimum, 97 ft³/s (2.75 m³/s) Sept. 26, 27 (gage height, 3.79 ft or 1.155 m).
Period of record: Maximum discharge, 8,250 ft³/s (234 m³/s) May 10, 1961 (gage height, 19.35 ft or 5.898 m); maximum gage height, 19.81 ft (6.038 m) Mar. 11, 1964; minimum discharge, 21 ft³/s (0.59 m³/s) Sept. 18, 1954 (gage height, 3.13 ft or 0.954 m).
Flood in June 1945 reached a stage of 19.85 ft (6.050 m) from floodmark (discharge, 5,830 ft³/s or 165.1 m³/s).

REMARKS.--Records fair. This Little River ditch 1 flows into Little River ditch 251 at point 35.3 mi (56.8 km) downstream, and is independent of the ditch for which records are published as Little River ditch 1 near Kennett.

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	1,970	4,500	432	1,250	915	179	3,930	2,790	4,900	180	191	143
2	1,680	5,140	400	858	1,320	174	2,520	4,940	4,600	168	177	133
3	1,410	5,190	378	1,030	946	169	1,680	5,160	4,150	164	167	127
4	967	5,050	356	2,590	723	166	1,240	4,720	3,550	162	160	124
5	563	4,680	343	1,850	578	160	861	3,740	2,950	162	155	119
6	390	4,280	369	1,260	489	154	677	2,470	2,550	157	153	120
7	316	4,370	430	896	475	601	597	3,020	2,200	155	150	119
8	274	4,810	2,060	632	2,010	974	679	4,470	1,800	161	147	116
9	245	4,510	4,500	478	1,790	705	1,210	3,920	1,450	185	147	115
10	221	3,980	4,310	398	1,200	848	1,520	2,480	1,150	172	185	116
11	207	3,460	3,050	360	886	4,200	967	2,490	710	163	165	145
12	197	2,830	2,170	330	636	4,690	768	2,310	540	157	155	132
13	191	2,660	3,020	306	598	4,560	616	1,780	720	157	158	118
14	191	3,460	2,700	291	1,010	4,310	534	1,260	1,000	161	179	110
15	196	2,420	2,010	280	891	4,100	486	783	740	157	173	105
16	192	1,730	1,640	270	655	3,390	484	562	530	157	166	102
17	186	1,340	1,150	273	512	2,810	535	483	450	158	161	100
18	355	965	744	467	441	2,170	1,400	413	390	158	153	98
19	1,480	983	981	1,690	402	1,560	3,010	370	330	159	147	101
20	1,340	1,330	2,450	990	372	1,930	4,940	333	520	162	143	112
21	1,050	963	2,010	2,430	343	2,120	5,170	296	940	160	137	135
22	705	790	1,450	4,550	321	1,310	5,170	289	720	157	133	110
23	1,140	686	1,100	4,360	299	982	5,570	661	600	260	130	106
24	1,330	581	835	3,180	268	768	5,810	1,080	490	338	129	102
25	1,090	568	656	2,170	246	666	5,790	950	420	231	127	101
26	836	665	561	1,960	224	794	5,500	682	340	229	123	100
27	600	657	494	1,880	204	697	5,060	2,840	295	260	120	99
28	683	556	450	1,730	192	587	4,700	4,830	255	254	115	104
29	629	490	416	1,280	-----	758	4,320	5,220	225	223	114	130
30	508	458	594	862	-----	1,050	3,540	5,380	200	234	170	122
31	1,510	-----	1,750	666	-----	2,700	-----	5,390	-----	223	150	-----
TOTAL	22,652	74,102	43,809	41,567	18,946	50,282	79,284	76,112	39,715	5,824	4,680	3,464
MEAN	731	2,470	1,413	1,341	677	1,622	2,643	2,455	1,324	188	151	115
MAX	1,970	5,190	4,500	4,550	2,010	4,690	5,810	5,390	4,900	338	191	145
MIN	186	458	343	270	192	154	484	289	200	155	114	98
CFSM	1.62	5.49	3.14	2.98	1.50	3.60	5.87	5.46	2.94	.42	.34	.26
IN.	1.87	6.13	3.62	3.44	1.57	4.16	6.55	6.29	3.28	.48	.39	.29
AC-FT	44,930	147,000	86,900	82,450	37,580	99,730	157,300	151,000	78,770	11,550	9,280	6,870
CAL YR 1972	TOTAL 301,590	MEAN 824	MAX 5,190	MIN 112	CFSM 1.83	IN 24.93	AC-FT 598,200					
WTR YR 1973	TOTAL 460,437	MEAN 1,261	MAX 5,810	MIN 98	CFSM 2.80	IN 38.06	AC-FT 913,300					

07044000 Little River ditch 251 near Kennett, Mo.

LOCATION.--36°14'08", long 89°58'45", in NW¼ sec.3, T.18 N., R.10 E., Dunklin County, on downstream side of bridge on State Highway 84, and 4 mi (6.4 km) east of Kennett.

DRAINAGE AREA.--883 mi² (2,287 km²), includes that of Little River ditch 66.

PERIOD OF RECORD.--November 1926 to current year.

GAGE.--Nonrecording gage. Datum of gage is 241.00 ft (73.457 m) above mean sea level (Corps of Engineers bench mark). Prior to Oct. 20, 1966, at site 100 ft (30.5 m) upstream at present datum.

AVERAGE DISCHARGE.--46 years (1927-73), 701 ft³/s (19.85 m³/s), 507,900 acre-ft/yr (626 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 6,160 ft³/s (174.5 m³/s) Apr. 24 (gage height, 16.40 ft or 4.999 m); minimum, 66 ft³/s (1.87 m³/s) Sept. 28 (gage height, 1.62 ft or 0.494 m).

Period of record: Maximum discharge, 8,380 ft³/s (237.3 m³/s) Nov. 20, 1957 (gage height, 21.18 ft or 6.456 m); maximum gage height, 21.80 ft or 6.644 m) Mar 11, 1964; minimum discharge observed, 22 ft³/s (0.62 m³/s) Sept. 23, 1969 (gage height, 1.59 ft or 0.485 m).

REMARKS.--Records fair. Since Oct. 27, 1965 some base flow has been diverted into ditch 66. Little River ditch 66 diverts water at a point 7.6 mi (12.23 km) upstream. Ditches 66 and 66-A made one ditch in vicinity of gage on May 12, 1965. Prior to April 1951, above discharges of about 4,000 ft³/s (113.3 m³/s), a spillway 6.3 mi (10.1 km) upstream diverted water from ditches 66, 66-A and 251 to Little River ditch 1. On Mar. 11, 1964 old spillway between Cotton Belt and Frisco Railroads upstream near Peach Orchard was blasted to divert floodwater.

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	850	2,300	365	1,240	700	235	3,030	2,120	2,900	235	265	107
2	820	3,500	365	910	1,150	225	2,700	3,700	2,900	235	179	94
3	700	3,550	340	640	1,060	225	1,600	4,850	2,860	225	145	94
4	580	3,030	315	1,060	760	225	1,270	3,980	2,780	215	129	91
5	415	2,580	295	1,630	580	225	1,060	3,030	2,500	215	129	87
6	265	2,300	315	1,240	490	225	700	2,200	2,580	206	113	86
7	197	2,500	365	760	415	235	580	1,810	2,470	197	111	99
8	153	3,760	1,020	640	1,060	640	820	2,780	1,980	188	111	103
9	145	3,350	3,450	490	1,660	760	790	2,620	1,520	197	110	95
10	129	2,660	3,980	415	1,240	640	1,240	2,120	1,000	197	161	91
11	121	2,260	3,120	365	820	2,540	1,090	2,060	730	206	129	83
12	113	1,940	2,260	315	640	4,550	700	1,810	580	275	129	86
13	110	1,630	2,300	315	520	3,980	550	1,630	820	215	111	89
14	103	2,220	2,360	295	670	3,120	440	1,270	1,180	197	390	84
15	108	2,120	1,910	275	1,060	3,160	390	1,000	1,490	188	465	81
16	102	1,600	1,560	265	760	2,820	340	760	1,210	179	295	79
17	102	1,150	1,240	255	550	2,440	390	610	790	170	206	75
18	129	910	880	246	440	1,910	700	520	550	161	161	74
19	465	730	700	315	390	1,420	2,360	465	580	161	138	74
20	940	610	910	940	365	1,180	4,480	415	580	161	129	75
21	850	940	1,520	940	315	1,360	5,480	610	640	179	121	94
22	610	760	1,300	3,260	315	1,490	5,320	550	580	197	113	94
23	490	610	1,000	3,450	295	970	5,800	580	580	188	108	84
24	760	550	790	2,580	275	730	6,070	820	520	215	108	75
25	790	520	610	1,840	265	610	5,640	1,840	415	340	110	70
26	580	520	520	1,330	255	580	4,550	1,240	315	275	107	69
27	490	580	465	1,180	245	580	4,030	1,000	275	225	100	68
28	520	550	440	1,120	235	520	3,210	2,500	275	197	95	66
29	640	465	390	1,980	-----	440	2,620	3,120	255	188	81	81
30	520	415	340	1,300	-----	465	2,330	3,080	245	161	99	76
31	550	-----	670	850	-----	1,160	-----	2,980	-----	235	97	-----
TOTAL	13,347	50,610	36,095	32,441	17,530	39,660	70,280	58,070	36,100	6,423	4,745	2,524
MEAN	431	1,687	1,164	1,046	626	1,279	2,343	1,873	1,203	207	153	84.1
MAX	940	3,760	3,980	3,450	1,660	4,550	6,070	4,850	2,900	340	465	107
MIN	102	415	295	246	235	225	340	415	245	161	81	66
AC-FT	26,470	100,400	71,590	64,350	34,770	78,670	139,400	115,200	71,600	12,740	9,410	5,010

CAL YR 1972 TOTAL 213,747 MEAN 584 MAX 3,980 MIN 78 AC-FT 424,000
WTR YR 1973 TOTAL 367,825 MEAN 1,008 MAX 6,070 MIN 66 AC-FT 729,600

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LOCATION.--Lat 36°14'09", long 89°58'48", in NE¼ sec.4, T.18 N., R.10 E., Dunklin County, on downstream side of bridge on State Highway 84, and 4 mi (6.4 km) east of Kennett.

GAGE.--Nonrecording gage. Datum of gage is 241.00 ft (73.457 m) above mean sea level (Corps of Engineers bench mark). Prior to Oct. 20, 1966, at site 100 ft (30 m) upstream at present datum.

EXTREMES.--Current year: Maximum discharge, 8,610 ft³/s (243.8 m³/s) Apr. 24 (gage height, 16.30 ft or 4.968 m); minimum, 179 ft³/s (5.07 m³/s) Sept. 27 (gage height, 1.13 ft or 0.344 m).

Period of record: Maximum discharge, 8,610 ft³/s (243.8 m³/s) Apr. 24, 1973 (gage height, 16.30 ft or 4.968 m); maximum gage height, 21.79 ft (6.642 m) Mar. 11, 1964; no flow at times 1944-65.

REMARKS.--Records fair. Ditches 66 and 66-A made one ditch in vicinity of gage on May 12, 1965. Little River ditch 66 heads in Little River ditch 251 at a point 7.6 mi (12.2 km) upstream. Since Oct. 27, 1965 some base flow received from ditch 251.

REVISIONS (WATER YEARS).--WSP 877: 1938.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,300	2,950	623	1,500	949	419	3,970	3,060	4,200	499	353	215
2	1,260	4,930	623	1,180	1,260	419	3,400	5,340	4,200	484	321	208
3	1,060	5,110	587	912	1,380	419	2,120	7,220	4,140	462	304	204
4	912	4,510	551	1,580	1,020	403	1,630	6,170	4,080	453	286	201
5	695	3,850	516	2,120	875	403	1,260	4,560	3,780	444	270	199
6	493	3,400	516	1,540	767	403	912	3,420	3,840	432	260	199
7	387	3,680	587	1,100	659	419	803	2,580	3,660	414	247	215
8	328	5,350	912	949	1,260	659	949	4,080	2,940	402	247	222
9	302	4,870	4,150	803	2,080	986	912	4,080	2,280	411	252	210
10	277	3,910	5,800	695	1,630	875	1,420	3,600	1,460	393	291	208
11	265	3,200	4,270	587	1,140	3,220	1,420	2,680	1,100	399	260	206
12	253	2,750	2,950	587	949	6,250	986	2,880	980	388	257	222
13	242	2,450	2,850	516	803	5,730	803	2,480	1,220	365	260	220
14	242	3,100	3,100	516	949	4,330	695	1,830	1,260	359	302	213
15	253	3,050	2,400	516	1,340	4,150	623	1,460	1,780	348	332	208
16	242	2,220	2,080	483	1,060	3,680	516	1,140	1,580	342	296	204
17	242	1,630	1,680	451	839	3,050	587	964	1,100	334	273	194
18	265	1,460	1,220	451	731	2,650	767	854	883	329	257	194
19	731	1,300	986	587	659	1,900	3,680	802	940	323	244	194
20	1,380	1,140	1,220	1,340	587	1,500	6,730	767	851	345	239	201
21	1,180	1,380	2,120	1,500	551	1,860	7,900	725	802	332	225	213
22	912	1,180	1,860	4,330	551	1,990	7,740	684	893	318	220	225
23	803	1,020	1,420	4,810	516	1,300	8,340	725	928	307	220	204
24	1,060	912	1,140	3,970	516	986	8,610	1,380	872	323	217	190
25	1,140	875	949	2,550	551	875	8,070	1,930	691	484	232	186
26	912	912	839	1,860	451	839	6,940	1,340	590	462	222	188
27	803	949	731	1,630	451	839	6,100	1,300	577	396	215	179
28	839	912	695	1,580	419	767	4,680	3,360	563	373	206	183
29	875	767	659	2,220	-----	695	3,960	4,200	522	362	201	190
30	803	695	587	1,540	-----	695	3,480	4,260	480	340	206	185
31	986	-----	1,100	1,100	-----	1,570	-----	4,260	-----	345	209	-----
TOTAL	21,442	74,462	49,721	45,503	24,943	54,281	100,003	84,131	53,192	11,968	7,924	6,080
MEAN	692	2,482	1,604	1,468	891	1,751	3,333	2,714	1,773	386	256	203
MAX	1,380	5,350	5,800	4,810	2,080	6,250	8,610	7,220	4,200	499	353	225
MIN	242	695	516	451</								

ST. FRANCIS RIVER BASIN

07046000 Little River ditch 259 near Kennett, Mo.

LOCATION.--Lat 36°14'08", long 89°58'41", in NW¼ sec.3, T.18 N., R.10 E., Dunklin County, on downstream side of bridge on State Highway 84, and 4 mi (6.4 km) east of Kennett.

DRAINAGE AREA,--89.0 mi² (230.5 km²).

PERIOD OF RECORD.--November 1926 to current year.

GAGE.--Nonrecording gage. Datum of gage is 241.00 ft (73.457 m) above mean sea level (Corps of Engineers bench mark). Prior to Oct. 20, 1966, at site 100 ft (30.5 m) upstream at present datum.

AVERAGE DISCHARGE.--46 years (1927-73), 110 ft³/s (3.11 m³/s), 79,700 acre-ft/yr (98.3 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,680 ft³/s (104.2 m³/s) Apr. 24 (gage height, 11.91 ft or 3.630 m); minimum, 9.2 ft³/s (0.261 m³/s) Sept. 19 (gage height, -0.77 ft or -0.235 m).

Period of record: Maximum discharge, 4,140 ft³/s (117.2 m³/s), including some overflow from levee breaks on Mississippi River, Apr. 29, 1927 (gage height, 15.57 ft or 4.746 m); no flow on many days in 1936, 1944-45, 1952-53.

REMARKS.--Records fair. Discharge affected by drainage from rice fields.

REVISIONS (WATER YEARS).--WSP 1281: 1932.

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	1,180	41	140	215	24	528	310	182	20	50	13
2	18	1,260	40	81	334	24	246	2,780	132	21	31	13
3	16	830	37	57	128	24	178	2,850	109	22	20	12
4	16	461	36	415	78	22	304	1,800	82	27	18	14
5	15	246	44	191	60	22	160	601	79	21	17	12
6	14	156	64	109	59	22	109	210	116	17	16	16
7	13	905	67	81	204	116	112	564	86	16	16	22
8	13	1,090	934	57	983	128	322	784	58	15	15	17
9	11	620	2,100	50	415	57	360	225	44	17	15	15
10	12	310	1,710	46	148	189	304	173	32	21	55	14
11	11	196	983	43	84	2,210	132	152	27	22	64	12
12	10	132	415	41	66	2,390	98	182	49	20	57	11
13	11	252	830	38	88	1,300	81	124	168	16	124	11
14	11	477	415	37	236	639	73	98	762	16	931	12
15	10	258	263	36	160	1,180	68	83	334	16	477	11
16	11	144	304	54	74	620	73	78	136	15	132	11
17	11	55	148	64	49	430	76	72	88	14	70	11
18	22	34	95	61	43	191	386	68	48	13	36	10
19	69	55	70	95	40	140	1,850	65	36	12	26	9.2
20	98	182	225	102	35	152	3,200	60	26	14	21	12
21	65	120	152	1,230	32	220	3,280	57	43	16	17	26
22	39	92	112	1,530	31	140	3,360	57	34	34	16	16
23	136	67	86	803	30	102	3,600	236	30	95	15	13
24	140	56	70	298	30	88	3,680	1,120	26	347	14	12
25	78	67	60	144	28	95	3,520	373	24	360	16	14
26	42	124	55	106	26	160	3,130	148	21	128	14	12
27	39	98	51	132	24	109	2,210	1,180	20	60	14	11
28	148	71	48	128	24	87	880	931	20	40	14	10
29	109	53	47	601	-----	75	401	220	20	27	13	11
30	64	46	44	196	-----	72	246	98	20	24	16	11
31	880	-----	210	112	-----	539	-----	102	-----	124	14	-----
TOTAL	2,151	9,637	9,756	7,078	3,724	11,567	32,967	15,801	2,852	1,610	2,354	394.2
MEAN	69.4	321	315	228	133	373	1,099	510	95.1	51.9	75.9	13.1
MAX	880	1,260	2,100	1,530	983	2,390	3,680	2,850	762	360	931	26
MIN	10	34	36	36	24	22	68	57	20	12	13	9.2
AC-FT	4,270	19,110	19,350	14,040	7,390	22,940	65,390	31,340	5,660	3,190	4,670	782
CAL YR 1972	TOTAL 39,023.5		MEAN 107	MAX 2,100	MIN 9.5	AC-FT 77,400						
WTR YR 1973	TOTAL 99,891.2		MEAN 274	MAX 3,680	MIN 9.2	AC-FT 198,100						

WHITE RIVER BASIN

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07050700 James River near Springfield, Mo.

LOCATION.--Lat 37°08'59", long 93°12'10", in NE¼NW¼ sec.11, T.28 N., R.21 W., Greene County, on left bank on county road at Kinser bridge, 1.1 mi (1.8 km) downstream from Pearson Creek, and 2.5 mi (4.0 km) southeast of Springfield.

DRAINAGE AREA.--246 mi² (637 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 1,143.27 ft (348.469 m) above mean sea level (levels by Corps of Engineers). Prior to Dec. 19, 1955, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--18 years, 205 ft³/s (5.81 m³/s), 11.32 in/yr (288 mm/yr), 148,500 acre-ft/yr (183 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 19,200 ft³/s (544 m³/s) Nov. 1 (gage height, 16.87 ft or 5.142 m); minimum, 6.1 ft³/s (0.173 m³/s) Sept. 1 (gage height, 2.59 ft or 0.789 m).

Period of record: Maximum discharge, 24,800 ft³/s (702 m³/s) Dec. 17, 1957 (gage height, 18.20 ft or 5.547 m); minimum, 0.1 ft³/s (0.003 m³/s) Sept. 16, 24, 25, 1956 (gage height, 2.18 ft or 0.664 m).
Maximum stage known about 22 ft (6.7 m) in July 1909, from information by local resident.

REMARKS.--Records good.

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	187	9,760	407	212	415	135	1,690	411	117	54	40	6.9
2	151	4,970	365	202	519	152	1,120	511	116	55	41	6.7
3	118	1,470	327	212	485	183	913	380	150	50	37	7.5
4	94	958	297	342	448	202	1,050	320	164	47	32	8.7
5	77	735	271	380	402	249	880	291	191	44	29	16
6	67	649	232	348	365	477	748	271	222	42	27	15
7	59	788	212	312	339	1,310	664	5,180	192	40	25	20
8	53	624	202	276	473	928	613	3,740	170	39	22	19
9	48	515	188	242	451	737	982	1,390	152	59	20	16
10	46	443	172	216	406	3,040	997	924	139	62	19	14
11	42	380	174	188	363	3,970	822	615	127	74	18	13
12	38	417	182	172	334	1,280	704	508	117	62	20	11
13	35	5,190	304	166	324	943	599	409	110	48	23	10
14	41	2,090	334	154	313	1,210	525	340	466	42	20	9.5
15	55	1,260	297	161	299	955	470	291	270	53	17	9.8
16	60	977	250	170	277	750	458	254	195	54	16	9.8
17	57	789	213	206	247	616	430	225	160	50	15	9.2
18	114	663	194	1,340	230	519	393	200	135	45	16	9.2
19	108	612	285	1,890	217	461	375	183	127	40	20	9.1
20	102	551	456	1,010	203	510	383	169	119	36	17	8.7
21	133	525	466	1,440	190	482	404	156	105	33	15	8.7
22	601	527	416	1,900	181	422	3,190	151	91	31	13	8.7
23	625	549	358	1,250	174	392	1,660	159	82	31	12	8.5
24	419	612	310	953	164	599	1,000	175	74	35	11	8.5
25	302	676	271	741	157	3,750	1,160	161	69	34	9.8	14
26	233	770	246	618	149	1,530	936	148	65	38	9.2	14
27	188	730	223	535	142	1,040	725	153	63	40	8.7	12
28	158	608	212	478	136	817	625	151	57	37	8.1	16
29	136	521	202	431	-----	786	535	139	54	34	7.7	19
30	122	453	208	394	-----	719	453	130	53	32	7.5	20
31	250	-----	212	372	-----	2,970	-----	122	-----	47	7.1	-----
TOTAL	4,719	39,812	8,486	17,311	8,403	32,134	25,504	18,257	4,152	1,388	583.1	358.5
MEAN	152	1,327	274	558	300	1,037	850	589	138	44.8	18.8	12.0
MAX	625	9,760	466	1,900	519	3,970	3,190	5,180	466	74	41	20
MIN	35	380	172	154	136	135	375	122	53	31	7.1	6.7
CFSM	.62	5.39	1.11	2.27	1.22	4.22	3.46	2.39	.56	.18	.08	.05
IN.	.71	6.02	1.28	2.62	1.27	4.86	3.86	2.76	.63	.21	.09	.05
AC-FT	9,360	78,970	16,830	34,340	16,670	63,740	50,590	36,210	8,240	2,750	1,160	711

CAL YR 1972 TOTAL 77,267.9 MEAN 211 MAX 9,760 MIN 6.1 CFSM .86 IN 11.68 AC-FT 153,300
WTR YR 1973 TOTAL 161,107.6 MEAN 441 MAX 9,760 MIN 6.7 CFSM 1.79 IN 24.36 AC-FT 319,600

PEAK DISCHARGE (BASE, 4,000 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-1	1945	16.87	19,200	3-25	1030	12.90	5,220
11-13	1415	14.18	8,470	4-22	1715	13.27	5,870
1-18	2200	11.80	4,000	5-7	1215	13.49	5,610
3-10	2245	15.06	11,600				

07052100 Wilson Creek near Springfield, Mo.

LOCATION.--Lat. 37°10'06", long 93°22'14", in NE¼NE¼ sec.6, T.28 N., R.22 W., Greene County, on right bank just downstream from bridge on county road, 1 mi (1.6 km) upstream from Southwest Sewage Treatment Plant of Springfield and South Creek and in Springfield.

DRAINAGE AREA.--31.4 mi² (81.3 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 1,149.65 ft (350.413 m) above mean sea level.

EXTREMES.--Current year: Maximum discharge, 2,840 ft³/s (80.43 m³/s), Nov. 1 (gage height, 8.57 ft or 2.612 m); minimum, 2.1 ft³/s (0.059 m³/s) Sept. 15-18; minimum gage height, 1.52 ft (0.463 m) Aug. 27.

REMARKS.--Records fair. Runoff affected by urbanized area. Records of water quality 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	28	1,490	7.0	4.6	52	48	75	58	12	390	4.1	2.8
2	26	133	6.5	3.8	25	34	57	38	19	32	3.8	2.6
3	24	43	5.7	4.6	19	16	49	18	62	14	3.8	10
4	23	22	4.9	9.1	17	29	43	14	11	11	3.8	21
5	23	14	6.4	6.1	17	25	36	13	63	9.9	3.6	14
6	23	56	5.1	5.4	15	174	31	32	13	8.7	3.0	3.7
7	22	18	3.7	5.3	56	72	29	194	11	7.7	3.6	10
8	21	13	3.5	5.1	28	49	70	43	9.8	8.9	3.5	3.7
9	21	14	2.9	4.8	19	48	62	30	8.6	25	3.5	3.2
10	106	23	2.2	4.9	18	257	35	25	7.8	30	3.2	2.9
11	33	11	2.1	4.3	17	94	29	44	7.2	11	3.2	2.9
12	30	119	22	5.2	19	53	26	21	7.4	7.3	4.3	2.6
13	31	357	13	4.2	18	60	24	16	28	6.6	17	2.7
14	89	57	6.8	7.9	17	69	23	15	34	6.0	4.5	2.7
15	36	26	4.5	7.1	15	38	34	13	31	4.8	4.2	2.3
16	35	17	3.2	7.0	13	31	84	12	9.6	7.4	4.2	2.1
17	51	11	2.6	8.2	13	26	31	11	8.7	6.8	4.6	2.1
18	44	10	9.7	178	13	22	33	11	7.2	6.7	3.6	2.2
19	35	23	22	44	13	35	87	10	19	6.2	3.3	2.3
20	34	21	10	32	13	25	75	9.3	7.9	5.6	2.8	2.5
21	181	25	8.8	194	12	19	50	8.7	6.8	5.5	3.1	2.6
22	74	17	6.9	101	12	17	795	21	6.3	5.1	3.2	2.8
23	53	16	6.1	54	12	43	107	45	6.0	5.3	3.3	3.5
24	48	20	5.5	42	12	185	66	19	5.6	25	3.7	5.7
25	47	34	5.0	34	12	142	74	16	5.0	11	3.2	27
26	45	24	4.4	31	11	67	51	9.4	5.0	5.7	2.8	2.9
27	45	15	4.3	25	12	50	34	22	6.1	4.9	3.4	2.6
28	44	12	4.2	29	12	51	25	11	5.4	4.5	3.9	47
29	44	9.3	4.0	20	-----	84	19	9.0	5.6	4.2	3.1	5.0
30	105	8.7	25	18	-----	65	15	8.0	5.2	5.9	4.8	24
31	271	-----	5.9	19	-----	350	-----	7.6	-----	4.9	3.5	-----
TOTAL	1,692	2,659.0	223.9	960.0	512	2,278	2,169	804.0	434.2	730.8	164.3	221.4
MEAN	54.6	88.6	7.22	31.0	18.3	73.5	72.3	25.9	14.5	23.6	5.30	7.38
MAX	271	1,490	25	194	56	350	795	194	63	390	43	47
MIN	21	8.7	2.1	3.8	11	16	15	7.6	5.0	4.2	2.8	2.1
AC-FT	3,360	5,270	444	1,900	1,020	4,520	4,300	1,590	861	1,450	326	439

WTR YR 1973 TOTAL 12,848.6 MEAN 35.2 MAX 1,490 MIN 2.1 AC-FT 25,490

PEAK DISCHARGE (BASE, 1,000 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-1	0700	8.57	2,840	4-22	0500	8.42	2,640
3-31	0430	5.94	1,100	7-1	1415	7.16	1,740

07052160 Wilson Creek near Battlefield, Mo.

LOCATION.--Lat 37°07'02", long 93°24'14", in SW¼NW¼ sec.24, T.28 N., R.23 W., Greene County, on left bank 300 ft (91 m) downstream from bridge on county road, 0.3 mi (0.5 km) upstream from McElhane Branch, and 1.8 mi (2.9 km) west of Battlefield.

DRAINAGE AREA.--55.0 mi² (142.4 km²).

PERIOD OF RECORD.--March 1968 to September 1970, October 1972 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,100 ft (335.3 m) above mean sea level. Prior to Sept. 20, 1972 at site 300 ft (91 m) upstream.

EXTREMES.--Current year: Maximum discharge, 3,860 ft³/s (109 m³/s), Nov. 1 (gage height, 10.57 ft or 3.222 m); minimum, 24 ft³/s (0.68 m³/s), Sept. 3 (gage height, 1.71 ft or 0.521 m).
Period of record.--Maximum discharge, 3,860 ft³/s (109 m³/s), Nov. 1 (gage height, 10.57 ft or 3.222 m); minimum, 7.6 ft³/s (0.22 m³/s) Aug. 25, 27, 29, 1970 (gage height, 1.42 ft or 0.432 m).

REMARKS.--Records fair. Natural flow partly regulated and affected by sewage effluent. Records of water-quality 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	129	2,350	123	73	169	102	434	225	78	849	36	29
2	91	1,100	113	72	138	150	329	218	95	294	36	26
3	75	532	103	128	122	104	275	170	186	168	34	30
4	65	360	96	96	116	111	239	159	107	116	35	41
5	59	259	95	85	114	130	206	150	187	93	34	72
6	55	280	85	82	109	372	184	163	128	81	33	38
7	46	229	78	78	150	423	168	444	109	71	32	45
8	40	189	76	77	137	323	194	264	99	62	32	37
9	43	169	74	79	120	282	233	219	91	77	32	32
10	168	187	68	77	119	641	181	200	85	95	33	31
11	115	152	66	75	113	553	168	205	84	78	32	32
12	77	182	91	73	114	380	163	165	84	53	105	32
13	66	1,060	87	69	112	306	151	146	84	48	122	31
14	119	510	89	71	108	342	140	133	131	43	40	31
15	73	338	77	78	99	256	136	126	114	130	36	29
16	62	265	71	79	94	224	242	119	76	68	35	27
17	58	217	67	82	88	200	171	112	70	56	37	28
18	100	181	72	401	84	180	168	107	71	49	33	30
19	73	183	137	321	85	182	247	101	77	45	30	30
20	63	176	120	243	86	170	278	95	70	44	30	30
21	143	172	115	545	82	152	256	95	64	42	32	31
22	313	169	109	517	81	140	1,370	110	61	40	31	29
23	197	166	98	356	80	164	553	136	60	43	31	28
24	146	177	94	280	77	350	395	104	57	61	31	29
25	117	198	86	231	73	523	365	114	57	80	30	76
26	102	202	86	209	73	364	306	87	57	46	27	39
27	92	179	87	183	73	280	257	100	56	49	29	35
28	82	161	83	169	73	246	226	83	52	43	33	93
29	73	142	79	147	-----	287	205	80	51	38	30	51
30	83	132	97	139	-----	233	189	78	46	39	33	62
31	259	-----	75	129	-----	797	-----	76	-----	39	31	-----
TOTAL	3,184	10,617	2,797	5,244	2,889	8,967	8,429	4,584	2,587	3,040	1,175	1,154
MEAN	103	354	90.2	169	103	289	281	148	86.2	98.1	37.9	38.5
MAX	313	2,350	137	545	169	797	1,370	444	187	849	122	93
MIN	40	132	66	69	73	102	136	76	46	38	27	26
AC-FT	6,320	21,060	5,550	10,400	5,730	17,790	16,720	9,090	5,130	6,030	2,330	2,290

WTR YR 1973 TOTAL 54,667 MEAN 150 MAX 2,350 MIN 26 AC-FT 108,400

PEAK DISCHARGE (BASE, 1,200 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-1	1615	10.57	3,860	3-31	0615	6.35	1,400
11-13	0845	6.77	1,540	4-22	0715	9.29	3,060
3-10	1630	5.94	1,250	7-1	1345	8.84	2,660

WHITE RIVER BASIN

07052250 James River near Boaz, Mo.

LOCATION.--Lat 37°00'25", long 93°21'50", in NE¼NE¼NW¼ sec. 32, T.27 N., R.22 W., Christian County, on left bank 150 ft (46 m) downstream from Frazier bridge, 0.2 mi (0.3 km) upstream from Turkey Hollow, and 2 mi (3.2 km) southeast of Boaz.

DRAINAGE AREA.--462 mi² (1,200 km²).

PERIOD OF RECORD.--October 1972 to current year. Occasional miscellaneous discharge measurements 1966-67.

GAGE.--Water-stage recorder. Datum of gage is 1,035.35 ft (315.575 m) above mean sea level.

EXTREMES.--Current year: Maximum discharge, 31,400 ft³/s (889.3 m³/s) July 1 (gage height, 20.56 ft or 6.267 m); minimum, 55 ft³/s (1.58 m³/s) Sept 2-4, 23, 24 (gage height, 2.08 ft or 0.634 m).
Period of record: Maximum discharge, 31,400 ft³/s (889.3 m³/s) July 1 (gage height, 20.56 ft or 6.267 m); minimum, 55 ft³/s (1.58 m³/s) Sept. 2, 3, 4, 23, 24, (gage height, 2.08 ft or 0.634 m).

REMARKS.--Records fair. Partly regulated at low flow by Lake Springfield and sewage effluent from City of Springfield Southwest Treatment Plant. Records of water quality 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	512	8,210	713	413	743	313	4,230	908	303	8,650	112	61
2	386	15,400	627	403	793	404	2,600	1,140	352	2,230	107	58
3	318	3,780	588	439	826	376	2,060	963	626	804	102	55
4	269	2,390	540	516	772	393	1,940	830	495	518	99	75
5	228	1,750	510	603	725	452	1,770	766	571	383	93	131
6	204	1,500	465	591	678	885	1,460	751	536	315	89	96
7	184	1,550	428	558	656	2,530	1,250	2,700	479	271	86	90
8	164	1,330	399	516	753	2,330	1,100	7,550	421	242	83	98
9	149	1,060	383	477	806	1,780	1,430	2,520	373	224	80	82
10	225	936	363	442	768	2,440	1,720	1,700	343	254	78	75
11	368	795	347	418	713	7,620	1,440	1,350	320	257	77	73
12	238	707	367	392	673	3,160	1,250	1,060	308	227	112	73
13	196	5,210	415	371	646	2,250	1,060	818	297	211	411	68
14	215	5,820	529	359	617	2,300	921	686	442	190	186	64
15	210	2,600	533	357	579	2,070	823	601	618	223	137	64
16	179	1,880	492	356	541	1,620	1,020	535	409	204	116	61
17	177	1,430	443	385	502	1,320	923	483	340	186	109	56
18	247	1,140	421	1,100	471	1,080	865	442	302	175	100	60
19	294	1,010	537	3,760	450	910	949	416	286	162	88	60
20	267	870	719	2,300	433	868	1,170	385	287	149	80	60
21	306	791	778	2,650	411	841	1,250	372	257	141	80	63
22	989	794	752	3,950	392	744	4,480	375	242	132	77	61
23	1,230	789	683	3,030	381	700	4,920	425	224	127	73	60
24	847	885	612	2,190	368	924	2,580	406	208	126	71	56
25	636	1,030	554	1,710	354	4,690	2,240	390	194	157	68	306
26	511	1,170	508	1,430	341	3,600	2,100	346	188	128	63	192
27	428	1,260	470	1,190	328	2,290	1,650	350	189	118	58	137
28	369	1,030	451	1,020	317	1,770	1,350	332	184	116	63	162
29	326	872	425	863	-----	1,650	1,130	319	172	113	61	186
30	304	759	432	768	-----	1,510	972	300	171	107	63	163
31	490	-----	412	712	-----	3,940	-----	292	-----	119	63	-----
TOTAL	11,466	68,748	15,896	34,269	16,037	57,760	52,653	30,511	10,137	17,259	3,085	2,846
MEAN	370	2,292	513	1,105	573	1,863	1,755	984	338	557	99.5	94.9
MAX	1,230	15,400	778	3,950	826	7,620	4,920	7,550	626	8,650	411	306
MIN	149	707	347	356	317	313	823	292	171	107	58	55
AC-FT	22,740	136,400	31,530	67,970	31,810	114,600	104,400	60,520	20,110	34,230	6,120	5,650

WTR YR 1973 TOTAL 320,667 MEAN 879 MAX 15,400 MIN 55 AC-FT 636,000

PEAK DISCHARGE (BASE, 7,000 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-2	0530	17.29	22,600	4-23	0300	9.69	7,560
11-14	0330	10.79	9,520	5-8	0945	11.83	10,800
3-11	0945	11.67	11,000	7-1	1130	20.56	31,400

07052500 James River at Galena, Mo.

LOCATION.--Lat 36°48'19", long 93°27'41", in SW¼SE¼SW¼ sec.6, T.24 N., R.23 W., Stone County, on left bank on downstream side of right pier of first arch span from left end of bridge on State Highways 13 and 248 in Galena, 0.7 mi (1.1 km) upstream from Railey Creek, and 42.3 mi (68.1 km) above mouth.

DRAINAGE AREA.--987 mi² (2,556 km²).

PERIOD OF RECORD.--October 1921 to current year (October 1921, monthly discharge only published in WSP 1311).

GAGE.--Water-stage recorder. Datum of gage is 921.37 ft (280.834 m) above mean sea level. Prior to Dec. 11, 1927, nonrecording gage at site 500 ft (152 m) downstream at datum 1.48 ft (0.451 m) higher. Dec. 11, 1927, to July 22, 1939, nonrecording gage, and July 23, 1939, to Sept. 30, 1953, water-stage recorder at present site and at datum 2.00 ft (0.610 m) higher.

AVERAGE DISCHARGE.--52 years, 937 ft³/s (26.5 m³/s), 12.89 in/yr (327 mm/yr), 678,900 acre-ft/yr (837 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 47,100 ft³/s (1,330 m³/s) July 1 (gage height, 27.97 ft or 8.525 m); minimum, 144 ft³/s (4.08 m³/s) Sept. 3, 4; minimum gage height recorded, 2.43 ft (0.741 m) Oct. 11. Period of record: Maximum discharge, 52,700 ft³/s (1,490 m³/s) May 20, 1943 (gage height, 29.82 ft or 9.089 m) present datum; minimum, 10 ft³/s (0.28 m³/s) Sept. 20, 1954; minimum gage height, 1.15 ft (0.351 m) Jan. 13, 1964 (result of ice conditions upstream).

REMARKS.--Records good.

REVISIONS (WATER YEARS).--WSP 977: 1935(M), 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	1,110	6,070	1,610	868	1,680	707	9,020	4,680	1,110	9,120	304	153
2	806	23,200	1,480	854	1,700	938	5,730	4,890	1,270	9,140	320	150
3	617	9,440	1,380	861	1,830	1,070	4,960	4,640	2,430	1,870	304	148
4	498	4,460	1,280	973	1,750	1,100	5,440	4,260	2,260	1,270	284	151
5	414	3,460	1,190	1,150	1,660	1,160	4,940	3,910	1,940	987	267	248
6	352	3,130	1,110	1,220	1,550	1,400	4,050	3,540	1,790	833	252	326
7	309	3,470	1,020	1,170	1,480	3,160	3,520	6,110	1,620	721	238	268
8	273	3,490	976	1,190	1,590	3,970	3,170	17,500	1,390	642	232	252
9	241	3,210	926	1,000	1,740	3,250	3,270	9,400	1,210	593	225	237
10	214	2,930	873	931	1,690	3,890	3,880	6,970	1,070	593	225	211
11	409	2,690	826	882	1,610	13,200	3,610	6,330	959	599	222	197
12	468	2,530	828	826	1,520	7,230	3,240	6,070	878	555	215	189
13	351	6,760	832	777	1,450	4,510	2,930	5,510	858	514	536	184
14	297	12,800	935	749	1,360	4,030	2,690	4,980	845	482	547	179
15	320	6,280	1,020	721	1,300	3,990	2,530	4,570	1,220	455	359	175
16	288	4,610	974	714	1,220	3,310	2,770	4,160	1,020	487	314	173
17	255	3,700	895	742	1,150	2,850	2,790	3,760	874	440	276	166
18	258	3,090	838	1,620	1,080	2,530	2,660	3,350	781	415	254	162
19	368	2,750	931	5,510	1,030	2,320	2,580	2,910	740	395	230	163
20	399	2,460	1,290	4,320	994	2,210	2,840	2,460	715	370	210	167
21	400	2,250	1,490	3,250	945	2,190	3,140	2,090	665	352	195	170
22	890	2,140	1,490	6,590	882	2,090	6,760	1,850	623	352	190	168
23	1,920	2,090	1,400	5,690	861	2,010	11,000	1,800	589	380	183	169
24	1,720	2,150	1,280	4,090	819	2,290	6,330	1,830	561	435	178	169
25	1,350	2,330	1,160	3,200	791	7,450	5,260	1,740	536	370	167	838
26	1,090	2,400	1,060	2,710	756	9,290	5,340	1,610	516	390	161	774
27	915	2,390	994	2,360	735	5,210	5,340	1,550	506	356	154	538
28	771	2,220	938	2,100	700	4,070	5,210	1,480	491	338	150	450
29	652	1,950	903	1,850	-----	3,610	5,050	1,370	468	320	150	486
30	580	1,750	896	1,670	-----	3,330	4,880	1,270	458	308	149	454
31	966	-----	889	1,580	-----	5,660	-----	1,180	-----	296	153	-----
TOTAL	19,501	132,200	33,714	62,168	35,873	114,025	134,930	127,770	30,393	34,378	7,644	8,115
MEAN	629	4,407	1,088	2,005	1,281	3,678	4,498	4,122	1,013	1,109	247	271
MAX	1,920	23,200	1,610	6,590	1,830	13,200	11,000	17,500	2,430	9,140	547	838
MIN	214	1,750	826	714	700	707	2,530	1,180	458	296	149	148
CFSM	.64	4.47	1.10	2.03	1.30	3.73	4.56	4.18	1.03	1.12	.25	.27
IN.	.73	4.98	1.27	2.34	1.35	4.30	5.09	4.82	1.15	1.30	.29	.31
AC-FT	38,680	262,200	66,870	123,300	71,150	226,200	267,600	253,400	60,280	68,190	15,160	16,100

CAL YR 1972 TOTAL 289,273 MEAN 790 MAX 23,200 MIN 62 CFSM .80 IN 10.90 AC-FT 573,800
WTR YR 1973 TOTAL 740,711 MEAN 2,029 MAX 23,200 MIN 148 CFSM 2.06 IN 27.92 AC-FT 1,469,000

PEAK DISCHARGE (BASE, 12,000 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-2	1630	21.90	29,600	4-23	0830	14.42	13,600
11-14	1000	15.06	14,100	5-8	1100	16.88	19,100
3-11	1730	17.04	17,700	7-1	2145	27.97	47,100
3-26	0300	14.06	12,700				

WHITE RIVER BASIN

07053400 Table Rock Lake near Branson, Mo.

LOCATION.--Lat 36°35'46", long 93°18'35", in NW¼ sec.22, T.22 N., R.22 W., Taney County, at dam on White River, 3 mi (4.8 km) upstream from Fall Creek, and 6.1 mi (9.82 km) southwest of Branson.

DRAINAGE AREA.--4,020 mi² (10,412 km²).

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

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Corps of Engineers). Prior to July 18, 1958, nonrecording gage at same site and datum.

EXTREMES.--Current year: Maximum contents, 3,390,000 acre-ft (4.18 km³) May 11 (elevation, 929.60 ft or 283.342 m); minimum, 2,177,000 acre-ft (2.68 km³) Oct. 20 (elevation 901.75 ft or 274.853 m).

Period of record: Maximum contents, 3,541,800 acre-ft (4.37 km³) May 10, 1961 (elevation, 932.52 ft or 284.232 m); minimum, since initial filling to bottom of power pool level, 1,535,500 acre-ft (1.89 km³) Feb. 8, 1965 (elevation, 881.54 ft or 268.693 m).

REMARKS.--Lake is formed by a combination concrete-gravity and embankment type dam. Storage began on Sept. 9, 1956. Storage for purpose of filling to power pool level at elevation 881 ft (268.5 m) and capacity 1,520,500 acre-ft (1.87 km³) began Nov. 24, 1958 and was reached Dec. 19, 1959. Capacity is 3,567,500 acre-ft (4.40 km³) at top of spillway gates, elevation 933 ft or 284.4 m. Capacity is 3,462,000 acre-ft (4.27 km³) at top of flood control pool, elevation 931 ft or 283.8 m. Capacity between elevations 915 ft (278.9 m) and 931 ft (283.8 m) is reserved for flood control, 760,000 acre-ft (0.937 km³). Capacity between elevation 881 ft (268.5 m) and 915 ft (278.9 m) of 1,181,500 acre-ft (1.46 km³) is used for power generation. The capacity at the lowest outlet, elevation 721.96 ft (220.053 m), is 3,530 acre-ft (4.35 km³). Lake is used for flood control, power, and recreational purposes. Figures represent total contents. Contents computed from daily readings at 2400 and prior to Oct. 1, 1963 to five significant figures.

COOPERATION.--Records furnished by Corps of Engineers.

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

901.8	2,179,000	910	2,493,000
903	2,222,000	920	2,923,000
906	2,355,000	929.6	3,390,000

CONTENTS, IN THOUSANDS OF ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1971 to SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,200	2,280	2,650	2,610	2,710	2,710	2,940	3,330	3,000	3,080	2,790	2,760
2	2,200	2,370	2,650	2,610	2,710	2,720	2,950	3,330	3,010	3,100	2,780	2,760
3	2,210	2,400	2,660	2,610	2,710	2,730	2,960	3,320	3,060	3,090	2,770	2,760
4	2,200	2,420	2,660	2,610	2,710	2,740	2,980	3,302	3,100	3,090	2,770	2,760
5	2,200	2,430	2,650	2,610	2,710	2,740	2,990	3,280	3,110	3,080	2,760	2,760
6	2,200	2,440	2,650	2,620	2,710	2,750	3,000	3,260	3,110	3,070	2,760	2,740
7	2,200	2,460	2,640	2,620	2,720	2,760	3,000	3,300	3,100	3,050	2,760	2,730
8	2,200	2,470	2,630	2,620	2,730	2,760	3,000	3,360	3,110	3,040	2,760	2,730
9	2,200	2,470	2,620	2,610	2,740	2,770	3,000	3,370	3,120	3,030	2,760	2,730
10	2,190	2,460	2,620	2,610	2,740	2,800	3,000	3,370	3,120	3,020	2,760	2,720
11	2,190	2,470	2,610	2,610	2,730	2,870	2,990	3,390	3,120	3,010	2,760	2,720
12	2,200	2,480	2,610	2,610	2,730	2,890	2,980	3,380	3,120	3,000	2,750	2,720
13	2,190	2,530	2,610	2,610	2,730	2,900	2,970	3,370	3,120	2,990	2,760	2,710
14	2,190	2,560	2,600	2,610	2,730	2,900	2,960	3,360	3,120	2,970	2,750	2,700
15	2,190	2,570	2,580	2,610	2,720	2,900	2,960	3,340	3,120	2,960	2,750	2,700
16	2,190	2,580	2,580	2,620	2,710	2,900	2,970	3,330	3,120	2,940	2,760	2,700
17	2,194	2,580	2,580	2,620	2,710	2,880	2,980	3,310	3,120	2,930	2,760	2,690
18	2,190	2,590	2,570	2,650	2,700	2,860	2,980	3,290	3,120	2,920	2,760	2,690
19	2,180	2,600	2,570	2,670	2,700	2,860	2,980	3,260	3,110	2,910	2,750	2,680
20	2,180	2,600	2,580	2,690	2,690	2,850	2,990	3,230	3,110	2,900	2,750	2,680
21	2,180	2,590	2,580	2,730	2,690	2,830	3,010	3,200	3,110	2,890	2,750	2,680
22	2,190	2,590	2,580	2,760	2,690	2,810	3,050	3,170	3,100	2,870	2,760	2,680
23	2,190	2,590	2,580	2,780	2,690	2,810	3,170	3,150	3,100	2,860	2,760	2,680
24	2,180	2,600	2,590	2,780	2,690	2,820	3,220	3,130	3,090	2,850	2,760	2,680
25	2,180	2,610	2,590	2,780	2,690	2,870	3,250	3,100	3,090	2,840	2,760	2,680
26	2,180	2,620	2,600	2,770	2,690	2,900	3,300	3,080	3,080	2,830	2,760	2,690
27	2,180	2,620	2,600	2,760	2,690	2,910	3,330	3,070	3,070	2,820	2,770	2,690
28	2,180	2,630	2,600	2,750	2,700	2,910	3,340	3,050	3,060	2,810	2,770	2,690
29	2,180	2,640	2,600	2,740	-----	2,900	3,340	3,040	3,060	2,810	2,770	2,690
30	2,180	2,640	2,610	2,720	-----	2,900	3,340	3,020	3,050	2,800	2,770	2,680
31	2,210	-----	2,611	2,710	-----	2,920	-----	3,000	-----	2,790	2,770	-----
(†)	902.60	913.60	912.86	915.24	914.95	919.88	928.55	921.72	922.74	917.09	916.51	914.57
(‡)	+9	+434	-31	+101	-12	+218	+418	-333	+48	-258	-26	-83
MAX	2,210	2,640	2,660	2,780	2,740	2,920	3,340	3,390	3,120	3,100	2,790	2,760
MIN	2,180	2,280	2,570	2,610	2,690	2,710	2,940	3,000	3,000	2,790	2,750	2,680

CAL YR 1972.....‡ +162
WTR YR 1973.....‡ +485

† Elevation in feet at end of month.

‡ Change in contents, in thousands of acre-feet.

WHITE RIVER BASIN

153

07053500 White River near Branson, Mo.

LOCATION.--Lat 36°35'51", long 93°17'42", in SE¼NE¼ sec.22, T.22 N., R.22 W., Taney County, on left bank 0.9 mi (1.4 km) downstream from Table Rock Dam, 2.1 mi (3.4 km) upstream from Fall Creek, 5 mi (8.0 km) southwest of Branson, 7.4 mi (11.9 km) upstream from Missouri Pacific bridge, and at mile 527.8 (849.2 km).

DRAINAGE AREA.--4,022 mi² (10,417 km²).

PERIOD OF RECORD.--July 1909 to December 1910 (gage heights and discharge measurements only), October 1951 to current year.

GAGE.--Water-stage recorder. Datum of gage is 696.00 ft (212.141 m) above mean sea level (levels by Corps of Engineers). July 19, 1909 to Dec. 31, 1910, nonrecording gage at site 7.4 mi (11.9 km) downstream at different datum. Oct. 1, 1951 to Mar. 6, 1952, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--22 years, 3,395 ft³/s (96.15 m³/s), 2,460,000 acre-ft/yr (3,030 hm³/yr).

EXTREMES.--Current year: Maximum daily discharge, 18,500 ft³/s (523.9 m³/s) May 18, 19, 25; maximum gage height, 16.30 ft (4.968 m) May 25; minimum daily discharge, 45 ft³/s (1.27 m³/s) Oct. 7.
Period of record: Maximum discharge, 89,100 ft³/s (2,523 m³/s) May 16, 1956 (gage height, 36.9 ft or 11.25 m); prior to building dam, 24 ft³/s (0.68 m³/s) Sept. 20, 1954; no outflow from reservoir at various times.
Maximum stage known, 52.8 ft (16.09 m), from floodmark, Apr. 16, 1945 (discharge, 203,000 ft³/s or 5,750 m³/s).

REMARKS.--Records good. Discharge computations based on power releases, conduit releases, fish hatchery releases, and pool elevation at Table Rock Lake. Fish hatchery releases began on Feb. 18, 1959. Regulated by Table Rock Lake, some regulation since Sept. 9, 1956.

COOPERATION.--Computations of daily discharge furnished by Corps of Engineers and reviewed by Geological Survey.

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	47	3,610	1,240	55	10,400	1,180	14,300	16,100	6,300	1,620	2,770	1,840
2	47	2,220	48	1,520	5,150	1,080	14,300	16,500	6,200	7,680	3,340	1,970
3	256	4,160	869	2,780	5,170	47	14,200	17,900	6,160	9,080	4,610	1,690
4	3,110	747	4,980	2,720	5,080	49	14,200	17,700	11,600	5,410	3,530	4,860
5	1,790	490	7,540	3,410	5,520	5,950	14,200	17,800	14,300	8,420	3,610	4,940
6	1,660	3,070	8,300	699	5,920	5,960	14,200	16,900	14,200	8,270	2,810	7,500
7	45	2,990	10,700	729	6,050	8,250	14,100	14,000	14,000	8,760	4,340	7,370
8	47	1,620	8,200	6,670	7,790	10,200	14,200	15,300	6,120	9,880	4,560	1,790
9	47	3,700	6,160	5,520	11,100	10,600	14,200	17,200	679	8,590	3,400	1,780
10	1,970	8,380	2,220	4,380	11,100	10,600	14,200	17,700	542	8,530	2,840	5,390
11	1,310	295	9,800	3,600	11,100	9,550	14,100	16,200	5,050	8,740	1,820	4,570
12	1,040	689	6,920	2,780	11,200	12,800	14,100	17,200	5,580	8,580	1,920	4,550
13	2,360	6,550	5,920	575	11,200	15,000	14,200	17,700	5,600	8,560	3,150	4,580
14	385	7,980	9,850	53	11,200	15,000	14,200	17,700	5,690	8,570	4,110	4,580
15	47	5,800	7,940	463	10,800	15,100	14,200	17,800	6,440	7,930	3,100	1,730
16	1,130	5,610	4,580	555	9,820	14,900	14,200	17,800	1,480	8,800	2,320	1,750
17	2,450	4,830	799	645	5,370	14,900	14,200	18,200	1,430	9,460	3,620	3,960
18	4,940	559	6,270	690	5,310	15,000	14,200	18,500	7,910	9,110	1,000	2,700
19	5,120	783	2,750	618	5,120	15,000	14,200	18,500	7,520	9,180	879	3,240
20	1,710	8,010	2,320	159	5,150	15,000	14,200	18,400	7,720	9,270	3,720	2,450
21	757	8,020	3,650	8,330	4,420	15,000	14,100	18,400	7,450	9,190	2,620	2,520
22	49	6,890	2,070	12,600	4,320	14,800	14,100	18,400	8,000	9,260	2,250	601
23	3,270	438	53	10,200	2,980	14,500	14,000	17,800	1,630	9,210	2,800	1,350
24	3,440	1,620	57	8,790	47	14,500	13,900	17,300	3,300	8,900	4,020	2,470
25	1,660	49	56	10,900	48	14,400	13,800	18,500	8,030	8,930	2,410	2,040
26	638	52	805	11,100	2,990	14,500	13,800	18,400	7,980	9,120	1,040	1,570
27	1,950	300	662	11,100	3,130	14,200	15,200	16,500	8,550	9,880	2,870	1,270
28	744	251	292	11,200	288	14,300	17,100	18,000	8,250	2,840	2,670	1,310
29	256	2,830	190	11,200	-----	14,300	16,800	16,400	8,280	2,260	3,590	1,110
30	4,250	1,570	51	11,200	-----	14,300	17,500	14,400	2,280	8,080	4,040	1,070
31	847	-----	54	10,400	-----	14,300	-----	13,800	-----	5,420	3,570	-----
TOTAL	47,372	94,113	115,346	155,641	177,773	355,266	434,200	533,000	198,271	247,530	93,329	88,551
MEAN	1,528	3,137	3,721	5,021	6,349	11,460	14,470	17,190	6,609	7,985	3,011	2,952
MAX	5,120	8,380	10,700	12,600	11,200	15,100	17,500	18,500	14,300	9,880	4,610	7,500
MIN	45	49	48	53	47	47	13,800	13,800	542	1,620	879	601
AC-FT	93,960	186,700	228,800	308,700	352,600	704,700	861,200	1,057M	393,300	491,000	185,100	175,600
CAL YR 1972	TOTAL	884,741	MEAN	2,417	MAX	10,700	MIN	41	AC-FT	1,755,000		
WTR YR 1973	TOTAL	2,540,392	MEAN	6,960	MAX	18,500	MIN	45	AC-FT	5,039,000		

07057500 North Fork River near Tecumseh, Mo.

LOCATION.--Lat 36°37'22", long 92°14'53", in NE¼SE¼ sec.35, T.23 N., R.12 W., Ozark County, on right bank 3.2 mi (5.2 km) downstream from Spring Creek, and 3.5 mi (5.6 km) northeast of Tecumseh.

DRAINAGE AREA.--561 mi² (1,453 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 584.67 ft (178.207 m) above mean sea level (levels by Corps of Engineers). Prior to May 12, 1945, nonrecording gage at same site at datum 0.22 ft (0.067 m) lower.

AVERAGE DISCHARGE.--29 years, 704 ft³/s (19.94 m³/s), 17.05 in/yr (433 mm/yr), 510,100 acre-ft/yr (629 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 17,900 ft³/s (507 m³/s) May 7 (gage height, 13.59 ft or 4.142 m); minimum, 263 ft³/s (7.45 m³/s) Oct. 11-13 (gage height, 2.21 ft or 0.674 m).
Period of record: Maximum discharge, 30,600 ft³/s (867 m³/s) Jan. 30, 1969 (gage height, 19.33 ft or 5.892 m); minimum, 187 ft³/s (5.30 m³/s) Sept. 14-18, 1954 (gage height, 2.06 ft or 0.628 m).

REMARKS.--Records good.

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	304	1,160	610	1,330	822	632	2,470	1,970	1,010	718	534	420
2	296	6,030	596	1,070	907	649	2,100	1,900	1,020	705	524	417
3	289	2,190	582	980	895	646	1,880	1,690	3,420	689	516	439
4	284	1,340	566	1,080	829	658	1,950	1,570	2,990	677	507	503
5	280	1,000	554	1,050	792	705	1,890	1,490	2,690	669	500	489
6	278	874	542	948	744	799	1,720	1,480	2,260	659	497	475
7	277	1,040	523	864	755	1,140	1,650	10,000	1,870	654	492	462
8	274	1,100	521	800	1,070	1,270	1,590	9,160	1,610	768	493	524
9	272	945	523	748	1,260	1,540	2,260	3,700	1,430	704	496	505
10	269	841	526	698	1,150	9,010	2,560	3,160	1,300	678	507	480
11	268	757	519	671	1,050	3,840	2,100	2,690	1,210	666	507	464
12	268	700	548	644	982	2,500	1,890	2,640	1,150	641	500	450
13	268	2,730	908	611	1,140	2,180	1,700	2,240	1,110	629	505	439
14	276	3,730	1,160	598	1,560	2,200	1,550	2,000	1,130	619	496	435
15	278	1,960	1,010	584	1,410	1,860	1,480	1,810	1,150	621	486	428
16	275	1,480	856	572	1,140	1,630	1,620	1,690	1,100	610	478	422
17	273	1,210	760	572	1,040	1,460	1,890	1,590	1,040	598	474	417
18	296	1,040	707	584	977	1,340	1,790	1,500	988	604	470	411
19	393	951	689	732	919	1,290	1,830	1,450	951	615	462	409
20	370	868	680	856	855	1,270	2,360	1,370	910	581	457	411
21	343	805	665	1,230	802	1,170	2,250	1,290	871	566	451	410
22	348	766	635	2,180	771	1,100	6,230	1,240	842	556	447	410
23	399	729	613	1,760	754	1,080	7,310	1,280	822	553	445	408
24	428	707	592	1,370	725	1,440	4,560	1,940	806	634	443	417
25	402	706	561	1,190	697	2,840	4,360	1,620	791	677	438	420
26	385	710	537	1,130	671	2,330	3,950	1,420	775	635	433	421
27	382	705	523	1,050	648	1,910	3,240	1,360	767	584	428	421
28	365	689	509	976	638	1,720	2,740	1,280	750	566	426	424
29	353	656	510	903	-----	1,630	2,400	1,180	733	554	423	432
30	346	624	779	842	-----	1,570	2,140	1,100	731	550	424	433
31	408	-----	1,720	812	-----	2,050	-----	1,050	-----	549	422	-----
TOTAL	9,947	39,043	21,024	29,435	26,003	55,459	77,460	69,860	38,227	19,529	14,681	13,196
MEAN	321	1,301	678	950	929	1,789	2,582	2,254	1,274	630	474	440
MAX	428	6,030	1,720	2,180	1,560	9,010	7,310	10,000	3,420	768	534	524
MIN	268	624	509	572	638	632	1,480	1,050	731	549	422	408
CFSM	.57	2.32	1.21	1.69	1.66	3.19	4.60	4.02	2.27	1.12	.84	.78
IN.	.66	2.59	1.39	1.95	1.72	3.68	5.14	4.63	2.53	1.29	.97	.88
AC-FT	19,730	77,440	41,700	58,380	51,580	110,000	153,600	138,600	75,820	38,740	29,120	26,170

CAL YR 1972 TOTAL 216,682 MEAN 592 MAX 8,000 MIN 268 CFSM 1.06 IN 14.37 AC-FT 429,800
WTR YR 1973 TOTAL 413,864 MEAN 1,134 MAX 10,000 MIN 268 CFSM 2.02 IN 27.44 AC-FT 820,900

PEAK DISCHARGE (BASE, 5,000 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-2	1230	8.81	8,740	4-22	1300	9.38	9,840
11-14	0015	7.96	7,270	5-7	2115	13.59	17,900
3-10	1630	12.48	15,400				

07058000 Bryant Creek near Tecumseh, Mo.

LOCATION.--Lat 36°37'33", long 92°18'16", in E½ sec.32, T.23 N., R.12 W., Ozark County, on left bank 0.8 mi (1.3 km) downstream from Pine Creek, 3 mi (4.8 km) northwest of Tecumseh, and 5 mi (8.0 km) upstream from mouth.

DRAINAGE AREA.--570 mi² (1,476 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 573.15 ft (174.696 m) above mean sea level (levels by Corps of Engineers). Prior to July 30, 1945, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--29 years, 519 ft³/s (14.7 m³/s), 12.37 in/yr (314 mm/yr), 376,100 acre-ft/yr (464 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 33,200 ft³/s (940 m³/s) Mar. 11 (gage height, 21.93 ft or 6.684 m); minimum, 130 ft³/s (3.68 m³/s) Oct. 12 (gage height, 2.02 ft or 0.616 m).

Period of record: Maximum discharge, 33,200 ft³/s (940 m³/s) Mar. 11, 1973 (gage height, 21.93 ft or 6.684 m); minimum, 96 ft³/s (2.72 m³/s) Sept. 16, 17, 1954; minimum gage height, 1.98 ft (0.604 m) Aug. 13, 1964.

REMARKS.--Records good prior to March 10 and fair thereafter.

REVISIONS (WATER YEARS).--WSP 1117: Drainage area. WSP 1441: 1945, 1946-47(M), 1950. WSP 1731 1945-47, 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	189	1,560	432	565	710	403	2,390	2,400	571	317	267	187
2	169	5,550	418	490	721	443	1,960	2,200	670	308	258	189
3	157	1,750	403	507	671	451	1,740	2,000	3,990	301	254	221
4	151	1,000	388	641	629	459	2,150	1,800	2,320	297	247	289
5	148	709	374	629	615	525	1,800	1,700	1,770	298	243	243
6	145	617	364	585	585	649	1,590	1,600	1,410	293	240	238
7	143	815	340	550	677	1,410	1,480	7,200	1,160	291	238	236
8	143	713	342	514	1,170	1,400	1,400	18,000	997	317	234	261
9	140	603	331	475	1,080	1,290	1,800	4,200	885	316	233	269
10	138	536	321	444	950	5,040	2,400	3,240	820	313	244	242
11	136	477	306	425	856	20,800	1,900	2,850	773	316	245	229
12	136	434	379	404	810	4,650	1,600	2,830	725	306	240	221
13	137	3,160	549	388	1,060	2,880	1,450	2,410	696	302	246	216
14	146	3,270	570	379	1,170	2,710	1,300	2,150	678	300	242	213
15	155	1,620	530	374	1,070	2,250	1,200	1,950	653	319	235	211
16	151	1,210	465	370	950	1,880	1,450	1,790	610	317	227	207
17	147	959	408	373	840	1,630	1,800	1,640	572	301	223	205
18	145	810	381	410	783	1,460	1,600	1,480	537	311	221	202
19	188	736	368	1,820	728	1,370	1,800	1,360	517	305	216	201
20	173	668	368	1,250	668	1,370	2,400	1,220	508	301	212	204
21	166	613	368	1,710	610	1,320	1,900	1,080	473	295	208	205
22	178	590	359	2,270	564	1,220	5,400	993	447	289	203	201
23	233	560	346	1,780	546	1,180	12,000	985	414	284	202	203
24	223	545	334	1,410	515	1,450	7,000	1,330	389	292	202	211
25	205	542	318	1,190	488	4,480	5,400	1,040	377	309	198	228
26	190	543	306	1,050	459	3,340	4,500	891	371	299	193	235
27	190	525	294	991	436	2,260	4,000	919	363	288	191	224
28	186	501	291	899	414	1,860	3,500	862	341	280	189	220
29	179	467	298	790	-----	1,680	3,000	760	329	274	188	231
30	179	450	612	720	-----	1,530	2,600	670	326	272	189	228
31	253	-----	705	690	-----	2,140	-----	614	-----	273	188	-----
TOTAL	5,219	32,533	12,268	25,093	20,775	75,530	84,510	74,164	24,692	9,284	6,916	6,670
MEAN	168	1,084	396	809	742	2,436	2,817	2,392	823	299	223	222
MAX	253	5,550	705	2,270	1,170	20,800	12,000	18,000	3,990	319	267	289
MIN	136	434	291	370	414	403	1,200	614	326	272	188	187
CFSM	.29	1.90	.69	1.42	1.30	4.27	4.94	4.20	1.44	.52	.39	.39
IN.	.34	2.12	.80	1.64	1.36	4.93	5.52	4.84	1.61	.61	.45	.44
AC-FT	10,350	64,530	24,330	49,770	41,210	149,800	167,600	147,100	48,980	18,410	13,720	13,230

CAL YR 1972 TOTAL 138,425 MEAN 378 MAX 8,400 MIN 130 CFSM .66 IN 9.03 AC-FT 274,600
WTR YR 1973 TOTAL 377,654 MEAN 1,035 MAX 20,800 MIN 136 CFSM 1.82 IN 24.65 AC-FT 749,100

PEAK DISCHARGE (BASE, 6,000 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-2	0945	11.43	7,200	5-8	*	18.5	23,900
11-13	2200	10.87	6,500	6-3	1045	11.47	7,260
3-11	0615	21.93	33,200				*Unknown

WHITE RIVER BASIN

07061300 East Fork Black River at Lesterville, Mo.

LOCATION.--Lat 37°27'03", long 90°49'38", in NE¼SE¼ sec.16, T.32 N., R.2 E., Reynolds County, at bridge on State Highway 21 at Lesterville, and 0.8 mi (1.3 km) upstream from Black River.

DRAINAGE AREA.--94.5 mi² (244.8 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 655.34 ft (199.748 m) above mean sea level.

AVERAGE DISCHARGE.--13 years, 94.7 ft³/s (2.68 m³/s), 68,640 acre-ft/yr (84.6 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 10,400 ft³/s (295 m³/s) Nov. 2 (gage height, 11.13 ft or 3.392 m); minimum, 1.2 ft³/s (0.034 m³/s) July 20, 21, 22, 23; minimum gage height, 1.59 ft (0.485 m) Oct. 11, 13. Period of record: Maximum discharge, 10,400 ft³/s (295 m³/s) Nov. 2, 1972 (gage height, 11.13 ft or 3.392 m); no flow Oct. 15 to Nov. 21, 1963, July 17-21, July 31 to Aug. 20, 1964, Nov. 13, 14, 1971. Flood of March 1935 reached a stage of about 13.8 ft (4.21 m) from information by local resident.

REMARKS.--Records poor. Low flow regulated by Union Electric Company Taum Sauk pumped-storage power plant lower reservoir, 4 mi (6.4 km) upstream, since Feb. 19, 1963, capacity 6,350 acre-ft (7.83 hm³).

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	124	1,530	88	1,500	133	20	982	109	100	4.5	81	1.8
2	87	4,470	130	450	189	55	219	106	84	4.2	5.9	1.6
3	49	2,420	128	150	127	41	224	90	326	4.4	3.6	481
4	48	580	104	800	112	19	956	78	1,150	5.0	2.8	49
5	47	178	65	520	102	72	534	70	1,260	5.5	2.2	6.6
6	36	250	196	300	26	111	286	71	405	8.7	1.7	3.7
7	14	314	215	195	25	1,670	270	1,010	204	8.2	1.6	3.1
8	12	408	61	125	170	763	139	1,510	137	5.7	1.5	10
9	11	103	144	80	286	252	1,340	463	105	8.5	1.7	43
10	6.1	253	199	100	144	1,030	1,550	252	31	5.0	1.8	121
11	4.8	253	146	62	49	2,230	545	179	11	2.8	1.5	116
12	10	149	162	39	101	1,560	132	143	24	1.7	2.2	103
13	5.2	1,600	798	200	118	678	223	116	82	1.5	6.1	9.4
14	27	2,060	256	142	242	512	193	97	114	1.4	10	8.8
15	28	1,600	299	89	177	432	140	82	39	1.3	6.1	21
16	28	310	252	59	41	268	361	71	7.9	1.3	3.2	40
17	14	88	52	131	143	198	479	62	5.5	1.3	3.8	27
18	7.5	299	51	60	113	171	291	52	4.6	1.3	10	30
19	5.8	162	115	210	53	99	408	48	21	1.3	19	24
20	9.6	177	195	250	67	660	928	44	70	1.2	15	25
21	23	114	123	340	101	465	801	36	99	1.2	4.4	21
22	24	218	118	838	24	222	3,220	50	15	1.2	10	24
23	13	164	130	328	102	250	2,420	55	12	1.3	6.4	31
24	5.9	119	50	212	26	121	729	83	21	533	7.2	58
25	15	69	89	194	20	299	389	67	14	368	5.2	20
26	19	69	70	87	30	394	262	55	8.0	14	4.7	11
27	22	113	45	99	73	259	196	1,310	22	23	6.0	14
28	22	277	30	104	19	166	160	418	23	33	3.1	17
29	7.1	199	150	76	-----	165	137	207	20	46	5.0	34
30	5.3	72	1,600	80	-----	153	119	150	6.2	27	3.6	79
31	120	-----	2,500	87	-----	788	-----	122	-----	119	2.5	-----
TOTAL	850.3	18,618	8,561	7,907	2,813	14,123	18,633	7,206	4,421.2	1,241.5	238.8	1,434.0
MEAN	27.4	621	276	255	100	456	621	232	147	40.0	7.70	47.8
MAX	124	4,470	2,500	1,500	286	2,230	3,220	1,510	1,260	533	81	481
MIN	4.8	69	30	39	19	19	119	36	4.6	1.2	1.5	1.6
AC-FT	1,690	36,930	16,980	15,680	5,580	28,010	36,960	14,290	8,770	2,460	474	2,840

CAL YR 1972 TOTAL 56,093.9 MEAN 153 MAX 4,470 MIN 1.2 AC-FT 111,300
WTR YR 1973 TOTAL 86,046.8 MEAN 236 MAX 4,470 MIN 1.2 AC-FT 170,700

07061500 Black River near Annapolis, Mo.

LOCATION.--Lat 37°20'10", long 90°47'19", in SW¼NW¼ sec.25, T.31 N., R.2 E., Reynolds County, on right bank 0.4 mi (0.6 km) downstream from Mayberry Branch, 7 mi (11.2 km) southwest of Annapolis, 11 mi (17.7 km) downstream from East Fork, and at mile 278.5 (448.1 km).

DRAINAGE AREA.--484 mi² (1,254 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 569.72 ft (173.651 m) above mean sea level (levels by Corps of Engineers). Prior to Aug. 21, 1942, at site 415 ft (126 m) upstream at same datum.

AVERAGE DISCHARGE.--34 years, 555 ft³/s (15.72 m³/s), 15.88 in/yr (396 mm/yr), 402,300 acre-ft/yr (496 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 49,700 ft³/s (1,410 m³/s) Nov. 2 (gage height, 21.55 ft or 6.568 m); minimum, 141 ft³/s (3.99 m³/s) Oct. 13, 14; minimum gage height, 1.39 ft (0.424 m) Sept. 2, 3. Period of record: Maximum discharge, 49,700 ft³/s (1,410 m³/s) Nov. 2, 1972 (gage height, 21.55 ft or 6.568 m); minimum, 65 ft³/s (1.84 m³/s) Aug. 16, 17, 18, 1965; minimum gage height, 1.26 ft (0.384 m) Sept. 15, 16, 17, 18, 1971.

REMARKS.--Records good. Small regulation from upstream reservoir since Feb. 1963. Records of chemical analyses 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	381	1,990	400	3,640	649	342	2,890	923	702	263	530	166
2	353	25,300	439	1,540	927	359	1,780	890	628	254	358	163
3	267	5,190	430	1,490	826	390	1,460	795	1,320	289	298	163
4	234	2,210	394	1,820	784	342	2,460	714	2,110	268	270	406
5	214	1,040	354	1,360	670	394	2,430	653	4,190	251	253	359
6	203	886	449	1,190	588	478	1,650	632	2,150	240	237	228
7	181	907	649	965	527	4,110	1,460	3,760	1,410	233	226	206
8	167	1,070	548	829	747	3,250	1,230	8,720	1,070	226	216	209
9	159	716	587	690	1,060	1,660	5,800	3,440	874	235	211	228
10	153	695	693	675	866	3,730	6,060	2,050	702	269	267	1,160
11	148	705	644	608	677	14,000	3,020	1,550	577	264	310	734
12	146	546	657	491	670	4,950	1,670	1,270	529	240	277	627
13	142	6,020	1,900	500	730	2,880	1,500	1,060	582	221	271	376
14	155	7,490	1,670	461	1,140	2,410	1,270	922	698	210	260	314
15	176	3,080	1,380	419	1,160	2,560	1,070	813	585	206	259	277
16	183	1,540	1,050	389	926	1,730	1,340	733	462	202	243	314
17	181	896	790	427	884	1,400	1,880	669	430	196	226	270
18	175	834	675	382	794	1,220	1,590	614	448	191	222	256
19	176	765	649	453	684	986	1,570	577	612	189	218	244
20	175	728	783	536	632	4,110	3,070	544	815	188	219	240
21	177	556	691	779	603	3,300	3,690	503	705	185	211	237
22	179	648	626	2,850	544	1,820	13,200	527	570	181	197	244
23	178	573	639	2,060	516	1,550	15,100	564	466	405	193	256
24	169	529	542	1,460	498	1,190	4,690	795	434	7,260	189	280
25	164	461	512	1,180	421	1,450	2,760	741	398	3,460	187	255
26	169	458	487	918	403	1,750	2,000	629	359	1,360	182	225
27	169	465	490	808	439	1,530	1,600	2,110	334	964	178	232
28	173	639	458	772	381	1,270	1,320	1,730	315	717	175	242
29	165	602	507	681	-----	1,150	1,140	1,180	302	627	171	310
30	158	464	6,560	626	-----	1,050	1,010	948	281	509	174	700
31	207	-----	8,400	592	-----	1,990	-----	801	-----	489	169	-----
TOTAL	5,877	68,003	35,053	31,591	19,746	69,351	91,710	41,857	25,058	20,792	7,397	9,921
MEAN	190	2,267	1,131	1,019	705	2,237	3,057	1,350	835	671	239	331
MAX	381	25,300	8,400	3,640	1,160	14,000	15,100	8,720	4,190	7,260	530	1,160
MIN	142	458	354	382	381	342	1,010	503	281	181	169	163
CFSM	.39	4.68	2.34	2.11	1.46	4.62	6.32	2.79	1.73	1.39	.49	.68
IN.	.45	5.23	2.69	2.43	1.52	5.33	7.05	3.22	1.93	1.60	.57	.76
AC-FT	11,660	134,900	69,530	62,660	39,170	137,600	181,900	83,020	49,700	41,240	14,670	19,680

CAL YR 1972 TOTAL 246,684 MEAN 674 MAX 25,300 MIN 104 CFSM 1.39 IN 18.96 AC-FT 489,300
WTR YR 1973 TOTAL 426,356 MEAN 1,168 MAX 25,300 MIN 142 CFSM 2.41 IN 32.77 AC-FT 845,700

PEAK DISCHARGE (BASE, 7,000 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-2	0645	21.55	49,700	3-9	1945	10.08	11,700
11-13	2315	12.14	16,500	3-22	2015	15.15	26,700
12-31	0145	10.82	13,200	5-8	0530	10.19	11,700
3-11	.0700	13.81	22,200	7-24	1600	11.04	14,300

07062000 Clearwater Lake near Piedmont, Mo.

LOCATION.--Lat 37°08'00", long 90°46'31", NW¼ sec.6, T.28 N., R.3 E., Wayne county, in intake tower at dam on Black River, 2.3 mi (3.70 km) upstream from Brewer Bay, 4.5 mi (7.24 km) west of Piedmont, and at mile 257.4 (414.16 km).

DRAINAGE AREA.--898 mi² (2,326 km²).

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

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

EXTREMES.--Current year: Maximum contents, 225,000 acre-ft (277 hm³) May 10 (elevation, 544.88 ft or 166.079 m), minimum, 21,600 acre-ft (26.6 hm³) Feb. 7 (elevation, 493.83 ft or 150.519 m).
Period of record: Maximum contents, 399,400 acre-ft (492 hm³) May 28, 1957 (elevation, 565.59 ft or 172.392 m); minimum, since initial filling to conservation pool level, 15,800 acre-ft (19.5 hm³) Jan. 23, 1972 (elevation, 490.00 ft or 149.352 m).

REMARKS.--Lake is formed by earth-fill dam. Storage began June 3, 1948; conservation pool level reached July 4, 1948. Capacity at crest of spillway 413,700 acre-ft (510 hm³) at elevation 567 ft (172.8 m), of which 391,800 acre-ft (483 hm³) is available for flood-control storage, and 21,920 acre-ft (27.0 hm³) is permanent storage which under normal operating conditions will be maintained for purposes of conservation and recreation at elevation 494 ft (150.6 m). Lake used for flood control and incidental recreational purposes. Contents computed from daily readings at 2400.

COOPERATION.--Records furnished by Corps of Engineers.

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

493.8	21,600	520	91,600
495	23,600	530	137,000
500	32,800	540	193,000
510	57,300	545	225,000

CONTENTS, IN HUNDREDS OF ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1971 to SEPTEMBER 1972

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	241	264	892	663	220	219	948	1,880	1,740	1,030	490	264
2	239	878	858	684	223	219	943	1,900	1,710	996	466	263
3	235	1,020	823	694	224	218	915	1,890	1,720	971	440	263
4	230	1,080	788	711	222	218	902	1,860	1,730	948	415	269
5	225	1,100	754	711	219	218	894	1,830	1,800	923	389	272
6	221	1,120	715	701	217	226	866	1,800	1,810	896	362	273
7	219	1,150	684	682	219	300	837	1,940	1,800	870	335	276
8	220	1,170	667	658	222	364	804	2,180	1,780	845	313	280
9	220	1,170	658	627	230	383	876	2,240	1,750	821	301	282
10	220	1,160	646	588	231	468	967	2,250	1,710	797	291	304
11	220	1,130	628	546	230	829	974	2,240	1,670	772	281	311
12	220	1,100	617	500	226	959	950	2,230	1,630	747	271	314
13	219	1,220	632	451	223	1,030	921	2,210	1,590	721	266	313
14	221	1,400	646	405	227	1,090	883	2,180	1,550	696	263	310
15	221	1,460	644	357	234	1,150	854	2,150	1,520	672	262	307
16	221	1,470	631	312	237	1,160	825	2,110	1,500	646	265	303
17	221	1,460	611	271	236	1,150	809	2,070	1,470	619	267	300
18	223	1,450	588	246	234	1,140	793	2,030	1,440	591	265	295
19	222	1,430	564	234	230	1,120	821	1,990	1,410	564	262	291
20	222	1,410	540	230	224	1,140	895	1,950	1,390	536	260	286
21	222	1,370	517	247	220	1,160	996	1,900	1,370	508	260	282
22	222	1,330	491	292	221	1,140	1,330	1,860	1,340	481	262	278
23	221	1,280	468	310	219	1,110	1,710	1,830	1,310	457	264	273
24	220	1,230	443	305	220	1,080	1,900	1,830	1,280	524	265	269
25	220	1,190	416	284	218	1,050	1,960	1,800	1,250	598	263	267
26	220	1,140	388	258	217	1,040	1,970	1,760	1,210	601	261	264
27	220	1,090	358	240	219	1,020	1,970	1,780	1,180	590	261	261
28	221	1,040	329	236	220	989	1,950	1,820	1,140	575	263	258
29	220	993	302	230	-----	956	1,930	1,830	1,100	556	264	255
30	220	941	390	223	-----	920	1,900	1,810	1,070	535	265	251
31	224	-----	585	219	-----	922	-----	1,780	-----	513	265	-----
(†)	494.27	520.62	510.41	494.00	494.04	520.15	539.52	537.55	523.58	507.87	496.71	495.92
(‡)	-17.1	+71.7	-35.6	-36.4	+1.0	+70.2	+97.6	-11.9	-71.4	-55.2	-24.8	-1.4
MAX	241	1,470	892	711	237	1,160	1,970	2,250	1,810	1,030	490	314
MIN	219	264	302	219	217	218	793	1,760	1,070	457	260	251

CAL YR 1972.....‡ +375.2

WTR YR 1973.....‡ +10.7

† Elevation, in feet, at end of month.

‡ Change in contents, in hundreds of acre-feet.

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LOCATION.--Lat 37°04'42", long 90°42'52", in SE¼SW¼ sec.22, T.28 N., R.3 E., Wayne County, on downstream side of pier at right end of left truss of bridge on State Highway 34, 0.5 mi (0.8 km) northwest of Leeper, 2 mi (3.2 km) downstream from McKenzie Creek, 6 mi (9.7 km) downstream from Clearwater Dam, and at mile 251.0 (403.9 km).

PERIOD OF RECORD.--June 1921 to current year.

GAGE.--Water-stage recorder. Datum of gage is 428.51 ft (130.610 m) above mean sea level. Prior to Oct. 22, 1937, nonrecording gage, Oct. 22, 1937, to Jan. 21, 1942, water-stage recorder, and Jan. 22 to Apr. 6, 1942; nonrecording gage. all at site 1,900 ft (579 m) downstream at datum 3.85 ft (1.173 m) lower.

EXTREMES.--Current year: Maximum discharge, 5,460 ft³/s (154.6 m³/s) Mar. 10 (gage height, 6.52 ft or 1.987 m); minimum, 245 ft³/s (6.94 m³/s) Oct. 10 (gage height, 0.97 ft or 0.296 m).
Period of record: Maximum discharge, 78,400 ft³/s (2,220 m³/s) May 14, 1933 (gage height, 20.01 ft or 6.009 m, site and datum then in use), from rating curve extended above 55,000 ft³/s (1,560 m³/s); minimum, 62 ft³/s (1.76 m³/s) Sept. 22-25, 1966 (gage height, 0.42 ft or 1.28 m), result of closure of Clearwater Dam; minimum, prior to regulation, 133 ft³/s (3.77 m³/s) Aug. 11, 1934.
Maximum stage known, about 22.3 ft (6.80 m) in March 1904 (present site and datum), from floodmarks (discharge, 125,000 ft³/s or 3,540 m³/s, from rating curve extended above 55,000 ft³/s or 1,560 m³/s).

REMARKS.--Records good. Flow regulated by Clearwater Lake since June 3, 1948.

REVISIONS (WATER YEARS).--WSP 762: 1933(M). WSP 1007: 1943. WSP 1281: 1922-23, 1927-29(M).

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	476	552	3,460	1,290	1,250	756	2,690	2,880	3,030	2,440	1,920	401
2	478	945	2,500	1,390	1,240	766	2,810	998	3,060	2,360	1,950	404
3	651	470	2,440	2,210	1,350	761	3,620	1,320	2,820	1,800	1,930	408
4	685	380	2,410	1,750	1,390	767	3,700	2,690	2,390	1,760	1,910	411
5	685	415	2,420	2,190	1,370	740	3,560	2,690	2,410	1,740	1,880	411
6	667	685	2,450	2,620	1,240	835	3,740	2,710	2,400	1,790	1,900	411
7	471	371	2,480	2,610	1,150	1,260	3,700	2,870	2,820	1,790	1,950	414
8	338	501	2,210	2,700	1,120	1,680	3,570	1,180	2,990	1,780	1,770	432
9	259	973	1,450	3,000	1,150	1,790	2,900	1,580	2,970	1,780	1,430	418
10	249	1,990	1,510	3,150	1,380	2,740	3,140	2,810	2,950	1,780	1,250	414
11	248	2,640	1,880	3,480	1,380	1,650	3,700	2,800	2,970	1,760	1,220	492
12	253	2,630	1,880	3,460	1,370	836	3,680	2,790	3,260	1,760	1,210	710
13	292	2,270	1,410	3,680	1,380	834	3,610	2,770	3,220	1,770	1,090	719
14	290	774	1,500	3,600	1,360	1,240	3,570	2,800	3,200	1,760	822	723
15	253	1,350	1,920	3,500	1,360	885	3,540	2,940	2,890	1,750	754	719
16	292	1,690	2,240	3,400	1,360	1,950	3,190	2,990	2,220	1,790	418	708
17	299	1,910	2,230	3,190	1,350	2,600	2,980	2,980	2,190	1,850	428	705
18	316	2,260	2,270	2,590	1,340	2,590	3,290	3,030	2,240	1,840	684	702
19	313	2,210	2,370	1,790	1,340	2,880	2,340	3,140	2,430	1,810	661	696
20	307	2,270	2,340	1,320	1,330	3,620	1,080	3,130	2,310	1,800	648	693
21	307	3,030	2,310	1,310	1,260	3,600	1,170	3,200	2,180	1,840	565	693
22	324	3,170	2,290	1,130	989	3,570	2,490	3,300	2,250	1,830	341	690
23	380	3,460	2,260	2,350	979	3,570	1,370	2,920	2,310	1,840	326	682
24	378	3,430	2,240	2,680	898	3,680	894	1,790	2,290	2,550	335	684
25	304	3,410	2,210	3,200	890	3,420	995	2,180	2,330	1,520	483	683
26	298	3,360	2,250	3,120	866	3,130	2,580	3,070	2,430	1,660	507	682
27	307	3,350	2,420	2,780	747	3,120	2,640	2,180	2,410	1,920	443	682
28	302	3,400	2,370	1,670	709	3,270	2,980	741	2,400	1,910	319	686
29	307	3,450	2,350	1,620	-----	3,410	2,960	850	2,440	1,890	310	640
30	376	3,550	2,870	1,570	-----	3,350	2,940	2,150	2,480	1,900	310	674
31	359	-----	1,470	1,400	-----	3,340	-----	2,700	-----	1,920	335	-----
TOTAL	11,464	60,896	68,410	75,750	33,548	68,640	85,429	76,179	78,290	57,690	30,099	17,827
MEAN	370	2,030	2,207	2,444	1,198	2,214						

07063000 Black River at Poplar Bluff, Mo.

LOCATION.--Lat 36°45'34", long 90°23'17", in SW¼NW¼ sec.2, T.24 N., R.6 E., Butler County, on right bank at City Light and Water Plant in Poplar Bluff, 1,500 ft (457 m) upstream from bridge on U.S. Highway 60, 4.8 mi (7.7 km) downstream from Indian Creek, and at mile 211.2 (339.8 km).

DRAINAGE AREA.--1,245 mi² (3,225 km²).

PERIOD OF RECORD.--October 1936 to September 1937, October 1939 to current year. Gage-height records collected at site 1,800 ft (549 m) downstream September 1923 to July 1935, and since July 1935 at site 1,500 ft (457 m) downstream are contained in reports of National Weather Service.

GAGE.--Water-stage recorder. Datum of gage is 317.38 ft (96.737 m) above mean sea level. Prior to Oct. 1, 1940, nonrecording gage at site 1,500 ft (457 m) downstream are at datum 2.00 ft (0.610 m) higher, Oct. 1, 1940 to June 7, 1955, at site 1,500 ft (457 m) downstream at present datum.

AVERAGE DISCHARGE.--35 years, 1,248 ft³/s (35.34 m³/s), 904,200 acre-ft/yr (1,115 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 14,000 ft³/s (396.5 m³/s) Mar. 11 (gage height, 18.86 ft or 5.749 m); minimum, 474 ft³/s (13.42 m³/s) Oct. 12; minimum gage height, 1.28 ft (0.390 m) Oct. 12, 13, 16.

Period of record: Maximum discharge, 52,600 ft³/s (1,490 m³/s) May 12, 1943, from rating curve extended above 44,000 ft³/s (1,246 m³/s); maximum gage height, 20.80 ft (6.340 m) June 10, 1945, from graph based on gage readings; minimum discharge, 180 ft³/s (5.10 m³/s) Sept. 25, 26, 1966 (gage height, 0.65 ft or 0.198 m), closure of Clearwater Dam for repairs; minimum prior to regulation, 236 ft³/s (6.68 m³/s) Aug. 12, 1944.

Maximum discharge known, 100,000 ft³/s (2,830 m³/s) March 1904; maximum stage known, 21.1 ft (6.43 m) Mar. 12, 1935, present datum (affected by levees constructed since 1904).

REMARKS.--Records good. Flow regulated by Clearwater Lake.

REVISIONS.--WSP 927: 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	789	5,670	3,640	3,790	2,100	983	5,120	3,560	2,850	2,650	2,010	513
2	694	5,640	3,570	2,510	2,040	1,020	4,220	5,860	3,100	2,640	2,010	556
3	681	3,990	3,030	2,400	1,890	1,040	3,670	3,950	3,350	2,550	2,020	568
4	757	2,010	2,810	3,140	1,880	1,010	4,020	2,740	3,990	2,190	2,010	572
5	792	1,320	2,740	2,790	1,880	1,010	4,170	3,180	3,580	2,070	1,990	569
6	801	1,150	2,750	2,820	1,830	1,020	4,050	3,250	3,310	2,050	1,960	573
7	791	2,320	2,750	2,970	1,720	2,260	4,110	4,390	2,960	2,070	1,970	593
8	686	2,490	3,680	2,970	1,980	2,780	4,160	6,280	3,010	2,070	2,000	588
9	588	1,660	4,500	2,990	1,860	2,640	4,200	4,450	3,140	2,060	1,860	610
10	516	1,670	3,000	3,130	1,770	3,810	3,960	3,160	3,130	2,080	1,640	667
11	490	2,270	2,470	3,240	1,860	12,300	3,780	3,480	3,090	2,100	1,440	604
12	478	2,740	2,650	3,440	1,840	10,600	4,060	3,540	3,170	2,090	1,380	618
13	477	3,150	3,470	3,500	1,850	4,980	4,100	3,370	3,390	2,040	1,370	752
14	512	4,270	2,990	3,630	1,870	3,100	4,030	3,240	3,410	2,010	1,330	794
15	534	2,650	2,570	3,640	1,820	3,080	3,950	3,200	3,400	2,000	1,080	802
16	492	2,210	2,650	3,560	1,760	2,380	4,090	3,230	3,180	1,980	989	804
17	499	2,300	2,740	3,460	1,710	2,730	4,090	3,230	2,680	2,000	792	803
18	906	2,400	2,720	3,330	1,690	3,030	4,180	3,190	2,530	2,050	704	804
19	1,470	2,650	2,810	2,980	1,670	3,030	5,760	3,180	2,570	2,040	834	804
20	905	2,660	3,010	2,280	1,650	3,420	10,100	3,230	2,790	2,020	835	804
21	690	2,650	2,950	3,440	1,620	3,990	8,790	3,210	2,640	2,010	816	805
22	743	3,050	2,850	5,610	1,540	3,990	6,640	3,310	2,510	2,030	761	803
23	1,070	3,250	2,770	3,900	1,350	3,900	9,610	3,780	2,530	2,030	626	800
24	822	3,440	2,710	3,270	1,290	3,870	8,490	3,550	2,560	2,120	571	796
25	718	3,560	2,650	3,230	1,210	4,100	5,080	2,580	2,550	2,300	559	799
26	644	3,600	2,600	3,480	1,180	4,120	3,520	2,510	2,590	1,840	636	796
27	673	3,550	2,590	3,480	1,140	3,740	3,640	6,670	2,650	1,840	671	792
28	790	3,490	2,680	3,230	1,030	3,560	3,500	8,570	2,640	2,000	642	796
29	697	3,500	2,650	2,510	-----	3,630	3,560	4,390	2,620	2,010	560	831
30	659	3,560	2,800	2,230	-----	3,780	3,530	2,360	2,630	2,000	528	800
31	1,370	-----	4,700	2,110	-----	4,390	-----	2,480	-----	2,010	514	-----
TOTAL	22,734	88,870	92,500	99,060	47,030	109,293	146,180	117,120	88,550	64,950	37,108	21,416
MEAN	733	2,962	2,984	3,195	1,680	3,526	4,873	3,778	2,952	2,095	1,197	714
MAX	1,470	5,670	4,700	5,610	2,100	12,300	10,100	8,570	3,990	2,650	2,020	831
MIN	477	1,150	2,470	2,110	1,030	983	3,500	2,360	2,510	1,840	514	513
AC-FT	45,090	176,300	183,500	196,500	93,280	216,800	289,900	232,300	175,600	128,800	73,600	42,480
CAL YR 1972	TOTAL 505,966		MEAN 1,382		MAX 6,590		MIN 358		AC-FT 1,004,000			
WTR YR 1973	TOTAL 934,811		MEAN 2,561		MAX 12,300		MIN 477		AC-FT 1,854,000			

07064300 Fudge Hollow near Licking, Mo.

LOCATION.--Lat 37°31'50", long 91°44'13", in NW¼SW¼ sec.29, T.33 N., R.7 W., Dent County, on downstream side of right abutment of bridge on State Highway 32, 8 mi (12.9 km) east of junction of U.S. Highway 63 and State Highway 32 at Licking.

DRAINAGE AREA.--1.72 mi² (4.45 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 1,157.59 ft (352.833 m) above mean sea level.

AVERAGE DISCHARGE.--17 years, 0.19 ft³/s (0.005 m³/s), 1.50 in/yr (38 mm/yr), 138 acre-ft/yr (170,200 m³/yr).

EXTREMES.--Current year: Maximum discharge, 291 ft³/s (8.24 m³/s) July 22 (gage height, 5.89 ft or 1.795 m); no flow on many days.

Period of record: Maximum discharge, 580 ft³/s (16.4 m³/s) Sept. 4, 1965 (gage height, 6.46 ft or 1.969 m); no flow at times each year.

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	12	.10	.04	.26	.04	.14	.06	.10	0	0	0
2	0	1.3	.06	.04	.08	.02	.10	.04	.26	0	0	0
3	0	.60	.04	.22	.08	.02	.50	.04	.34	0	0	3.0
4	0	.40	.04	.08	.08	.02	.26	.04	.26	0	0	.08
5	0	.30	.04	.04	.08	.02	.22	.02	.14	0	0	.08
6	0	.40	.06	.04	.08	.22	.10	.04	.08	0	0	.06
7	0	.30	.04	.04	.22	.14	.10	8.7	.06	0	0	.08
8	0	.30	.04	.02	.08	.14	.30	.90	.04	0	0	.06
9	0	.20	.10	.02	.08	1.1	1.4	.38	.04	0	0	.06
10	0	.20	.04	.02	.08	12	.22	.34	.02	0	5.6	.04
11	0	.10	.02	.02	.06	.60	.14	.26	.02	0	.14	.02
12	0	.90	.30	.02	.10	.38	.10	.18	.02	0	.14	.02
13	0	20	.20	.02	.22	.42	.08	.10	.06	0	.80	0
14	.10	.70	.14	0	.18	.46	.08	.08	.04	0	.14	0
15	0	.50	.10	0	.14	.30	.08	.08	.02	0	.08	0
16	0	.40	.08	0	.14	.30	.18	.04	.02	0	.06	0
17	0	.40	.06	0	.14	.26	.10	.04	0	0	.02	0
18	0	.40	.04	.18	.10	.22	.10	.04	0	0	0	0
19	0	.40	.12	.06	.10	11	.06	.02	0	0	0	0
20	0	.40	.08	.04	.08	1.3	.42	.04	0	0	0	0
21	0	.40	.06	.60	.08	.22	.18	.04	0	0	0	0
22	0	.40	.04	.30	.10	.14	11	1.4	0	8.2	0	0
23	0	.40	.02	.22	.10	.14	.38	6.7	0	.90	0	0
24	0	.40	.02	.22	.10	.22	.26	1.3	0	.30	0	.02
25	0	.40	.02	.18	.10	.30	.26	.26	0	.14	.02	.16
26	0	.60	0	.18	.10	.14	.18	.22	0	.01	0	.04
27	0	.40	0	.14	.08	.08	.10	.22	0	0	0	0
28	0	.30	0	.14	.06	.08	.10	.18	0	0	0	.12
29	0	.20	.02	.10	-----	.14	.08	.14	0	0	0	.08
30	0	.10	.14	.10	-----	.04	.06	.14	0	0	0	.06
31	1.0	-----	.04	.08	-----	.70	-----	.10	-----	0	0	-----
TOTAL	1.10	43.80	2.06	3.16	3.10	31.16	17.28	22.14	1.52	9.55	7.00	3.98
MEAN	.036	1.46	.067	.10	.11	1.01	.58	.71	.051	.31	.23	.13
MAX	1.0	20	.30	.60	.26	12	11	8.7	.34	8.2	5.6	3.0
MIN	0	.10	0	0	.06	.02	.06	.02	0	0	0	0
CFSM	.02	.85	.04	.06	.06	.59	.34	.41	.03	.18	.13	.08
IN.	.02	.95	.04	.07	.07	.67	.37	.48	.03	.21	.15	.09
AC-FT	2.2	87	4.1	6.3	6.1	62	34	44	3.0	19	14	7.9

CAL YR 1972 TOTAL 81.26 MEAN .22 MAX 20 MIN 0 CFSM .13 IN 1.76 AC-FT 161
 WTR YR 1973 TOTAL 145.85 MEAN .40 MAX 20 MIN 0 CFSM .23 IN 3.15 AC-FT 289

PEAK DISCHARGE (BASE, 100 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-13	0530	4.35	102	7-22	2300	5.89	291
3-19	1930	4.44	109	8-10	1720	4.98	141

WHITE RIVER BASIN

07064500 Big Creek near Yukon, Mo.

LOCATION.--Lat 37°13'57", long 91°50'59", in SW¼NW¼ sec.5, T.29 N., R.8 W., Texas County, on downstream side of left pier of bridge on State Highway 137, and 3 mi (4.8 km) south of Yukon.

DRAINAGE AREA.--8.36 mi² (21.7 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 1,194.81 ft (364.178 m) above sea level.

AVERAGE DISCHARGE.--24 years, 8.18 ft³/s (0.232 m³/s), 13.28 in/yr (337.3 mm/yr), 5,930 acre-ft/yr (7.31 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,440 ft³/s (97.4 m³/s) Nov. 1, May 7; maximum gage height, 5.77 ft (1.759 m) May 7; no flow on many days.

Period of record: Maximum discharge, 5,520 ft³/s (156 m³/s) Oct. 27, 1970 (gage height, 5.44 ft or 1.658 m) in gage well, about 6.5 ft (1.98 m) at outside gage, from rating curve extended above 2,800 ft³/s (79.3 m³/s) on basis of contracted opening measurement at gage height, 5.20 ft (1.585 m) in gage well 6.15 ft (1.875 m) from floodmark outside; no flow at times in most years.

Flood of April 1945 reached a stage of about 10.5 ft (3.20 m) and next highest flood (since 1932) reached a stage of about 10.0 ft (3.05 m) in February 1935, from information by local resident.

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	.01	803	3.3	15	68	2.1	35	11	3.2	.93	1.2	0
2	0	159	3.0	9.1	30	2.4	20	12	7.2	.89	1.1	0
3	0	47	2.7	23	20	2.8	56	8.2	33	.92	1.1	.20
4	0	24	2.4	18	10	9.2	53	6.1	13	.93	.96	.25
5	0	15	2.5	11	7.0	13	25	4.9	11	.92	.93	.25
6	0	35	3.0	6.7	60	64	17	13	6.1	.88	.85	.23
7	0	38	2.6	5.2	40	56	14	720	4.0	.87	.84	.31
8	0	19	3.2	4.3	29	20	17	87	3.2	.91	.78	.31
9	0	12	4.4	3.5	15	15	173	36	2.6	.89	.74	.36
10	0	9.3	3.6	2.6	9.8	636	35	25	2.2	.90	.74	.40
11	0	6.2	3.1	2.3	7.2	98	22	22	1.9	.89	.70	.41
12	0	22	82	1.9	17	38	15	18	1.8	.86	.71	.36
13	0	658	37	1.6	67	26	11	14	2.1	.88	.71	.34
14	0	42	17	1.4	29	47	9.2	12	1.9	.85	.69	.31
15	0	18	9.7	1.2	16	26	7.8	10	1.6	.92	.65	.31
16	0	11	5.9	1.1	9.9	18	33	8.9	1.4	.88	.65	.30
17	0	8.0	4.5	30	7.6	13	21	7.7	1.4	.86	.61	.31
18	0	6.2	4.5	12	6.0	9.7	16	7.0	1.3	.91	.59	.32
19	0	6.1	6.3	9.0	5.1	8.6	38	6.3	1.2	1.0	.55	.32
20	0	6.0	6.3	7.0	4.6	9.8	47	5.6	1.2	.99	.53	.35
21	.01	7.2	5.6	120	3.8	7.3	34	4.9	1.1	1.0	.49	.32
22	.03	7.9	4.7	30	3.5	6.1	374	4.6	1.1	.98	.44	.35
23	.03	8.1	3.9	18	3.2	5.8	94	7.0	1.1	14	.42	.37
24	.03	8.8	3.4	15	2.9	61	42	7.1	1.0	20	.38	.39
25	.03	12	3.1	12	2.7	134	77	4.9	1.0	9.8	.32	3.6
26	.04	13	2.8	10	2.5	34	42	3.9	1.0	5.9	.25	1.4
27	.04	8.7	2.6	9.4	2.3	20	27	3.8	.97	2.9	.19	1.0
28	.04	5.9	2.5	8.6	2.2	14	19	3.4	.98	2.2	.11	3.5
29	.04	4.6	7.3	8.0	-----	20	14	3.2	.95	1.7	.05	2.5
30	.04	3.9	175	7.4	-----	14	11	5.9	.94	1.5	.02	1.4
31	7.6	-----	34	7.0	-----	130	-----	3.8	-----	1.3	0	-----
TOTAL	7.94	2,024.9	451.9	411.3	481.3	1,560.8	1,399.0	1,087.2	111.44	79.36	18.30	20.47
MEAN	.26	67.5	14.6	13.3	17.2	50.3	46.6	35.1	3.71	2.56	.59	.68
MAX	7.6	803	175	120	68	636	374	720	33	20	1.2	3.6
MIN	0	3.9	2.4	1.1	2.2	2.1	7.8	3.2	.94	.85	0	0
CFSM	.03	8.07	1.75	1.59	2.06	6.02	5.57	4.20	.44	.31	.07	.08
IN.	.04	9.01	2.01	1.83	2.14	6.95	6.23	4.84	.50	.35	.08	.09
AC-FT	16	4,020	896	816	955	3,100	2,770	2,160	221	157	36	41

CAL YR 1972 TOTAL 4,793.95 MEAN 13.1 MAX 803 MIN 0 CFSM 1.57 IN 21.33 AC-FT 4,510
WTR YR 1973 TOTAL 7,653.91 MEAN 21.0 MAX 803 MIN 0 CFSM 2.51 IN 34.06 AC-FT 15,180

PEAK DISCHARGE (BASE, 500 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-1	1745	5.49	3,440	3-10	1430	5.18	2,490
	1445	5.34	2,900	4-22	0445	4.32	1,360
			690	5-7	0430	5.77	

07065000 Round Spring at Round Spring, Mo.

LOCATION.--Lat 37°16'57", long 91°24'27", in SW¼NW¼ sec.20, T.30 N., R.4 W., Shannon County, inside spring basin at Round Spring, 1,500 ft (457 m) upstream from Current River on State Highway 19 in Round Spring State Park, and 10 mi (16.9 km) northwest of Eminence.

PERIOD OF RECORD.--October 1928 to September 1939, August 1965 to current year. Occasional discharge measurements in 1923-25, 1948, 1954, 1956, 1964-65.

GAGE.--Nonrecording gage. Datum of gage is 665.06 ft (202.710 m) above mean sea level.

AVERAGE DISCHARGE.--19 years (1928-39, 1965-73), 42.4 ft³/s (1.20 m³/s), 30,720 acre-ft/yr (37.9 hm³/yr).

EXTREMES.--Current year: Maximum daily discharge estimated, 350 ft³/s (9.9 m³/s) Apr. 22 (backwater from Current River); minimum daily estimated, 15 ft³/s (0.42 m³/s) Oct. 11-17.

Period of record: Maximum discharge observed, 520 ft³/s (14.7 m³/s) May 14, 1933, during period of backwater from Current River; maximum gage height, 15.4 ft (4.69 m), from floodmark, Apr. 17, 1939, backwater from Current River; minimum discharge observed, 10 ft³/s (0.28 m³/s) Dec. 10-12, 1937.

REMARKS.--Records poor. Records of chemical analyses 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	19	100	35	180	70	50	215	145	71	56	45	31
2	19	250	35	150	80	50	200	133	82	56	44	31
3	18	200	35	140	80	50	158	127	98	61	41	31
4	18	150	35	120	70	60	165	115	98	61	41	29
5	17	125	35	90	70	60	158	109	115	56	39	30
6	16	100	35	80	65	70	145	109	98	41	39	31
7	16	90	35	70	61	110	139	275	87	40	39	32
8	16	90	35	60	75	100	127	461	76	38	39	32
9	16	80	35	60	70	100	323	390	71	38	38	31
10	16	60	35	60	70	100	323	339	66	40	38	33
11	15	50	45	50	65	250	291	291	66	41	38	32
12	15	50	60	50	60	240	245	245	61	41	39	32
13	15	90	70	50	100	200	172	230	82	40	42	31
14	15	100	90	50	200	200	158	172	71	40	41	29
15	15	90	100	50	200	180	145	145	71	40	40	31
16	15	66	90	50	150	170	133	133	66	40	38	31
17	15	65	80	50	130	160	133	127	66	40	38	31
18	20	65	70	50	120	150	133	121	66	38	35	26
19	20	60	60	60	110	140	127	109	61	40	39	27
20	25	60	55	60	100	130	186	98	61	40	38	27
21	25	50	55	120	90	120	186	98	61	38	35	28
22	25	50	52	200	80	110	350	98	58	38	32	28
23	24	50	50	150	80	100	330	92	54	38	32	27
24	23	45	45	120	70	100	300	92	55	100	32	27
25	22	45	45	100	70	200	250	92	61	92	32	76
26	21	45	40	90	60	250	250	92	61	82	31	230
27	20	40	40	80	60	240	260	87	61	76	31	133
28	20	40	40	80	50	220	215	87	61	66	32	109
29	20	40	40	76	-----	200	200	76	61	56	31	66
30	20	40	70	70	-----	180	179	76	61	45	31	61
31	20	-----	200	60	-----	190	-----	71	-----	47	31	-----
TOTAL	581	2,386	1,747	2,676	2,506	4,480	6,196	4,835	2,127	1,565	1,141	1,393
MEAN	18.7	79.5	56.4	86.3	89.5	145	207	156	70.9	50.5	36.8	46.4
MAX	25	250	200	200	200	250	350	461	115	100	45	230
MIN	15	40	35	50	50	50	127	71	54	38	31	26
AC-FT	1,150	4,730	3,470	5,310	4,970	8,890	12,290	9,590	4,220	3,100	2,260	2,760

CAL YR 1972 TOTAL 16,245 MEAN 44.4 MAX 350 MIN 15 AC-FT 32,220
WTR YR 1973 TOTAL 31,633 MEAN 86.7 MAX 461 MIN 15 AC-FT 62,740

07065500 Alley Spring at Alley, Mo.

LOCATION.--Lat 37°09'14", long 91°26'29", in NW¼SE¼ sec.25, T.29 N., R.5 W., Shannon County, in Ozark National Scenic Riverways, 200 ft (61 m) below spring outlet, 0.6 mi (1.0 km) upstream from Jacks Fork, 5 mi (8.0 km) west of Eminence.

PERIOD OF RECORD.--October 1928 to September 1939, October 1965 to current year. Occasional discharge measurements 1922, 1925, 1939-41, 1954-55, 1964-65.

GAGE.--Nonrecording gage. Datum of gage is about 665 ft (202.692 m) above mean sea level. Prior to June 26, 1929, at site 230 ft (70 m) downstream and June 26, 1929, to Sept. 30, 1939, at site 200 ft (61 m) downstream; datum of both gages 664.35 ft (202.494 m) above mean sea level.

AVERAGE DISCHARGE.--19 years (1928-39, 1965-73), 127 ft³/s (3.60 m³/s), 92,270 acre-ft/yr (114 hm³/yr).

EXTREMES.--Current year: Maximum discharge observed, 565 ft³/s (16.0 m³/s) Apr. 22 (gage height, 3.40 ft or 1.036 m); minimum, 67 ft³/s (1.90 m³/s) Oct. 5-8; minimum gage height, 1.28 ft (0.390 m) Oct. 24, 27, 28, 29. Period of record: Maximum discharge observed, 1,060 ft³/s (30.0 m³/s) Mar. 11, 1935; maximum gage height, 7.00 ft (2.134 m) Feb. 10, 1966; minimum discharge, 54 ft³/s (1.53 m³/s) Oct. 15-18, 1934.

REMARKS.--Records fair. Occasional runoff from drainage area of 15.8 mi² (40.9 km²) included in records. Records of chemical analyses 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	71	215	120	342	232	148	390	328	215	160	129	101
2	69	452	116	308	272	143	340	315	215	160	129	101
3	68	385	116	272	258	143	315	290	215	160	125	100
4	68	278	105	278	232	148	315	278	290	160	125	98
5	67	260	105	248	228	157	290	240	365	155	125	96
6	67	220	109	238	208	167	305	290	340	155	125	101
7	67	208	105	218	218	240	295	522	315	155	125	105
8	67	201	105	208	258	240	275	590	290	155	125	105
9	70	191	120	193	258	228	450	565	252	155	125	105
10	72	174	120	179	248	240	440	535	215	160	125	101
11	69	167	112	169	232	428	400	502	196	165	120	100
12	72	155	150	169	208	415	365	465	191	160	120	98
13	72	328	186	165	268	390	340	428	189	155	120	98
14	72	390	230	160	308	372	315	390	181	155	116	93
15	71	365	220	155	308	352	290	340	179	155	116	91
16	71	345	201	153	282	340	290	302	178	155	112	91
17	71	300	181	136	248	328	290	278	178	155	109	88
18	72	270	169	136	232	290	290	270	177	155	109	88
19	72	240	162	160	220	290	300	265	179	155	109	88
20	73	215	155	160	208	265	385	265	179	145	109	88
21	72	191	155	308	198	240	440	240	175	141	109	86
22	72	181	150	382	189	225	565	240	172	136	109	85
23	71	172	141	358	189	215	540	252	172	136	105	84
24	69	165	136	300	184	215	490	260	169	153	105	84
25	69	160	132	270	179	352	465	265	169	186	105	340
26	69	153	118	245	174	415	440	260	169	315	105	302
27	69	143	114	232	174	340	415	260	169	245	105	250
28	69	134	110	232	165	325	390	240	160	177	103	230
29	69	120	114	232	-----	300	415	230	160	162	103	215
30	69	120	332	222	-----	290	340	228	160	148	103	205
31	69	-----	382	208	-----	302	-----	215	-----	143	101	-----
TOTAL	2,168	6,898	4,771	7,036	6,378	8,543	11,180	10,148	6,214	5,072	3,551	3,817
MEAN	69.9	230	154	227	228	276	373	327	207	164	115	127
MAX	73	452	382	382	308	428	565	590	365	315	129	340
MIN	67	120	105	136	165	143	275	215	160	136	101	84
AC-FT	4,300	13,680	9,460	13,960	12,650	16,950	22,180	20,130	12,330	10,060	7,040	7,570

CAL YR 1972 TOTAL 43,605 MEAN 119 MAX 502 MIN 65 AC-FT 86,490
WTR YR 1973 TOTAL 75,776 MEAN 208 MAX 590 MIN 67 AC-FT 150,300

07066000 Jacks Fork at Eminence, Mo.

LOCATION.--Lat 37°09'18", long 91°21'31", in SW¼NW¼ sec.26, T.29 N., R.4 W., Shannon County, on left bank 50 ft (15 m) upstream from bridge on State Highway 19, at Eminence, 1.5 mi (2.4 km) downstream from Mahans Creek, and 8.0 mi (12.9 km) upstream from mouth.

DRAINAGE AREA.--398 mi² (1,031 km²).

PERIOD OF RECORD.--October 1921 to current year. Monthly discharge only for October 1921, published in WSP 1311.

GAGE.--Water-stage recorder. Datum of gage is 617.87 ft (188.327 m) above mean sea level. Prior to Jan. 27, 1934, nonrecording gage at site 1,350 ft (411 m) upstream at datum 2.11 ft (0.643 m) higher. Jan. 27, 1934, to Jan. 10, 1935, nonrecording gage at site 75 ft (22.239 m) downstream at datum 0.04 ft (0.012 m) lower. Jan. 11, 1935, to July 9, 1964, nonrecording gage at site 50 ft (15 m) downstream at present datum.

AVERAGE DISCHARGE.--52 years, 434 ft³/s (12.3 m³/s), 14.81 in/yr (376 mm/yr), 314,400 acre-ft/yr (388 hm³/s).

EXTREMES.--Current year: Maximum discharge, 18,100 ft³/s (513 m³/s) May 7 (gage height, 11.82 ft or 3.602 m); minimum, 116 ft³/s (3.29 m³/s) Oct. 9, 12 (gage height, 1.05 ft or 0.320 m).
Period of record: Maximum discharge observed, 40,000 ft³/s (1,130 m³/s) June 13, 1928 (gage height, about 17.2 ft or 5.24 m, present site and datum), from rating curve extended above 21,000 ft³/s (595 m³/s); minimum, 0.64 ft³/s (0.018 m³/s) Aug. 28, 1936; minimum gage height, 0.64 ft (0.195 m) Sept. 18, 1971.
Floods in 1895 and March 1904 reached a stage of about 25 ft (7.6 m) present site and datum, from information by local residents.

REMARKS.--Records good except periods of no gage-height record, which are fair.

REVISIONS (WATER YEARS).--WSP 787: 1928(M), 1934. WSP 877: 1938. WSP 927: Drainage area. WSP 1281: 1929.

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	149	2,070	361	2,000	1,300	353	1,970	950	520	300	258	177
2	142	7,390	345	1,400	1,500	359	1,490	900	500	294	248	174
3	135	1,710	327	1,100	1,300	364	1,290	850	1,000	287	241	184
4	132	1,100	313	900	1,000	374	1,350	800	1,800	280	236	210
5	130	789	310	800	900	409	1,360	800	2,000	279	229	231
6	126	644	324	700	800	525	1,220	850	1,400	275	225	226
7	124	875	330	600	800	828	1,140	10,000	920	270	222	219
8	124	971	361	550	933	982	1,070	5,240	772	268	218	240
9	121	745	392	500	1,030	879	2,770	3,000	663	270	219	245
10	120	605	410	460	866	1,850	2,690	1,840	589	274	221	248
11	118	509	388	430	756	8,330	1,770	1,590	556	277	246	242
12	120	444	461	420	690	2,460	1,450	1,450	522	276	247	225
13	122	2,260	1,210	400	900	1,590	1,250	1,330	537	266	240	214
14	133	1,770	1,170	390	1,350	1,640	1,110	1,180	635	259	226	207
15	137	1,350	914	370	1,110	1,790	1,010	1,040	610	270	218	201
16	134	1,060	759	360	900	1,420	1,130	968	517	257	216	198
17	134	818	595	350	765	1,210	1,260	902	471	254	209	196
18	149	664	510	360	686	1,050	1,210	830	436	252	208	193
19	172	597	483	380	635	942	1,290	776	412	255	206	190
20	207	537	461	400	581	882	1,830	732	396	249	203	187
21	190	488	441	1,000	529	795	1,730	676	375	245	197	184
22	179	462	416	2,500	493	717	5,120	634	358	243	195	182
23	171	440	392	2,000	473	689	10,000	771	346	249	193	180
24	168	422	371	1,700	449	715	5,000	1,190	338	285	190	180
25	165	424	361	1,400	421	2,110	2,000	1,090	333	344	189	180
26	161	445	333	1,300	399	2,560	1,700	862	326	434	187	200
27	160	461	316	1,200	378	1,650	1,400	784	320	376	184	666
28	158	437	336	1,100	366	1,330	1,200	714	313	328	182	430
29	155	395	378	1,000	-----	1,180	1,100	630	309	297	180	357
30	154	367	1,110	1,000	-----	1,090	1,000	580	305	277	179	358
31	239	-----	3,010	1,000	-----	1,380	-----	550	-----	267	180	-----
TOTAL	4,629	31,249	17,888	28,070	22,310	42,453	59,910	44,509	18,579	8,757	6,592	7,124
MEAN	149	1,042	577	905	797	1,369	1,997	1,436	619	282	213	237
MAX	239	7,390	3,010	2,500	1,500	8,330	10,000	10,000	2,000	434	258	666
MIN	118	367	310	350	366	353	1,000	550	305	243	179	174
CFSM	.37	2.62	1.45	2.27	2.00	3.44	5.02	3.61	1.56	.71	.54	.60
IN.	.43	2.92	1.67	2.62	2.09	3.97	5.60	4.16	1.74	.82	.62	.67
AC-FT	9,180	61,980	35,480	55,680	44,250	84,210	118,800	88,280	36,850	17,370	13,080	14,130
CAL YR 1972	TOTAL 142,451	MEAN 389	MAX 7,390	MIN 101	CFSM .98	IN 13.31	AC-FT 282,600					
WTR YR 1973	TOTAL 292,070	MEAN 800	MAX 10,000	MIN 118	CFSM 2.01	IN 27.30	AC-FT 579,300					

PEAK DISCHARGE (BASE, 3,900 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-2	1145	11.64	16,400	4-9	2045	6.09	4,500
11-13	1945	7.05	5,580	4-22	2130	9.60	11,700
5-11	0815	11.22	15,600	5-7	2215	11.82	18,100

07066500 Current River near Eminence, Mo.

LOCATION.--Lat 37°11'02", long 91°15'30", in SW¼NE¼ sec.15, T.29 N., R.3 W., Shannon County, on right bank 1 mi (1.6 km) downstream from Jacks Fork, 8 mi (12.9 km) northeast of Eminence, and at mile 123.0 (197.9 km).

DRAINAGE AREA.--1,272 mi² (3,294 km²).

PERIOD OF RECORD.--August 1921 to current year.

GAGE.--Water-stage recorder. Datum of gage is 568.82 ft (173.376 m) above mean sea level. Prior to Oct. 20, 1921, nonrecording gage at site 1,200 ft (366 m) upstream at different datum. Oct. 20, 1921, to Dec. 8, 1934, nonrecording gage at site 30 ft (9 m) upstream at datum 0.06 ft (0.018 m) higher than present datum.

AVERAGE DISCHARGE.--52 years, 1,422 ft³/s (40.27 m³/s), 15.19 in/yr (586 mm/yr), 1,030,000 acre-ft/yr (1,270 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 38,300 ft³/s (1,085 m³/s) Nov. 2 (gage height, 16.10 ft or 4.907 m); minimum, 449 ft³/s (12.7 m³/s) Oct. 11, 12 (gage height, 0.30 ft or 0.091 m).
Period of record: Maximum discharge, 88,500 ft³/s (2,506 m³/s) Feb. 10, 1966 (gage height, 29.69 ft or 9.050 m) from rating curve extended above 50,000 ft³/s (1,420 m³/s); minimum, 324 ft³/s (9.18 m³/s), Oct. 7, 8, 1956; minimum gage height, 0.22 ft (0.067 m) Sept. 15, 16, 1971.
Maximum stage known, 37.5 ft (11.43 m) March 1904, present datum, from floodmark.

REMARKS.--Records good.

REVISIONS.--WSP 927: 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	761	4,780	1,320	4,480	2,130	1,320	5,270	3,260	1,870	1,200	1,260	808
2	666	23,900	1,280	3,340	2,530	1,340	4,480	3,070	1,860	1,180	1,180	794
3	601	6,870	1,230	3,040	2,420	1,340	3,930	2,800	3,130	1,150	1,120	852
4	563	3,880	1,180	3,220	2,180	1,360	4,370	2,610	4,240	1,130	1,070	957
5	538	2,900	1,160	2,910	2,030	1,400	4,280	2,480	4,560	1,110	1,040	960
6	521	2,390	1,260	2,550	1,890	1,660	3,840	2,440	3,460	1,090	1,010	940
7	502	2,670	1,240	2,270	1,940	2,710	3,550	8,380	2,810	1,070	986	967
8	490	2,540	1,350	2,080	2,530	2,950	3,330	17,900	2,440	1,060	973	1,020
9	481	2,150	1,400	1,900	2,710	2,670	7,400	8,060	2,200	1,090	974	1,040
10	470	1,880	1,370	1,760	2,450	4,740	7,830	5,800	2,040	1,120	1,030	1,240
11	455	1,680	1,300	1,650	2,220	17,000	5,330	4,880	1,930	1,100	1,080	1,140
12	457	1,520	1,560	1,560	2,090	7,550	4,430	4,280	1,890	1,070	1,070	1,050
13	460	7,480	2,970	1,480	2,550	5,220	3,800	3,750	1,970	1,040	1,180	960
14	515	13,000	3,100	1,430	3,540	5,240	3,330	3,350	2,140	1,010	1,110	921
15	546	5,060	2,620	1,390	3,260	5,180	3,030	3,030	2,010	1,070	1,070	881
16	527	3,690	2,230	1,330	2,760	4,240	3,420	2,810	1,840	1,030	1,020	849
17	512	2,960	1,920	1,300	2,410	3,610	3,460	2,650	1,750	993	972	831
18	567	2,490	1,750	1,350	2,210	3,150	3,320	2,510	1,660	975	936	807
19	633	2,250	1,690	1,500	2,080	2,820	3,630	2,410	1,610	975	912	793
20	673	2,020	1,670	1,630	1,950	5,930	4,820	2,300	1,560	956	895	790
21	639	1,830	1,640	2,970	1,820	4,450	4,710	2,180	1,490	942	879	788
22	627	1,720	1,580	5,680	1,710	3,400	10,100	2,130	1,440	932	863	767
23	627	1,630	1,510	4,500	1,660	3,060	16,900	2,480	1,390	1,630	853	755
24	612	1,560	1,440	3,270	1,600	2,930	8,850	3,260	1,370	10,400	846	769
25	585	1,570	1,360	2,900	1,520	4,650	6,680	3,030	1,340	3,390	833	987
26	567	1,590	1,280	2,550	1,460	6,390	5,970	2,600	1,330	2,340	821	2,000
27	561	1,610	1,230	2,320	1,400	4,820	5,010	2,500	1,310	1,900	807	1,670
28	552	1,550	1,200	2,230	1,340	3,990	4,310	2,340	1,270	1,630	797	1,310
29	538	1,450	1,490	2,070	-----	3,590	3,850	2,150	1,240	1,450	789	1,170
30	535	1,370	4,600	1,940	-----	3,260	3,520	2,050	1,220	1,330	791	1,110
31	784	-----	7,210	1,870	-----	4,060	-----	1,940	-----	1,320	809	-----
TOTAL	17,565	111,990	58,140	74,470	60,390	126,030	156,750	115,430	60,370	48,683	29,976	29,926
MEAN	567	3,733	1,875	2,402	2,157	4,065	5,225	3,724	2,012	1,570	967	998
MAX	784	23,900	7,210	5,680	3,540	17,000	16,900	17,900	4,560	10,400	1,260	2,000
MIN	455	1,370	1,160	1,300	1,340	1,320	3,030	1,940	1,220	932	789	755
CFSM	.45	2.93	1.47	1.89	1.70	3.20	4.11	2.93	1.58	1.23	.76	.78
IN.	.51	3.28	1.70	2.18	1.77	3.69	4.58	3.38	1.77	1.42	.88	.88
AC-FT	34,840	222,100	115,300	147,700	119,800	250,000	310,900	229,000	119,700	96,560	59,460	59,360
CAL YR 1972	TOTAL 505,998	MEAN 1,383	MAX 23,900	MIN 455	CFSM 1.09	IN 14.80	AC-FT 1,004,000					
WTR YR 1973	TOTAL 889,720	MEAN 2,438	MAX 23,900	MIN 455	CFSM 1.92	IN 26.02	AC-FT 1,765,000					

PEAK DISCHARGE (BASE, 12,000 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-2	1330	16.10	38,300	4-23	0330	13.38	22,100
11-14	0500	13.41	22,100	5-8	0400	15.05	27,500
3-11	1345	14.35	24,200	7-24	1345	14.09	24,200

07067000 Current River at Van Buren, Mo.

LOCATION.--Lat 36°59'29", long 91°00'53", in NE¼NW¼ sec.25, T.27 N., R.1 W., Carter County, near right bank on downstream side of pier of bridge on U.S. Highway 60 in Van Buren, 0.4 mi (0.6 km) downstream from Pike Creek, 4.7 mi (7.6 km) upstream from Big Spring, and at mile 90.4 (145.5 km).

DRAINAGE AREA.--1,667 mi² (4,318 km²).

PERIOD OF RECORD.--October 1912 to current year. Prior to July 1921 monthly discharge only, published in WSP 1311.

GAGE.--Water-stage recorder. Datum of gage is 442.78 ft (134.959 m) above mean sea level. Prior to Sept. 1, 1926, nonrecording gage at site 100 ft (30 m) downstream at different datum. Sept. 1, 1926, to Oct. 19, 1934, nonrecording gage and Oct. 20, 1934 to Sept. 30, 1939, water-stage recorder, at present site at datum 3.00 ft (0.914 m) higher, set to read same as gage 100 ft (30 m) downstream.

AVERAGE DISCHARGE.--61 years, 1,835 ft³/s (51.97 m³/s), 15.19 in/yr (386 mm/yr), 1,329,000 acre-ft/yr (1,639 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 30,300 ft³/s (858 m³/s) Nov. 3 (gage height, 15.16 ft or 4.621 m); minimum, 610 ft³/s (17.3 m³/s) Oct. 12; minimum gage height, 1.63 ft (0.497 m) Oct. 12.

Period of record: Maximum discharge, 125,000 ft³/s (3,540 m³/s) Aug. 21, 1915 (gage height, 25.9 ft or 7.89 m, present datum), from rating curve extended above 62,000 ft³/s (1,760 m³/s); minimum, 473 ft³/s (13.4 m³/s) Oct. 7, 8, 1956; minimum gage height, 1.55 ft (0.472 m) Sept. 16, 1971.

Maximum stage known, 29.0 ft (8.84 m) Mar. 26, 1904, present datum, from floodmarks.

REMARKS.--Records good.

REVISIONS (WATER YEARS).--WSP 877: 1938. WSP 897: 1939. WSP 927: Drainage area. WSP 1281: 1929.

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	964	2,910	1,680	6,130	2,820	1,830	6,350	4,490	2,480	1,630	1,760	1,070
2	872	23,900	1,610	4,520	3,230	1,830	5,730	4,390	2,440	1,610	1,650	1,050
3	790	18,200	1,550	3,930	3,330	1,860	4,880	4,070	4,180	1,580	1,550	1,160
4	739	5,390	1,490	4,090	3,080	1,830	5,120	3,790	4,650	1,550	1,480	1,210
5	703	3,880	1,450	3,860	2,870	1,880	5,350	3,590	5,560	1,520	1,430	1,250
6	683	3,160	1,530	3,430	2,700	2,110	4,840	3,490	4,740	1,500	1,390	1,240
7	668	3,610	1,540	3,090	2,580	3,690	4,490	9,460	3,910	1,480	1,360	1,250
8	652	3,440	1,700	2,820	3,440	4,090	4,310	22,400	3,400	1,470	1,330	1,450
9	640	2,970	1,980	2,580	3,710	3,780	7,610	12,600	3,070	1,610	1,330	1,400
10	628	2,550	1,930	2,380	3,480	5,800	10,000	7,700	2,840	1,640	1,380	1,470
11	622	2,250	1,820	2,220	3,200	16,100	6,960	6,350	2,660	1,620	1,440	1,530
12	615	2,000	1,890	2,100	2,980	15,000	5,610	5,580	2,590	1,520	1,440	1,400
13	622	6,150	3,120	1,980	3,160	6,870	4,880	4,950	2,680	1,470	1,540	1,300
14	653	16,000	4,000	1,900	4,020	6,330	4,360	4,500	2,950	1,430	1,500	1,240
15	698	7,410	3,470	1,810	4,230	6,530	4,020	4,140	2,750	1,460	1,460	1,190
16	700	4,790	3,000	1,740	3,750	5,530	4,360	3,860	2,530	1,480	1,410	1,160
17	683	3,900	2,570	1,680	3,340	4,770	4,530	3,630	2,380	1,410	1,340	1,130
18	774	3,310	2,310	1,670	3,060	4,260	4,470	3,430	2,260	1,390	1,290	1,110
19	781	2,990	2,180	1,810	2,890	3,830	4,820	3,290	2,160	1,370	1,240	1,100
20	825	2,710	2,110	2,000	2,700	4,390	6,290	3,140	2,090	1,370	1,210	1,100
21	836	2,470	1,960	3,140	2,540	6,530	6,200	2,980	2,010	1,340	1,180	1,100
22	813	2,300	1,980	6,350	2,390	4,420	12,400	2,880	1,940	1,330	1,160	1,100
23	800	2,160	1,880	6,250	2,300	3,880	22,700	3,020	1,870	1,430	1,140	1,080
24	795	2,050	1,790	4,840	2,220	3,690	13,800	3,840	1,830	6,780	1,130	1,100
25	771	2,030	1,680	4,080	2,140	4,280	8,740	3,950	1,800	9,310	1,120	1,190
26	746	2,030	1,580	3,580	2,040	6,920	7,590	3,420	1,770	3,830	1,100	1,830
27	747	2,040	1,510	3,300	1,960	5,920	6,500	3,490	1,750	2,840	1,080	2,380
28	743	1,990	1,460	3,120	1,880	4,890	5,670	3,190	1,720	2,380	1,070	1,930
29	726	1,870	1,550	2,940	-----	4,440	5,100	2,920	1,670	2,090	1,050	1,680
30	722	1,750	4,800	2,770	-----	4,100	4,740	2,730	1,660	1,890	1,050	1,550
31	871	-----	8,190	2,650	-----	5,100	-----	2,580	-----	1,770	1,060	-----
TOTAL	22,882	142,210	71,310	98,760	82,040	156,480	202,420	153,850	80,340	65,100	40,670	39,750
MEAN	738	4,740	2,300	3,186	2,930	5,048	6,747	4,963	2,678	2,100	1,312	1,325
MAX	964	23,900	8,190	6,350	4,230	16,100	22,700	22,400	5,560	9,310	1,760	2,380
MIN	615	1,750	1,450	1,670	1,880	1,830	4,020	2,580	1,660	1,330	1,050	1,050
CFSM	.44	2.84	1.38	1.91	1.76	3.03	4.05	2.98	1.61	1.26	.79	.79
IN.	.51	3.17	1.59	2.20	1.83	3.49	4.52	3.43	1.79	1.45	.91	.89
AC-FT	45,390	282,100	141,400	195,900	162,700	310,400	401,500	305,200	159,400	129,100	80,670	78,840
CAL YR 1972	TOTAL	656,503	MEAN	1,794	MAX	24,500	MIN	608	CFSM	1.08	IN	14.65
WTR YR 1973	TOTAL	1,155,812	MEAN	3,167	MAX	23,900	MIN	615	CFSM	1.90	IN	25.79
AC-FT												1,302,000
AC-FT												2,293,000

PEAK DISCHARGE (BASE, 14,000 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-3	0130	15.16	30,300	4-23	1415	14.14	26,400
11-14	1745	12.61	20,100	5-8	1615	14.42	27,700
3-12	0245	13.58	24,200	7-25	0230	12.01	19,200

07067500 Big Spring near Van Buren, Mo.

LOCATION.--Lat 36°57'05", long 90°59'36", in SW¼NE¼ sec.6, T.26 N., R.1 E., Carter County, on right bank 400 ft (122 m) downstream from spring outlet, 0.4 mi (0.6 km) upstream from Current River, and 3.5 mi (5.6 km) southeast of Van Buren.

PERIOD OF RECORD.--October 1921 to current year. Prior to Oct. 1, 1923, published as "near Chicopee". Monthly discharge only for some periods, published in WSP 1311.

GAGE.--Water-stage recorder. Datum of gage is 429.08 ft (130.784 m) above mean sea level. Prior to Feb. 19, 1971, nonrecording gage, prior to Oct. 1, 1934 at datum 1.0 ft (0.3 m) higher.

AVERAGE DISCHARGE.--52 years, 430 ft³/s (12.2 m³/s), 311,500 acre-ft/yr (384 hm³/yr).

EXTREMES.--Current year: Maximum daily discharge, 1,100 ft³/s (31.2 m³/s) Jan. 1, Apr. 22, 23, during period of backwater from Current River; minimum, 283 ft³/s (8.01 m³/s) Oct. 30; minimum gage height, 0.71 ft (0.216 m) Oct. 30, 31.

Period of record: Maximum discharge, 1,300 ft³/s (36.8 m³/s), estimated, sometime in June 1928, during period of backwater from Current River; minimum, 236 ft³/s (6.68 m³/s) Oct. 6, 1956.

REMARKS.--Records good except those for periods of backwater from Current River, which are poor. Records of chemical analyses are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1311: 1922-23, 1928(M), 1929.

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	302	397	467	1,100	608	462	800	850	648	559	506	461
2	300	900	464	900	653	455	850	890	637	559	501	458
3	298	1,000	455	850	665	448	900	950	750	556	500	458
4	297	900	449	900	633	447	850	875	850	556	498	457
5	297	881	442	850	603	441	850	832	900	556	496	457
6	297	703	433	828	578	435	850	806	875	552	496	455
7	297	858	428	751	562	612	900	850	945	552	493	454
8	295	818	457	709	687	835	950	950	818	552	493	460
9	293	703	524	666	743	793	1,000	950	757	549	493	468
10	292	621	513	630	719	734	950	900	718	549	492	467
11	292	569	495	609	669	872	900	900	693	549	493	462
12	292	537	508	588	634	1,000	850	900	681	549	491	457
13	292	550	676	575	641	1,000	825	850	693	546	490	454
14	292	850	845	564	777	950	800	850	736	542	493	451
15	290	750	719	549	849	900	775	850	699	542	490	448
16	290	700	625	508	747	900	800	850	676	542	490	445
17	289	675	561	499	671	875	825	835	661	542	490	445
18	291	663	534	494	627	850	850	801	652	539	490	441
19	297	678	526	495	603	838	875	768	639	536	488	441
20	297	631	526	494	575	810	925	739	636	536	488	438
21	295	594	514	666	554	800	1,000	701	630	536	486	435
22	295	565	502	700	537	800	1,100	691	626	536	483	432
23	293	547	489	800	526	772	1,100	695	621	536	482	432
24	290	531	476	900	519	703	1,000	823	621	587	480	429
25	290	526	461	859	505	800	950	875	621	600	478	429
26	288	520	451	763	495	750	950	763	611	600	476	429
27	288	511	446	706	481	725	925	832	601	568	473	425
28	288	500	440	668	470	725	925	779	588	537	470	425
29	285	485	438	641	-----	725	900	719	576	519	470	422
30	283	479	700	611	-----	700	900	688	563	511	466	422
31	295	-----	1,000	592	-----	750	-----	667	-----	507	464	-----
TOTAL	9,080	19,642	16,564	21,465	17,331	22,907	27,075	25,429	20,722	17,000	15,099	13,357
MEAN	293	655	534	692	619	739	903	820	691	548	487	445
MAX	302	1,000	1,000	1,100	849	1,000	1,100	950	945	600	506	468
MIN	283	397	428	494	470	435	775	667	563	507	464	422
AC-FT	18,010	38,960	32,850	42,580	34,380	45,440	53,700	50,440	41,100	33,720	29,950	26,490

CAL YR 1972 TOTAL 154,985 MEAN 423 MAX 1,000 MIN 283 AC-FT 307,400

WTR YR 1973 TOTAL 225,671 MEAN 618 MAX 1,100 MIN 283 AC-FT 447,600

07068000 Current River at Doniphan, Mo.

LOCATION.--Lat 36°37'19", long 90°50'51", in NW¼NW¼ sec.27, T.23 N., R.2 E., Ripley County, on right bank 0.5 mi (0.8 km) upstream from U.S. Highway 160, 1 mi (1.6 km) west of Doniphan, 2.5 mi (4.0 km) upstream from Brian Creek, and at mile 51.3 (82.5 km).

DRAINAGE AREA.--2,038 mi² (5,278 km²).

PERIOD OF RECORD.--October 1918 to current year. Prior to July 1921 monthly discharge only, published in WSP 1311.

GAGE.--Water-stage recorder. Datum of gage is 321.21 ft (97.905 m), above mean sea level. July 3, 1936 to Sept. 30, 1971 datum is 1.00 ft (0.305 m) higher. Prior to July 3, 1936, nonrecording gages at several sites 0.5 mi (0.8 km) downstream at various datums.

AVERAGE DISCHARGE.--55 years, 2,675 ft³/s (75.8 m³/s), 17.81 in/yr (452 mm/yr), 1,938,000 acre-ft/yr (2,390 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 26,600 ft³/s (753 m³/s), Apr. 24 (gage height, 13.77 ft or 4.197 m); minimum, 1,110 ft³/s (31.4 m³/s) Oct. 12, 13, 14 (gage height, 0.97 ft or 0.296 m).
Period of record: Maximum discharge, 94,400 ft³/s (2,670 m³/s) Mar. 12, 1935 (gage height, 23.0 ft or 7.01 m, present site and datum), from rating curve extended above 60,000 ft³/s (1,700 m³/s); minimum, 852 ft³/s (24.1 m³/s) Oct. 8-19, 1956.
Maximum stage known, 25.9 ft (7.89 m) in March 1904, from floodmarks, present site and datum (discharge, 130,000 ft³/s or 3,680 m³/s) from rating curve extended above 60,000 ft³/s (1,700 m³/s).

REMARKS.--Records good. Records of water temperature are published in Part 2 of yearly report.

REVISIONS (WATER YEARS).--WSP 877: 1937-38(M). WSP 927: 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	1,590	5,770	2,680	9,070	3,830	2,650	8,110	6,990	4,210	2,340	2,450	1,790
2	1,520	9,950	2,590	6,660	4,080	2,650	8,110	7,740	4,020	2,330	2,390	1,790
3	1,420	21,800	2,520	5,650	4,300	2,630	7,080	6,270	4,870	2,310	2,310	1,800
4	1,340	14,600	2,440	5,470	4,160	2,620	6,690	5,760	5,830	2,290	2,250	1,890
5	1,280	6,310	2,350	5,330	3,950	2,620	6,900	5,430	6,520	2,270	2,190	1,910
6	1,240	5,090	2,330	4,940	3,760	2,880	6,640	5,260	6,440	2,250	2,150	1,920
7	1,220	5,780	2,360	4,540	3,640	5,980	6,200	8,270	5,480	2,220	2,120	1,930
8	1,180	5,480	3,100	4,200	4,020	5,690	5,950	13,600	4,820	2,210	2,090	2,040
9	1,160	4,810	3,410	3,920	4,560	5,670	6,830	20,200	4,370	2,290	2,070	2,080
10	1,140	4,250	3,260	3,690	4,580	8,240	10,500	11,600	4,040	2,420	2,090	2,040
11	1,120	3,800	3,080	3,480	4,300	17,800	9,840	8,640	3,820	2,370	2,120	2,090
12	1,110	3,460	3,210	3,300	4,060	18,200	7,700	7,720	3,670	2,310	2,170	2,050
13	1,110	4,500	4,140	3,150	3,990	13,100	6,780	6,960	3,570	2,260	2,210	1,950
14	1,150	10,500	5,010	3,050	4,380	9,070	6,120	6,370	3,840	2,220	2,240	1,880
15	1,180	15,000	4,920	2,960	5,040	9,140	5,650	5,930	3,740	2,220	2,160	1,840
16	1,200	7,540	4,370	2,860	4,840	8,330	5,790	5,590	3,520	2,260	2,160	1,790
17	1,200	5,810	3,910	2,780	4,440	7,340	6,180	5,290	3,310	2,230	2,110	1,770
18	1,390	5,000	3,570	2,760	4,140	6,650	6,190	5,060	3,170	2,200	2,050	1,740
19	1,530	4,520	3,410	2,820	3,800	6,170	7,810	4,880	3,040	2,190	2,000	1,730
20	1,470	4,180	3,330	2,930	3,640	5,960	12,500	4,710	2,940	2,190	1,970	1,720
21	1,470	3,870	3,280	4,310	3,470	7,760	9,990	4,550	2,830	2,160	1,940	1,710
22	1,480	3,640	3,170	6,880	3,300	6,910	13,900	4,480	2,730	2,150	1,910	1,710
23	1,460	3,440	3,050	8,020	3,190	6,030	24,000	4,440	2,640	2,150	1,890	1,680
24	1,420	3,280	2,920	6,800	3,100	5,680	25,100	4,900	2,560	2,760	1,880	1,670
25	1,390	3,200	2,800	5,650	3,000	5,710	16,600	5,360	2,510	8,780	1,870	1,700
26	1,350	3,150	2,680	5,000	2,900	7,110	11,200	5,060	2,450	5,230	1,850	1,790
27	1,360	3,100	2,570	4,620	2,820	8,080	9,620	11,800	2,440	3,670	1,830	2,430
28	1,340	3,060	2,490	4,360	2,720	6,930	8,330	6,060	2,420	3,150	1,810	2,510
29	1,320	2,950	2,460	4,140	-----	6,290	7,480	5,130	2,390	2,850	1,810	2,220
30	1,310	2,810	4,070	3,930	-----	5,870	6,890	4,690	2,360	2,650	1,800	2,040
31	2,330	-----	8,890	3,760	-----	7,320	-----	4,420	-----	2,520	1,780	-----
TOTAL	41,780	180,650	104,370	141,030	108,010	217,080	280,680	213,160	110,550	83,450	63,670	57,210
MEAN	1,348	6,022	3,367	4,549	3,858	7,003	9,356	6,876	3,685	2,692	2,054	1,907
MAX	2,330	21,800	8,890	9,070	5,040	18,200	25,100	20,200	6,520	8,780	2,450	2,510
MIN	1,110	2,810	2,330	2,760	2,720	2,620	5,650	4,420	2,360	2,150	1,780	1,670
CFSM	.66	2.95	1.65	2.23	1.89	3.44	4.59	3.37	1.81	1.32	1.01	.94
IN.	.76	3.30	1.91	2.57	1.97	3.96	5.12	3.89	2.02	1.52	1.16	1.04
AC-FT	82,870	358,300	207,000	279,700	214,200	430,600	556,700	422,800	219,300	165,500	126,300	113,500
CAL YR 1972	TOTAL 912,950	MEAN 2,494	MAX 23,000	MIN 1,090	CFSM 1.22	IN 16.66	AC-FT 1,811,000					
WTR YR 1973	TOTAL 1,601,640	MEAN 4,388	MAX 25,100	MIN 1,110	CFSM 2.15	IN 29.24	AC-FT 3,177,000					

PEAK DISCHARGE (BASE, 14,000 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-3	2115	13.30	25,100	4-24	1430	13.77	26,600
11-15	1300	10.33	17,200	5-9	1245	12.55	21,300
3-11	0745	11.22	19,400	5-27	0515	9.94	15,400
3-12	2200	11.71	20,700				

07070500 Eleven Point River near Thomasville, Mo.

LOCATION.--Lat 36°47'05", long 91°29'31", NE¼NE¼ sec.3, T.24 N., R.5 W., Oregon County, on left bank attached to bluff at end of Grandpappy Ridge, 500 ft (152 m) upstream from Posy Spring, 1.5 mi (2.4 km) downstream from Barren Fork, 2.5 mi (4.0 km) east of Thomasville, and at mile 86.5 (139 km).

DRAINAGE AREA.--361 mi² (935 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 610 ft (185.9 m) from topographic map.

AVERAGE DISCHARGE.--23 years, 91.8 ft³/s (2.60 m³/s), 3.45 in/yr (88 mm/yr), 66,510 acre-ft/yr (82 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 6,490 ft³/s (184 m³/s) Apr. 22 (gage height, 13.56 ft or 4.133 m); minimum, 6.5 ft³/s (0.184 m³/s) Oct. 9-13 (gage height, 1.42 ft or 0.433 m).
Period of record: Maximum discharge, 31,000 ft³/s (878 m³/s) Feb. 10, 1966 (gage height, 21.65 ft or 6.599 m); from rating curve extended above 2,400 ft³/s (68.0 m³/s) on basis of slope-area measurements at gage heights 13.8 ft (4.21 m) and 17.95 ft (5.471 m); minimum, 2.7 ft³/s (0.076 m³/s) Sept. 13, 14, 15, 16, 1954; minimum gage height, 1.13 ft (0.344 m) Feb. 4, 5, 1964.

REMARKS.--Records poor.

REVISIONS (WATER YEARS)--WSP 1341: 1951-52(P).

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	9.6	495	50	335	235	123	493	580	299	166	90	46
2	8.8	1,150	45	261	239	130	409	640	287	160	88	44
3	7.8	336	40	278	228	123	381	580	769	156	86	52
4	7.8	193	37	255	210	120	416	540	730	152	94	61
5	7.4	140	36	233	198	121	378	520	540	150	88	83
6	7.0	124	33	210	181	145	339	500	460	143	84	79
7	7.0	363	29	194	213	216	329	2,500	420	140	82	82
8	7.0	280	101	178	324	210	319	980	390	137	80	86
9	7.0	210	118	159	312	217	1,330	780	360	134	78	74
10	6.5	174	99	143	279	927	758	680	340	135	120	72
11	6.5	135	85	133	251	1,570	533	630	329	138	190	62
12	6.5	111	135	121	240	663	448	590	323	126	110	56
13	7.0	717	164	113	315	474	376	540	307	121	92	51
14	8.8	731	175	107	333	548	336	500	315	120	81	48
15	8.3	354	170	102	299	489	312	474	302	119	75	44
16	7.4	266	142	95	263	414	437	457	280	122	81	41
17	7.0	216	119	91	238	355	398	429	267	114	86	39
18	14	183	108	102	226	314	402	404	257	112	76	38
19	12	171	111	104	212	291	765	388	246	121	69	36
20	10	141	102	101	200	274	937	364	234	108	66	36
21	9.6	125	94	436	189	245	632	342	222	104	62	35
22	9.6	113	84	604	179	224	3,340	344	212	102	60	33
23	9.2	101	76	410	173	213	4,390	378	204	98	58	32
24	8.3	86	67	321	163	237	1,830	433	199	95	56	40
25	7.8	95	58	272	155	732	1,600	383	195	109	53	39
26	7.8	89	52	247	145	689	1,400	347	191	100	51	38
27	9.2	81	46	227	136	501	1,030	670	187	96	48	46
28	9.2	70	42	210	130	415	807	482	178	92	47	51
29	8.3	60	69	188	-----	375	672	386	176	90	48	45
30	9.2	55	453	177	-----	331	601	341	173	100	59	39
31	38	-----	511	170	-----	520	-----	316	-----	94	51	-----
TOTAL	289.6	7,365	3,451	6,577	6,266	12,206	26,398	17,498	9,392	3,754	2,409	1,528
MEAN	9.34	246	111	212	224	394	880	564	313	121	77.7	50.9
MAX	38	1,150	511	604	333	1,570	4,390	2,500	769	166	190	86
MIN	6.5	55	29	91	130	120	312	316	173	90	47	32
CFSM	.03	.68	.31	.59	.62	1.09	2.44	1.56	.87	.34	.22	.14
IN.	.03	.76	.36	.68	.65	1.26	2.72	1.80	.97	.39	.25	.16
AC-FT	574	14,610	6,850	13,050	12,430	24,210	52,360	34,710	18,630	7,450	4,780	3,030

CAL YR 1972 TOTAL 26,230.6 MEAN 71.7 MAX 2,090 MIN 6.2 CFSM .20 IN 2.70 AC-FT 52,030
WTR YR 1973 TOTAL 97,133.6 MEAN 266 MAX 4,390 MIN 6.5 CFSM .74 IN 10.01 AC-FT 192,700

PEAK DISCHARGE (BASE, 1,800 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-1	2230	9.75	3,430	4-22	1500	13.56	6,490
3-10	2300	9.08	3,000	5-7	*	9.40†	3,200
4-9	0945	7.51	2,020			*Unknown	†About

07071000 Greer Spring at Greer, Mo.

LOCATION.--Lat 36°47'11", long 91°20'53", in SE&SW¼ sec.36, T.25 N., R.4 W., Oregon County, on right bank 300 ft (91 m) downstream from lower outlet of spring, 1 mi (1.6 km) north of Greer, and 1 mi (1.6 km) upstream from Eleven Point River.

PERIOD OF RECORD.--August to December 1904 (gage heights and discharge measurements only), October 1921 to current year. October to December 1921 monthly discharge only, published in WSP 1311.

GAGE.--Water-stage recorder. Datum of gage is 564.00 ft (171.907 m) above mean sea level. Aug. 10 to Dec. 31, 1904, nonrecording gage at site 250 ft (76 m) downstream at different datum. Nov. 17, 1921 to June 25, 1934, nonrecording gage at site 250 ft (76 m) downstream at datum 0.74 ft (0.226 m) lower than present datum.

AVERAGE DISCHARGE.--52 years, 330 ft³/s (9.35 m³/s), 239,100 acre-ft/yr (295 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 795 ft³/s (22.5 m³/s) Apr. 23 (gage height, 1.90 ft or 0.579 m); minimum, 145 ft³/s (4.11 m³/s) Oct. 30 (gage height, 0.37 ft or 0.113 m).
Period of record: Maximum discharge, 1,510 ft³/s (42.8 m³/s) Nov. 17, 1958, includes about 900 ft³/s (25 m³/s) of surface runoff (gage height, 2.63 ft or 0.802 m), from rating curve extended about 700 ft³/s (20 m³/s) maximum excluding surface runoff, 903 ft³/s (25.57 m³/s) May 26, 1927; minimum, 104 ft³/s (2.95 m³/s) Nov. 16-19, 1956, Jan. 18, 19, 1957.

REMARKS.--Records good. Occasional runoff from drainage area of 2.97 mi² (7.69 km²) included in records.

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	298	354	500	449	400	578	663	606	564	458	404
2	168	495	350	475	463	400	568	658	601	564	458	404
3	181	495	345	450	458	400	564	654	625	559	454	404
4	180	486	341	475	454	375	559	649	634	555	449	404
5	180	467	333	460	449	375	555	644	639	550	449	404
6	175	449	329	450	440	375	555	644	634	541	449	404
7	175	467	325	440	436	375	550	707	630	532	454	400
8	175	463	341	430	463	440	545	692	625	532	449	400
9	170	449	354	420	472	440	582	682	625	536	444	400
10	170	440	350	415	476	486	591	678	625	527	444	400
11	170	426	345	410	472	587	587	673	625	522	444	396
12	165	413	362	405	463	573	582	663	625	513	444	396
13	165	481	392	400	472	564	573	654	620	513	440	392
14	165	518	396	395	486	564	568	649	620	513	436	392
15	165	509	396	390	486	564	564	649	620	509	436	387
16	160	499	383	387	481	559	564	644	615	504	436	383
17	160	490	374	383	476	555	573	644	610	499	431	383
18	160	472	370	379	467	550	568	639	606	495	431	379
19	160	460	366	379	463	545	582	634	601	490	426	379
20	160	450	366	383	454	536	606	630	601	490	422	374
21	155	440	362	436	450	532	596	625	596	490	422	374
22	155	426	354	490	450	527	654	620	591	486	422	370
23	155	409	350	495	425	518	742	615	587	481	418	370
24	152	400	341	486	425	513	702	620	582	481	418	366
25	155	392	337	481	425	541	702	615	582	486	418	362
26	155	387	333	472	400	564	697	610	582	486	418	370
27	155	383	329	463	400	559	687	658	587	481	413	362
28	152	374	325	454	400	559	678	625	568	476	409	358
29	149	366	354	449	-----	555	673	620	568	472	409	358
30	149	358	472	444	-----	550	663	610	568	467	404	358
31	171	-----	490	440	-----	578	-----	610	-----	463	404	-----
TOTAL	5,072	13,162	11,219	13,536	12,655	15,659	18,208	19,978	18,198	15,777	13,409	11,533
MEAN	164	439	362	437	452	505	607	644	607	509	433	384
MAX	181	518	490	500	486	587	742	707	639	564	458	404
MIN	149	298	325	379	400	375	545	610	568	463	404	358
AC-FT	10,060	26,110	22,250	26,850	25,100	31,060	36,120	39,630	36,100	31,290	26,600	22,880
CAL YR 1972	TOTAL 106,249		MEAN 290		MAX 606		MIN 149		AC-FT 210,700			
WTR YR 1973	TOTAL 168,406		MEAN 461		MAX 742		MIN 149		AC-FT 334,000			

07071500 Eleven Point River near Bardley, Mo.

LOCATION.--Lat 36°38'55", long 91°12'03", in NE¼SE¼ sec.17, T.23 N., R.2 W., Oregon County, on downstream side of right pier of main truss of bridge on U.S. Highway 160, 7 mi (11.3 km) southwest of Bardley, 7.5 mi (12.1 km) upstream from Fredericks Fork, and at mile 53.7 (86.4 km).

DRAINAGE AREA.--793 mi² (2,050 km²).

PERIOD OF RECORD.--October 1921 to current year. October 1921 monthly discharge only, published in WSP 1311.

GAGE.--Water-stage recorder. Datum of gage is 410.84 ft (125.224 m) above mean sea level. Prior to June 26, 1934, nonrecording gage at site 100 ft (30 m) upstream at datum 0.06 ft (0.018 m) higher. June 26, 1934, to Oct. 19, 1939, nonrecording gage, at present site and datum.

AVERAGE DISCHARGE.--52 years, 743 ft³/s (21.0 m³/s), 12.72 in/yr (323 mm/yr), 538,300 acre-ft/yr (664 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 16,300 ft³/s (462 m³/s) Apr. 23 (gage height, 12.69 ft or 3.868 m); minimum, 276 ft³/s (7.82 m³/s) Oct. 18 (gage height, 1.76 ft or 0.536 m).

Period of record: Maximum discharge, 40,000 ft³/s (1,133 m³/s) Apr. 14, 1927 (gage height, 18.74 ft or 5.712 m, from floodmarks), from rating curve extended above 25,000 ft³/s (708 m³/s); minimum, 152 ft³/s (4.30 m³/s) Jan. 27, 1956, Jan. 11, 1957; minimum gage height, 1.06 ft (0.323 m) Sept. 6-11, 1925 (present site and datum).

Maximum stage known, 19.7 ft (6.00 m) in August 1915, from floodmarks (discharge, 44,000 ft³/s or 1,250 m³/s, from rating curve extended above 25,000 ft³/s or 708 m³/s).

REMARKS.--Records good. Records of chemical analyses are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 827: 1927-28, 1935. WSP 927: 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	344	1,500	766	2,030	1,340	1,000	2,660	2,790	1,960	1,300	878	757
2	332	4,350	747	1,710	1,460	1,010	2,310	2,880	1,900	1,280	869	755
3	319	2,380	735	1,630	1,400	1,000	2,110	2,660	2,450	1,240	868	766
4	312	1,470	718	1,710	1,340	1,000	2,080	2,510	2,630	1,210	861	773
5	305	1,220	702	1,570	1,300	1,020	2,020	2,390	2,580	1,190	854	779
6	300	1,080	690	1,470	1,240	1,110	1,910	2,360	2,420	1,170	847	787
7	301	1,660	674	1,370	1,220	2,030	1,880	6,680	2,200	1,140	841	781
8	297	1,770	767	1,310	1,500	1,670	1,860	8,220	2,050	1,120	835	821
9	294	1,450	1,070	1,230	1,610	1,550	3,080	4,430	1,940	1,100	836	799
10	289	1,270	1,030	1,160	1,540	3,310	3,230	3,400	1,860	1,100	841	780
11	285	1,120	940	1,110	1,460	6,080	2,560	3,050	1,800	1,100	927	771
12	281	1,000	990	1,060	1,400	3,440	2,320	2,920	1,770	1,080	885	759
13	280	1,640	1,350	1,020	1,450	2,600	2,110	2,690	1,740	1,050	861	750
14	280	3,030	1,300	1,000	1,640	2,790	1,960	2,510	1,730	1,030	846	744
15	292	2,190	1,250	979	1,610	2,700	1,870	2,390	1,730	1,030	829	731
16	281	1,690	1,130	947	1,500	2,390	2,110	2,300	1,680	1,010	823	724
17	281	1,470	1,030	930	1,420	2,180	2,210	2,210	1,640	1,000	819	718
18	285	1,310	976	934	1,370	1,990	2,150	2,130	1,590	996	818	712
19	325	1,210	984	959	1,340	1,880	3,210	2,070	1,570	980	816	705
20	340	1,130	1,030	963	1,290	1,820	4,470	2,000	1,520	972	808	705
21	330	1,040	1,010	1,580	1,230	1,700	3,320	1,920	1,480	965	800	705
22	322	935	966	2,640	1,190	1,600	7,540	1,930	1,450	958	793	693
23	322	928	924	2,170	1,170	1,530	15,300	2,000	1,430	942	788	687
24	312	920	886	1,850	1,140	1,510	8,120	2,330	1,410	942	785	687
25	303	912	844	1,660	1,110	1,850	6,260	2,180	1,400	957	778	693
26	298	898	816	1,560	1,080	2,420	5,040	2,020	1,390	939	774	693
27	300	870	798	1,500	1,040	2,180	4,150	6,720	1,370	925	768	687
28	301	833	780	1,410	1,020	1,990	3,510	3,090	1,340	910	764	705
29	300	798	796	1,310	-----	1,890	3,150	2,470	1,330	900	763	699
30	301	780	1,920	1,250	-----	1,790	2,910	2,200	1,310	897	763	681
31	436	-----	2,730	1,230	-----	2,630	-----	2,050	-----	893	765	-----
TOTAL	9,548	42,854	31,349	43,252	37,410	63,660	107,410	91,500	52,670	32,326	25,503	22,047
MEAN	308	1,428	1,011	1,395	1,336	2,054	3,580	2,952	1,756	1,043	823	735
MAX	436	4,350	2,730	2,640	1,640	6,080	15,300	8,220	2,630	1,300	927	821
MIN	280	780	674	930	1,020	1,000	1,860	1,920	1,310	893	763	681
CFSM	.39	1.80	1.27	1.76	1.68	2.59	4.51	3.72	2.21	1.32	1.04	.93
IN.	.45	2.01	1.47	2.03	1.75	2.99	5.04	4.29	2.47	1.52	1.20	1.03
AC-FT	18,940	85,000	62,180	85,790	74,200	126,300	213,000	181,500	104,500	64,120	50,590	43,730
CAL YR 1972	TOTAL 237,770	MEAN 650	MAX 5,690	MIN 275	CFSM .82	IN 11.15	AC-FT 471,600					
WTR YR 1973	TOTAL 559,529	MEAN 1,533	MAX 15,300	MIN 280	CFSM 1.93	IN 26.25	AC-FT 1,110,000					

PEAK DISCHARGE (BASE, 4,000 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-2	0945	7.46	5,500	4-23	0230	12.69	16,300
3-10	2315	9.01	8,180	5-7	2130	9.86	9,550
4-9	2130	6.20	4,030	5-27	0815	10.93	11,500
4-19	1700	6.80	4,870				

07185500 Stahl Creek near Miller, Mo.

LOCATION.--Lat 37°11'42", long 93°50'37", in SE¼ sec.26, T.29 N., R.27 W., Lawrence County, on left down-stream wingwall of bridge on State Highway 39, 1.5 mi (2.4 km) south of Miller and 6.4 mi (10.3 km) upstream from mouth.

DRAINAGE AREA.--3.86 mi² (10.0 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 1,184.49 ft (361.033 m) above mean sea level.

AVERAGE DISCHARGE.--23 years, 2.87 ft³/s (0.081 m³/s), 10.10 in/yr (257 mm/yr), 2,080 acre-ft/yr (2.56 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,450 ft³/s (41.1 m³/s) Nov. 1 (gage height, 7.30 ft or 2.225 m); minimum, no flow on many days.

Period of record.--Maximum discharge, 1,450 ft³/s (41.1 m³/s) Nov. 1, 1972 (gage height, 7.30 ft or 2.225 m); no flow at times most years.

REMARKS.--Records fair.

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	390	.64	1.4	6.2	2.7	7.7	56	1.7	.38	.01	0
2	4.1	7.1	.58	1.3	4.9	5.0	6.0	14	5.4	.32	.01	.11
3	3.6	2.6	.57	29	3.8	2.9	5.3	6.4	72	.23	.01	0
4	3.2	1.6	.47	8.4	3.6	29	4.9	5.2	5.4	.23	.01	57
5	3.0	1.3	.48	3.0	3.3	8.5	4.4	4.6	17	.23	0	3.2
6	2.7	1.7	.38	2.6	3.1	177	4.0	5.0	5.2	.19	0	.40
7	2.8	1.2	.38	2.6	5.9	21	3.8	27	4.1	.16	0	.24
8	2.5	.79	.41	2.6	4.3	7.9	6.3	7.8	3.5	.16	0	.20
9	2.2	.83	.38	2.6	3.8	13	7.9	5.2	3.0	.14	0	.19
10	2.2	2.3	.38	2.6	3.4	297	5.0	4.5	2.7	.14	.02	.15
11	2.1	.78	.38	2.7	3.0	14	4.2	4.9	2.4	.14	.02	.13
12	2.0	108	4.4	2.9	3.1	6.9	3.9	4.0	2.2	.12	.01	.66
13	2.0	94	2.0	2.9	4.2	6.0	3.5	3.4	2.1	.08	.01	4.1
14	2.3	4.1	1.8	3.0	3.1	5.7	3.3	3.0	11	.10	0	.44
15	2.3	2.5	1.1	3.3	2.5	4.5	9.1	2.8	18	.14	0	.20
16	2.1	2.3	1.0	4.7	2.4	4.1	50	2.6	2.8	.12	0	.13
17	2.0	1.7	1.1	7.7	2.1	3.6	7.2	2.3	2.2	.12	0	.11
18	2.3	1.5	6.5	18	2.2	3.5	5.6	2.2	1.9	.12	0	.08
19	2.2	2.4	23	6.1	2.2	8.8	24	2.0	3.0	.09	0	.08
20	1.9	2.3	5.4	96	2.3	7.0	8.2	1.9	2.1	.06	0	.07
21	7.7	2.6	3.6	12	2.0	4.9	11	1.8	1.6	.09	0	.05
22	89	2.7	2.4	10	1.9	4.3	156	2.7	1.3	.08	0	7.1
23	9.8	3.1	2.3	9.0	1.8	5.1	8.8	2.3	1.1	.09	0	2.1
24	5.2	2.7	1.9	7.0	1.6	196	6.6	2.6	.90	.06	0	1.8
25	4.3	3.7	1.8	5.9	1.5	47	31	3.6	.70	.08	0	128
26	3.6	2.4	1.6	6.1	1.4	10	20	2.3	.70	.03	0	4.3
27	3.2	1.4	1.4	5.3	1.4	7.1	7.7	3.5	.90	.02	0	3.1
28	3.0	1.0	1.3	4.9	1.4	7.9	5.7	2.5	.52	.02	0	7.5
29	2.7	.80	2.1	4.1	-----	12	5.0	2.1	.60	.02	0	4.3
30	5.4	.74	2.3	4.2	-----	6.6	4.5	1.8	.45	.02	0	78
31	57	-----	1.5	4.2	-----	48	-----	1.7	-----	.02	0	-----
TOTAL	244.0	650.14	73.55	276.1	82.4	977.0	430.6	191.7	176.47	3.80	.10	303.74
MEAN	7.87	21.7	2.37	8.91	2.94	31.5	14.4	6.18	5.88	.12	.003	10.1
MAX	89	390	23	96	6.2	297	156	56	72	.38	.02	128
MIN	1.9	.74	.38	1.3	1.4	2.7	3.3	1.7	.45	.02	0	0
CFSM	2.04	5.62	.61	2.31	.76	8.16	3.73	1.60	1.52	.03	.0008	2.62
IN.	2.35	6.27	.71	2.66	.79	9.42	4.15	1.85	1.70	.04	0	2.93
AC-FT	484	1,290	146	548	163	1,940	854	380	350	7.5	.2	602

CAL YR 1972 TOTAL 1,406.37 MEAN 3.84 MAX 390 MIN .02 CFSM .99 IN 13.55 AC-FT 2,790
WTR YR 1973 TOTAL 3,409.60 MEAN 9.34 MAX 390 MIN 0 CFSM 2.42 IN 32.86 AC-FT 6,760

PEAK DISCHARGE (BASE, 300 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-1	0315	7.30	1,450	3-10	1230	6.61	1,270	9-4	1945	5.18	628
11-12	2130	5.89	770	3-24	2115	5.52	766	9-25	0145	5.58	784
11-20	*	5.03	550	4-22	0130	6.14	1,080	9-30	0215	4.70	480
3-6	1230	4.56	416	6-3	0215	4.43	413	*Unknown			

07185700 Spring River at Larussell, Mo.

LOCATION.--Lat 37°09'13", long 94°03'21", SW¼SW¼ sec.12, T.28 N., R.29 W., Lawrence County, on right bank on upstream side of Bower Mills Bridge, 0.8 mi (1.3 km) north of Larussell, and 2.5 mi (4.0 km) upstream from Cave Spring Branch.

DRAINAGE AREA.--306 mi² (793 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 1,030 ft (313.9 m) from topographic map. Prior to Oct. 18, 1961, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--16 years, 221 ft³/s (6.26 m³/s) 9.81 in/yr (249 mm/yr), 160,100 acre-ft/yr (197 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 22,500 ft³/s (637 m³/s) Nov. 1 (gage height, 17.58 ft or 5.358 m); minimum, 64 ft³/s (1.81 m³/s) Sept. 22 (gage height, 4.99 ft or 1.521 m); minimum gage height, 4.93 ft (1.501 m) Oct. 21.

Period of record: Maximum discharge, 22,500 ft³/s (637 m³/s) Nov. 1, 1972 (gage height, 17.58 ft or 5.358 m); minimum, 15 ft³/s (0.425 m³/s) Dec. 21, 1963, result of ice conditions upstream; minimum gage height, 3.87 ft (1.180 m) Sept. 12, 13, 1959.

REMARKS.--Records good.

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	410	10,000	518	304	559	299	1,400	1,080	319	238	148	81
2	318	4,100	492	291	546	334	1,060	1,210	333	233	142	115
3	265	1,440	473	383	495	333	943	879	1,570	223	137	101
4	235	1,200	451	512	477	364	871	762	640	218	134	305
5	211	1,080	431	406	460	530	778	693	837	212	131	1,030
6	196	997	411	371	442	1,920	706	681	625	210	127	226
7	182	962	387	354	443	2,100	668	1,040	509	203	121	178
8	169	826	375	341	504	1,060	657	1,120	458	201	118	156
9	153	751	361	320	463	969	899	798	418	197	116	147
10	139	762	339	307	449	4,380	756	708	388	196	116	126
11	129	707	325	299	437	4,480	657	693	366	195	119	115
12	121	838	404	286	433	1,480	613	685	352	193	113	138
13	112	5,170	436	276	437	1,260	570	586	361	189	126	196
14	108	1,850	408	268	426	1,190	540	541	353	190	119	138
15	103	1,190	386	272	401	1,020	550	506	883	191	112	120
16	96	1,060	349	291	387	913	1,700	482	450	190	109	104
17	89	941	331	334	374	828	1,130	463	388	186	107	96
18	88	862	323	817	374	766	888	443	360	185	106	87
19	90	852	634	1,020	368	721	948	428	358	180	102	82
20	83	796	619	701	363	746	1,200	407	351	174	100	77
21	103	767	526	1,890	353	647	1,100	388	323	173	98	72
22	1,110	754	465	1,780	347	589	3,400	425	309	170	94	279
23	783	738	436	1,130	342	565	2,100	436	293	170	91	208
24	482	741	409	913	337	1,200	1,200	434	284	183	91	154
25	397	748	382	807	329	3,290	2,300	440	271	174	89	1,840
26	351	752	362	750	324	1,330	1,310	398	265	168	87	561
27	316	672	343	705	313	1,070	1,100	439	261	159	83	302
28	288	612	335	642	301	976	933	397	253	153	83	299
29	262	568	325	577	-----	1,170	848	366	248	150	81	305
30	247	543	342	551	-----	970	778	340	248	148	83	747
31	688	-----	334	542	-----	1,870	-----	326	-----	154	82	-----
TOTAL	8,324	43,279	12,712	18,440	11,484	39,370	32,603	18,594	13,074	5,806	3,365	8,385
MEAN	269	1,443	410	595	410	1,270	1,087	600	436	187	109	280
MAX	1,110	10,000	634	1,890	559	4,480	3,400	1,210	1,570	238	148	1,840
MIN	83	543	323	268	301	299	540	326	248	148	81	72
CFSM	.88	4.72	1.34	1.94	1.34	4.15	3.55	1.96	1.42	.61	.36	.92
IN.	1.01	5.26	1.55	2.24	1.40	4.79	3.96	2.26	1.59	.71	.41	1.02
AC-FT	16,510	85,840	25,210	36,580	22,780	78,090	64,670	36,880	25,930	11,520	6,670	16,630
CAL YR 1972	TOTAL 95,837	MEAN 262	MAX 10,000	MIN 25	CFSM .86	IN 11.65	AC-FT 190,100					
WTR YR 1973	TOTAL 215,436	MEAN 590	MAX 10,000	MIN 72	CFSM 1.93	IN 26.19	AC-FT 427,300					

PEAK DISCHARGE (BASE, 3,000 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-1	0930	17.58	22,500	3-10	2130	14.04	9,080
11-13	1145	12.79	6,680	3-25	0730	11.64	4,350
3-6	2330	10.65	3,510				

07185765 Spring River at Carthage, Mo.

LOCATION.--Lat 37°11'11", long 94°18'56", in N½SW¼SE¼ sec.33, T.29 N., R.31 W., Jasper County, on downstream side of second pier from left abutment of Missouri Pacific Railroad bridge in Carthage and 600 ft (183 m) downstream from U.S. Highway 71 bridge.

DRAINAGE AREA.--425 mi² (1,100 km²).

PERIOD OF RECORD.--October 1966 to current year. Occasional discharge measurements 1951-54. Intermittent gage readings since Oct. 31, 1945 collected by Corps of Engineers.

GAGE.--Water-stage recorder. Datum of gage is 923.68 ft (281.538 m) above mean sea level. Prior to Jan. 26, 1967, nonrecording gage at site 600 ft (183 m) upstream at same datum.

AVERAGE DISCHARGE.--7 years, 367 ft³/s (10.39 m³/s), 11.73 in/yr (298 mm/yr), 265,900 acre-ft/yr (328 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 24,800 ft³/s (702 m³/s) Nov. 1 (gage height, 17.15 ft or 5.227 m); minimum, 100 ft³/s (2.83 m³/s) Aug. 30, 31 (gage height, 3.00 ft or 0.914 m).

Period of record: Maximum discharge, 24,800 ft³/s (702 m³/s) Nov. 1, 1972 (gage height, 17.15 ft or 5.227 m); minimum, 37 ft³/s (1.05 m³/s) July 26, 27, 1972.

Flood of May 18, 1943 reached a stage of 22.0 ft (6.71 m) by highwater mark 1,800 ft (549 m) upstream.

REMARKS.--Records fair. Low-flow slightly regulated by gristmills upstream.

REVISIONS (WATER YEARS).--WRD Mo. 1969: 1968.

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	7,380	573	405	749	389	2,580	1,490	465	317	185	109
2	427	9,890	542	382	749	446	1,490	2,040	491	305	172	124
3	353	2,680	518	457	683	468	1,240	1,330	3,460	294	166	139
4	312	1,500	489	837	629	504	1,110	1,090	1,480	286	159	133
5	281	1,210	473	596	600	936	1,010	976	1,540	278	154	1,040
6	260	1,040	459	518	572	2,100	914	952	1,130	270	152	481
7	246	975	429	490	564	4,810	851	1,310	837	262	147	231
8	231	869	416	469	648	1,680	828	1,700	727	256	144	210
9	214	784	405	439	611	1,330	1,050	1,120	654	250	144	212
10	201	757	384	428	564	3,300	1,030	959	606	248	148	181
11	186	736	367	414	551	8,410	853	934	569	242	142	165
12	175	777	453	390	537	2,850	786	916	541	237	140	224
13	166	5,540	598	378	534	1,660	735	803	540	228	139	360
14	165	5,140	544	368	520	1,570	696	741	533	229	143	239
15	159	1,580	523	368	497	1,280	744	701	936	242	135	194
16	149	1,240	474	398	477	1,080	3,120	668	697	236	132	174
17	143	1,080	437	481	461	960	2,310	636	554	224	131	163
18	138	956	413	1,240	455	878	1,330	612	508	219	128	153
19	136	928	716	2,080	449	859	1,230	592	1,494	215	126	146
20	134	885	1,050	1,120	446	946	1,900	568	484	206	122	143
21	149	829	806	2,770	434	826	1,880	545	447	204	119	140
22	1,630	828	672	3,700	422	737	5,660	597	420	202	118	165
23	1,390	810	598	1,910	416	699	4,430	628	399	196	118	418
24	702	799	556	1,280	412	1,460	1,680	675	384	195	116	256
25	548	811	516	1,120	403	5,810	3,400	635	368	218	115	3,520
26	474	849	490	1,030	398	3,120	2,470	595	358	200	113	1,560
27	418	771	462	926	393	1,520	1,880	613	355	190	111	612
28	381	685	441	902	389	1,300	1,440	587	337	181	107	537
29	353	627	427	798	-----	1,670	1,250	533	331	175	109	552
30	369	597	434	745	-----	1,420	1,120	497	330	218	111	795
31	906	-----	443	724	-----	2,460	-----	473	-----	207	108	-----
TOTAL	11,986	53,553	16,108	28,163	14,563	57,478	51,017	26,516	20,975	7,230	4,154	13,376
MEAN	387	1,785	520	908	520	1,854	1,701	855	699	233	134	446
MAX	1,630	9,890	1,050	3,700	749	8,410	5,660	2,040	3,460	317	185	3,520
MIN	134	597	367	368	389	389	696	473	330	175	107	109
CFSM	.91	4.20	1.22	2.14	1.22	4.36	4.00	2.01	1.64	.55	.32	1.05
IN.	1.05	4.69	1.41	2.47	1.27	5.03	4.47	2.32	1.84	.63	.36	1.17
AC-FT	23,770	106,200	31,950	55,860	28,890	114,000	101,200	52,590	41,600	14,340	8,240	26,530

CAL YR 1972 TOTAL 125,669 MEAN 343 MAX 9,890 MIN 37 CFSM .81 IN 11.00 AC-FT 249,300
WTR YR 1973 TOTAL 305,119 MEAN 836 MAX 9,890 MIN 107 CFSM 1.97 IN 26.71 AC-FT 605,200

PEAK DISCHARGE (BASE, 3,500 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-1	1915	17.15	24,800	3-7	0415	11.63	6,060	4-22	1615	12.68	8,300
11-13	1900	12.52	7,900	3-11	0515	13.50	10,000	4-25	1415	10.29	4,210
1-19	0100	9.85	3,630	3-25	1300	12.19	7,120	6-3	1815	11.24	5,660
1-22	0100	10.56	4,440	4-16	2000	10.25	4,130				

07186000 Spring River near Waco, Mo.

LOCATION.--37°14'44", long 94°33'58", on line between SE¼ sec. 7 and NE¼ sec.18, T.29 N., R.33 W., Jasper County, on left bank on downstream side of left pier of county highway bridge, 0.8 mi (1.3 km) downstream from Blackberry Creek, 1.5 mi (2.4 km) east of Waco, and 47.6 mi (76.6 km) upstream from south.

DRAINAGE AREA.--1,164 mi² (3,015 km²).

PERIOD OF RECORD.--April 1924 to current year.

GAGE.--Water-stage recorder. Datum of gage is 833.23 ft (253.969 m) above mean sea level. Prior to Feb. 23, 1935, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--48 years, 832 ft³/s (23.6 m³/s), 9.71 in/yr (247 mm/yr), 602,800 acre-ft/yr (743 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 31,800 ft³/s (901 m³/s) Nov. 2 (gage height, 24.02 ft or 7.321 m); minimum, 105 ft³/s (2.97 m³/s) Aug. 28, 29 (gage height, 1.90 ft or 0.579 m).
Period of record: Maximum discharge, 103,000 ft³/s (2,920 m³/s) May 19, 1943 (gage height, 30.94 ft or 9.431 m, from floodmark); minimum, 4.2 ft³/s (0.119 m³/s) Aug. 28, 1954; minimum gage height, 0.80 ft (0.244 m) July 24, 1934.

REMARKS.--Records fair. Low flow slightly regulated by gristmills above station. Records of chemical analyses are published in Part 2 of this report.

REVISIONS.--WSP 1117: 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	711	11,300	1,090	1,260	1,800	582	8,590	3,410	971	497	307	118
2	541	25,000	1,040	927	2,960	626	4,680	5,570	1,040	450	229	160
3	449	13,300	968	2,990	2,280	968	2,550	4,050	2,150	414	199	155
4	393	4,410	908	5,940	1,570	1,170	2,130	2,430	4,010	396	182	224
5	354	2,140	870	3,560	1,350	3,940	1,910	1,860	3,840	372	173	759
6	324	1,690	840	1,580	1,230	5,870	1,720	2,630	3,000	326	164	1,030
7	302	1,540	790	1,110	1,320	13,000	1,590	15,600	1,890	318	155	411
8	285	1,390	760	995	2,390	9,120	1,520	11,600	1,350	302	153	304
9	265	1,240	750	931	1,890	4,680	2,290	7,250	1,160	300	147	295
10	246	1,160	705	870	1,360	6,770	2,530	2,790	1,040	420	150	266
11	229	1,140	675	843	1,200	17,800	1,970	1,960	957	300	167	222
12	220	1,660	896	770	1,150	13,800	1,600	1,800	897	254	154	222
13	211	13,400	1,450	764	1,150	7,350	1,440	1,570	861	406	151	623
14	208	16,500	1,380	757	1,150	3,390	1,340	1,420	1,160	330	146	546
15	199	9,610	1,330	860	1,030	2,680	1,430	1,310	1,610	294	140	316
16	193	4,090	1,070	1,140	875	2,060	14,000	1,240	2,000	392	137	250
17	183	2,170	932	2,630	815	1,720	16,200	1,180	1,250	242	134	218
18	176	1,820	885	6,930	790	1,540	10,300	1,120	896	245	137	202
19	174	1,920	2,780	8,950	785	1,520	4,550	1,070	810	236	134	190
20	172	2,370	5,330	4,100	775	3,230	4,850	1,030	770	221	137	179
21	418	2,230	5,350	11,000	760	3,060	12,200	984	719	206	131	171
22	6,540	2,260	3,730	14,800	725	1,930	12,500	1,010	663	204	124	450
23	4,850	2,080	2,070	8,660	700	1,460	16,200	1,750	621	199	127	341
24	1,860	1,880	1,670	4,800	675	8,170	7,720	3,130	587	222	127	361
25	1,050	2,000	1,450	2,410	645	16,900	11,200	2,940	556	431	124	861
26	824	2,520	1,220	2,070	626	14,900	12,700	1,580	529	282	118	3,300
27	712	2,100	1,080	1,980	600	8,660	6,870	1,220	535	269	111	1,120
28	636	1,550	992	1,820	586	3,310	3,610	1,180	537	242	108	1,320
29	584	1,270	937	1,630	-----	4,940	2,360	1,050	650	213	111	1,060
30	838	1,150	1,460	1,420	-----	3,930	2,050	963	567	353	111	843
31	3,570	-----	1,840	1,390	-----	11,000	-----	898	-----	785	115	-----
TOTAL	27,717	136,890	47,248	99,887	33,187	180,076	174,600	87,595	37,626	10,121	4,603	16,517
MEAN	894	4,563	1,524	3,222	1,185	5,809	5,820	2,826	1,254	326	148	551
MAX	6,540	25,000	5,350	14,800	2,960	17,800	16,200	15,600	4,010	785	307	3,300
MIN	172	1,140	675	757	586	582	1,340	898	529	199	108	118
CFSM	.77	3.92	1.31	2.77	1.02	4.99	5.00	2.43	1.08	.28	.13	.47
IN.	.89	4.37	1.51	3.19	1.06	5.76	5.58	2.80	1.20	.32	.15	.53
AC-FT	54,980	271,500	93,720	198,100	65,830	357,200	346,300	173,700	74,630	20,080	9,130	32,760

CAL YR 1972 TOTAL 303,099 MEAN 828 MAX 25,000 MIN 44 CFSM .71 IN 9.69 AC-FT 601,200
WTR YR 1973 TOTAL 856,067 MEAN 2,345 MAX 25,000 MIN 108 CFSM 2.01 IN 27.36 AC-FT 1,698,000

PEAK DISCHARGE (BASE, 13,000 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-2	1115	24.02	31,800	3-25	2100*	18.98	17,300	4-26	0115	17.95	16,000
11-14	0830	19.00	17,300	3-31	1815	16.23	13,000	5-7	1115	18.38	16,700
3-7	1700	17.43	14,600	4-16	2245	19.32	18,500	About			
3-11	1500	20.32	20,600	4-23	1030	18.94	17,600				

ARKANSAS RIVER BASIN

177

07186400 Center Creek near Cartersville, Mo.

LOCATION.--Lat 37°08'26", long 94°22'57", in NW¼NW¼NW¼ sec.24, T.28 N., R.32 W., Jasper County, at downstream side of right pier of bridge on County Road HH, 1.5 mi (2.4 km) downstream from Grove Creek, 3 mi (4.8 km) east of Cartersville, and 17 mi (27.4 km) above mouth.

DRAINAGE AREA.--232 mi² (601 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 913.21 ft (278.346 m) above mean sea level (levels by Missouri State Highway Commission).

AVERAGE DISCHARGE.--11 years, 162 ft³/s (4.59 m³/s), 9.48 in/yr (241 mm/yr), 117,400 acre-ft/yr (145 hm³/s).

EXTREMES.--Current year: Maximum discharge, 22,500 ft³/s (637 m³/s) Nov. 1 (gage height, 15.94 ft or 4.859 m); minimum, 36 ft³/s (1.02 m³/s) Aug. 31, Sept. 1 (gage height, 0.35 ft or 0.107 m).
Period of record: Maximum discharge, 22,500 ft³/s (637 m³/s) Nov. 1, 1972 (gage height, 15.94 ft or 4.859 m); minimum, 9.4 ft³/s (0.266 m³/s) Aug. 20, 21, 1972; minimum gage height, 0.28 ft (0.085 m) Oct. 20, 1964.
Flood of Oct. 2, 1959 reached a stage of 18.57 ft (5.660 m), from floodmark.

REMARKS.--Records fair. Records of water quality 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	103	7,000	267	178	375	190	1,160	1,070	165	169	108	38
2	97	3,360	247	167	364	195	863	1,390	296	165	96	56
3	90	1,550	237	296	332	190	718	806	2,570	157	91	51
4	83	1,010	223	436	315	218	627	679	616	151	86	63
5	77	812	212	330	302	295	551	602	1,430	147	81	613
6	73	699	195	300	284	1,620	491	571	704	145	77	167
7	70	607	177	281	303	2,030	452	800	531	143	74	125
8	68	521	170	256	459	932	440	728	426	139	71	110
9	65	464	159	237	349	806	595	557	365	135	71	155
10	61	426	155	234	327	3,130	480	493	312	133	71	114
11	56	375	153	233	315	3,920	420	790	272	137	68	99
12	54	513	202	224	304	1,420	393	572	260	131	121	89
13	52	4,440	264	213	296	1,100	366	453	270	126	174	82
14	54	1,470	239	187	279	1,020	342	405	250	127	90	72
15	52	911	232	165	262	789	412	368	462	127	78	67
16	48	726	205	180	246	675	3,470	340	310	120	74	61
17	44	608	184	232	233	593	1,300	321	247	118	69	58
18	43	532	175	1,840	232	535	905	291	237	113	63	56
19	45	514	486	1,350	225	510	801	272	232	108	61	52
20	41	483	520	662	217	498	1,350	252	223	104	58	51
21	52	457	413	2,800	209	435	1,530	237	210	104	56	49
22	1,890	455	355	2,120	203	397	4,620	221	199	103	52	125
23	832	429	319	1,020	201	374	1,760	244	192	101	51	153
24	464	423	287	753	199	1,430	1,180	260	190	98	49	214
25	364	428	258	623	196	3,120	3,030	267	179	110	45	2,960
26	304	425	237	560	194	1,210	2,090	228	173	106	42	487
27	260	383	219	501	192	881	1,520	228	189	95	42	312
28	224	342	207	450	188	745	1,090	226	179	90	40	358
29	197	309	194	395	-----	986	906	201	177	89	38	316
30	241	287	205	369	-----	720	773	181	173	118	42	315
31	1,170	-----	193	351	-----	2,430	-----	169	-----	195	38	-----
TOTAL	7,274	30,959	7,589	17,943	7,601	33,394	34,635	14,222	12,039	3,904	2,177	7,468
MEAN	235	1,032	245	579	271	1,077	1,155	459	401	126	70.2	249
MAX	1,890	7,000	520	2,800	459	3,920	4,620	1,390	2,570	195	174	2,960
MIN	41	287	153	165	188	190	342	169	165	89	38	38
CFSM	1.01	4.45	1.06	2.50	1.17	4.64	4.98	1.98	1.73	.54	.30	1.07
IN.	1.17	4.96	1.22	2.88	1.22	5.35	5.55	2.28	1.93	.63	.35	1.20
AC-FT	14,430	61,410	15,050	35,590	15,080	66,240	68,700	28,210	23,880	7,740	4,320	14,810

CAL YR 1972 TOTAL 68,251.7 MEAN 186 MAX 7,000 MIN 9.7 CFSM .80 IN 10.94 AC-FT 135,400
WTR YR 1973 TOTAL 179,205.0 MEAN 491 MAX 7,000 MIN 38 CFSM 2.12 IN 28.73 AC-FT 355,500

PEAK DISCHARGE (BASE, 2,500 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-22	1130	8.19	3,500	3-6	2115	8.81	3,700	4-20	2245	8.08	3,200
11-1	1130	15.94	22,500	3-10	2245	11.77	6,140	4-22	1100	11.80	6,210
11-13	0745	11.30	5,320	3-25	0515	9.13	3,870	4-25	0430	8.52	3,520
1-18	1900	9.93	4,280	3-31	1000	8.95	3,720	6-3	1130	10.36	4,620
1-21	0945	9.25	3,740	4-16	0645	9.71	4,410	9-25	1030	9.85	4,290

ARKANSAS RIVER BASIN

07187000 Shoal Creek above Joplin, Mo.

LOCATION.--Lat 37°01'23", long 94°30'58", in SE¼NE¼NE¼ sec.34, T.27 N., R.33 W., Newton County, on right bank 250 ft (76 m) upstream from mouth of Spring Creek, 1,400 ft (427 m) upstream from bridge on State Highway 86, 0.5 mi (0.8 km) south of city limits of Joplin and 13.2 mi (21.2 km) above mouth.

DRAINAGE AREA.--427 mi² (1,106 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 886.87 ft (270.318 m) above mean sea level. Prior to July 21, 1966, water-stage recorder at site 1.8 mi (2.9 km) upstream, at datum 15.5 ft (4.72 m) higher.

AVERAGE DISCHARGE.--32 years, 383 ft³/s (10.85 m³/s), 12.18 in/yr (309 mm/yr), 277,500 acre-ft/yr (342 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 14,900 ft³/s (422 m³/s) Nov. 1 (gage height, 14.85 ft or 4.526 m); minimum, 44 ft³/s (1.25 m³/s) Oct. 20, 21 (gage height, 2.25 ft or 0.686 m).

Period of record: Maximum discharge, 62,100 ft³/s (1,730 m³/s) May 18, 1943 (gage height, 16.8 ft or 5.12 m) former site and datum; minimum, 12 ft³/s (0.340 m³/s) Sept. 7, 1954.

REMARKS.--Records fair.

REVISIONS.--WSP 1117: 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	111	8,990	822	591	1,100	581	2,940	1,840	640	453	329	173
2	115	8,710	788	569	1,070	590	2,290	1,950	771	463	304	212
3	100	2,940	767	643	1,000	626	1,950	1,740	2,920	423	289	216
4	91	2,110	733	765	968	650	1,840	1,580	3,330	410	277	208
5	83	1,660	707	779	938	676	1,690	1,480	2,550	398	266	291
6	79	1,390	684	756	894	1,330	1,500	1,440	2,040	386	257	518
7	74	1,300	656	729	901	2,940	1,390	1,550	1,500	376	256	286
8	70	1,150	636	700	1,070	2,040	1,310	1,710	1,250	369	249	255
9	66	1,050	619	658	1,100	1,770	1,410	1,500	1,080	364	247	342
10	63	987	594	627	1,050	3,010	1,490	1,400	965	410	255	263
11	57	906	584	595	1,000	8,180	1,320	1,470	884	489	274	233
12	53	973	648	578	975	3,420	1,260	2,030	826	465	306	212
13	50	3,900	694	551	945	2,610	1,200	1,490	849	383	274	375
14	52	3,370	698	541	901	2,280	1,140	1,340	802	382	263	286
15	54	2,160	708	526	852	1,900	1,110	1,260	974	384	248	222
16	52	1,780	675	524	806	1,650	2,920	1,200	945	366	248	208
17	52	1,520	647	539	786	1,480	3,570	1,160	776	348	236	202
18	46	1,350	633	1,100	760	1,340	2,580	1,120	721	337	226	195
19	46	1,290	708	1,920	748	1,250	2,150	1,080	709	322	219	189
20	44	1,190	843	1,560	728	1,200	2,170	1,020	675	310	216	183
21	64	1,130	850	2,640	702	1,110	2,400	970	630	311	208	179
22	1,020	1,100	825	3,360	682	1,030	3,420	920	596	302	202	263
23	674	1,060	802	2,690	670	985	3,370	890	571	297	195	352
24	528	1,030	767	2,100	650	1,620	2,530	1,050	551	376	192	259
25	418	1,040	728	1,750	632	3,220	3,020	1,010	527	438	186	560
26	353	1,040	691	1,570	614	2,890	2,990	970	516	582	183	608
27	303	1,000	661	1,420	596	2,050	2,590	910	519	386	173	412
28	263	948	639	1,300	581	1,790	2,180	860	486	346	170	517
29	232	891	623	1,200	-----	1,830	1,940	810	478	332	167	523
30	235	851	635	1,120	-----	1,700	1,780	739	472	323	173	465
31	605	-----	618	1,080	-----	3,050	-----	690	-----	347	176	-----
TOTAL	6,053	58,816	21,683	35,481	23,719	60,798	63,450	39,179	30,553	11,878	7,264	9,207
MEAN	195	1,961	699	1,145	847	1,961	2,115	1,264	1,018	383	234	307
MAX	1,020	8,990	850	3,360	1,100	8,180	3,570	2,030	3,330	582	329	608
MIN	44	851	584	524	581	581	1,110	690	472	297	167	173
CFSM	.46	4.59	1.64	2.68	1.98	4.59	4.95	2.96	2.38	.90	.55	.72
IN.	.53	5.12	1.89	3.09	2.07	5.30	5.53	3.41	2.66	1.03	.63	.80
AC-FT	12,010	116,700	43,010	70,380	47,050	120,600	125,900	77,710	60,600	23,560	14,410	18,260

CAL YR 1972 TOTAL 124,722 MEAN 341 MAX 8,990 MIN 31 CFSM .80 IN 10.87 AC-FT 247,400
WTR YR 1973 TOTAL 368,081 MEAN 1,008 MAX 8,990 MIN 44 CFSM 2.36 IN 32.07 AC-FT 730,100

PEAK DISCHARGE (BASE, 6,000 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-1	1215	14.85	14,900	3-11	1415	12.25	10,300

07189000 Elk River near Tiff City, Mo.

LOCATION.--Lat 36°37'50", long 94°35'12", in NE¼ sec.22, T.22 N., R.34 W., McDonald County, on downstream side of right pier of bridge on State Highway 43, 0.8 mi (1.3 km) downstream from Blackfoot Branch, 2.8 mi (4.5 km) upstream from Buffalo Creek, 3.0 mi (4.8 km) southeast of Tiff City, and at mile 15.8 (25.4 km).

DRAINAGE AREA.--872 mi² (2,258 km²).

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

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

AVERAGE DISCHARGE.--34 years, 773 ft³/s (21.9 m³/s), 12.04 in/yr (306 mm/yr), 560,000 acre-ft/yr (690 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 26,500 ft³/s (750 m³/s) Mar. 11 (gage height, 19.37 ft or 5.904 m); minimum, 89 ft³/s (2.52 m³/s) Oct. 13, 14.

Period of record: Maximum discharge, 137,000 ft³/s (3,880 m³/s) Apr. 19, 1941 (gage height, 28.4 ft or 8.66 m, from floodmark), from rating curve extended above 60,000 ft³/s (1,700 m³/s) on basis of slope-area measurement of peak flow; minimum daily, 5.1 ft³/s (0.14 m³/s), Sept. 5, 6, 1954.

REMARKS.--Records good. Records of water quality are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 927: 1940. WSP 1117: 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	321	11,900	1,180	710	1,720	587	6,210	2,420	1,350	583	267	137
2	258	14,200	1,090	698	1,770	897	4,280	3,180	1,800	543	250	182
3	215	5,940	1,020	710	1,730	1,580	3,980	3,070	19,300	508	239	192
4	185	3,300	958	1,020	1,650	1,720	6,600	2,510	13,000	480	229	188
5	163	2,420	890	1,310	1,570	1,640	4,690	2,200	5,700	464	222	232
6	147	1,960	854	1,300	1,470	2,900	3,420	1,990	5,110	443	211	251
7	133	1,820	806	1,240	1,480	5,220	2,830	2,060	3,710	419	202	265
8	121	1,720	734	1,170	2,070	3,930	2,500	2,990	2,890	407	197	250
9	114	1,500	686	1,080	2,410	3,240	2,860	2,530	2,370	396	194	243
10	107	1,320	640	988	2,240	8,610	3,100	2,160	2,010	410	190	227
11	100	1,170	620	911	2,010	20,400	2,780	2,090	1,750	451	236	225
12	95	1,080	668	849	1,790	7,160	2,470	3,000	1,550	418	482	218
13	91	3,980	812	792	1,610	4,420	2,190	2,680	1,430	388	348	212
14	94	6,340	902	739	1,420	3,460	1,980	2,230	1,320	368	294	238
15	99	3,580	938	712	1,250	2,800	2,030	1,930	1,240	399	270	218
16	99	2,680	918	708	1,130	2,400	9,140	1,700	1,180	379	258	202
17	96	2,160	881	690	1,020	2,080	8,100	1,510	1,050	368	243	191
18	93	1,830	846	1,510	938	1,860	4,630	1,350	959	353	231	181
19	91	1,670	848	4,070	860	1,700	3,680	1,240	966	337	218	173
20	91	2,000	999	3,560	812	1,590	4,350	1,140	1,680	321	209	167
21	98	1,900	1,080	5,570	776	1,440	3,740	1,040	1,530	319	193	163
22	647	1,780	1,090	10,300	728	1,300	7,390	948	1,190	313	180	162
23	1,350	1,670	1,070	6,630	686	1,220	8,030	931	1,010	311	172	160
24	1,060	1,550	1,010	4,080	674	2,050	4,950	973	897	344	166	160
25	782	1,450	944	3,060	650	8,070	4,270	979	817	396	160	170
26	631	1,490	938	2,570	625	7,150	4,460	959	738	401	155	200
27	539	1,560	884	2,270	600	4,150	4,200	3,630	692	342	150	226
28	462	1,530	776	2,060	586	3,170	3,590	3,340	641	305	143	306
29	398	1,390	746	1,880	-----	2,750	3,050	2,360	614	290	142	310
30	374	1,280	740	1,760	-----	2,450	2,670	1,880	604	287	144	348
31	2,440	-----	716	1,670	-----	6,050	-----	1,580	-----	284	139	-----
TOTAL	11,494	88,170	27,284	66,617	36,275	117,994	128,170	62,600	79,098	12,027	6,734	6,397
MEAN	371	2,939	880	2,149	1,296	3,806	4,272	2,019	2,637	388	217	213
MAX	2,440	14,200	1,180	10,300	2,410	20,400	9,140	3,630	19,300	583	482	348
MIN	91	1,080	620	690	586	587	1,980	931	604	284	139	137
CFSM	.43	3.37	1.01	2.46	1.49	4.36	4.90	2.32	3.02	.45	.25	.24
IN.	.49	3.76	1.16	2.84	1.55	5.03	5.47	2.67	3.37	.51	.29	.27
AC-FT	22,800	174,900	54,120	132,100	71,950	234,000	254,200	124,200	156,900	23,860	13,360	12,690

CAL YR 1972 TOTAL 228,401 MEAN 624 MAX 14,200 MIN 54 CFSM .72 IN 9.74 AC-FT 453,000
WTR YR 1973 TOTAL 642,860 MEAN 1,761 MAX 20,400 MIN 91 CFSM 2.02 IN 27.42 AC-FT 1,275,000

PEAK DISCHARGE (BASE, 9,000 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
11-2	0230	17.01	18,000	4-16	2200	14.42	12,500
1-22	0430	13.73	11,200	4-23	0100	13.19	10,300
3-11	0700	19.37	26,500	6-3	2230	19.18	25,700
3-25	2145	13.35	10,600				

DISCHARGE AT PARTIAL-RECORD STATIONS

Crest-stage partial-record stations

The following table contains annual maximum discharges for crest-stage stations. A crest-stage gage is a device which will register the peak stage occurring between inspections of the gage. A stage-discharge relation for each gage is developed from discharge measurements made by indirect measurements of peak flow or by current meter. The date of the maximum discharge is not always certain but is usually determined by comparison with nearby continuous-record stations, weather records, or local inquiry. Only the maximum discharge for each water year is given. Information on some lower floods may have been obtained but is not published herein. The years given in the period of record represent water years for which the annual maximum has been determined.

Annual maximum discharge at crest-stage partial-record stations, water year

Station no.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum Date	maximum Gage height (feet)	Dis-charge (cfs)
Fox River basin							
05495100	Big Branch Tributary near Wayland.	Lat 40°18'52", long 91°34'34", in NW¼SE¼ sec.29, T.64 N., R.6 W., Clark County, at culvert under U.S. Highway 61 and 5.6 miles south of Wayland.	0.70	1955-65 1966-69f 1970-73	4-22-73	11.50	941
Fabius River basin							
05497500	Middle Fabius River near Baring.	Lat 40°19'55", long 92°12'50", in NW¼NW¼ sec.26, T.64 N., R.12 W., Scotland County, at bridge on State Highway 15, 1 mile downstream from confluence of North and South Forks of Middle Fabius River, and 6 miles north of Baring.	185	1931-60† 1961-73	4-22-73	25.94	12,100
05497700	Bridge Creek Branch near Baring.	Lat 40°15'30", long 92°13'00", in NE¼NE¼ sec.22, T.63 N., R.12 W., Knox County, at culvert under State Highway 15 and about 1 mile northwest of Baring.	2.38	1955-60 1961-63f 1964-73	4-22-73	16.49	950
South River basin							
05501200	Nichols Branch near Palmyra.	Lat 39°44'39", long 91°31'52", in SE¼SE¼ sec.11, T.57 N., R.6 W., Marion County, at culvert on county road 4 miles south of Palmyra.	2.58	1955-73	5-27-73	22.36	1,700
Salt River basin							
05502700	Easdale Branch near Shelbyville.	Lat 39°48'17", long 92°00'27", in SE¼SW¼ sec.22, T.58 N., R.10 W., Shelby County, at culvert under Missouri State Highway 168, 1.8 miles east of Shelbyville.	0.71	1958-69 1970-71f 1972-73	4-21-73	8.60	750
05504700	Bean Creek near Mexico.	Lat 39°15'30", long 91°49'50", in NW¼SW¼ sec.29, T.52 N., R.8 W., Audrain County, at culvert under County Road J, 6.5 miles north of Mexico.	3.02	1960-73	7-24-73	14.80	2,960
05506000	Youngs Creek near Mexico.	Lat 39°18'39", long 91°56'51", in NW¼SW¼ sec.5, T.52 N., R.9 W., Audrain County, on downstream side of bridge on State Highway 15, 6 miles upstream from mouth and 11 miles north of Mexico.	67.4	1931-69† 1970-73	4-21-73	13.19	3,460
Kings Lake basin							
05513600	Camp Creek near Elsberry.	Lat 39°06'56", long 90°46'23", in SW portion of Survey 1724, T.50 N., R.2 E., Lincoln County, at culvert on State Highway 79, 3.6 miles south of Elsberry.	1.50	1955-73	9-8-73	4.42	720
05513650	Hurricane Creek near Elsberry.	Lat 39°06'29", long 90°46'13", in SW portion of Survey 1724, T.50 N., R.2 E., Lincoln County, at culvert on State Highway 79, 4.1 miles south of Elsberry.	3.6	1955-73	7-23-73	8.63	1,310
Cuivre River basin							
05513700	Mams Slough Creek near Wellsville.	Lat 39°09'45", long 91°39'40", in NW¼NW¼ sec.35, T.51 N., R.7 W., Audrain County, at bridge on U.S. Highway 54, 8 miles northwest of Wellsville.	5.08	1955-57 1961-73	5-7-73	12.70	1,000

Explanation of symbols and footnotes are at the end of list.

DISCHARGE AT PARTIAL-RECORD STATIONS

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Annual maximum discharge at crest-stage partial-record stations--Continued

Station no.	Station name	Location	Drainage area (sq mi)	Period of record	Annual Date	maximum Gage height (feet)	Dis- charge (cfs)
Cuivre River basin--Continued							
05514200	Reid Branch near Bowling Green.	Lat 39°15'15", long 91°02'50", in SE¼ west part of Survey No. 1685, T.52 N., R.1 W., Pike County, upstream from culvert on U.S. Highway 61, 3.9 miles south of Cyrene and 10 miles south of Bowling Green.	0.54	1955-73	5-27-73	7.46	440
05514700	Dry Branch near Wentzville.	Lat 38°49'10", long 90°54'20", in NW¼ sec.22, T.47 N., R.1 E., St. Charles County, at bridge on Point Prairie Road, 3 miles northwest of Wentzville.	0.97	1955-65 1967-73d	5-7-73	12.78	+
Little Tarkio creek basin							
06815550	Staples Branch near Burlington Junction.	Lat 40°26'15", long 95°12'05", in SW¼SE¼ sec.17, T.65 N., R.38 W., Atchison County, at culvert under U.S. Highway 136, about 7.3 miles west of Burlington Junction.	0.49	1959-65 1966-71f 1972-73	4-15-73	12.62	158
Platte River (Iowa-Missouri) basin							
06820000	White Cloud Creek near Maryville	Lat 40°23'22", long 94°54'33", in NW¼NW¼ sec.1, T.64 N., R.36 W., Nodaway County, at bridge on U.S. Highway 71, 4 miles upstream from Big Slough and 4.5 miles northwest of Maryville.	6.06	1948-70† 1971-73	5-6-73	8.86	450
06820300	Big Slough near Wilcox.	Lat 40°23'23", long 94°55'32", on south line of SW¼ sec.35, T.65 N., R.36 W., Nodaway County, at culvert on U.S. Highway 71, 3 miles south- east of Wilcox.	1.30	1950-73	9-10-73	5.15	700
06821130	First Creek near Nashua.	Lat 39°17'20", long 94°35'05", in NW¼SW¼ sec.26, T.52 N., R.33 W., Clay County, at culvert on farm road 150 feet east of U.S. Highway 169, and 1 mile south of Nashua.	0.55	1959-65 1966-73f	3-13-73	9.86	85
Crooked River basin							
06895000	Crooked River near Richmond.	Lat 39°19'58", long 93°58'46", in NW¼NW¼ sec.7, T.52 N., R.27 W., Ray County, at bridge on State Highway 13, 4.0 miles north of Richmond, 8.5 miles upstream from West Fork Crooked River, and 24.5 miles upstream from mouth.	159	1948-70† 1971-73	4-21-73	26.24	7,900
Grand River basin							
06896170	Grand River near Stanberry.	Lat 40°14'30", long 94°29'12", in SE¼ sec.22, T.63 N., R.32 W., Gentry County, on downstream side of bridge on U.S. Highways 136 and 169, 2.8 miles northeast of Stanberry.	-	1965-66 1967-68f 1969-73	5-8-73	13.84	11,800
06896180	DeMoss Branch near Stanberry.	Lat 40°13'35", long 94°33'35", in NE¼SE¼ sec.36, T.63 N., R.33 W., Gentry County, at culvert on U.S. Highway 136, 0.8 mile west of Stanberry.	0.38	1955-59 1960-64f 1965-73	5-7-73	14.76	92
06896190	Middle Fork Grand River near Albany.	Lat 40°14'27", long 94°24'10", in SW¼SE¼ sec.21, T.63 N., R.31 W., Gentry County, on downstream side of bridge on U.S. Highway 136, 3 miles west of Albany.	-	1965-66 1967-68f 1969-73	4-1-73	14.72	7,300
06896400	East Fork Grand River at Albany.	Lat 40°14'55", long 94°21'37", in NW¼ sec.23, T.63 N., R.31 W., Gentry County, on downstream side of bridge on U.S. Highway 136, 0.8 mile west of Albany.	-	1965-66 1967-68f 1969-73	4-1-73	16.64	8,500

DISCHARGE AT PARTIAL-RECORD STATIONS

Annual maximum discharge at crest-stage partial-record stations--Continued

Station no.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum Date	maximum Gage height (feet)	Dis-charge (cfs)
Grand River basin--Continued							
06896700	O'Neill Branch at Osborn.	Lat 39°45'25", long 94°20'35", in SW¼NE¼ sec.14, T.57 N., R.31 W., DeKalb County, under U.S. Highway 36, 1 mile northeast of Osborn and 5.5 miles northwest of Cameron.	0.80	1955-62 1963-66f 1967-73	5-7-73	15.09	160
06897200	Simpson Branch near Bethany.	Lat 40°15'55", long 93°58'55", in SE¼SW¼ sec.7, T.63 N., R.27 W., Harrison County, at bridge on U.S. Highway 136, 2.3 miles east of Bethany.	4.72	1955-70 1971-72f 1973	3-25-73	8.82	870
06897700	Grand River Tributary near Utica.	Lat 39°44'22", long 93°38'18", in SW¼NE¼ sec.19, T.57 N., R.24 W., Livingston County, at culvert under U.S. Highway 36, 0.2 mile west of Utica.	1.44	1958 1960-73	5-7-73	8.86	300
06898200	Thompson River near Trenton.	Lat 40°08'50", long 93°42'05", on line between SW¼ sec.22 and NW¼ sec.27, T.62 N., R.25 W., Grundy County, 4.5 miles upstream from Weldon River, 6.5 miles northwest of Trenton, and 1.5 miles east of Brimson.	-	1961-73	3-25-73	24.16	16,000
06898500	Weldon River near Mercer.	Lat 40°32'56", long 93°36'10", in SW¼ sec.3, T.66 N., R.24 W., Mercer County, at county highway bridge, 4.2 miles northwest of Mercer, and 5 miles upstream from Little River.	246	1939-59† 1961-73	3-25-73	16.32	12,500
06898700	Weldon River below Mercer.	Lat 40°29'20", long 90°35'10", in SE¼SE¼ sec.27, T.66 N., R.24 W., Mercer County, about 0.8 mile below Little River, and 3 miles southwest of Mercer.	427	1963-73	3-25-73	13.16	11,800
06899100	Weldon River near Trenton.	Lat 40°08'05", long 93°38'15", in SE¼ sec.30, T.62 N., R.24 W., Grundy County, at bridge on County Highway A, 2 miles northwest of Trenton.	494	1961-73	3-25-73	19.19	19,000
06899600	West Fork Leakey Branch near Chillicothe.	Lat 39°53'00", long 93°38'00", in NE¼SE¼ sec.36, T.59 N., R.24 W., Livingston County, at culvert under U.S. Highway 65, 6 miles north of Chillicothe.	0.21	1955-71 1972-73f	5-1-73	7.92	172
06901300	Moffet Branch near Reger.	Lat 40°07'53", long 93°14'30", in NW¼ sec.34, T.62 N., R.21 W., Sullivan County, at culvert under State Highway 6, 2.5 miles west of Reger, and 3.8 miles east of Humphreys.	0.13	1955-63 1964-66f 1967-73	5-1-73	5.22	200
06902800	Onion Branch at St. Catherine.	Lat 39°47'46", long 92°59'17", in NE¼SE¼ sec.35, T.58 N., R.19 W., Linn County, at culvert under State Highway 11, 0.3 mile northeast of St. Catherine and 5 miles northeast of Brookfield.	1.04	1955-61 1962-66f 1967-73	5-27-73	17.38	540
06902900	East Yellow Creek near Brookfield.	Lat 39°45'22", long 91°58'58", in SW¼ sec.12, T.57 N., R.19 W., Linn County, on downstream side of bridge on State Highway 5 and U.S. Highway 36, 2.3 miles southeast of St. Catherine and 4.5 miles southeast of Brookfield.	-	1965-73	5-27-73	16.65	7,350
Chariton River basin							
06904300	Shoal Creek near Hartford.	Lat 40°29'00", long 92°46'20", in NE¼NE¼ sec.35, T.66 N., R.17 W., Putnam County, at bridge on U.S. Highway 136, 3 miles northeast of Hartford.	155	1963-73	5-27-73	20.5	4,500

Annual maximum discharge at crest-stage partial-record stations--Continued

Station no.	Station name	Location	Drainage area (sq mi)	Period of record	Annual Date	maximum Gage height (feet)	Dis-charge (cfs)
Chariton River basin--Continued							
06904700	Strop Branch near Novinger.	Lat 40°13'05", long 92°42'55", in NE¼SW¼ sec.32, T.63 N., R.16 W., Adair County, at culvert on county road about 1 mile south-west of Novinger.	0.96	1955-71 1972-73f	4-20-73	16.07	1,320
06905000	Chariton River at Elmer.	Lat 39°57'08", long 92°39'54", in E½ sec.3, T.59 N., R.16 W., Macon County, at bridge on County Road J, 0.8 mile south-west of Elmer.	1,660	1921-30† 1961-73	4-22-73	30.73	e26,000
06905700	Puzzle Creek near Salisbury.	Lat 39°26'30", long 92°47'30", in SW¼NW¼ sec.35, T.54 N., R.17 W., Chariton County at culvert on State Highway 129, 0.8 mile north of Salisbury.	0.80	1955-73	4-20-73	7.78	388
Lamine River basin							
06907200	Shaver Creek Tributary near Clifton City.	Lat 38°45'29", long 93°04'25", in NE¼SW¼ sec.13, T.46 N., R.20 W., Pettis County, at culvert under State Highway 135, about 2 miles southwest of Clifton City and 9.5 miles northeast of Sedalia.	1.65	1955-61 1962-63f 1964-73	4-20-73	10.50	635
06908300	Trent Branch near Waverly.	Lat 39°12'06", long 93°34'46", in SE¼NE¼ sec.19, T.51 N., R.24 W., Lafayette County, at culvert on U.S. Highway 24 and 3.8 miles west of Waverly.	0.97	1955-59 1960-62f 1963-73	9-23-73	13.22	250
06908500	Shiloh Branch near Marshall.	Lat 39°07'00", long 93°05'50", in NW¼ sec.15, T.50 N., R.20 W., Saline County, at culvert on State Highway 41, in front of Shiloh Church, 5.5 miles east of Marshall.	2.87	1952-65† 1966-73	4-21-73	10.39	1,160
Bonne Femme Creek basin							
06909400	Cottonwood Creek Tributary at Estill.	Lat 39°02'55", long 92°44'38", in NW¼SW¼NE¼ sec.17, T.49 N., R.16 W., Howard County, at culvert under State Highway 5, 0.2 mile north of Estill and 2 miles north of New Franklin.	0.30	1958-73	4-20-73	9.33	135
Moniteau Creek basin							
06909500	Moniteau Creek near Fayette.	Lat 39°07'15", long 92°33'40", in SE¼SE¼ sec.14, T.50 N., R.15 W., Howard County, at "Buoy" bridge, 1 mile downstream from Hungry Mother Creek, 7 miles east of Fayette and 15 miles upstream from mouth.	81	1948-60 1962-69† 1970-73	4-20-73	22.23	13,700
Petite Saline Creek basin							
06909700	Petite Saline Creek Tributary near Bellair.	Lat 38°50'34", long 92°50'31", in SW¼NE¼ sec.13, T.47 N., R.18 W., Cooper County, at culvert under State Highway 5, at junction of highways 5 and F, 0.5 mile north of Bellair and 10.5 miles south-west of Boonville.	0.49	1955-64 1965-69f 1970-73	4-20-73	14.95	300
Perche Creek basin							
06910200	Cow Branch near Columbia.	Lat 39°00'10", long 92°19'25", in NW¼ sec.30, T.49 N., R.12 W., Boone County, at culvert under U.S. Highway 63, 2.7 miles north of Columbia.	1.01	1955-73	7-20-73	12.60	540
Bonne Femme Creek basin							
06910250	Traxler Branch near Columbia.	Lat 38°51'15", long 92°19'45", in NE¼SE¼ sec.13, T.47 N., R.13 W., Boone County, at culvert under County Road N about 5.5 miles south of Columbia.	0.55	1958-63f 1964-73	7-20-73	11.06	274

DISCHARGE AT PARTIAL-RECORD STATIONS

Annual maximum discharge at crest-stage partial-record stations--Continued

Station no.	Station name	Location	Drainage area (sq mi)	Period of record	Annual Date	maximum Gage height (feet)	Dis- charge (cfs)
Baldwin Branch basin							
06910400	Baldwin Branch near Jefferson City.	Lat 38°39'35", long 92°13'25", in SE¼SE¼ sec.24, T.45 N., R.12 W., Boone County, at culvert on U.S. Highway 63, 5.4 miles northwest of Jefferson City.	0.60	1958-73	-	a	+
Grays Creek basin							
06910430	Dickerson Creek Tributary near Jefferson City.	Lat 38°34'55", long 92°16'43", in SW¼NW¼ sec.8, T.44 N., R.12 W., Cole County, on left bank up- stream from culvert under U.S. Highway 50, 0.25 mile upstream from mouth, 1.9 miles west of Jefferson City.	0.10	1970-73	3-10-73	7.75	70
06910455	Wears Creek at Jefferson City.	Lat 38°33'57", long 92°13'22", in SE¼NE¼ sec.15, T.44 N., R.12 W., Cole County, on left abutment of former foot bridge, 50 ft upstream from Frog Hollow, 0.8 mile south of Jefferson City and 3 miles upstream from mouth.	4.77	1970-73	-	a	+
Moreau River basin							
06910700	Hazel Branch Tribu- tary near Wards- ville.	Lat 38°28'15", long 92°12'35", in NE¼SE¼ sec.14, T.43 N., R.12 W., Cole County, at culvert on county road 2.5 miles southwest of Wards- ville.	0.13	1957-73	6-15-73	12.42	180
Osage River basin							
06918200	North Fork Panther Creek Tributary near Appleton	Lat 38°11'38", long 94°04'53", in SW¼NW¼ sec.2, T.39 N., R.29 W., Bates County, at culvert under State Highway 52, ¼ mile south of Hudson, 3 miles west of Appleton City, and 18 miles southeast of Butler.	0.08	1955-73	4-20-73	5.36	73
06918300	West Fork Clear Creek Tributary near Nevada.	Lat 37°51'43", long 94°13'51", in SW¼SW¼ sec.27, T.36 N., R.30 W., Vernon County, at culvert under U.S. Highway 54, 0.2 mile east of County Road C and 7.5 miles north- east of Nevada.	0.51	1955-73	4-16-73	6.39	185
06918400	Pickereel Creek Trib- utary near Republic.	Lat 37°07'09", long 93°31'28", in NW¼SE¼ sec.23, T.28 N., R.24 W., Greene County, at culvert under State Highway 174, 2.0 miles west of Republic.	0.57	1957-61 1962f 1963-73	7-1-73	7.30	105
06918750	Franca Branch near Brighton.	Lat 37°29'57", long 93°21'00", in SE¼NW¼SE¼ sec.16, T.32 N., R.22 W., Polk County, at culvert under State Highway 13, 3 miles north of Brighton, and 8.7 miles south- east of Bolivar.	0.59	1955-73	12-12-72	12.69	125
06919200	Sac River Tributary near Caplinger Mills.	Lat 37°48'22", long 93°51'00", in NE¼NE¼ sec.13, T.35 N., R.27 W., Cedar County, at culvert under State Highway 39, 6.2 miles south of junction of U.S. Highway 54 and State Highway 39, 2.5 miles west of Caplinger Mills and 10.5 miles southeast of Eldorado Springs.	0.14	1955-62 1963-73	4-16-73	5.52	34
06920800	Big Muddy Creek at Lowry City.	Lat 38°09'29", long 93°43'22", in SE¼NE¼ sec.12, T.39 N., R.26 W., St. Clair County, at culvert under State Highway 13, one mile north of Lowry City.	0.31	1955-73	4-20-73	9.45	+

Annual maximum discharge at crest-stage partial-record stations--Continued

Station no.	Station name	Location	Drainage area (sq mi)	Period of record	Annual Date	maximum Gage height (feet)	Dis-charge (cfs)
Osage River basin--Continued							
06921100	Olinger Creek near Buffalo.	Lat 37°40'47", long 93°06'10", in NW¼SW¼SW¼ sec.11, T.34 N., R.20 W., Dallas County, at culvert under U.S. Highway 65 about 0.2 mile north of County Highway Z and 2.5 miles north of Buffalo.	1.96	1957-63 1964f 1966-73	11-1-72	9.59	630
06921400	Ferguson Branch at Nemo.	Lat 37°52'50", long 93°15'30", in NE¼SE¼ sec.8, T.36 N., R.21 W., Hickory County, at culvert under County Road D, 0.5 mile northeast of Nemo.	0.18	1957-73	9-2-73	6.59	40
06921800	Granddaddy Creek near Urich.	Lat 38°21'49", long 94°00'47", in NW¼NW¼SW¼ sec.10, T.41 N., R.28 W., Henry County, at culvert under County Route K, 0.3 mile north of junction of County Route K and State Highway 18, and 6.5 miles south of Urich.	0.92	1958-73	4-20-73	7.63	220
06922600	Little Turkey Creek Tributary near Warsaw.	Lat 38°10'30", long 93°17'30", in NW¼SW¼ sec.1, T.39 N., R.22 W., Benton County, at culvert on State Highway 7, 1.5 miles east of junction of State Highway 7 and U.S. Highway 65, and 5 miles southeast of Warsaw.	0.18	1959-69 1970-73f	4-21-73	10.54	115
06922700	Chub Creek near Lincoln.	Lat 38°26'12", long 93°18'07", in NW¼ sec.12, T.42 N., R.22 W., Benton County, at culvert on U.S. Highway 65, 3.4 miles north of Lincoln.	2.86	1958-63 1964-70f 1971-73	4-21-73	21.56	970
06923000	Niangua Branch at Marshfield.	Lat 37°20'50", long 92°54'45", in SE¼NE¼ sec.4, T.30 N., R.18 W., Webster County, at concrete culvert under county highway at Marshfield.	0.82	1950-57f 1958f 1960-73	11-1-72	5.62	126
06925300	Prairie Branch near Decaturville.	Lat 37°52'30", long 92°42'30", in SE¼NE¼ sec.8, T.36 N., R.16 W., Laclede County, at bridge on State Highway 5, 2.4 miles south of Decaturville.	1.48	1955-69 1970-72f 1973	11-1-72	10.97	540
069254500	Little Gravois Creek near Versailles.	Lat 38°23'58", long 92°49'30", in NE¼SW¼ sec.17, T.42 N., R.17 W., Morgan County, at bridge on old County Highway TT, and 2.5 miles south of Versailles.	4.74	1955-73	6-5-73	13.33	1,450
06926150	Jack Buster Creek at Eugene.	Lat 38°21'10", long 92°24'00", in NW¼NE¼ sec.31, T.42 N., R.13 W., Cole County, at culvert on State Highway 17 at Eugene.	0.17	1961-73	6-5-73	7.36	165
06926200	Van Cleve Branch near Meta.	Lat 38°13'35", long 92°09'40", in SE¼NE¼ sec.8, T.40 N., R.11 W., Maries County, 20 feet upstream from culvert under State Highway 133, 7 miles south of Meta.	0.75	1957-72f 1973	6-5-73	3.33	215
06926800	Long Branch near Vienna.	Lat 38°11'00", long 92°05'05", in SW¼NW¼ sec.30, T.40 N., R.10 W., Maries County, at culvert on State Highway 42, 7.5 miles west of Vienna.	0.32	1958-73	11-1-72	8.52	235
06927000	Maries River at Westphalia.	Lat 38°25'55", long 91°59'23", in NE¼ sec.35, T.43 N., R.10 W., Osage County, at bridge on U.S. Highway 63, 0.8 mile southeast of Westphalia, 1.2 miles downstream from Little Maries Creek, and at mile 9.9.	257	1947-70f 1971-73	6-5-73	20.12	24,400

DISCHARGE AT PARTIAL-RECORD STATIONS

Annual maximum discharge at crest-stage partial-record stations--Continued

Station no.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum Date	Gage height (feet)	Dis-charge (cfs)
Auxvasse Creek basin							
06927100	Doane Branch near Kingdom City.	Lat 38°56'20", long 91°49'40", in NE¼ sec.17, T.48 N., R.8 W., Callaway County at culvert on access road to Interstate Highway 70, 0.9 mile east of Auxvasse Creek and about 6 miles east of Kingdom City.	0.54	1955-59 1960-62f 1963 1965-73	3-31-73	9.31	25
Gasconade River basin							
06927600	Wheeler Branch near Mountain Grove.	Lat 37°06'52", long 92°16'37", in SW¼NE¼ sec.17, T.28 N., R.12 W., Wright County, on County Road D, 0.8 mile southwest of Mountain Grove.	1.34	1955-73	3-10-73	3.90	270
06929000	Coyle Branch at Houston.	Lat 37°19'25", long 91°57'12", in NW¼NW¼ sec.8, T.30 N., R.9 W., Texas County, at double culvert on U.S. Highway 63, at east edge of Houston.	1.10	1949-55f 1959-73	11-13-72	3.47	200
06930750	Prewett Hollow near Dixon.	Lat 37°57'25", long 92°04'50", in SW¼SE¼ sec.1, T.37 N., R.11 W., Pulaski County, at culvert on County Road D, 2 miles southeast of Dixon.	0.46	1960-64 1966f 1967-71 1972-73f	11-1-72	14.06	460
06931000	Beaver Creek near Rolla.	Lat 37°52'45", long 91°47'45", in SW¼SE¼ sec.34, T.37 N., R.8 W., Phelps County, at bridge on U.S. Highway 63, 5 miles south of Rolla.	13.7	1949-58f 1960-73	3-10-73	5.80	4,750
06931600	Paulsell Branch near Rolla.	Lat 37°55'15", long 91°49'40", in NW¼NE¼ sec.20, T.37 N., R.8 W., Phelps County, at culvert on St. Louis-San Francisco RR, 0.8 mile above confluence with Little Beaver Creek and 3.5 miles southwest of Rolla.	2.33	1949-73	5-7-73	2.47	1,250
06933700	Penzer Hollow near Rolla.	Lat 38°00'40", long 91°50'05", in NE¼NW¼ sec.20, T.38 N., R.8 W., Phelps County, at culvert on Phelps County Road E, 5.0 miles north of Rolla.	0.27	1956-64 1966f 1967-73	11-1-72	16.41	118
Loutre River basin							
06934600	Rumbo Branch at Danville.	Lat 38°55'00", long 91°32'03", in SW¼NE¼ sec.24, T.48 N., R.6 W., Montgomery County, at culvert on State Highway 161, 0.5 mile north of Danville.	1.40	1954-58f 1959-73	7-23-73	5.16	290
Little Berger Creek basin							
06934750	Little Berger Creek Tributary near Hermann.	Lat 38°40'10", long 91°22'25", in NW¼NE¼ sec.9, T.45 N., R.4 W., Gasconade County, at culvert on State Highway 100, 4 miles southeast of Hermann.	0.25	1955-70 1971-73f	6-18-73	15.33	115
Bonhomme Creek basin							
06935800	Shotwell Creek near Ellisville.	Lat 38°37'05", long 90°35'00", in NW¼NW¼ sec.28, T.45 N., R.4 E., St. Louis County, at culvert on State Highway 340, 1.8 miles north of Ellisville.	0.81	1960-62 1963-73f	7-23-73	8.02	495
Meramec River basin							
07011200	Love Creek near Salem.	Lat 37°38'10", long 91°33'35", in W¼NE¼ sec.23, T.34 N., R.6 W., Dent County, at culvert under State Highways 32 and 72, 0.5 mile west of Salem.	0.89	1955-59 1960-63f 1964-73	5-7-73	4.93	130

DISCHARGE AT PARTIAL-RECORD STATIONS

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Annual maximum discharge at crest-stage partial-record stations--Continued

Station no.	Station name	Location	Drainage area (sq mi)	Period of record	Annual Date	maximum Gage height (feet)	Dis-charge (cfs)
Meramec River basin--Continued							
07011300	Ragan Branch near Rolla.	Lat 37°49'05", long 91°41'45", in NE¼NE¼ sec.28, T.36 N., R.7 W., Phelps County, at bridge on State Highway 72, 3 miles northwest of Lake Spring and 9 miles south-east of Rolla.	6.58	1949-73	5-7-73	3.45	520
07012000	Behmke Branch near Rolla.	Lat 37°56'05", long 91°42'35", in NE¼NE¼ sec.17, T.37 N., R.7 W., Phelps County, 300 ft upstream from county highway bridge and 3.5 miles southeast of Rolla.	1.05	1945-49† 1960-73	12-12-72	2.96	850
07015700	Lanes Fork near Vichy.	Lat 38°06'15", long 91°42'45", in SW¼NE¼ sec.17, T.39 N., R.7 W., Maries County, at bridge on State Highway 68, 2.5 miles east of Vichy.	24.1	1944-45 1948-73	11-1-72	10.30	6,820
07015800	Langenberg Branch near Rosebud.	Lat 38°23'03", long 91°25'41", in SE¼NE¼ sec.13, T.42 N., R.5 W., Gasconade County, at culvert under State Highway 28, 1.7 miles west of Rosebud.	0.64	1960-64 1966-70f 1971-73	5-7-73	8.89	118
07017700	Fountain Farm Branch near Potosi.	Lat 37°58'20", long 90°43'40", in SE¼NE¼ sec.32, T.38 N., R.3 E., Washington County, at culvert under County Road E, about 4 miles northeast of Potosi.	2.16	1957-73	11-1-72	14.69	900
Plattin Creek basin							
07019820	Murphy Branch near Crystal City.	Lat 38°11'12", long 90°23'46", in NW portion of Missouri Survey No. 1995, T.40 N., R.6 E., Jefferson County, at culvert under U.S. Highway 61, and 2.5 miles south-west of Crystal City.	0.45	1955-60 1961-63f 1964-73	6-19-73	9.20	290
Apple Creek basin							
07020700	Hoehs Branch near Uniontown.	Lat 37°37'50", long 89°43'50", in SW¼SE¼ sec.20, T.34 N., R.12 E., Perry County, on bridge on U.S. Highway 61, 1.2 miles north of Uniontown.	1.66	1955-73	5-27-73	13.49	2,100
Headwater diversion channel basin							
07021200	Sunnybrook Creek at Lutesville.	Lat 37°17'05", long 89°58'55", in NW¼SE¼ sec.7, T.30 N., R.10 E., Bollinger County, on bridge under State Highway 51, 0.5 mile south of Lutesville.	0.52	1955-73	5-7-73	2.45	220
St. Francis River basin							
07033000	Wolf Creek near Farmington.	Lat 37°45'45", long 90°23'15", in SE¼ sec.5, T.35 N., R.6 E., St. Francois County, at bridge on County Highway 00, 1.5 miles southeast of Farmington.	40.3	1940† 1955-73	11-1-72	16.33	5,000
07038000	Clark Creek at Patterson.	Lat 37°11'25", long 90°32'20", in NE¼ sec.18, T.29 N., R.5 E., Wayne County, at bridge on State Highway 34, 0.6 mile east of Patterson.	37.5	1940† 1955-73	7-23-73	9.09	3,500
0704110	Delaware Creek Tributary near Bloomfield.	Lat 36°51'35", long 89°56'10", in NW¼NE¼ sec.35, T.26 N., R.10 E., Stoddard County, at culvert under State Highway 25, 1.8 miles south-west of Bloomfield.	0.38	1955-71 1972-73f	5-11-73	14.61	+
White River basin							
07050800	Maple Grove Branch near Ozark.	Lat 37°04'20", long 93°13'05", in SW¼NE¼ sec.3, T.27 N., R.21 W., Christian County, at culvert under County Highway NN, 3.4 miles north of Ozark.	0.64	1957-65 1966-71f 1972-73	11-1-72	6.93	242

DISCHARGE AT PARTIAL-RECORD STATIONS

Annual maximum discharge at crest-stage partial-record stations--Continued

Station no.	Station name	Location	Drainage area (sq mi)	Period of record	Annual Date	maximum Gage height (feet)	Dis-charge (cfs)
White River basin--Continued							
07052700	Brawley Hollow near Cassville.	Lat 36°38'50", long 93°54'15", in NE¼SE¼ sec.1, T.22 N., R.28 W., Barry County, at culvert under State Highway 37, 3.1 mile south-west of Cassville.	2.61	1960-66 1967-73f	6-3-73	13.29	185
07053950	Ingenthron Hollow near Forsyth.	Lat 36°43'52", long 93°07'30", in SW¼NE¼ sec.17, T.24 N., R.20 W., Taney County, at culvert under County Road H, 2 miles north of Forsyth.	0.65	1957-62 1963-66f 1967-73	11-1-72	15.69	320
07054100	Cedar Hollow at Bradleyville.	Lat 36°46'45", long 92°55'25", in NE¼SW¼ sec.10, T.24 N., R.18 W., Taney County, at culvert under State Highway 76, 0.8 mile south-west of Bradleyville.	0.83	1957-73	4-10-73	7.24	430
07054200	Yandell Branch near Kirbyville.	Lat 36°36'36", long 93°05'47", in SW¼ sec.27, T.23 N., R.20 W., Taney County, at culvert on County Road K, 2.8 miles south-east of Kirbyville.	0.33	1955-66 1967-73f	11-1-72	15.58	117
07054300	Gray Branch at Lutie.	Lat 36°35'05", long 92°42'30", in NE¼SW¼ sec.15, T.22 N., R.16 W., Ozark County, at culvert under U.S. Highway 160, 1.7 miles west of Lutie.	0.23	1955-59 1960-62f 1963-71 1973	7-24-73	15.42	335
07061800	Brawley Hollow near Centerville.	Lat 37°20'59", long 90°58'14", in SE¼NW¼ sec.29, T.31 N., R.1 E., Reynolds County, at culvert under State Highway 21, about 6 miles south of Centerville.	1.00	1955-73	11-2-72	4.47	+
07063200	Pike Creek Tributary near Poplar Bluff.	Lat 36°47'02", long 90°25'41", in SW¼SW¼ sec.28, T.25 N., R.6 E., Butler County at culvert under U.S. Highway 67, 2 miles north-west of Poplar Bluff.	0.28	1955-59 1960-63f 1964-69 1973	3-11-73	9.06	250
07066800	Sycamore Creek near Winona.	Lat 37°02'45", long 91°19'30", in S¼SW¼ sec.31, T.28 N., R.3 W., Shannon County, at culvert under State Highway 19, about 3 miles north of Winona.	0.88	1955-64 1966-71f 1972-73	11-1-72	6.72	370
07068200	North Prong Little Black River at Hunter.	Lat 36°53'25", long 90°50'30", in NE¼SE¼ sec.21, T.26 N., R.2 E., Carter County, at culvert under State Highway 21, at Hunter.	1.23	1958-64 1966-71f 1972-73	5-7-73	13.00	315
07068500	Little Black River near Fairdealing.	Lat 36°39'40", long 90°34'25", in NW¼NW¼ sec.7, T.23 N., R.5 E., Ripley County, at bridge on U.S. Highway 160, 2.5 miles east of Fairdealing.	187	1940-42† 1955-73	3-11-73	21.35	19,000
07069100	Adams Branch near West Plains.	Lat 36°41'35", long 91°48'06", in SE¼NW¼ sec.1, T.23 N., R.8 W., Howell County, at culvert under U.S. Highway 63, 4 miles south-east of West Plains.	2.27	1955-70 1971-73f	4-22-73	4.66	280
07070200	Burnham Branch near Willow Springs.	Lat 36°56'00", long 91°56'00", in NW¼NE¼ sec.16, T.26 N., R.9 W., Howell County, at culvert under U.S. Highway 63, 4.5 miles south-east of Willow Springs.	1.27	1955-72 1973f	5-7-73	11.43	135
07071800	Williams Spring Branch near Alton.	Lat 36°40'35", long 91°20'10", in SE¼SW¼ sec.6, T.23 N., R.3 W., Oregon County, on bridge on U.S. Highway 160 and 4 miles east of Alton.	4.24	1954-73	5-26-73	16.21	1,800
Arkansas River basin							
07185600	South Fork Stahl Creek near Miller.	Lat 37°11'15", long 93°50'25", in NE¼NE¼ sec.35, T.29 N., R.27 W., Lawrence County, at culvert on State Highway 39, 2 miles south of Miller.	0.94	1951-70 1971-73f	11-1-72	7.52	1,000

DISCHARGE AT PARTIAL-RECORD STATIONS

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Annual maximum discharge at crest-stage partial-record stations--Continued

Station no.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum Date Gage height (feet)	Dis- charge (cfs)
Arkansas River basin--Continued						
07185900	O'Possum Creek at Jasper.	Lat 37°19'20", long 94°18'09", in NE¼NE¼ sec.26, T.30 N., R.31 W., Jasper County, on wingwall of bridge on U.S. Highway 71, just south of Jasper.	9.67	1955-70 1971-73f	5-6-73 15.13	2,450
07186950	North Fork Carver Branch at Diamond.	Lat 36°59'45", long 94°19'50", in SW¼SW¼ sec.4, T.26 N., R.31 W., Newton County, at culvert under County Road V, 0.8 mile west of Diamond.	0.33	1955-60 1961-66f 1967-73	11-1-72 8.63	138
07188500	Lost Creek at Seneca.	Lat 36°50'28", long 94°36'30", in SE¼SE¼ sec.35, T.25 N., R.34 W., Newton County, at Seneca Street bridge, 2 blocks east of Main Street in Seneca.	42.0	1948-59‡ 1960-73	11-1-72 9.14	7,290

+ Discharge not determined.

‡ Operated as a continuous-record gaging station.

a Peak stage did not reach bottom of gage.

b Revised.

d Discontinued.

e Estimated.

f Discharge measurements and daily gage-height and rainfall records available.

PART 2. WATER QUALITY RECORDS

WATER QUALITY RECORDS

DES MOINES RIVER BASIN

05490600 DES MOINES RIVER AT ST. FRANCISVILLE, MO.

LOCATION.--Lat 40°27'45", long 91°34'00", Clark County, at bridge on County Highway B at St. Francisville, and 8 mi (12.9 km) upstream from Sugar Creek.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT. 03... 10800		14	20	0	73	22	12	5.0	248	0	63	18
NOV. 08... 17100		18	0	10	91	24	12	4.6	304	0	55	21
DEC. 18... 5600		19	0	20	120	34	15	3.1	396	0	84	26
JAN. 09... 10200		10	70	10	58	13	8.6	6.3	176	0	48	13
FEB. 06... 28000		9.7	110	10	44	12	8.5	4.9	154	0	39	11
MAR. 06... 23500		12	40	10	58	15	8.0	4.8	188	0	46	12
APR. 03... 17400		12	180	10	61	12	6.1	4.1	156	0	57	11
MAY 08... 42200		11	50	10	54	14	6.9	3.6	168	0	50	9.5
JUNE 05... 22700		13	40	0	74	22	7.9	2.7	224	0	53	15
JULY 11... 21000		15	20	30	76	26	8.9	2.7	260	0	57	18
AUG. 07... 18200		14	100	190	65	19	7.1	3.7	214	0	60	13
SEP. 05... 10100		12	50	0	69	25	11	3.8	248	0	63	17
DATE	PH (UNITS)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (MG/L)	SUS- PEN- DED SEDI- MENT (MG/L)	TEMPER- ATURE (DEG C)	CHEM- ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	IMME- DIATE COLI- FORM (COL. PER 100 ML)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)
OCT. 03...	8.2	50	--	--	17.5	18	--	8.0	83	--	1200	260
NOV. 08...	8.1	10	--	--	7.5	14	--	8.0	67	--	650	--
DEC. 18...	8.3	5	--	--	.0	6	--	11.0	75	--	20	100
JAN. 09...	7.9	20	110	--	.0	6	7.0	9.3	64	4000	200	4000
FEB. 06...	7.7	25	--	324	2.0	23	--	10.4	75	8500	1100	6800
MAR. 06...	8.0	25	70	188	4.0	23	--	9.2	70	2400	320	3800
APR. 03...	7.7	25	--	--	7.0	66	22	9.6	79	11000	3600	13000
MAY 08...	7.8	20	--	--	13.5	73	--	7.8	74	60000	14000	17000
JUNE 05...	8.0	7	--	--	18.5	0	--	7.3	77	7200	1600	--
JULY 11...	8.0	4	--	123	25.5	16	--	5.6	68	--	320	50
AUG. 07...	8.2	10	--	96	25.0	--	5.0	7.4	89	6400	80	120
SEP. 05...	8.2	20	--	148	25.0	26	--	6.8	82	14800	4800	4600

05490600 DES MOINES RIVER AT ST. FRANCISVILLE, MO.--Continued

PERIOD OF RECORD.--Chemical analyses: August 1967 to September 1973.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS-SOLVED FLUORIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	ORGANIC NITROGEN (N) (MG/L)	DIS-SOLVED PHOSPHORUS (P) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L)	DIS-SOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	HARDNESS (CA, MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	ALKALINITY AS CaCO3 (MG/L)	SPECIFIC CONDUCTANCE (MICRO-MHOS)
OCT. 03...	.3	5.4	.00	.53	.16	.28	.07	345	270	70	203	595
NOV. 08...	.2	7.4	.00	.01	.14	.37	.12	388	320	75	249	650
DEC. 18...	.4	10	.06	.20	.18	.54	.09	532	440	115	325	940
JAN. 09...	.3	4.1	1.4	.71	.12	.22	.10	265	200	54	144	520
FEB. 06...	.3	2.1	.31	.75	.09	.42	.05	224	160	34	126	378
MAR. 06...	.3	4.5	.00	.53	.16	.36	.05	286	210	52	154	455
APR. 03...	.0	5.6	.00	.01	.05	.68	.06	259	200	74	128	400
MAY 08...	.2	4.1	.01	1.6	.06	.60	.06	259	190	54	138	292
JUNE 05...	.4	6.5	.01	.91	.11	.19	.12	362	280	92	184	540
JULY 11...	.6	7.7	.02	.76	.11	.19	--	437	300	87	213	600
AUG. 07...	.6	--	.02	.56	--	.16	--	341	240	65	176	480
SEP. 05...	.2	3.1	.08	.14	.06	.16	--	276	280	77	203	565

DATE	DIS-SOLVED CADMIUM (CD) (UG/L)	DIS-SOLVED CHROMIUM (CR) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	DIS-SOLVED SELENIUM (SE) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)
JAN. 09...	0	<10	7	14	0	.1	2	140	<10	0	<10	9
APR. 03...	2	<10	9	0	1	<.5	--	60	<10	2	20	18
AUG. 07...	2	0	0	28	2	.0	4	60	0	10	10	<25

DATE	TOTAL COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MANGANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL SELENIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	ORGANIC CARBON IN BED MATERIAL (C) (G/KG)	TOTAL PHOSPHORUS IN BOTTOM DEPOSITS (MG/KG)	TOTAL NITRATE PLUS NITRITE IN BOTTOM DEPOSITS (MG/KG)
JAN. 09...	15	1100	0	50	1.2	--	230	<10	--	--	--
APR. 03...	30	7500	40	540	.5	4	140	<10	--	--	--
AUG. 07...	40	2300	<50	230	.0	6	100	0	.7	98	1.8

DATE	TOTAL CADMIUM IN BOTTOM DEPOSITS (UG/G)	TOTAL CHROMIUM IN BOTTOM DEPOSITS (UG/G)	TOTAL COBALT IN BOTTOM DEPOSITS (UG/G)	TOTAL COPPER IN BOTTOM DEPOSITS (UG/G)	TOTAL IRON IN BOTTOM DEPOSITS (UG/G)	TOTAL LEAD IN BOTTOM DEPOSITS (UG/G)	TOTAL MANGANESE IN BOTTOM DEPOSITS (UG/G)	TOTAL MERCURY IN BOTTOM DEPOSITS (UG/G)	TOTAL SELENIUM IN BOTTOM DEPOSITS (UG/G)	TOTAL ZINC IN BOTTOM DEPOSITS (UG/G)	TOTAL ARSENIC IN BOTTOM DEPOSITS (UG/G)
JAN. 09...	--	--	--	--	--	--	--	--	--	--	--
APR. 03...	--	--	--	--	--	--	--	--	--	--	--
AUG. 07...	0	3	8	1	4000	<5	610	.0	0	13	2

UPPER MISSISSIPPI RIVER BASIN

05495150 MISSISSIPPI RIVER AT CANTON, MO.

LOCATION.--Lat 40°07'51", long 91°30'49", Lewis County, multi-parameter digital recorder at raw-water inlet of City of Canton Water Treatment Plant in Canton.

PERIOD OF RECORD.--Chemical analyses: May 1969 to September 1973.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)
OCT. 03...	10	110	10	55	17	9.9	3.6	200	0	43	13	.2
NOV. 07...	14	50	10	71	21	10	4.0	252	0	45	17	.2
DEC. 18...	9.4	110	60	79	22	12	2.8	282	0	52	16	.3
JAN. 09...	8.7	150	60	49	13	7.9	6.2	160	0	37	18	.2
FEB. 05...	11	80	20	50	13	8.5	5.4	172	0	40	12	.2
MAR. 07...	12	40	20	55	15	8.4	4.6	184	0	40	15	.2
APR. 02...	9.7	110	20	43	11	5.7	3.9	140	0	34	9.3	.0
MAY 08...	9.4	50	10	53	15	6.9	3.5	180	0	40	10	.0
JUNE 04...	8.3	30	10	70	18	6.9	3.0	148	0	98	24	.3
JULY 10...	10	30	40	64	22	8.1	2.7	222	0	47	14	.4
AUG. 07...	11	150	40	60	20	8.1	2.9	218	0	41	13	.4
SEP. 04...	6.7	100	20	49	21	11	2.5	208	0	39	15	.3

DATE	NON-CARBONATE HARDNESS (MG/L)	ALKALINITY AS CaCO3 (MG/L)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	COLOR (PLATINUM-COBALT UNITS)	TEMPERATURE (DEG C)	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	DIS-SOLVED OXYGEN (MG/L)	PERCENT SATURATION	FECAL COLIFORM (COL. PER 100 ML)	STREPTOCOCCI (COLONIES PER 100 ML)
OCT. 03...	43	164	455	8.0	60	17.0	19	6.6	68	1900	3800
NOV. 07...	57	207	570	8.0	20	8.5	24	8.0	68	700	--
DEC. 18...	56	231	640	8.2	15	.0	17	11.4	78	250	400
JAN. 09...	44	131	420	7.6	30	.0	22	9.0	62	500	7000
FEB. 05...	38	141	405	7.7	20	2.0	36	8.6	62	650	4400
MAR. 07...	48	151	422	7.9	30	4.0	21	8.0	61	800	1300
APR. 02...	38	115	332	7.6	60	8.5	36	7.8	67	2900	7500
MAY 08...	46	148	300	8.0	15	14.0	11	8.0	77	1200	2800
JUNE 04...	130	121	535	6.7	2	20.5	20	9.5	106	<20	<20
JULY 10...	68	182	490	7.7	10	28.0	18	5.6	71	10000	6000
AUG. 07...	51	179	470	8.2	10	25.5	18	6.2	76	900	360
SEP. 04...	39	171	450	7.7	20	26.0	24	5.0	61	1200	150

05495150 MISSISSIPPI RIVER AT CANTON, MO.--Continued

EXTREMES, May 1969 to Sept. 1973.--Specific conductance: Maximum, 737 micromhos Dec. 20, 1972; minimum, 184 micromhos Sept. 23, 1970.

PH: Maximum, 9.0 Dec. 19, 20, 21, 23, 1969; minimum, 7.2 Jan. 15 to 25, 1970.

Water temperatures: Maximum, 29.0°C July 25, 1970, Aug. 20, 21, 1972; minimum: freezing point on many days during winter months.

REMARKS.--No discharge records available. Recorder inoperative on many days during the year.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TOTAL NITRATE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	DIS- SOL- VED- PHOS- PHORUS (P) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	SODIUM AD- SORP- TION RATIO	PERCENT SODIUM	HARD- NESS (CA,MG) (MG/L)
OCT.											
03...	4.1	.02	.84	.14	.20	.06	269	.37	.3	9	210
NOV.											
07...	5.0	.05	.00	.12	.42	.10	309	.42	.3	7	260
DEC.											
18...	5.4	.11	.52	.12	.20	.06	349	.47	.3	8	290
JAN.											
09...	2.7	.43	.76	.09	.14	.05	241	.33	.3	9	180
FEB.											
05...	2.1	.39	.92	.09	.45	.05	250	.34	.3	9	180
MAR.											
07...	3.8	.00	.51	.14	.36	.05	277	.38	.3	8	200
APR.											
02...	2.9	.43	.76	.05	.19	.06	204	.28	.2	7	150
MAY											
08...	4.3	.05	.67	.08	.29	.04	256	.35	.2	7	190
JUNE											
04...	5.0	.02	1.0	.01	.34	.10	359	.49	.2	6	250
JULY											
10...	5.0	.02	.91	.13	.26	--	329	.45	.2	7	250
AUG.											
07...	3.6	.09	.69	.07	.18	--	287	.39	.2	7	230
SEP.											
04...	1.4	.12	.53	.10	.14	--	284	.39	.3	10	210

05495150 MISSISSIPPI RIVER AT CANTON, MO.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	578	565	616	588	558	517	444	431	476	465
2	---	---	566	543	599	565	518	433	457	440	465	451
3	459	338	571	561	597	572	489	429	454	406	447	444
4	457	439	585	562	597	561	485	442	414	381	449	444
5	450	440	627	585	602	568	474	425	463	399	449	434
6	452	447	627	591	623	574	422	371	500	396	446	434
7	454	443	616	552	705	564	414	384	409	368	444	383
8	444	420	586	548	638	584	425	408	360	345	388	369
9	420	415	577	541	708	578	447	420	344	262	376	369
10	415	374	601	551	634	556	447	400	372	294	377	371
11	412	397	603	594	593	529	464	444	384	297	375	338
12	416	403	601	531	569	558	479	447	400	322	354	327
13	425	404	567	536	619	550	494	486	393	345	359	345
14	422	400	560	513	656	585	507	487	371	358	378	354
15	449	410	572	549	675	608	517	507	398	368	376	359
16	473	433	575	505	687	636	521	502	436	401	380	360
17	477	446	581	526	696	651	516	482	461	435	375	369
18	485	465	582	563	716	640	537	512	485	461	379	372
19	491	455	566	544	713	668	538	467	504	485	379	373
20	486	440	550	507	737	662	467	426	508	492	380	369
21	480	433	559	506	734	671	463	426	545	496	378	368
22	483	449	569	537	717	664	494	456	522	507	369	354
23	486	480	573	528	715	679	492	482	526	522	367	349
24	496	463	568	522	708	665	491	453	529	517	354	346
25	501	476	578	544	695	645	465	401	551	530	352	338
26	515	484	590	535	695	622	454	418	565	552	348	336
27	547	512	583	528	687	632	448	437	553	520	338	326
28	569	529	605	546	658	617	450	424	507	476	330	309
29	583	569	618	565	627	556	447	436	---	---	326	315
30	581	570	622	590	617	534	435	425	---	---	351	327
31	573	560	---	---	586	550	434	422	---	---	382	350
MONTH	583	338	627	505	737	529	558	371	565	262	476	309

DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	384	356	421	405	---	---	---	---	---	---	471	457
2	354	328	414	366	---	---	---	---	---	---	468	452
3	338	329	362	306	---	---	---	---	---	---	471	452
4	384	346	303	283	---	---	---	---	---	---	471	443
5	437	382	318	275	---	---	---	---	---	---	453	442
6	469 #	437	338	288	---	---	---	---	---	---	460	446
7	491	471	316	292	---	---	---	---	471	468	457	448
8	500	489	310	294	---	---	---	---	470	455	454	434
9	506	474	292	270	---	---	---	---	461	449	442	427
10	470	399	282	271	---	---	---	---	450	435	437	423
11	460	416	298	281	---	---	---	---	454	434	433	423
12	489	450	304	273	---	---	---	---	450	429	442	422
13	488	445	318	302	---	---	---	---	448	417	440	420
14	444	395	320	311	---	---	---	---	451	425	441	424
15	394	369	311	300	---	---	---	---	445	431	431	384
16	414	374	308	301	---	---	---	---	440	414	399	377
17	419	364	314	305	---	---	---	---	463	442	421	394
18	374	347	321	312	---	---	---	---	470	432	422	412
19	408	384	324	315	---	---	---	---	481	462	413	396
20	442	410	333	320	---	---	---	---	482	430	420	401
21	436	337	335	327	---	---	---	---	490	478	433	416
22	342	269	337	322	---	---	---	---	489	468	435	422
23	276	245	337	327	---	---	---	---	477	460	447	429
24	296	271	335	323	---	---	---	---	477	462	458	437
25	318	293	336	327	---	---	---	---	480	466	471	444
26	375	318	333	320	---	---	---	---	486	474	456	390
27	413	375	---	---	---	---	---	---	487	476	393	359
28	429	414	---	---	---	---	---	---	488	474	347	321
29	426	421	---	---	---	---	---	---	486	478	346	332
30	425	415	---	---	---	---	---	---	486	478	---	---
31	---	---	---	---	---	---	---	---	485	456	---	---
MONTH	506	265	421	270	---	---	---	---	490	414	471	321

05495150 MISSISSIPPI RIVER AT CANTON, MO.--Continued

PH, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	8.0	8.0	8.3	8.2	7.9	7.8	7.9	7.7	7.9	7.9
2	---	---	8.1	8.0	8.2	8.1	7.9	7.6	7.8	7.7	7.9	7.9
3	8.0	7.9	8.0	8.0	8.2	8.1	7.8	7.6	7.7	7.6	7.9	7.9
4	7.9	7.8	8.1	7.8	8.2	8.2	7.9	7.7	7.8	7.7	7.8	7.7
5	7.9	7.8	8.1	7.8	8.3	8.2	7.8	7.6	7.8	7.7	7.8	7.8
6	7.8	7.7	8.1	8.1	8.2	8.2	7.6	7.6	7.8	7.7	7.8	7.8
7	7.9	7.8	8.1	8.0	8.2	8.2	7.7	7.5	7.8	7.7	7.9	7.8
8	7.9	7.8	8.0	8.0	8.2	8.2	7.6	7.5	7.7	7.7	7.9	7.9
9	7.9	7.8	8.0	8.0	8.2	8.1	7.8	7.5	7.7	7.7	7.9	7.9
10	7.9	7.8	8.1	8.0	8.2	8.1	7.9	7.8	7.7	7.6	8.0	7.8
11	7.9	7.9	8.2	8.0	8.1	8.1	7.9	7.8	7.7	7.6	8.0	7.9
12	8.0	7.8	8.2	8.0	8.1	8.1	7.9	7.8	7.8	7.7	8.1	7.8
13	7.9	7.9	8.2	8.0	8.0	7.9	7.8	7.8	8.1	7.7	8.0	7.8
14	7.9	7.8	8.1	8.0	8.1	8.0	7.9	7.8	8.1	7.9	8.0	7.7
15	8.0	7.9	8.1	8.0	8.1	8.0	7.9	7.8	8.0	7.9	7.9	7.8
16	8.0	7.9	8.1	8.0	8.1	8.0	7.9	7.9	8.0	8.0	7.9	7.8
17	8.1	8.0	8.1	8.0	8.1	8.0	7.9	7.8	8.0	8.0	7.9	7.8
18	8.2	8.0	8.1	8.0	8.2	8.0	8.0	7.9	8.0	8.0	8.0	7.8
19	8.2	8.1	8.1	8.0	8.3	8.2	8.0	7.9	7.9	7.7	7.9	7.8
20	8.2	8.1	8.1	8.0	8.2	8.1	7.9	7.9	7.9	7.8	8.0	7.9
21	8.2	8.1	8.1	8.0	8.2	8.1	8.0	7.9	8.0	7.8	8.0	7.8
22	8.2	8.1	8.2	8.1	8.2	8.1	8.0	7.9	8.0	8.0	7.9	7.9
23	8.1	8.1	8.2	8.1	8.1	8.1	8.1	8.0	8.0	7.9	8.0	7.9
24	8.2	8.0	8.2	8.1	8.1	8.0	8.1	7.9	8.0	7.9	8.0	7.8
25	8.2	8.1	8.2	8.1	8.1	8.0	8.0	7.9	8.0	7.9	7.9	7.8
26	8.1	8.1	8.2	8.1	8.1	8.0	7.9	7.9	8.0	8.0	7.9	7.8
27	8.1	8.0	8.2	8.1	8.1	8.0	7.9	7.8	8.0	7.9	7.9	7.7
28	8.2	8.1	8.2	8.1	8.1	8.0	7.9	7.8	8.0	7.9	7.8	7.7
29	8.2	8.1	8.3	8.2	8.0	8.0	8.0	7.8	---	---	7.8	7.7
30	8.1	8.1	8.2	8.2	8.0	7.9	7.8	7.8	---	---	7.8	7.6
31	8.1	8.0	---	---	8.2	7.9	7.8	7.7	---	---	7.8	7.7
MONTH	8.2	7.7	8.3	7.8	8.3	7.9	8.1	7.5	8.1	7.6	8.1	7.6

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.8	7.7	8.0	7.9	---	---	---	---	---	---	8.1	7.8
2	7.7	7.6	8.0	7.8	---	---	---	---	---	---	8.0	7.8
3	7.8	7.7	7.8	7.6	---	---	---	---	---	---	7.9	7.7
4	7.9	7.7	7.6	7.5	---	---	---	---	---	---	7.8	7.6
5	7.9	7.8	7.7	7.5	---	---	---	---	---	---	7.8	7.6
6	8.0	7.9	7.9	7.7	---	---	---	---	---	---	7.8	7.6
7	8.1	8.0	7.9	7.9	---	---	---	---	8.2	8.1	7.9	7.7
8	8.2	8.0	8.0	7.8	---	---	---	---	8.2	8.0	7.8	7.6
9	8.2	8.0	8.0	7.9	---	---	---	---	8.1	7.9	7.6	7.5
10	8.1	8.0	8.0	7.7	---	---	---	---	8.0	7.9	7.6	7.5
11	8.1	8.0	8.1	7.8	---	---	---	---	8.0	7.8	7.6	7.5
12	8.1	8.0	8.1	7.8	---	---	---	---	7.8	7.7	7.6	7.5
13	8.1	8.0	8.2	7.9	---	---	---	---	7.8	7.5	7.8	7.6
14	8.1	8.0	8.2	8.1	---	---	---	---	7.9	7.8	7.9	7.7
15	8.1	7.9	8.3	8.2	---	---	---	---	7.9	7.8	7.8	7.7
16	8.0	7.9	8.3	8.1	---	---	---	---	7.9	7.7	7.7	7.6
17	8.0	7.8	8.3	8.3	---	---	---	---	8.1	7.8	7.8	7.6
18	7.9	7.8	8.4	8.3	---	---	---	---	8.1	7.9	7.8	7.6
19	7.9	7.8	8.5	8.4	---	---	---	---	8.1	7.8	7.8	7.7
20	8.0	7.9	8.5	8.4	---	---	---	---	8.1	7.8	7.8	7.7
21	7.9	7.6	8.4	8.3	---	---	---	---	8.1	7.9	7.8	7.7
22	7.6	7.4	8.3	8.2	---	---	---	---	8.1	7.8	7.9	7.7
23	7.5	7.4	8.3	8.2	---	---	---	---	8.0	7.8	7.9	7.7
24	7.4	7.3	8.3	8.2	---	---	---	---	7.9	7.6	7.9	7.5
25	7.7	7.4	8.2	8.1	---	---	---	---	7.8	7.6	8.0	7.6
26	7.7	7.4	8.3	8.1	---	---	---	---	7.9	7.6	7.9	7.7
27	7.8	7.7	8.1	7.8	---	---	---	---	8.0	7.8	7.9	7.8
28	7.9	7.6	7.8	7.7	---	---	---	---	8.0	7.9	7.8	7.7
29	8.0	7.9	7.9	7.7	---	---	---	---	8.1	7.9	7.8	7.6
30	8.0	7.9	7.7	7.6	---	---	---	---	8.1	7.9	---	---
31	---	---	---	---	---	---	---	---	8.0	7.8	---	---
MONTH	8.2	7.3	8.5	7.5	---	---	---	---	8.2	7.5	8.1	7.5

05495150 MISSISSIPPI RIVER AT CANTON, MO.--Continued

DISSOLVED OXYGEN (MG/L), WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	8.2	8.1	11.1	10.9	---	---	8.8	7.5	---	---
2	---	---	8.3	8.1	11.0	10.6	---	---	8.8	7.9	---	---
3	7.6	6.6	8.4	8.2	11.1	10.7	---	---	9.0	8.0	---	---
4	7.4	7.1	8.3	8.0	11.7	11.1	---	---	8.8	7.8	---	---
5	7.2	6.3	8.3	8.1	11.5	11.2	---	---	8.6	8.1	---	---
6	6.8	6.1	8.3	8.1	11.4	11.2	---	---	8.7	8.6	---	---
7	6.7	6.3	8.1	8.0	11.5	11.3	---	---	8.8	8.7	8.0	7.3
8	6.7	6.3	8.3	8.0	11.5	11.4	---	---	9.0	8.9	7.9	6.8
9	6.5	6.2	8.5	8.1	11.5	11.2	9.1	8.8	9.1	8.7	7.2	6.9
10	6.5	5.8	8.3	8.2	11.4	11.2	9.1	8.9	9.1	9.0	7.1	6.5
11	7.0	6.4	8.5	8.3	11.4	11.3	9.1	8.9	9.1	9.0	7.0	6.2
12	6.6	5.9	8.6	8.4	11.5	11.4	9.1	8.8	9.1	---	6.9	6.6
13	6.7	6.4	8.8	7.9	11.5	11.3	9.1	9.0	---	---	6.6	5.1
14	6.7	6.3	9.2	8.5	11.5	11.3	9.2	9.1	---	---	6.3	6.0
15	7.1	6.6	9.4	9.1	11.5	11.4	9.1	9.1	---	---	6.1	5.9
16	7.4	6.6	9.9	9.2	11.4	11.2	9.1	8.9	---	---	6.1	5.5
17	7.1	6.8	9.8	9.5	11.5	11.3	9.1	8.9	---	---	6.7	6.1
18	8.1	7.2	9.9	9.7	11.5	11.2	9.1	8.7	---	---	6.7	6.5
19	8.4	7.9	10.2	9.8	11.5	11.3	9.1	9.0	---	---	6.7	6.3
20	8.8	8.2	10.3	10.2	11.4	11.2	9.1	8.6	---	---	6.9	6.5
21	9.0	8.3	10.4	10.1	11.4	11.2	9.1	9.0	---	---	6.8	5.6
22	8.9	8.4	10.6	10.4	11.4	11.3	9.1	9.0	---	---	6.8	6.4
23	8.8	8.7	10.9	10.6	11.5	11.3	9.1	8.5	---	---	7.1	6.5
24	8.7	7.9	11.0	10.7	11.5	11.3	9.1	8.2	---	---	7.3	7.0
25	8.3	8.0	10.9	10.6	11.4	11.3	9.1	8.9	---	---	7.4	7.2
26	8.4	8.0	10.7	10.5	---	---	9.1	9.1	---	---	7.6	6.5
27	8.3	8.1	10.8	10.7	---	---	9.1	9.0	---	---	7.6	7.0
28	8.2	8.0	10.9	10.7	---	---	9.1	8.9	---	---	7.6	7.3
29	8.2	8.2	11.0	10.8	---	---	9.1	7.6	---	---	7.6	7.5
30	8.3	8.1	11.1	10.9	---	---	9.1	8.9	---	---	7.8	6.6
31	8.2	8.0	---	---	---	---	9.1	8.7	---	---	7.6	6.6
MONTH	9.0	5.8	11.1	7.9	11.7	10.6	---	---	---	---	8.0	5.1

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.7	6.4	8.0	7.2	9.6	9.2	---	---	---	---	5.4	5.2
2	7.9	7.5	8.2	7.2	9.6	9.4	---	---	---	---	5.3	5.1
3	8.0	7.9	8.2	7.4	9.7	9.4	---	---	---	---	5.2	5.0
4	8.1	7.9	8.1	7.6	9.5	9.1	---	---	---	---	5.1	4.9
5	8.2	7.9	8.0	7.3	9.3	9.1	---	---	---	---	5.2	5.0
6	7.9	7.6	8.0	7.4	9.1	8.7	---	---	---	---	5.3	5.0
7	7.6	7.3	8.0	7.7	8.8	8.5	---	---	6.3	6.1	5.2	4.9
8	7.8	7.4	8.1	7.5	8.5	7.8	---	---	6.4	6.2	5.2	5.0
9	8.4	7.8	8.2	7.7	8.2	7.4	---	---	6.5	6.2	5.3	5.1
10	9.1	8.5	7.9	7.1	---	---	---	---	6.5	6.2	5.0	4.9
11	9.2	8.9	7.7	7.4	---	---	---	---	6.4	6.0	4.8	4.5
12	8.9	8.7	7.7	7.5	---	---	---	---	6.3	6.0	4.8	4.3
13	8.9	8.5	7.9	7.6	---	---	---	---	6.3	6.1	4.4	4.0
14	8.6	8.4	8.0	7.8	---	---	---	---	6.4	6.2	4.2	3.9
15	8.5	7.8	8.0	7.9	---	---	---	---	6.6	6.3	4.3	4.1
16	8.2	7.9	7.9	7.8	---	---	---	---	6.5	6.2	4.3	4.1
17	8.0	7.7	8.0	7.9	---	---	---	---	6.4	6.0	4.7	4.3
18	7.7	7.4	8.1	8.0	---	---	---	---	6.2	5.9	5.0	4.5
19	7.8	7.0	8.2	7.9	---	---	---	---	6.2	5.9	5.2	5.0
20	8.0	7.4	8.0	7.8	---	---	---	---	6.1	5.8	5.1	4.8
21	7.8	6.5	8.0	7.9	---	---	---	---	6.3	5.9	5.0	4.4
22	8.0	7.0	8.1	7.8	---	---	---	---	6.5	6.1	4.5	4.3
23	7.9	7.6	8.1	8.0	---	---	---	---	6.6	6.3	4.6	4.3
24	7.8	7.2	8.0	7.8	---	---	---	---	6.7	6.5	4.5	4.2
25	7.7	7.1	7.8	7.6	---	---	---	---	6.6	6.4	4.3	4.0
26	7.8	7.0	7.9	7.7	---	---	---	---	6.3	6.0	4.2	3.9
27	8.2	7.5	8.2	7.9	---	---	---	---	6.1	5.8	4.2	3.9
28	8.4	7.4	8.4	7.8	---	---	---	---	5.8	5.6	4.1	4.1
29	8.3	7.4	8.6	8.4	---	---	---	---	5.7	5.5	4.1	4.0
30	8.2	7.4	9.1	9.0	---	---	---	---	5.6	5.3	---	---
31	---	---	9.5	9.2	---	---	---	---	5.5	5.3	---	---
MONTH	9.2	6.4	9.5	7.1	---	---	---	---	6.7	5.3	5.4	3.9

05495150 MISSISSIPPI RIVER AT CANTON, MO.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	8.5	8.0	0.0	0.0	1.0	0.0	1.0	0.5	3.0	2.0
2	---	---	8.5	8.0	0.0	0.0	1.5	0.0	1.5	0.5	3.0	3.0
3	17.0	16.5	8.5	7.5	0.0	0.0	0.5	0.0	1.0	0.5	3.5	3.0
4	17.0	16.0	9.5	8.0	0.0	0.0	0.5	0.0	1.5	1.0	3.5	3.0
5	17.0	16.0	9.5	7.5	0.0	0.0	0.5	0.0	2.0	1.0	4.0	3.5
6	16.5	16.0	9.0	7.5	0.0	0.0	0.5	0.0	2.0	2.0	4.0	3.5
7	16.0	14.5	9.5	8.0	0.0	0.0	0.5	0.0	2.0	2.0	5.0	4.0
8	15.0	14.5	8.0	7.0	0.0	0.0	1.0	0.0	2.0	1.5	5.5	4.5
9	15.5	14.0	7.0	6.5	0.0	0.0	0.5	0.0	2.0	1.5	6.0	5.0
10	15.5	13.5	7.0	5.5	0.0	0.0	1.0	0.0	2.0	1.5	5.5	5.0
11	14.5	13.5	7.0	5.5	0.0	0.0	1.0	0.0	2.0	1.5	7.0	5.5
12	15.0	14.0	6.0	4.5	0.0	0.0	1.0	0.0	2.0	1.5	7.5	6.0
13	15.0	14.0	6.0	5.0	0.0	0.0	1.5	0.0	1.5	0.5	8.0	7.5
14	15.0	13.5	5.0	3.0	0.0	0.0	1.5	0.0	1.0	0.5	8.5	7.0
15	13.5	12.5	3.0	2.0	0.0	0.0	1.5	0.0	0.5	0.0	8.5	8.0
16	13.0	11.5	2.0	1.5	0.0	0.0	1.5	0.0	0.0	0.0	8.0	7.5
17	12.5	11.5	1.5	0.5	0.0	0.0	1.0	0.0	0.0	0.0	7.5	6.5
18	11.0	9.5	1.0	0.5	0.0	0.0	1.0	0.0	0.0	0.0	7.0	6.5
19	9.5	7.5	2.5	0.0	0.0	0.0	1.0	0.0	0.0	0.0	7.5	6.0
20	9.5	8.0	1.5	0.0	0.0	0.0	1.0	0.0	0.5	0.0	6.0	5.5
21	9.0	8.5	0.0	0.0	0.0	0.0	1.0	0.0	1.0	0.0	6.0	5.5
22	10.0	9.0	0.0	0.0	0.0	0.0	1.0	0.0	1.5	0.0	6.5	5.5
23	10.0	9.0	0.0	0.0	0.0	0.0	1.0	0.0	2.0	1.0	9.0	6.0
24	9.0	8.0	0.0	0.0	0.0	0.0	1.0	0.0	2.5	1.5	7.5	6.5
25	8.5	7.5	0.0	0.0	0.0	0.0	1.0	0.0	3.0	2.0	8.5	6.5
26	8.5	8.0	0.0	0.0	0.5	0.0	1.0	0.0	2.5	2.0	8.0	6.5
27	8.5	8.0	0.0	0.0	1.0	0.0	1.0	0.0	2.0	1.5	8.0	7.0
28	8.5	8.0	0.0	0.0	0.5	0.0	1.0	0.0	2.5	1.5	8.5	7.0
29	8.5	8.0	0.0	0.0	1.0	0.0	1.0	0.0	---	---	7.5	7.0
30	8.5	8.0	0.0	0.0	0.5	0.0	1.0	0.0	---	---	8.0	7.5
31	8.5	8.5	---	---	1.0	0.0	1.0	0.0	---	---	8.5	8.0
MONTH	17.0	7.5	9.5	0.0	1.0	0.0	1.5	0.0	3.0	0.0	9.0	2.0

DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	8.5	8.0	15.5	14.5	19.0	17.5	---	---	---	---	27.0	26.0
2	8.5	7.5	15.0	14.0	20.0	19.0	---	---	---	---	27.0	26.0
3	8.5	8.0	14.0	13.5	20.5	20.0	---	---	---	---	26.5	25.5
4	8.0	7.5	15.0	14.0	20.5	20.0	---	---	---	---	26.0	25.0
5	8.5	7.5	15.0	14.5	20.5	20.0	---	---	---	---	26.0	25.0
6	9.5	8.5	14.5	14.0	21.0	20.5	---	---	---	---	26.0	24.0
7	10.0	9.5	14.5	14.0	21.5	20.5	---	---	25.5	25.0	26.0	24.5
8	10.0	9.0	14.5	14.0	22.0	21.5	---	---	26.0	25.0	25.0	24.0
9	8.5	7.0	15.0	14.5	23.5	22.5	---	---	26.0	24.5	24.0	23.5
10	7.0	5.5	16.0	15.0	---	---	---	---	26.0	24.5	23.5	23.0
11	6.0	5.5	16.5	16.0	---	---	---	---	26.5	25.0	23.5	22.5
12	6.5	6.0	16.0	15.5	---	---	---	---	26.5	25.0	23.0	21.5
13	6.5	6.0	16.0	15.0	---	---	---	---	26.0	25.0	22.0	21.5
14	7.0	6.5	15.5	15.0	---	---	---	---	25.5	24.5	21.5	21.0
15	8.5	7.0	15.5	14.5	---	---	---	---	25.5	24.0	21.0	20.0
16	9.5	8.5	15.5	15.0	---	---	---	---	26.0	24.5	20.5	19.5
17	10.0	9.0	15.5	15.0	---	---	---	---	26.5	25.0	20.0	18.5
18	11.0	10.0	16.0	15.5	---	---	---	---	27.0	25.5	19.0	17.5
19	11.5	11.0	17.0	16.0	---	---	---	---	27.0	26.0	17.5	17.0
20	13.0	12.0	17.5	16.5	---	---	---	---	27.5	26.0	18.0	17.0
21	14.5	12.5	17.5	17.5	---	---	---	---	27.0	25.5	18.5	17.0
22	15.0	14.5	15.5	17.0	---	---	---	---	26.0	25.0	19.0	18.0
23	16.0	15.0	17.5	17.0	---	---	---	---	25.0	24.5	18.5	18.0
24	16.5	16.0	18.5	17.5	---	---	---	---	25.0	24.0	19.5	18.5
25	16.0	15.5	18.5	18.0	---	---	---	---	25.5	24.0	20.0	19.5
26	15.5	15.0	18.0	17.5	---	---	---	---	26.0	24.5	20.0	19.5
27	15.0	14.5	18.0	17.0	---	---	---	---	26.5	25.0	20.5	20.0
28	14.5	13.5	17.0	16.5	---	---	---	---	27.0	26.0	21.0	20.5
29	14.5	14.0	18.5	16.5	---	---	---	---	27.0	26.0	20.5	20.0
30	14.5	14.0	17.0	16.5	---	---	---	---	27.0	26.0	---	---
31	---	---	18.0	17.0	---	---	---	---	27.0	26.0	---	---
MONTH	16.5	5.5	18.5	13.5	---	---	---	---	27.5	24.0	27.0	17.0

FABIUS RIVER BASIN

05500000 SOUTH FABIUS RIVER NEAR TAYLOR, MO.

LOCATION.--Lat 39°53'49", long 91°34'49", in SW¼NW¼ sec.21, T.59 N., R.6 W., Marion County, at gaging station on right bank at downstream side of highway bridge, 4.5 mi (7.2 km) southwest of Taylor, 5 mi (8.0 km) downstream from Grassy Creek, and 5.3 mi (8.5 km) upstream from confluence with North Fabius River.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS- CHARGE (CFS)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	DIS- SOL- VED- PHOS- PHORUS (P) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)
OCT.												
04...	14	196	0	44	7.9	.2	--	.00	.57	.03	--	248
NOV.												
08...	51	112	0	34	9.6	.2	1.1	.00	.96	.04	.23	180
DEC.												
19...	80	136	0	50	11	.2	.81	.00	2.0	.46	.53	232
JAN.												
10...	374	84	0	39	7.8	.2	.66	.00	1.2	.06	.20	159
FEB.												
07...	448	94	0	38	7.6	.2	1.8	.00	.78	.02	.14	189
MAR.												
07...	2900	84	0	26	5.9	.2	1.4	.16	3.5	.03	1.2	150
APR.												
04...	3680	68	0	24	2.5	.2	.61	.00	.82	.02	.42	114
MAY												
09...	4430	68	0	15	3.2	.1	.56	.10	.22	.05	.24	109
JUNE												
06...	341	120	0	29	4.4	.2	.72	.00	1.2	.05	--	168
JULY												
12...	350	170	0	39	6.4	.2	.73	.06	.94	.02	.15	236
AUG.												
08...	14	132	0	26	5.2	.2	.77	.03	.79	.01	.14	182
SEP.												
05...	23	218	0	39	7.4	.2	.19	.14	.34	.03	.03	262

DATE	ALDRIN (UG/L)	LINDANE (UG/L)	CHLOR- DANE (UG/L)	DDD (UG/L)	DDE (UG/L)	DDT (UG/L)	DI- ELDRIN (UG/L)
OCT.							
04...	.00	.00	.0	.00	.00	.00	.01
APR.							
04...	.00	.00	.0	.00	.00	.00	.01
JUNE							
06...	.00	.00	.0	.00	.00	.00	.03
AUG.							
08...	--	--	--	--	--	--	--

05500000 SOUTH FABIUS RIVER NEAR TAYLOR, MO.--Continued

DRAINAGE AREA.--620 mi² (1,606 km²).

PERIOD OF RECORD.--Chemical analyses: July 1972 to August 1973 (discontinued).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	ALKA- LITY AS CACO ₃ (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	CHEM- ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)
OCT.												
04...	.34	9.37	161	410	8.1	16.0	23	3.0	7.0	71	250	160
NOV.												
08...	.24	24.8	92	275	7.9	6.5	--	3.7	8.4	68	300	--
DEC.												
19...	.32	50.1	112	405	7.9	.0	--	>7.7	11.8	81	4500	30000
JAN.												
10...	.22	161	69	212	7.5	.0	--	3.4	9.5	65	60	440
FEB.												
07...	.26	229	77	284	7.6	3.0	11	2.4	9.3	69	200	1800
MAR.												
07...	.20	1170	69	200	8.0	8.0	45	6.6	5.9	50	3800	96000
APR.												
04...	.16	1130	56	158	7.2	7.5	47	3.3	8.0	67	1900	3600
MAY												
09...	.15	1300	56	144	7.5	16.5	47	3.9	6.8	69	5500	6500
JUNE												
06...	.23	155	98	273	7.5	19.0	38	5.0	6.3	67	10000	22000
JULY												
12...	.32	223	139	359	7.7	26.0	--	5.2	5.8	71	600	850
AUG.												
08...	.25	6.88	108	284	8.0	26.0	--	2.5	6.6	80	480	300
SEP.												
05...	.36	16.3	179	425	8.3	25.5	--	3.2	8.6	105	80	260

DATE	ENDRIN (UG/L)	HEPTA- CHLOR (UG/L)	HEPTA- CHLOR EPOXIDE (UG/L)	2,4-D (UG/L)	2,4,5-T (UG/L)	SILVEX (UG/L)
OCT.						
04...	.00	.00	.00	.00	.00	.00
APR.						
04...	.00	.00	.00	.00	.01	.00
JUNE						
06...	.00	.00	.00	.00	.02	.00
AUG.						
08...	--	--	--	.00	.01	.00

NORTH RIVER BASIN

05501000 NORTH RIVER AT PALMYRA, MO.

LOCATION.--Lat 39°49'06", long 91°31'13", in SE¼SW¼ sec.13, T.58 N., R.6 W., Marion County, at highway bridge on dual U.S. Highways 24 and 61, 0.5 mi (0.8 km) north of Palmyra, and 7 mi (11.3 km) upstream from mouth.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT. 04...	10	6.9	20	200	49	8.3	17	5.5	172	0	38	15
DEC. 19...	125	5.4	140	410	53	8.2	11	7.3	152	0	50	14
FEB. 05...	285	9.2	200	100	39	7.2	7.8	4.8	116	0	40	7.2
APR. 02...	1220	7.0	500	60	25	4.0	4.1	3.6	80	0	22	3.7
JUNE 04...	176	7.7	100	20	37	6.2	5.5	2.6	110	0	26	5.6
AUG. 06...	25	7.9	160	60	52	8.5	10	3.7	160	8	33	8.8

DATE	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	ALKA- LINITY AS CACO ₃ (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHQS)	PH (UNITS)	COLOR (PLAT- INUM- COBALT UNITS)	TEMPER- ATURE (DEG C)	CHEM- ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)
OCT. 04...	160	15	141	395	7.9	15	17.0	16	6.2	64	800	340
DEC. 19...	160	41	125	400	7.9	20	0	18	11.6	79	320	11000
FEB. 05...	130	32	95	305	7.5	40	4.0	21	8.4	64	1000	3800
APR. 02...	79	14	66	179	7.3	100	9.5	38	7.4	64	3800	8200
JUNE 04...	120	30	90	260	7.3	60	22.0	46	6.4	73	14000	34000
AUG. 06...	160	15	145	355	8.7	20	27.0	20	10.2	128	220	70

05501000 NORTH RIVER AT PALMYRA, MO.--Continued

DRAINAGE AREA.--373 mi² (966 km²).

PERIOD OF RECORD: Chemical analyses: August 1972 to September 1973.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	DIS- SOL- VED- PHOS- PHORUS (P) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	SODIUM AD- SORP- TION RATIO	PERCENT SODIUM
OCT.												
04...	.2	.48	.48	.56	.24	.38	.06	235	.32	6.34	.6	18
DEC.												
19...	.1	2.2	.30	1.8	.70	.75	.05	231	.31	78.0	.4	12
FEB.												
05...	.2	.72	.11	.61	.05	.13	.04	188	.26	145	.3	11
APR.												
02...	.0	.72	.00	3.1	.03	.42	.02	113	.15	372	.2	10
JUNE												
04...	.3	1.2	.04	1.8	.03	.31	.04	163	.22	77.5	.2	9
AUG.												
06...	.2	.18	.02	.70	.01	.12	--	222	.30	15.0	.3	11

SALT RIVER BASIN

05508000 SALT RIVER NEAR NEW LONDON, MO.

LOCATION.--Lat 39°36'44", long 91°24'30", NE¼NW¼ sec.36, T.56 N., R.5 W., Ralls County, at gaging station on left bank 180 ft (54.9 m) upstream from upstream bridge on dual U.S. Highway 61, 2 mi (3.2 km) north of New London, 8 mi (12.9 km) upstream from Spencer Creek and at mile 35.5 (57.1 km).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT.												
03...	126	6.3	120	0	26	4.6	11	7.2	92	0	24	12
NOV.												
07...	478	6.5	260	60	26	4.5	9.3	8.0	84	0	26	11
DEC.												
18...	148	9.3	90	350	65	10	19	6.6	156	0	98	19
JAN.												
10...	1450	4.7	160	120	22	4.0	6.6	5.8	60	0	32	7.8
FEB.												
05...	4310	7.5	270	60	21	4.7	6.9	4.7	62	0	30	6.8
MAR.												
05...	3900	8.5	110	30	32	6.1	9.0	5.1	80	0	43	12
APR.												
02...	32400	5.3	250	10	15	2.4	3.0	2.8	48	0	15	2.0
MAY												
07...	7100	7.1	160	10	31	5.0	6.2	3.6	92	0	29	4.5
JUNE												
04...	1190	5.0	100	40	31	5.4	5.9	2.8	95	0	26	6.0
JULY												
10...	580	8.2	50	60	35	6.1	9.1	4.0	104	0	31	7.3
AUG.												
06...	165	9.3	220	20	36	6.0	10	4.0	112	4	28	11
SEP.												
04...	80	8.5	110	90	39	6.3	15	4.4	128	0	23	21

DATE	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	ALKA- LINITY AS CACO ₃ (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	COLOR (PLAT- INUM- COBALT UNITS)	TEMPER- ATURE (DEG C)	CHEM- ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)
OCT.												
03...	84	8	75	255	7.7	100	17.5	28	6.0	63	120	150
NOV.												
07...	84	14	69	222	7.7	100	9.0	42	8.0	69	600	--
DEC.												
18...	200	75	128	535	7.8	25	.0	18	12.2	84	50	180
JAN.												
10...	72	22	49	225	7.4	60	.0	19	10.4	71	20	260
FEB.												
05...	72	21	51	198	7.3	150	4.0	41	8.3	63	880	8800
MAR.												
05...	100	40	66	267	7.6	200	7.0	36	9.0	74	1100	9200
APR.												
02...	48	8	39	115	7.1	160	10.0	53	6.3	56	6400	26000
MAY												
07...	98	22	75	182	7.6	60	15.0	18	7.0	69	20000	21000
JUNE												
04...	100	22	78	226	7.3	90	21.0	32	6.6	73	3300	6000
JULY												
10...	110	25	85	258	7.3	60	28.5	42	5.7	73	680	260
AUG.												
06...	110	11	99	285	8.5	60	27.5	19	9.4	118	40	100
SEP.												
04...	120	15	105	178	8.0	20	26.0	24	7.6	93	70	70

05508000 SALT RIVER NEAR NEW LONDON, MO.--Continued

DRAINAGE AREA.--2,480 mi² (6,423 km²).

PERIOD OF RECORD.--Chemical analyses: August 1967 to September 1973.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	DIS- SOL- VED- PHOS- PHORUS (P) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	SODIUM AD- SORP- TION RATIO	PERCENT SODIUM
OCT. 03...	.3	.63	.07	.23	.02	.13	.05	142	.19	48.3	.5	20
NOV. 07...	.1	1.1	.05	.00	.06	.37	.07	142	.19	183	.4	18
DEC. 18...	.3	.90	.05	.62	.05	.16	.05	318	.43	127	.6	16
JAN. 10...	.0	.99	.23	.83	.03	.07	.03	125	.17	489	.3	15
FEB. 05...	.2	.54	.11	1.2	.03	.16	.02	120	.16	1400	.4	16
MAR. 05...	.2	1.6	.01	.23	.07	.42	.03	165	.22	1740	.4	15
APR. 02...	.0	.32	.08	.80	.03	.74	.00	75	.10	6560	.2	11
MAY 07...	.0	.68	.10	1.1	.04	.52	.02	140	.19	2680	.3	12
JUNE 04...	.2	.14	.02	1.3	.01	.83	.00	147	.20	472	.3	11
JULY 10...	.3	1.1	.19	1.5	.03	.26	--	183	.25	287	.4	14
AUG. 06...	.2	.86	.05	.70	.01	.13	--	173	.24	77.1	.4	15
SEP. 04...	.2	.02	.12	.38	.02	.06	--	208	.28	44.9	.6	20

DATE	ALDRIN (UG/L)	LINDANE (UG/L)	CHLOR- DANE (UG/L)	DDD (UG/L)	DDE (UG/L)	DDT (UG/L)	DI- ELDRIN (UG/L)
OCT. 03...	.00	.00	.0	.00	.00	.00	.01
APR. 02...	.00	.00	.0	.00	.00	.00	.02
JUNE 04...	.00	.00	.0	.00	.00	.00	.04
AUG. 06...	.00	.00	.0	.00	.00	.00	.02

DATE	ENDRIN (UG/L)	HEPTA- CHLOR (UG/L)	HEPTA- CHLOR EPOXIDE (UG/L)	2,4-D (UG/L)	2,4,5-T (UG/L)	SILVEX (UG/L)
OCT. 03...	.00	.00	.00	.00	.04	.00
APR. 02...	.00	.00	.00	.00	.01	.00
JUNE 04...	.00	.00	.00	1.3	.01	.00
AUG. 06...	.00	.00	.00	.02	.04	.00

CUIVRE RIVER BASIN

05514500 CUIVRE RIVER NEAR TROY, MO.

LOCATION.--Lat 39°00'59", long 90°59'00", in SE¼ sec.14, T.49 N., R.1 W., Lincoln County, at highway bridge on U.S. Highway 61, 1.2 mi (1.9 km) downstream from confluence of North and West Forks, and 2 mi (3.2 km) north of Troy.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
NOV. 07...	--	6.2	130	340	40	6.8	9.0	6.2	128	0	31	13
JAN. 10...	370	7.2	70	140	38	5.5	6.1	4.3	116	0	28	9.3
MAR. 05...	7800	7.3	280	50	23	4.4	6.2	5.0	60	0	26	8.9
MAY 07...	840	4.6	80	160	46	7.0	8.0	4.7	150	0	30	7.3
JULY 10...	47	9.1	10	500	54	8.5	6.9	3.7	184	0	23	7.4
SEP. 04...	5.0	8.7	110	950	47	7.7	6.2	5.0	168	0	16	7.9

DATE	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	ALKA- LINITY AS CACO ₃ (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	COLOR (PLAT- INUM- COBALT UNITS)	TEMPER- ATURE (DEG C)	CHEM- ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)
NOV. 07...	130	23	105	298	7.5	60	10.0	24	7.6	67	1000	--
JAN. 10...	120	22	95	314	7.6	20	.0	8	11.2	77	120	2200
MAR. 05...	76	26	49	184	7.7	250	8.5	190	9.2	79	6000	20000
MAY 07...	140	21	123	262	7.7	20	15.5	18	7.2	72	65000	80000
JULY 10...	170	19	151	350	7.4	2	27.5	14	7.0	88	340	250
SEP. 04...	150	12	138	192	7.5	10	24.0	24	5.4	64	49000	62000

05514500 CUIVRE RIVER NEAR TROY, MO.--Continued

DRAINAGE AREA.--903 mi² (2,339 km²).

PERIOD OF RECORD.--Chemical analyses: July 1972 to September 1973.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	DIS- SOL- VED- PHOS- PHORUS (P) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	SODIUM AD- SORP- TION RATIO	PERCENT SODIUM
NOV. 07...	.2	.72	.03	.71	.03	.17	.04	171	.23	--	.3	13
JAN. 10...	.0	1.4	.17	.55	.01	.02	.05	172	.23	172	.2	10
MAR. 05...	.2	2.7	.56	.70	.05	.31	.01	130	.18	2740	.3	14
MAY 07...	.0	.95	.23	1.1	.07	.42	.04	192	.26	435	.3	10
JULY 10...	.1	.02	.04	.65	.02	.10	--	232	.32	29.4	.2	8
SEP. 04...	.2	.21	.29	.40	.03	.17	--	202	.27	2.73	.2	8

NODAWAY RIVER BASIN

06817800 NODAWAY RIVER NEAR OREGON, MO.

LOCATION.--Lat 39°58'19", long 94°59'46", Holt County, at bridge on U.S. Highway 59, 7 mi (11.3 km) east of Oregon.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO_2) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO_3) (MG/L)	CAR- BONATE (CO_3) (MG/L)	DIS- SOLVED SULFATE (SO_4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT.												
11...	438	15	40	50	60	15	11	3.6	218	0	36	7.9
NOV.												
14...	4340	13	30	10	46	11	9.3	5.9	168	0	34	7.7
DEC.												
12...	1000	18	40	100	66	15	13	2.7	234	0	42	9.4
JAN.												
16...	1750	14	20	190	56	12	11	6.5	192	0	36	9.1
FEB.												
13...	3800	12	110	220	42	9.0	8.7	5.2	156	0	30	7.4
MAR.												
13...	4330	12	70	40	41	8.9	7.4	4.4	144	0	29	5.7
APR.												
10...	2770	11	110	50	50	11	12	3.1	172	0	38	8.4
MAY												
15...	2350	13	50	30	50	12	9.6	3.3	172	0	36	6.7
JUNE												
12...	880	17	140	30	58	15	11	2.5	207	0	36	8.1
JULY												
17...	400	16	110	30	53	14	10	3.1	204	0	34	8.6
AUG.												
14...	2450	11	730	60	24	5.5	5.2	5.0	108	0	12	4.8
SEP.												
11...	870	11	110	0	30	6.9	7.0	6.0	124	0	20	5.2

DATE	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	ALKA- LINITY AS CaCO_3 (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	COLOR (PLAT- INUM- COBALT UNITS)	TEMPER- ATURE (DEG C)	CHEM- ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)
OCT.												
11...	210	32	179	465	7.9	5	17.0	2	8.1	84	760	520
NOV.												
14...	160	22	138	375	8.0	20	3.0	32	8.6	64	14000	56000
DEC.												
12...	230	34	192	515	7.6	3	.0	6	10.0	68	880	470
JAN.												
16...	190	32	157	460	7.5	20	.0	18	6.8	47	1200	7500
FEB.												
13...	140	14	128	343	7.7	35	1.0	221	9.6	68	5000	65000
MAR.												
13...	140	20	118	332	7.8	40	8.5	725	8.8	75	4500	6000
APR.												
10...	170	29	141	407	7.7	5	3.5	24	8.8	66	2100	2000
MAY												
15...	170	34	141	385	7.9	5	15.0	0	7.8	77	2000	1100
JUNE												
12...	210	37	170	440	8.1	7	24.5	24	7.2	86	580	850
JULY												
17...	190	23	167	430	8.0	10	24.0	28	7.2	85	2800	1800
AUG.												
14...	83	0	89	290	7.7	80	24.0	180	5.4	64	28000	16000
SEP.												
11...	100	0	102	245	7.7	100	21.5	85	6.4	72	41000	24000

06817800 NODAWAY RIVER NEAR OREGON, MO.--Continued

PERIOD OF RECORD.--Chemical analyses: November 1968 to September 1973.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	DIS- SOL- VED- PHOS- PHORUS (P) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	SODIUM AD- SORP- TION RATIO	PERCENT SODIUM
OCT. 11...	.1	5.9	.00	.36	.16	.16	.05	270	.37	319	.3	10
NOV. 14...	.2	3.2	.00	.25	.21	.38	.06	215	.29	2520	.3	11
DEC. 12...	.3	5.0	.07	.38	.07	.09	.04	299	.41	807	.4	11
JAN. 16...	.3	3.8	1.2	1.1	.34	.48	.08	254	.35	1200	.3	11
FEB. 13...	.2	2.2	.84	3.3	.10	.92	.04	200	.27	2050	.3	11
MAR. 13...	.3	.66	1.2	1.1	.07	2.1	.04	186	.25	2180	.3	10
APR. 10...	.3	4.7	.00	.35	.07	.66	.05	240	.33	1800	.4	13
MAY 15...	.3	5.0	.10	.12	.11	.60	.05	247	.34	1570	.3	10
JUNE 12...	.3	3.5	.02	1.1	.18	.41	.00	279	.38	663	.3	10
JULY 17...	.3	3.2	.01	1.3	.20	.51	--	249	.34	269	.3	10
AUG. 14...	.4	1.3	.11	.01	.15	1.4	--	154	.21	1020	.3	11
SEP. 11...	.2	.98	.04	.39	.18	.83	--	176	.24	413	.3	12

DATE	ALDRIN (UG/L)	LINDANE (UG/L)	CHLOR- DANE (UG/L)	DDD (UG/L)	DDE (UG/L)	DDT (UG/L)	DI- ELDRIN (UG/L)
OCT. 11...	.00	.00	.0	.00	.00	.00	.01
APR. 10...	.00	.00	.0	.00	.00	.00	.01
JUNE 12...	.00	.00	.0	.00	.00	.00	.01
AUG. 14...	.00	.00	.0	.00	.00	.00	.02

DATE	ENDRIN (UG/L)	HEPTA- CHLOR (UG/L)	HEPTA- CHLOR EPOXIDE (UG/L)	2,4-D (UG/L)	2,4,5-T (UG/L)	SILVEX (UG/L)
OCT. 11...	.00	.00	.00	.00	.00	.00
APR. 10...	.00	.00	.00	.02	.00	.00
JUNE 12...	.00	.00	.00	.00	.00	.00
AUG. 14...	.00	.00	.00	.16	.06	.00

06818000 MISSOURI RIVER AT ST. JOSEPH, MO.

LOCATION.--Lat 39°48'14", long 94°52'34", Buchanan County, at raw-water intake of St. Joseph Water Company water treatment plant at mile 449.1 (722.6 km).

DRAINAGE AREA.--424,300 mi² (1,098,937 km²), approximately (at gaging station).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT.												
11...	56800	9.5	10	10	64	18	64	8.0	204	0	190	13
NOV.												
14...	82700	10	10	120	59	17	49	7.5	194	0	150	11
DEC.												
12...	25000	14	0	20	78	21	63	7.1	264	0	180	19
JAN.												
16...	45000	14	10	20	70	20	54	10	244	0	150	24
FEB.												
13...	48900	16	20	60	74	16	47	8.6	236	0	130	21
MAR.												
13...	90000	13	20	40	50	14	27	8.2	188	0	75	14
APR.												
10...	54700	13	30	10	74	22	41	7.8	260	0	130	17
MAY												
15...	56300	11	70	0	68	21	45	7.7	232	0	140	16
JUNE												
12...	63500	15	100	0	70	21	55	6.6	230	0	160	18
JULY												
17...	41900	11	90	20	68	21	57	6.1	224	0	180	18
AUG.												
14...	60000	10	150	10	55	16	48	6.5	192	0	140	13
SEP.												
11...	43700	10	60	0	58	21	64	5.9	208	0	180	16

DATE	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	ALKA- LINITY AS CACO ₃ (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	COLOR (PLAT- INUM- COBALT UNITS)	TEMPER- ATURE (DEG C)	CHEM- ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)
OCT.												
11...	230	66	167	740	8.3	5	16.5	17	8.1	83	5000	700
NOV.												
14...	220	58	159	610	8.1	13	6.5	46	5.9	48	22000	110000
DEC.												
12...	280	64	216	840	8.1	3	.5	0	11.2	78	3800	1800
JAN.												
16...	260	56	200	780	7.9	10	1.0	6	11.0	78	400	500
FEB.												
13...	250	57	194	680	8.0	15	1.5	18	9.4	67	2400	3800
MAR.												
13...	180	28	154	510	7.9	25	6.0	119	7.4	60	5700	16000
APR.												
10...	280	62	213	810	8.0	5	7.0	21	8.6	71	3000	1900
MAY												
15...	260	66	190	730	8.1	5	15.5	31	8.2	82	500	400
JUNE												
12...	260	71	189	735	8.1	7	24.0	8	6.2	73	960	140
JULY												
17...	260	76	184	740	8.2	4	25.5	24	5.4	66	1900	440
AUG.												
14...	200	42	157	690	7.9	5	25.5	59	5.2	63	12000	8200
SEP.												
11...	230	59	171	740	8.1	4	22.0	32	6.3	72	1700	1600

06818000 MISSOURI RIVER AT ST. JOSEPH, MO.--Continued

PERIOD OF RECORD.--Chemical analyses: October 1969 to September 1973.

REMARKS.--Records of discharge are given for gaging station Missouri River at St. Joseph 0.9 mi (1.4 km) downstream.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	DIS- SOL- VED- PHOS- PHORUS (P) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	SODIUM AD- SORP- TION RATIO	PERCENT SODIUM
OCT. 11...	.2	.54	.02	.42	.06	.06	.02	465	.63	71300	1.8	36
NOV. 14...	.2	1.2	.00	1.0	.10	.17	.05	401	.55	89500	1.4	32
DEC. 12...	.4	1.5	.18	.03	.08	.10	.05	526	.72	35500	1.6	32
JAN. 16...	.4	.61	.68	.33	.16	.16	.02	472	.64	57300	1.5	30
FEB. 13...	.3	1.4	.00	.44	.13	.51	.04	419	.57	55300	1.3	28
MAR. 13...	.4	1.1	.33	.63	.10	.10	.08	300	.41	72900	.9	23
APR. 10...	.4	.50	.00	.16	.11	.54	.06	447	.61	66000	1.1	24
MAY 15...	.4	2.7	.03	.00	.09	.64	.05	456	.62	69300	1.2	27
JUNE 12...	.5	1.4	.05	.95	.13	.34	.00	488	.66	83700	1.5	31
JULY 17...	.4	1.2	.01	1.3	.10	.36	--	482	.66	54500	1.6	32
AUG. 14...	.5	1.1	.04	2.3	.13	.85	--	370	.50	59900	1.5	33
SEP. 11...	.4	.51	.00	.20	.09	.28	--	466	.63	55000	1.8	37

DATE	ALDRIN (UG/L)	LINDANE (UG/L)	CHLOR- DANE (UG/L)	DDD (UG/L)	DDE (UG/L)	DDT (UG/L)	Di- ELDRIN (UG/L)
OCT. 11...	.00	.00	.0	.00	.00	.00	.00
APR. 10...	.00	.00	.0	.00	.00	.02	.01
JUNE 12...	.00	.00	.0	.00	.00	.00	.01
AUG. 14...	.00	.00	.0	.00	.00	.00	.01

DATE	ENDRIN (UG/L)	HEPTA- CHLOR (UG/L)	HEPTA- CHLOR EPOXIDE (UG/L)	2,4-D (UG/L)	2,4,5-T (UG/L)	SILVEX (UG/L)
OCT. 11...	.00	.00	.00	.00	.00	.00
APR. 10...	.00	.00	.00	.03	.00	.00
JUNE 12...	.00	.00	.00	.00	.00	.00
AUG. 14...	.00	.00	.00	.97	.01	.00

PLATTE RIVER BASIN (IOWA-MISSOURI)

06821200 PLATTE RIVER AT PLATTE CITY, MO.

LOCATION.--Lat 39°22'10", long 94°47'10", Platte County, at bridge on State Highway 92 in Platte City.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SiO ₂) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED MAN- GANESE (MN) (UG/L)	DIS-SOLVED CAL- CIUM (CA) (MG/L)	DIS-SOLVED MAG- NE- SIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS-SOLVED SULFATE (SO ₄) (MG/L)	DIS-SOLVED CHLO- RIDE (CL) (MG/L)
OCT.												
10...	131	9.5	20	320	64	13	15	6.7	234	0	54	10
NOV.												
13...	2210	13	30	90	45	8.8	11	7.5	148	0	37	11
DEC.												
11...	700	17	20	250	73	13	17	4.9	248	0	48	13
JAN.												
15...	812	15	30	320	67	12	15	6.4	244	0	46	9.8
FEB.												
12...	1840	14	10	260	62	10	12	5.2	204	0	38	12
MAR.												
12...	8230	11	90	50	35	7.4	7.5	5.2	126	0	26	6.1
APR.												
09...	1990	11	50	140	58	12	13	4.2	196	0	41	12
MAY												
14...	1410	12	60	90	51	9.8	9.6	4.9	170	0	35	7.1
JUNE												
11...	548	12	70	110	61	12	14	3.7	212	0	40	11
JULY												
16...	148	7.5	120	380	50	11	14	4.9	188	0	43	11
AUG.												
13...	3900	7.9	190	10	26	4.7	8.0	5.8	106	0	16	5.3
SEP.												
10...	400	11	80	20	62	12	14	5.2	228	0	30	9.4

DATE	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	ALKA- LINITY AS CACO ₃ (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	COLOR (PLAT- INUM- COBALT UNITS)	TEMPER- ATURE (DEG C)	CHEM- ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)
OCT.												
10...	210	21	192	490	7.7	10	16.5	21	6.0	61	300	180
NOV.												
13...	150	27	121	365	7.9	50	7.0	34	8.1	67	14000	34000
DEC.												
11...	240	32	203	560	7.6	3	.0	11	11.1	76	220	340
JAN.												
15...	220	16	200	560	7.5	10	.5	10	9.5	66	160	550
FEB.												
12...	200	26	167	455	7.7	10	1.0	22	9.0	63	500	2100
MAR.												
12...	118	15	103	295	7.8	100	9.0	270	8.0	69	1500	8000
APR.												
09...	190	34	161	410	7.7	10	7.5	25	8.8	73	400	600
MAY												
14...	170	28	139	385	7.7	10	17.5	26	6.7	70	2200	1700
JUNE												
11...	200	28	174	450	7.9	9	26.5	34	5.9	73	600	300
JULY												
16...	170	16	154	405	7.8	7	26.5	18	6.2	77	100	20
AUG.												
13...	84	0	87	219	7.5	80	23.5	130	3.7	43	20000	72000
SEP.												
10...	200	13	187	445	7.5	20	22.5	45	5.8	66	6800	9200

06821200 PLATTE RIVER AT PLATTE CITY, MO.--Continued

PERIOD OF RECORD.--Chemical analyses: August 1967 to September 1973.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	DIS- SOL- VED- PHOS- PHORUS (P) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	SODIUM AD- SORP- TION RATIO	PERCENT SODIUM
OCT.												
10...	.1	.09	.02	.69	.05	.06	.03	299	.41	106	.4	13
NOV.												
13...	.2	2.7	.22	.40	.15	.25	.05	221	.30	1320	.4	13
DEC.												
11...	.3	3.4	.13	.33	.09	.10	.04	318	.43	601	.5	13
JAN.												
15...	.2	1.5	.42	.39	.12	.15	.04	300	.41	658	.4	13
FEB.												
12...	.2	2.0	.27	1.9	.09	.40	.04	256	.35	1270	.4	11
MAR.												
12...	.3	.77	.39	.42	.09	.97	.03	173	.24	3840	.3	12
APR.												
09...	.3	2.7	.00	.00	.06	.20	.05	251	.34	1350	.4	12
MAY												
14...	.4	2.9	.02	.21	.11	.65	.06	238	.32	906	.3	11
JUNE												
11...	.0	1.3	.03	1.4	.07	.46	.00	278	.38	411	.4	13
JULY												
16...	.2	.63	.02	.89	.04	.29	--	248	.34	99.1	.5	15
AUG.												
13...	.5	1.4	.29	.02	.09	1.2	--	141	.19	1490	.4	16
SEP.												
10...	.3	.52	.01	1.3	.12	.64	--	271	.37	293	.4	13

MISSOURI RIVER BASIN

06894100 MISSOURI RIVER AT SIBLEY, MO.

LOCATION.--Lat 39°10'46", long 94°11'03", in NE¼NW¼ sec.2, T.50 N., R.30 W., Jackson County, multi-parameter digital recorder at raw-water intake line at Missouri Public Service Company steam generating plant at Sibley.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT.												
10...	56400	9.0	0	20	60	18	64	8.2	184	0	190	16
NOV.												
13...	78700	10	20	20	58	17	52	7.5	200	0	140	18
DEC.												
11...	35000	11	30	60	72	23	63	7.2	266	0	170	22
JAN.												
15...	29100	12	10	40	69	20	49	10	254	0	130	25
FEB.												
12...	64300	13	40	20	65	15	37	8.8	228	0	98	20
MAR.												
12...	166000	10	140	60	50	11	19	6.9	178	0	78	11
APR.												
09...	115000	11	50	20	67	17	31	7.6	224	0	100	18
MAY												
14...	93300	11	50	20	64	16	36	7.9	204	0	100	21
JUNE												
11...	71900	15	70	10	73	20	56	6.8	224	0	140	34
JULY												
16...	46500	11	140	20	62	20	58	6.9	200	0	160	29
AUG.												
13...	110000	7.1	750	70	47	13	41	6.6	190	0	110	17
SEP.												
10...	50200	10	100	0	62	20	65	6.0	212	0	160	30

DATE	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	ALKA- LINITY AS CACO ₃ (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	COLOR (PLAT- INUM- COBALT UNITS)	TEMPER- ATURE (DEG C)	CHEM- ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)
OCT.												
10...	220	72	151	760	7.7	10	16.0	7	7.6	77	7000	750
NOV.												
13...	210	50	164	675	8.1	10	8.0	22	7.2	60	16000	43000
DEC.												
11...	270	56	218	850	8.2	5	2.5	10	9.6	71	11000	80000
JAN.												
15...	250	46	208	730	7.9	10	6.0	8	7.2	58	2500	28000
FEB.												
12...	220	36	187	640	7.9	40	3.0	11	10.0	74	5200	49000
MAR.												
12...	170	24	146	450	7.9	40	7.0	168	8.2	68	3500	38000
APR.												
09...	240	54	184	600	8.0	10	9.0	9	6.6	57	3800	8600
MAY												
14...	230	58	167	640	7.9	10	17.5	41	7.0	73	6300	1500
JUNE												
11...	260	81	184	760	8.0	8	25.0	--	6.0	72	10000	22000
JULY												
16...	240	76	164	730	8.1	9	26.5	52	4.6	57	16000	2400
AUG.												
13...	170	14	156	605	7.7	20	25.5	150	3.6	44	20000	36000
SEP.												
10...	240	66	174	760	8.1	5	24.0	14	6.2	73	12000	3000

06894100 MISSOURI RIVER AT SIBLEY, MO.--Continued

PERIOD OF RECORD.--Chemical analyses: June 1972 to September 1973 (multi-parameter recorder discontinued July 1973).

REMARKS.--Records of discharge are given for gaging station at Kansas City, Mo.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	DIS- SOL- VED- PHOS- PHORUS (P) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	SODIUM AD- SORP- TION RATIO	PERCENT SODIUM
OCT. 10...	.1	.63	.02	.45	.06	.10	.03	465	.63	70800	1.9	37
NOV. 13...	.3	1.2	.06	.60	.19	.48	.05	415	.56	88200	1.5	34
DEC. 11...	.4	1.2	.29	.36	.10	.14	.06	520	.71	49100	1.7	33
JAN. 15...	.4	.81	.62	.58	.16	.16	.06	451	.61	35400	1.3	29
FEB. 12...	.3	.90	.17	.22	.14	.47	.06	375	.51	65100	1.1	25
MAR. 12...	.4	.86	.40	.91	.08	1.8	.06	254	.35	114000	.6	19
APR. 09...	.3	2.7	.01	.44	.11	.70	.04	368	.50	114000	.9	21
MAY 14...	.5	2.5	.02	.09	.14	.90	.22	372	.51	93700	1.0	25
JUNE 11...	.5	1.8	.02	1.3	.19	.44	.00	494	.67	95900	1.5	31
JULY 16...	.5	1.6	.05	1.8	.16	.63	--	475	.65	59600	1.6	34
AUG. 13...	.5	1.3	.05	10	.10	1.9	--	327	.44	97100	1.4	33
SEP. 10...	.3	.59	.01	.46	.14	.34	--	512	.70	69400	1.8	37

06899620 THOMPSON RIVER NEAR CHILLICOTHE, MO.

LOCATION.--Lat 39°49'50", long 93°36'25", Livingston County, at bridge on State Highway 170, 4 mi (6.4 km) northwest of Chillicothe.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT.												
11...	221	10	0	60	66	12	12	5.2	228	8	37	8.1
NOV.												
14...	7250	7.8	160	160	34	6.1	6.6	6.4	116	0	26	7.1
DEC.												
13...	380	15	150	120	80	15	15	4.7	292	0	45	11
JAN.												
16...	1400	12	20	60	67	13	12	7.0	242	0	47	8.5
FEB.												
13...	1720	11	80	110	59	10	12	5.2	202	0	46	7.8
MAR.												
13...	6230	9.7	140	30	33	6.1	5.6	4.3	100	0	26	4.0
APR.												
10...	1660	9.4	30	80	63	11	11	3.5	208	0	44	6.7
MAY												
15...	1340	11	60	20	60	12	9.3	4.1	210	0	38	5.4
JUNE												
12...	462	9.9	100	20	56	14	12	3.5	211	0	41	7.4
JULY												
17...	168	13	110	50	62	13	11	4.6	238	4	37	7.4
AUG.												
14...	3300	12	420	50	23	4.0	4.0	5.0	96	0	12	4.0
SEP.												
11...	400	7.9	60	0	37	7.0	8.5	4.5	138	0	22	5.1

DATE	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	ALKA- LINITAS AS CaCO ₃ (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	COLOR (PLAT- INUM- COBALT UNITS)	TEMPER- ATURE (DEG C)	CHEM- ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)
OCT.												
11...	210	14	200	465	8.7	5	18.0	5	10.4	108	35	80
NOV.												
14...	110	15	95	255	7.8	50	3.5	196	8.7	65	21000	250000
DEC.												
13...	260	22	239	595	7.7	5	.0	8	10.0	68	210	850
JAN.												
16...	220	22	198	565	7.4	10	.5	9	8.0	56	50	220
FEB.												
13...	190	22	166	455	7.9	20	1.0	29	10.0	70	900	4000
MAR.												
13...	110	26	82	262	7.8	100	8.5	37	8.8	75	3000	6500
APR.												
10...	200	32	171	438	7.8	10	4.0	19	9.4	72	250	900
MAY												
15...	200	27	172	435	7.9	10	16.0	32	7.6	77	4200	4800
JUNE												
12...	200	24	171	425	7.8	5	27.0	--	8.6	107	50	75
JULY												
17...	210	8	202	445	8.5	6	26.5	30	6.6	81	40	100
AUG.												
14...	74	0	79	190	7.7	100	26.0	92	6.3	77	14000	5000
SEP.												
11...	120	7	113	287	7.9	40	22.5	37	7.2	82	6000	17700

06899620 THOMPSON RIVER NEAR CHILLICOTHE, MO.--Continued

PERIOD OF RECORD.--Chemical analyses: November 1968 to September 1973.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	DIS- SOL- VED- PHOS- PHORUS (P) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	SODIUM AD- SORP- TION RATIO	PERCENT SODIUM
OCT. 11...	.1	.54	.06	.42	.09	.13	.04	282	.38	168	.4	11
NOV. 14...	.2	1.4	.22	.44	.22	.53	.07	167	.23	3270	.3	11
DEC. 13...	.0	1.6	.14	.13	.13	.17	.04	339	.46	348	.4	11
JAN. 16...	.2	1.0	.33	.43	.19	.20	.04	305	.41	1150	.4	10
FEB. 13...	.2	.54	.31	2.3	.05	.53	.06	250	.34	1160	.4	12
MAR. 13...	.3	4.1	.33	.43	.04	1.5	.02	149	.20	2510	.2	10
APR. 10...	.2	1.4	.01	.00	.02	.42	.04	260	.35	1170	.3	10
MAY 15...	.3	1.7	.05	.86	.11	.44	.04	272	.37	984	.3	9
JUNE 12...	.3	.05	.01	.78	.03	.25	.16	267	.36	333	.4	11
JULY 17...	.2	.03	.13	1.1	.07	.27	--	280	.38	127	.3	10
AUG. 14...	.4	.81	.38	5.0	.08	.96	--	114	.16	1020	.2	10
SEP. 11...	.2	.36	.01	.30	.07	.88	--	182	.25	197	.3	13

06902000 GRAND RIVER NEAR SUMNER, MO.

LOCATION.--Lat 39°38'25", long 93°16'25", NE¼ sec.29, T.56 N., R.21 W., Chariton County, at gaging station near right bank on downstream side of pier on State Highway 139, 240 ft (73.2 m) downstream from Chicago Burlington and Quincy Railroad bridge, 2 mi (3.2 km) southwest of Sumner, 2.5 mi (4.0 km) downstream from Locust Creek and at mile 41.0 (66.0 km).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT.												
11...	437	11	10	90	71	11	12	5.8	240	8	36	7.5
NOV.												
14...	24800	7.5	210	150	28	4.7	5.2	6.5	92	0	22	5.6
DEC.												
13...	600	16	90	280	88	15	16	5.4	310	0	55	11
JAN.												
16...	1600	11	20	130	68	12	12	6.8	236	0	52	7.8
FEB.												
13...	5310	12	20	100	65	10	11	5.0	216	0	46	8.7
MAR.												
13...	38600	9.4	100	30	32	5.6	5.5	4.2	108	0	22	3.7
APR.												
10...	6450	9.3	70	70	61	10	11	3.7	204	0	41	5.7
MAY												
15...	4500	11	60	80	56	10	8.7	4.3	194	0	36	5.4
JUNE												
12...	1390	10	120	20	65	13	12	3.7	240	0	40	6.9
JULY												
17...	551	12	100	50	60	13	11	4.7	236	0	38	7.4
AUG.												
14...	5540	8.4	460	40	26	4.8	4.4	4.8	106	0	14	3.6
SEP.												
11...	1710	9.3	60	0	56	10	11	4.4	196	0	29	6.0

DATE	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	ALKA- LINITY AS CACO ₃ (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	COLOR (PLAT- INUM- COBALT UNITS)	TEMPER- ATURE (DEG. C)	CHEM- ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)
OCT.												
11...	220	12	210	465	8.6	10	19.0	8	13.2	140	180	70
NOV.												
14...	90	14	75	214	7.7	80	5.0	100	6.6	52	28000	280000
DEC.												
13...	280	27	254	655	7.6	3	.0	8	10.3	71	320	240
JAN.												
16...	220	26	194	515	7.5	10	.0	10	6.8	47	760	370
FEB.												
13...	200	26	177	470	7.9	10	1.0	21	9.8	69	800	1300
MAR.												
13...	100	14	88	242	7.7	150	9.0	0	8.6	74	1200	7000
APR.												
10...	190	26	167	430	7.6	10	5.0	17	8.8	69	950	2100
MAY												
15...	180	22	159	422	7.7	10	17.5	12	7.4	77	1300	400
JUNE												
12...	220	23	197	455	8.2	6	28.0	22	9.8	124	120	75
JULY												
17...	200	6	194	450	8.1	4	27.0	29	7.2	90	40	20
AUG.												
14...	85	0	87	211	7.7	90	25.5	94	6.1	74	10000	5000
SEP.												
11...	180	19	161	387	7.6	20	23.5	34	7.4	86	1500	1700

06902000 GRAND RIVER NEAR SUMNER, MO.--Continued

DRAINAGE AREA.--6,880 mi² (17,819 km²), approximately.

PERIOD OF RECORD.--Chemical analyses: August 1962 to June 1963; August 1967 to September 1973.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	DIS- SOL- VED- PHOS- PHORUS (P) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	SODIUM AD- SORP- TION RATIO	PERCENT SODIUM
OCT. 11...	.2	.09	.08	.38	.02	.08	.03	283	.38	334	.4	10
NOV. 14...	.2	1.3	.24	.61	.11	.22	.02	140	.19	9370	.2	10
DEC. 13...	.2	1.1	.13	.29	.02	.07	.04	361	.49	585	.4	11
JAN. 16...	.2	.81	.32	.41	.05	.17	.05	301	.41	1300	.4	10
FEB. 13...	.2	.61	.00	2.0	.04	.42	.04	265	.36	3800	.3	10
MAR. 13...	.3	.84	.32	.41	.04	1.2	.02	145	.20	15100	.2	10
APR. 10...	.2	1.2	.00	.00	.02	.49	.03	250	.34	4350	.3	11
MAY 15...	.3	1.4	.02	.87	.06	.48	.04	241	.33	2930	.3	9
JUNE 12...	.3	.00	.02	.66	.04	.22	.07	292	.40	1100	.4	11
JULY 17...	.3	.10	.12	.81	.09	.21	--	262	.36	390	.3	10
AUG. 14...	.2	.98	.12	.98	.08	1.1	--	131	.18	1960	.2	10
SEP. 11...	.2	.23	.09	.84	.09	.39	--	225	.31	1040	.4	11

CHARITON RIVER BASIN

06905500 CHARITON RIVER NEAR PRAIRIE HILL, MO.

LOCATION.--Lat 39°32'25", long 92°47'23", NW¼SW¼ sec.26, T.55 N., R.17 W., Chariton County, at gaging station on right bank on downstream side of bridge on State Highway 129, 3.2 mi (5.1 km) northwest of Prairie Hill, 13.5 mi (21.7 km) upstream from Puzzle Creek, and at mile 19.6 (31.5 km).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT.												
12...	73	7.0	10	40	58	13	12	7.3	214	0	54	7.1
NOV.												
15...	2770	7.5	150	760	39	6.6	6.9	5.2	96	0	49	5.1
DEC.												
13...	400	1.7	10	60	47	9.0	11	7.3	156	0	46	8.1
JAN.												
17...	1500	3.4	170	180	43	8.5	9.7	6.8	128	0	54	10
FEB.												
14...	4280	5.9	180	40	33	6.6	7.5	5.3	104	0	42	5.4
MAR.												
14...	9990	8.0	230	50	26	5.3	5.2	3.7	76	0	35	1.2
APR.												
11...	3820	5.3	140	60	39	7.4	8.7	4.2	112	0	50	4.8
MAY												
16...	2020	5.5	80	0	39	8.3	7.7	5.4	116	0	45	5.2
JUNE												
13...	2080	5.5	150	0	33	7.1	7.1	4.4	105	0	36	5.7
JULY												
18...	1130	3.8	150	0	31	6.7	6.5	5.0	108	0	28	6.2
AUG.												
15...	1620	6.2	110	20	33	6.7	6.1	4.8	112	0	38	5.0
SEP.												
12...	550	5.5	80	0	37	7.7	7.4	4.8	130	0	33	4.4

DATE	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	ALKA- LINITAS AS CaCO ₃ (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	COLOR (PLAT- INUM- COBALT UNITS)	TEMPER- ATURE (DEG C)	CHEM- ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)
OCT.												
12...	200	22	176	445	8.3	10	16.5	7	8.2	84	80	150
NOV.												
15...	120	46	79	277	7.6	100	3.5	20	8.4	63	10000	31000
DEC.												
13...	150	26	128	380	7.8	2	.0	14	11.5	79	30	90
JAN.												
17...	140	37	105	365	7.5	100	.0	16	8.0	55	1000	9000
FEB.												
14...	110	24	85	283	7.6	60	.5	0	10.2	71	1000	6600
MAR.												
14...	87	25	62	214	7.6	150	10.5	4	7.5	67	4000	14000
APR.												
11...	130	36	92	314	7.4	20	5.0	17	8.1	63	900	1200
MAY												
16...	130	36	95	317	7.8	15	15.0	26	7.8	77	100	200
JUNE												
13...	110	26	86	277	7.6	40	23.0	26	6.6	76	950	750
JULY												
18...	110	21	89	252	8.0	40	23.5	26	7.0	81	<50	100
AUG.												
15...	110	18	92	280	7.7	50	23.5	33	7.1	83	3500	10000
SEP.												
12...	120	13	107	292	7.9	30	20.0	19	6.3	68	950	1300

06905500 CHARITON RIVER NEAR PRAIRIE HILL, MO.--Continued

DRAINAGE AREA.--1,870 mi² (4,843 km²).

PERIOD OF RECORD.--Chemical analyses: August 1962 to June 1963; August 1967 to September 1973.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	DIS- SOL- VED- PHOS- PHORUS (P) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	SODIUM AD- SORP- TION RATIO	PERCENT SODIUM
OCT. 12...	.2	.04	.00	.35	.00	.03	.03	265	.36	52.2	.4	11
NOV. 15...	.2	3.2	.38	1.7	.15	.39	.10	175	.24	1310	.3	10
DEC. 13...	.2	.38	.01	.47	.01	.08	.05	209	.28	226	.4	13
JAN. 17...	.2	.54	.27	2.2	.03	.95	.03	208	.28	842	.4	12
FEB. 14...	.2	.41	.00	2.2	.09	.58	.02	162	.22	1870	.3	12
MAR. 14...	.3	.29	.27	2.2	.03	.99	.01	135	.18	3640	.2	11
APR. 11...	.2	.77	.01	.00	.01	.32	.04	186	.25	1920	.3	12
MAY 16...	.2	.81	.00	.65	.06	.33	.05	185	.25	1010	.3	11
JUNE 13...	.2	.95	.04	1.0	.03	.33	.00	177	.24	994	.3	12
JULY 18...	.2	.78	.08	.89	.08	.26	--	169	.23	516	.3	11
AUG. 15...	.3	.32	.09	.41	.12	.62	--	171	.23	748	.3	10
SEP. 12...	.0	.47	.00	.36	.04	.23	--	171	.23	254	.3	11

LITTLE CHARITON RIVER BASIN

06906200 EAST FORK CHARITON RIVER NEAR MACON, MO.

LOCATION.--Lat 39°44'57", long 92°31'05", NW¼NW¼NW¼ sec.18, T.57 N., R.14 W., Macon County, at gaging station at bridge on U.S. Highway 36, 2 mi (3.2 km) downstream from Long Branch, and 3 mi (4.8 km) west of Macon.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SIO2) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT.												
11...	.01	8.0	150	240	34	7.1	11	6.6	100	0	50	10
NOV.												
15...	240	8.3	260	290	23	4.8	7.9	6.8	64	0	38	6.8
DEC.												
13...	2.7	12	70	270	75	14	31	6.4	208	0	120	21
JAN.												
17...	60	7.3	180	400	37	7.5	12	6.4	108	0	54	8.7
FEB.												
14...	340	8.7	240	220	27	6.0	11	3.8	80	0	41	7.2
MAR.												
14...	1250	6.6	340	110	15	3.0	4.7	3.3	48	0	19	2.0
APR.												
11...	319	7.0	210	130	27	5.7	9.5	2.3	76	0	38	3.3
MAY												
16...	17	11	160	160	42	8.8	12	3.2	136	0	49	4.8
JUNE												
13...	6.2	10	420	280	35	7.8	12	3.0	122	0	39	5.5
JULY												
17...	.85	8.6	160	130	28	6.3	8.7	4.1	104	0	28	6.4
AUG.												
15...	13	11	220	170	25	5.2	6.4	3.8	92	0	25	3.8
SEP.												
11...	48	8.6	130	60	19	4.2	6.1	4.6	64	0	20	2.9

DATE	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	COLOR (PLAT- INUM- COBALT UNITS)	TEMPER- ATURE (DEG C)	CHEM- ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)
OCT.												
11...	110	32	82	300	8.0	35	19.5	32	9.0	97	750	340
NOV.												
15...	77	24	52	207	7.7	100	3.5	50	7.4	56	4000	56000
DEC.												
13...	240	74	171	670	7.6	5	.0	14	10.2	70	20	50
JAN.												
17...	120	35	89	338	7.3	25	1.0	24	7.3	51	780	3200
FEB.												
14...	92	26	66	258	7.4	100	.0	34	8.7	60	950	2000
MAR.												
14...	50	10	39	162	7.3	300	10.0	170	7.6	67	7600	10000
APR.												
11...	91	29	62	222	7.2	100	3.0	--	8.8	65	800	1200
MAY												
16...	140	30	112	342	7.8	10	14.5	25	9.0	87	100	100
JUNE												
13...	120	19	100	295	7.4	50	24.0	23	5.0	59	200	400
JULY												
17...	96	11	85	250	7.7	80	25.0	41	6.1	73	120	280
AUG.												
15...	84	9	75	223	7.5	70	22.5	24	6.5	61	300	2500
SEP.												
11...	65	12	52	165	7.1	100	21.5	26	5.4	61	1200	1300

LITTLE CHARITON RIVER BASIN

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06906200 EAST FORK CHARITON RIVER NEAR MACON, MO.--Continued

DRAINAGE AREA.--112 mi² (290 km²).

PERIOD OF RECORD.--Chemical analyses: October 1971 to September 1973.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	DIS- SOL- VED- PHOS- PHORUS (P) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	SODIUM AD- SORP- TION RATIO	PERCENT SODIUM
OCT. 11...	.1	.09	.11	.64	.02	.05	.05	169	.23	.00	.4	16
NOV. 15...	.1	1.2	.07	.64	.09	.19	.05	142	.19	92.0	.4	17
DEC. 13...	.2	.61	.00	.55	.02	.06	.08	401	.55	2.92	.9	21
JAN. 17...	.2	.54	.40	.91	.06	.20	.06	196	.27	31.8	.5	17
FEB. 14...	.2	.45	.37	.88	.04	.30	.05	158	.21	145	.5	20
MAR. 14...	.3	.22	.40	.91	.04	.74	.02	85	.12	287	.3	16
APR. 11...	.0	.36	.00	.00	.01	.18	.02	140	.19	121	.4	18
MAY 16...	.3	.27	.04	.22	.01	.18	.10	199	.27	9.13	.4	15
JUNE 13...	.3	.85	.05	.78	.02	.18	.02	202	.27	3.38	.5	17
JULY 17...	.2	1.2	.21	.89	.04	.21	--	160	.22	.37	.4	16
AUG. 15...	.2	.51	.07	.44	.03	.11	--	139	.19	4.88	.3	14
SEP. 11...	.1	.35	.13	.45	.03	.20	--	118	.16	15.3	.3	16

LITTLE CHARITON RIVER BASIN

06906320 EAST FORK CHARITON RIVER NEAR CLIFTON HILL, MO.

LOCATION.--Lat 39°24'48", long 92°39'56", on line between sec.1 and 2, T.53 N., R.16 W., Randolph County, at bridge on county road 1.8 mi (2.9 km) south of Clifton Hill.

PERIOD OF RECORD.--Chemical analyses: September 1963 to September 1973.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT.												
12...	4.0	5.5	10	930	190	52	56	11	96	0	740	20
NOV.												
15...	770	8.2	240	710	39	11	11	6.1	72	0	100	6.0
DEC.												
14...	17	9.4	250	2800	140	55	43	7.6	190	0	540	20
JAN.												
17...	100	5.8	530	1500	80	25	19	6.2	80	0	270	12
FEB.												
14...	827	7.0	110	570	48	12	9.6	4.2	68	0	130	6.2
MAR.												
14...	2120	6.7	200	260	30	8.2	5.8	3.8	60	0	73	2.0
APR.												
11...	890	5.9	70	710	51	18	10	3.0	66	0	160	2.9
MAY												
16...	77	8.0	490	2900	140	65	23	5.3	100	0	550	10
JUNE												
13...	45	6.2	140	1000	73	29	20	3.7	88	0	250	11
JULY												
18...	8.0	6.1	120	1500	120	57	69	5.8	116	0	560	9.5
AUG.												
15...	136	9.1	200	910	41	14	11	4.6	66	0	130	4.9
SEP.												
12...	103	6.3	100	190	42	16	13	5.1	56	0	150	5.1

DATE	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	ALKA- LINITY AS CaCO ₃ (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	COLOR (PLAT- INUM- COBALT UNITS)	TEMPER- ATURE (DEG C)	CHEM- ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)
OCT.												
12...	690	610	78	1420	7.2	10	16.5	14	7.4	76	220	380
NOV.												
15...	140	84	59	365	7.4	50	5.5	41	5.8	46	2900	11000
DEC.												
14...	580	420	156	1400	7.2	5	.0	17	10.6	73	85	750
JAN.												
17...	300	240	66	730	7.1	15	.5	17	8.8	61	1400	3200
FEB.												
14...	170	114	56	420	7.4	35	.0	33	9.4	64	2400	10000
MAR.												
14...	110	60	49	278	7.4	200	12.5	39	7.6	71	1500	4800
APR.												
11...	200	150	54	435	7.0	20	5.5	10	10.2	81	1400	1300
MAY												
16...	620	540	82	1100	7.5	10	16.5	17	8.8	90	90	180
JUNE												
13...	300	230	72	710	7.3	20	24.0	39	5.6	66	23000	44000
JULY												
18...	530	440	95	1280	7.0	7	24.5	16	8.4	100	60	250
AUG.												
15...	160	110	54	412	7.1	50	24.0	28	5.3	62	320	1200
SEP.												
12...	170	120	46	253	7.0	50	20.0	30	7.2	78	1300	3500

06906320 EAST FORK CHARITON RIVER NEAR CLIFTON HILL, MO.--Continued

EXTREMES, 1963-1973.--Specific conductance: Maximum, 3,500 micromhos Nov. 15, 1964; minimum, 100 micromhos Mar. 12, 1972.

REMARKS.--Conductance recorder operation discontinued Mar. 14, 1973.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS-SOLVED FLUORIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	ORGANIC NITROGEN (N) (MG/L)	DIS-SOLVED PHOSPHORUS (P) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L)	DIS-SOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	SODIUM ADSORPTION RATIO	PERCENT SODIUM
OCT. 12...	.2	.07	.00	.30	.01	.33	.05	1050	1.43	11.3	.9	15
NOV. 15...	.1	.47	.26	.86	.03	.12	.10	230	.31	478	.4	14
DEC. 14...	.4	.93	.28	.84	.03	.05	.06	997	1.36	45.8	.8	14
JAN. 17...	.3	.70	.70	.90	.04	.27	.07	465	.63	126	.5	12
FEB. 14...	.2	.36	.00	2.3	.04	.46	.03	254	.35	567	.3	11
MAR. 14...	.0	1.5	.10	.75	.01	.54	.01	179	.24	1030	.2	10
APR. 11...	.3	.27	.00	.23	.00	.23	.03	307	.42	738	.3	10
MAY 16...	.0	.43	.01	.17	.01	.02	.05	884	1.20	185	.4	7
JUNE 13...	.3	.69	.04	2.0	.02	.27	.00	473	.64	57.5	.5	12
JULY 18...	.5	.53	.15	.55	.07	.10	--	949	1.29	20.5	1.3	22
AUG. 15...	.1	.40	.06	.63	.00	.12	--	270	.37	99.2	.4	13
SEP. 12...	.2	.35	.07	.35	.03	.69	--	286	.39	79.5	.4	14

CEDAR CREEK BASIN

06910410 CEDAR CREEK NEAR COLUMBIA, MO.

LOCATION.--Lat 38°54'40", long 92°09'30", Boone County, at left downstream side of bridge on County Highway WW, 3 mi (4.8 km) downstream from gaging station, and 9.3 mi (15 km) east of Columbia.

DRAINAGE AREA.--52.1 mi² (135 km²).

PERIOD OF RECORD.--Chemical analyses: July 1964 to September 1973.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT. 12...	.07	11	2560	18400	250	100	12	140	0	0	1520	6.6
NOV. 15...	13	7.7	3800	6200	160	43	12	12	0	0	590	5.6
DEC. 14...	12	6.7	6500	3300	85	24	12	7.6	4	0	320	14
JAN. 18...	44	7.0	5800	4600	78	31	9.6	5.0	4	0	360	6.8
FEB. 15...	41	8.4	1300	1200	35	10	6.7	4.5	20	0	120	5.2
MAR. 15...	60	9.8	1300	1600	44	14	6.1	3.3	16	0	160	3.0
APR. 12...	61	7.8	2730	1480	45	16	7.2	2.8	12	0	180	3.3
MAY 17...	3.2	13	1600	5400	110	40	12	5.0	4	0	440	6.9
JUNE 14...	1.3	12	160	4800	86	33	12	3.7	12	0	350	7.7
JULY 18...	.45	9.8	350	7700	130	50	14	5.2	0	0	600	4.9
AUG. 15...	4.7	6.2	200	2400	45	16	5.1	5.9	2	0	200	4.2
SEP. 12...	8.3	11	90	4400	77	27	7.7	5.3	2	0	310	4.2

DATE	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	ALKA- LINITY AS CACO ₃ (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	COLOR (PLAT- INUM- COBALT UNITS)	TEMPER- ATURE (DEG C)	CHEM- ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)
OCT. 12...	1040	1040	0	1780	3.8	5	15.5	1	6.0	60	0	180
NOV. 15...	570	570	0	1100	4.4	2	5.0	0	7.4	58	<2	70
DEC. 14...	310	310	3	750	5.0	2	.0	14	11.0	75	<1	76
JAN. 18...	320	320	3	800	5.0	5	.5	0	11.0	76	<4	70
FEB. 15...	130	110	16	350	6.7	80	.0	19	10.0	68	120	2100
MAR. 15...	170	150	13	423	6.5	30	10.5	12	8.4	75	600	1400
APR. 12...	180	170	10	412	6.3	5	8.0	5	9.8	82	40	220
MAY 17...	440	440	3	900	5.5	10	14.0	8	8.4	81	<2	<2
JUNE 14...	350	340	10	760	6.3	2	22.5	6	7.2	82	46	48
JULY 18...	530	530	0	1170	3.8	1	23.5	0	8.2	95	<2	6
AUG. 15...	180	180	2	490	4.7	1	27.0	12	7.0	88	16	24
SEP. 12...	300	300	2	555	4.7	1	20.0	4	7.4	80	20	68

06910410 CEDAR CREEK NEAR COLUMBIA, MO.--Continued

EXTREMES, 1972-73.--Specific conductance: Maximum, 1,960 micromhos Oct. 4, 5; minimum, 95 micromhos Mar. 31, Apr. 1.

EXTREMES, 1964-73.--Specific conductance: Maximum, 5,140 micromhos Nov. 12, 1964; minimum 60 micromhos Aug. 2, 1968.

REMARKS.--Conductance recorder inoperative Jan. 4-Feb. 14, 1973.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS-SOLVED FLUORIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	ORGANIC NITROGEN (N) (MG/L)	DIS-SOLVED PHOSPHORUS (P) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L)	DIS-SOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	SODIUM ADSORPTION RATIO	PERCENT SODIUM
OCT. 12...	.9	.16	.02	.24	.00	.09	.01	2260	3.07	.43	.2	2
NOV. 15...	.4	.34	.00	.17	.09	.10	.05	819	1.11	28.7	.2	4
DEC. 14...	.3	.45	.18	.47	.03	.04	.04	485	.66	15.7	.3	8
JAN. 18...	.5	.95	.16	.24	.03	.12	.09	540	.73	64.2	.2	6
FEB. 15...	.3	.70	.00	1.9	.03	.20	.04	215	.29	24.3	.3	10
MAR. 15...	.2	.66	.13	.50	.07	.07	.02	265	.36	42.9	.2	7
APR. 12...	.0	.66	.03	.14	.01	.04	.02	285	.39	47.2	.2	8
MAY 17...	.0	.50	.08	.36	.01	.01	.04	665	.90	5.76	.2	6
JUNE 14...	.3	1.1	.20	.20	.03	.03	.12	597	.81	2.10	.3	7
JULY 18...	.9	32	.13	.51	.02	.03	--	930	1.26	1.13	.3	5
AUG. 15...	.2	.26	.25	.14	.00	.00	--	296	.40	3.76	.2	6
SEP. 12...	.3	.66	.19	.04	.00	.03	--	508	.69	11.4	.2	5

CEDAR CREEK BASIN

06910410 CEDAR CREEK NEAR COLUMBIA, MO.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	1950	1900	1580	1400	960	920	320	310	---	---	820	230
2	1920	1900	1400	1370	990	970	360	320	---	---	340	220
3	1930	1920	1400	1360	990	990	380	360	---	---	340	290
4	1960	1930	1360	1290	1010	990	---	---	---	---	375	190
5	1960	1900	1290	1210	1040	1010	---	---	---	---	240	200
6	1920	1880	1210	1180	1090	1040	---	---	---	---	250	105
7	1940	1830	1180	1170	1120	1090	---	---	---	---	155	105
8	1830	1820	1180	1170	1140	1120	---	---	---	---	180	155
9	1820	1760	1200	1180	1180	1140	---	---	---	---	220	190
10	1790	1780	1200	1200	1200	1180	---	---	---	---	270	195
11	1780	1760	1200	1170	1250	1200	---	---	---	---	225	210
12	1780	1760	1170	1160	1250	870	---	---	---	---	270	250
13	1800	1780	1160	1100	1110	680	---	---	---	---	330	300
14	1860	1800	1100	1100	800	780	---	---	---	---	390	370
15	1910	1860	1100	1100	800	800	---	---	390	350	490	390
16	1930	1910	1100	1100	830	800	---	---	530	390	580	490
17	1930	1910	1110	1100	870	840	---	---	560	500	660	580
18	1910	1900	1110	1080	950	870	---	---	620	560	710	660
19	1910	1860	1100	1070	950	250	---	---	750	620	750	710
20	1860	1720	1070	980	390	240	---	---	800	750	760	430
21	1720	1700	1070	1000	390	370	---	---	760	750	460	430
22	1700	1600	1150	1070	370	370	---	---	800	740	530	460
23	1600	1580	1180	1150	380	370	---	---	800	740	610	530
24	1580	1520	1280	1180	400	380	---	---	800	760	630	150
25	1560	1520	1280	920	415	400	---	---	800	760	195	150
26	1640	1560	1250	920	420	415	---	---	820	800	385	195
27	1660	1640	1250	1140	465	420	---	---	820	820	460	385
28	1660	1640	1180	920	470	465	---	---	820	810	550	410
29	1640	1600	920	810	470	255	---	---	---	---	410	220
30	1600	1580	920	920	280	260	---	---	---	---	240	220
31	1580	1580	---	---	310	280	---	---	---	---	240	95
MONTH	1960	1520	1580	810	1250	240	---	---	---	---	820	95

06910410 CEDAR CREEK NEAR COLUMBIA, MO.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	130	95	730	700	450	420	770	750	530	480	760	750
2	155	130	750	730	480	450	800	730	480	400	760	760
3	190	155	800	750	490	480	1520	800	400	380	1300	760
4	235	190	830	800	520	480	1370	1080	380	370	1490	1300
5	290	235	850	830	560	480	1080	970	370	365	1480	1480
6	340	290	860	850	570	560	1200	980	370	365	1480	1460
7	390	340	860	110	590	570	1280	1200	380	370	1460	1450
8	420	390	305	200	600	590	1280	1270	420	380	1450	100
9	420	390	420	305	620	600	1720	430	480	420	240	200
10	400	395	510	420	660	620	880	310	520	480	380	240
11	405	400	600	510	690	660	1080	880	520	520	500	380
12	420	405	650	580	720	690	1140	1080	530	520	560	500
13	480	420	680	650	760	720	1150	1140	540	530	620	560
14	540	140	740	680	780	760	1150	1150	520	460	660	620
15	380	180	800	740	800	500	1150	1140	510	490	760	660
16	270	160	840	800	750	700	1140	1130	550	510	830	760
17	395	245	900	840	700	640	1150	1130	560	550	840	830
18	480	395	900	900	640	570	1170	900	580	560	1000	840
19	550	480	930	900	1420	310	900	850	600	580	1040	1000
20	610	550	950	930	430	315	900	830	620	600	1040	970
21	610	140	960	240	520	430	850	810	650	620	970	950
22	280	140	870	350	570	520	900	810	680	650	1030	950
23	370	230	1040	650	620	570	900	560	700	680	1050	140
24	450	370	700	670	650	620	560	330	700	700	185	155
25	500	450	770	700	670	650	330	290	710	700	210	185
26	550	500	800	240	700	670	320	290	710	700	250	210
27	590	550	550	170	700	690	355	320	700	700	290	250
28	640	590	300	250	720	700	390	355	700	700	360	290
29	660	640	350	300	750	720	400	390	710	700	400	360
30	700	660	400	350	750	750	410	400	730	710	410	350
31	---	---	420	400	---	---	500	410	750	730	---	---
MONTH	700	95	1040	110	1420	310	1720	290	750	365	1490	100

06916650 MARAIS DES CYGNES RIVER NEAR WORLAND, MO.

LOCATION.--Lat 38°13'07", long 94°36'45", in NW¼ sec.6, T.39 N., R.33 W., Bates County, at county road bridge on Kansas-Missouri State line and 2.2 mi (3.6 km) northwest of Worland.

DRAINAGE AREA.--3,230 mi² (8,366 km²).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT. 04...	38	7.0	40	10	46	6.2	12	4.8	160	0	26	11
DEC. 17...	154	9.5	20	80	97	8.4	17	4.2	296	0	54	17
FEB. 13...	3490	7.5	10	10	69	8.1	12	3.8	204	0	46	12
APR. 11...	6020	8.8	20	20	55	7.4	9.6	3.2	172	0	38	4.8
JUNE 12...	824	9.4	40	10	56	7.2	9.0	2.9	182	0	30	7.0
AUG. 08...	201	8.5	10	10	54	7.8	11	3.8	180	0	33	7.0

DATE	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	ALKA- LINITY AS CACO ₃ (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	COLOR (PLAT- INUM- COBALT UNITS)	TEMPER- ATURE (DEG C)	CHEM- ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)
OCT. 04...	140	10	131	329	7.9	40	19.0	18	6.8	72	--	--
DEC. 17...	280	34	243	600	7.9	10	.0	4	12.6	86	8	24
FEB. 13...	200	38	167	430	7.9	20	3.0	13	11.1	82	440	860
APR. 11...	170	26	141	377	7.7	30	8.5	5	10.2	87	760	160
JUNE 12...	170	20	149	361	7.7	20	24.5	24	5.2	62	1200	700
AUG. 08...	170	22	148	395	8.1	20	27.5	11	6.2	78	25	180

06916650 MARAIS DES CYGNES RIVER NEAR WORLAND, MO.--Continued

PERIOD OF RECORD.--Chemical analyses: August 1962 to June 1963; October 1972 to September 1973.

REMARKS.--Records of discharge are given for gaging station near Kansas-Missouri State line, 6.8 mi (10.9 km) upstream.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	DIS- SOL- VED- PHOS- PHORUS (P) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	SODIUM AD- SORP- TION RATIO	PERCENT SODIUM
OCT. 04...	.2	.66	.57	.66	.06	.41	.05	190	.26	19.5	.4	15
DEC. 17...	.0	1.1	.01	.30	.09	.14	.04	353	.48	147	.4	12
FEB. 13...	.2	.90	.00	.53	.06	.18	.07	253	.34	2380	.4	11
APR. 11...	.3	1.3	.00	.01	.04	.20	.04	200	.27	3250	.3	11
JUNE 12...	.4	1.3	.01	.85	.06	.24	.04	237	.32	527	.3	10
AUG. 08...	.1	1.3	.11	.37	.11	.15	--	230	.31	125	.4	12

06921070 POMME DE TERRE RIVER NEAR POLK, MO.

LOCATION.--Lat 37°40'56", long 93°22'12", in NE¼NW¼ NW¼ sec.17, T.34 N., R.22 W., Polk County, temperature recorder at gaging station on right bank 150 ft (46 m) upstream from Jefferson Bridge on County Highway D and 5 mi (8.0 km) southwest of Polk.

DRAINAGE AREA.--276 mi² (715 km²).

PERIOD OF RECORD.--Water temperature: June 1970 to September 1973.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1971 TO SEPTEMBER 1973

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	19.0	16.0	14.5	12.5	7.0	5.5	5.5	4.5	7.5	6.5	9.0	8.0
2	19.5	17.0	14.0	12.0	7.5	6.0	4.5	3.5	7.5	6.0	9.5	9.0
3	20.0	17.5	12.0	11.5	7.0	6.5	4.0	3.5	6.5	5.5	11.0	9.5
4	21.0	18.0	11.5	11.0	6.5	5.0	4.0	3.0	7.5	5.5	10.5	10.5
5	19.5	17.5	11.5	10.5	5.0	4.5	3.0	2.0	7.0	6.5	12.0	10.5
6	19.0	18.0	12.0	11.0	4.5	2.0	2.0	0.5	7.5	6.5	11.5	10.5
7	19.5	17.0	13.0	11.5	2.5	1.5	1.0	1.0	6.5	5.0	11.5	10.5
8	19.0	16.0	11.5	10.5	2.0	1.5	1.0	1.0	5.0	3.5	11.5	10.5
9	20.0	16.5	11.0	11.0	2.0	1.5	1.0	1.0	3.5	3.0	11.0	11.0
10	18.0	16.5	11.0	11.0	1.5	1.0	1.0	1.0	4.0	2.5	13.0	10.5
11	20.5	16.5	11.0	10.0	1.0	1.0	1.0	0.5	5.0	3.0	13.5	11.5
12	21.0	19.0	10.0	9.5	1.0	0.5	1.0	0.5	4.5	4.0	12.5	10.0
13	19.5	18.5	11.0	9.0	1.0	1.0	1.0	1.0	6.5	4.5	13.0	12.0
14	18.5	17.5	11.0	9.0	2.0	1.0	1.5	0.5	6.5	5.5	14.0	12.5
15	18.0	15.5	9.0	8.5	3.5	2.0	1.5	1.0	5.0	4.0	13.5	12.0
16	18.5	16.0	8.5	8.0	2.5	1.0	3.5	1.0	4.5	3.0	12.5	11.0
17	17.5	16.0	8.0	7.5	1.5	1.0	6.5	3.5	3.5	2.0	11.0	9.0
18	16.0	13.0	8.0	7.0	2.5	1.0	9.0	6.5	3.5	2.5	11.0	8.5
19	13.0	11.5	7.0	6.5	4.0	2.5	8.5	7.5	4.5	3.0	12.0	11.0
20	11.5	11.0	6.5	6.5	5.5	4.0	8.5	7.0	6.5	4.0	11.5	10.0
21	11.0	10.0	6.5	6.0	5.5	5.0	8.0	7.0	7.0	5.0	11.5	9.0
22	13.5	11.5	7.0	6.0	5.0	4.5	7.0	5.5	7.0	4.5	11.5	10.0
23	13.5	12.0	7.5	6.5	5.5	4.5	6.0	5.0	8.0	5.5	11.5	10.5
24	12.0	10.5	7.5	6.5	5.0	5.0	6.5	5.0	8.5	6.0	11.0	10.5
25	11.0	10.0	7.5	7.0	5.5	5.0	7.0	5.5	9.0	7.5	11.0	10.5
26	11.0	9.5	7.5	6.5	6.0	5.0	8.0	7.0	8.5	7.5	11.0	10.5
27	11.5	10.5	7.5	7.0	6.0	4.5	8.5	8.0	7.5	7.0	11.5	10.0
28	11.0	10.5	7.5	6.5	6.0	4.5	8.0	6.5	8.5	6.0	12.5	8.5
29	11.5	10.5	6.5	6.0	8.5	6.0	6.5	4.0	---	---	11.5	8.0
30	12.0	11.5	6.5	6.0	9.0	7.5	5.0	3.0	---	---	13.0	11.0
31	12.5	12.0	---	---	7.5	5.5	6.5	4.5	---	---	12.5	11.5
MONTH	21.0	9.5	14.5	6.0	9.0	0.5	9.0	0.5	9.0	2.0	14.0	8.0

06921070 POMME DE TERRE RIVER NEAR POLK, MO.--Continued

EXTREMES, 1972-73.--Water temperature: Maximum, 31.0°C July 20; minimum, 0.5°C Dec. 12, Jan. 6, 11, 12, 14.

EXTREMES, June 1970 to September 1973.--Water temperature: Maximum, 32.5°C July 2, Aug. 2, 3, 4, 5, 1970; minimum, freezing point Feb. 4, 1972.

REMARKS.--Temperature recorder inoperative April 15-May 8, 1973.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	11.5	10.0	---	---	19.0	16.0	28.0	25.5	26.5	24.0	28.0	25.5
2	11.5	9.0	---	---	18.5	17.5	29.0	26.0	25.5	23.5	27.5	25.5
3	11.5	10.0	---	---	17.0	14.5	30.5	26.5	26.0	22.5	27.0	25.0
4	10.0	9.0	---	---	17.5	16.0	30.0	26.5	27.0	22.5	26.5	24.5
5	11.5	8.5	---	---	17.5	16.0	30.0	26.0	27.0	23.5	24.5	23.5
6	13.0	10.5	---	---	18.0	15.0	30.5	26.5	27.0	23.5	24.5	23.0
7	13.5	12.0	---	---	21.0	17.0	30.5	26.5	28.0	24.0	24.0	23.0
8	12.5	10.0	---	---	23.0	19.5	30.0	26.5	27.5	25.5	26.5	23.0
9	10.0	7.5	16.5	16.5	25.0	21.5	30.5	26.5	28.0	25.5	25.0	24.5
10	8.0	6.0	19.0	16.0	26.5	24.0	28.0	26.5	28.0	25.0	25.5	24.0
11	10.0	7.0	19.5	17.5	27.0	24.5	30.0	25.0	29.5	25.0	26.0	24.0
12	12.5	9.5	19.0	17.0	27.0	25.0	30.5	25.5	30.0	25.5	26.0	23.5
13	13.5	11.0	18.5	16.0	28.0	25.0	29.5	26.0	27.0	25.5	24.5	23.5
14	12.5	11.0	18.0	15.5	26.5	25.0	27.5	25.5	27.5	24.5	24.0	21.5
15	---	---	18.0	14.5	26.5	24.5	27.5	24.5	28.0	24.0	25.0	20.5
16	---	---	18.0	15.0	28.0	25.5	28.0	25.0	28.0	24.5	23.5	20.5
17	---	---	18.0	15.0	28.0	25.5	26.0	24.5	29.0	24.5	22.0	19.0
18	---	---	19.5	15.5	27.5	26.0	28.5	24.0	29.0	25.0	20.0	17.5
19	---	---	21.0	18.0	26.5	24.5	28.5	26.0	29.0	25.0	18.5	17.0
20	---	---	20.5	17.5	26.0	23.0	31.0	26.0	29.0	25.0	21.5	18.0
21	---	---	21.5	18.5	26.5	23.0	30.0	27.0	29.5	25.5	24.0	19.5
22	---	---	22.0	19.5	26.5	23.5	30.0	26.0	29.0	24.5	22.5	20.5
23	---	---	21.0	18.5	27.0	23.5	30.0	26.5	28.0	25.0	22.5	20.5
24	---	---	19.5	16.5	27.5	24.5	30.5	26.5	30.0	25.5	22.5	21.5
25	---	---	20.0	17.5	28.5	25.0	29.0	26.5	30.0	25.5	22.5	21.0
26	---	---	18.0	17.5	27.5	26.0	29.0	26.0	30.5	26.0	24.0	22.0
27	---	---	18.0	17.0	29.0	25.5	30.0	25.5	30.0	26.0	23.5	22.5
28	---	---	17.0	15.5	27.0	25.0	30.5	26.0	29.0	26.0	23.0	22.0
29	---	---	17.5	14.5	26.5	24.5	28.5	26.0	28.5	25.5	22.5	20.5
30	---	---	18.0	15.5	27.5	24.5	27.0	26.0	28.0	25.0	21.0	20.5
31	---	---	19.0	16.0	---	---	27.5	24.5	27.5	25.0	---	---
MONTH	---	---	---	---	29.0	14.5	31.0	24.0	30.5	22.5	28.0	17.0

LOCATION.--Lat 37°56'45", long 93°18'35", in SE¼NE¼ sec.23, T.37 N., R.22 W., Hickory County, temperature recorder inside concrete house previously used for gaging station at bridge on U.S. Highway 54, 1.5 mi (2.4 km) downstream from Mill Creek and 0.25 mi (0.40 km) northeast of Hermitage.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

[illegible]

06921500 POMME DE TERRE RIVER AT HERMITAGE, MO.--Continued

PERIOD OF RECORD.--Water temperature: March 1970 to September 1973.

EXTREMES, March 1970 to September 1973.--Water temperatures: Maximum, 31.5°C Aug. 2, 3, 4, 1970; minimum, 0.5°C Feb. 6, 7, 1971.

REMARKS.--Temperature recorder inoperative on many days during the year.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	10.5	9.0	---	---	16.5	15.0	---	---	26.5	25.5	---	---
2	11.5	8.5	---	---	16.0	15.5	---	---	25.5	24.5	---	---
3	10.5	9.0	---	---	16.5	15.5	---	---	26.0	24.0	---	---
4	9.0	8.5	---	---	17.0	15.5	---	---	26.0	24.5	---	---
5	12.0	8.0	---	---	16.5	15.5	---	---	27.0	25.0	---	---
6	13.5	10.0	---	---	17.0	16.0	---	---	27.0	25.5	---	---
7	12.5	11.0	---	---	17.5	16.0	---	---	27.5	25.5	---	---
8	12.5	11.0	---	---	18.0	16.0	---	---	27.5	26.5	---	---
9	11.0	11.0	---	---	17.5	15.5	---	---	28.0	26.5	---	---
10	11.0	9.5	14.0	13.0	17.5	16.0	---	---	28.5	27.0	---	---
11	9.5	9.0	14.0	12.5	18.0	16.5	---	---	29.5	26.5	---	---
12	10.0	9.0	14.0	13.0	17.5	16.5	29.5	26.5	29.5	28.0	---	---
13	10.0	9.0	14.0	13.5	20.0	16.5	29.5	27.0	28.5	27.0	---	---
14	10.0	9.5	14.5	13.5	19.0	17.0	28.0	26.0	27.5	26.0	---	---
15	10.5	10.0	14.5	12.5	20.5	17.5	26.0	22.5	27.0	25.5	---	---
16	10.5	9.5	15.5	12.0	21.0	18.0	25.0	22.5	28.0	26.0	---	---
17	---	---	16.5	13.5	21.0	18.0	25.5	24.5	28.5	26.5	---	---
18	---	---	14.5	13.5	20.5	17.5	27.0	24.5	28.5	27.0	---	---
19	---	---	14.5	13.5	20.5	18.5	27.0	26.0	29.0	27.0	---	---
20	---	---	15.0	13.5	20.0	17.0	29.5	26.5	29.5	27.0	21.0	20.5
21	---	---	15.0	14.0	20.5	17.0	29.0	27.5	29.0	27.0	23.5	21.0
22	---	---	15.0	13.5	20.5	17.0	29.0	26.5	28.0	26.5	24.0	23.0
23	---	---	14.5	14.0	20.5	17.0	27.0	26.0	28.5	26.5	23.5	22.5
24	---	---	15.0	14.0	20.5	18.0	27.5	26.0	27.5	27.0	22.5	21.0
25	---	---	15.0	14.0	21.0	18.0	27.0	25.5	---	---	21.5	20.5
26	---	---	15.0	14.0	21.0	21.0	28.0	26.0	---	---	---	---
27	---	---	16.0	14.5	---	---	28.5	26.5	---	---	---	---
28	---	---	15.5	15.0	---	---	29.0	27.0	---	---	---	---
29	---	---	15.5	15.0	---	---	28.0	27.0	---	---	---	---
30	---	---	15.5	15.0	---	---	28.0	27.0	---	---	---	---
31	---	---	16.0	15.0	---	---	27.0	26.0	---	---	---	---
MONTH	---	---	---	---	21.0	15.0	---	---	---	---	---	---

06922500 OSAGE RIVER AT WARSAW, MO.

LOCATION.--Lat 38°14'40", long 92°23'10", in NE¼SW¼ sec.17, T.40 N., R.22 W., Benton County, temperature recorder at Union Electric Co. gaging station on left bank, 30 ft (9.2 m) downstream from bridge on State Highway 7 at Warsaw.

DRAINAGE AREA, --11,500 mi² (29,800 km²).

PERIOD OF RECORD.--Water temperatures: May 1969 to September 1973.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CONTINUOUS ETHYL-ALCOHOL-ACTUATED THERMOGRAPH)

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	23.5	23.0	15.0	15.0	9.5	9.5	---	---	---	---	9.0	9.0
2	23.5	23.0	15.0	15.0	10.0	9.5	---	---	---	---	9.0	9.0
3	23.5	23.0	15.0	15.0	10.0	10.0	---	---	---	---	9.5	9.0
4	23.0	23.0	15.0	15.0	10.0	9.5	---	---	---	---	10.0	9.5
5	23.0	23.0	15.0	15.0	9.5	9.5	---	---	---	---	10.0	10.0
6	23.0	22.0	15.0	15.0	9.5	9.0	---	---	---	---	11.0	10.0
7	22.0	22.0	15.0	15.0	9.0	8.5	---	---	---	---	11.0	11.0
8	22.0	21.5	15.0	15.0	8.5	8.0	---	---	---	---	11.5	11.0
9	22.0	21.5	15.0	15.0	8.0	7.0	---	---	---	---	12.0	11.5
10	22.0	21.5	15.0	15.0	7.0	6.5	---	---	---	---	12.0	12.0
11	21.5	21.5	15.0	15.0	7.0	7.0	---	---	---	---	12.0	12.0
12	21.5	21.5	15.0	15.0	---	---	---	---	---	---	12.0	12.0
13	21.5	21.0	15.0	13.5	---	---	---	---	---	---	12.0	12.0
14	21.0	21.0	13.5	13.0	---	---	---	---	---	---	13.0	12.0
15	21.0	20.5	13.0	12.0	---	---	---	---	---	---	13.5	13.0
16	20.5	20.0	12.0	12.0	---	---	---	---	---	---	13.5	13.5
17	20.0	20.0	12.0	11.5	---	---	---	---	---	---	13.5	13.5
18	20.0	19.0	11.5	11.5	---	---	---	---	---	---	13.5	13.0
19	19.0	18.0	11.5	11.0	---	---	---	---	---	---	13.0	13.0
20	18.0	17.0	11.0	11.0	---	---	---	---	---	---	13.0	13.0
21	17.0	17.0	11.0	11.0	---	---	---	---	---	---	13.0	12.0
22	17.0	16.5	11.0	11.0	---	---	---	---	---	---	12.0	11.5
23	16.5	15.0	11.0	11.0	---	---	---	---	---	---	11.5	11.5
24	15.5	15.0	11.0	10.5	---	---	---	---	---	---	11.5	11.0
25	15.0	15.0	10.5	10.5	---	---	---	---	---	---	11.0	11.0
26	15.0	15.0	10.5	10.5	---	---	---	---	8.5	8.5	11.5	11.0
27	15.0	15.0	10.5	10.0	---	---	---	---	8.5	8.5	11.5	11.5
28	15.0	15.0	10.0	10.0	---	---	---	---	9.0	8.5	11.5	11.5
29	15.0	15.0	10.0	10.0	---	---	---	---	---	---	12.0	11.5
30	15.0	15.0	10.0	9.5	---	---	---	---	---	---	13.0	12.0
31	15.0	15.0	---	---	---	---	---	---	---	---	13.5	13.0
MONTH	23.5	15.0	15.0	9.5	---	---	---	---	---	---	13.5	9.0

06922500 OSAGE RIVER AT WARSAW, MO.--Continued

EXTREMES, 1972-73.--Water temperatures: Maximum 29.5°C Aug. 26, 27, 29, 30.

EXTREMES, May 1969-73.--Water temperatures: Maximum 32.0°C July 13, 1971; minimum, 0.5°C Jan. 7, 1971.

REMARKS.--Temperature recorder inoperative Dec. 12 to Feb. 25, Apr. 22 to May 11, July 24 to Aug. 6.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CONTINUOUS ETHYL-ALCOHOL-ACTUATED THERMOGRAPH)

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	13.5	13.5	---	---	19.5	19.0	26.0	25.5	---	---	29.0	29.0
2	13.5	13.5	---	---	20.0	19.5	26.5	26.0	---	---	29.0	29.0
3	13.5	13.5	---	---	20.0	20.0	26.5	26.0	---	---	29.0	28.5
4	13.5	13.5	---	---	20.5	20.0	26.5	26.0	---	---	28.5	28.5
5	13.5	13.0	---	---	21.0	20.5	26.5	26.5	---	---	28.5	28.5
6	13.0	13.0	---	---	21.0	21.0	26.5	26.0	---	---	28.5	28.0
7	13.5	13.0	---	---	21.0	21.0	27.0	26.5	28.0	28.0	28.0	26.5
8	13.5	13.5	---	---	21.0	21.0	28.0	27.0	28.5	28.0	26.5	26.0
9	13.5	13.0	---	---	21.0	21.0	28.5	28.0	28.5	28.0	26.0	26.0
10	13.0	11.5	---	---	21.0	21.0	28.5	28.0	28.5	28.0	26.0	26.0
11	11.5	11.0	---	---	21.5	21.0	28.5	28.5	28.5	28.5	26.0	26.0
12	11.5	11.0	18.5	18.0	21.5	21.0	28.5	28.5	28.5	28.5	26.5	26.0
13	12.0	11.5	18.5	18.0	21.5	21.5	28.5	28.0	28.5	28.5	26.5	26.0
14	12.0	11.5	18.5	18.5	21.5	21.5	29.0	28.5	28.5	28.5	26.0	25.5
15	12.0	12.0	18.5	18.5	22.0	21.5	28.5	28.0	28.5	28.0	26.0	25.5
16	13.5	12.0	18.5	18.5	23.0	22.0	28.0	27.0	28.0	28.0	26.0	25.5
17	13.5	13.5	18.5	18.5	23.5	23.0	28.0	27.0	28.5	28.0	25.5	24.5
18	14.5	13.5	19.0	18.5	24.0	23.5	28.0	27.0	28.5	28.5	24.5	24.0
19	15.0	14.5	19.0	19.0	25.0	24.0	28.0	27.0	28.5	28.5	24.0	23.5
20	16.0	15.0	19.0	19.0	25.0	24.0	28.0	27.0	28.5	28.5	23.5	21.0
21	18.0	16.0	19.5	19.0	24.0	24.0	28.5	27.0	29.0	28.5	21.5	21.0
22	---	---	20.0	19.5	24.5	24.0	28.0	28.0	29.0	29.0	21.5	21.5
23	---	---	20.0	19.5	24.0	23.5	28.0	28.0	29.0	29.0	22.0	21.5
24	---	---	20.0	19.5	24.0	23.5	---	---	29.0	28.5	23.0	22.0
25	---	---	20.0	20.0	24.0	23.5	---	---	29.0	28.5	23.0	23.0
26	---	---	20.0	20.0	24.0	23.5	---	---	29.5	29.0	23.5	23.0
27	---	---	20.0	20.0	25.0	24.0	---	---	29.5	29.0	23.5	23.0
28	---	---	20.0	19.5	25.5	25.0	---	---	29.0	29.0	23.0	22.0
29	---	---	19.5	19.0	25.0	25.0	---	---	29.5	29.0	22.0	22.0
30	---	---	19.0	19.0	25.5	25.0	---	---	29.5	29.0	22.0	21.5
31	---	---	19.0	19.0	---	---	---	---	29.0	29.0	---	---
MONTH	---	---	---	---	25.5	19.0	---	---	29.5	28.0	29.0	21.0

06922800 BIG BUFFALO CREEK NEAR STOVER, MO.

LOCATION.--Lat 38°20'04", long 93°05'04", in NE¼SE¼SW¼ sec.12, T.41 N., R.20 W., Morgan County, temperature recorder at gaging station on right bank, 1.5 mi (2.41 km) southwest of Boylers Mill, 3 mi (4.83 km) upstream from mouth, and 9 mi (14.5 km) southwest of Stover.

DRAINAGE AREA.--24.2 mi² (62.7 km²).

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CONTINUOUS ETHYL-ALCOHOL-ACTUATED THERMOGRAPH)

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	18.0	16.0	14.0	13.5	7.0	6.0	4.5	4.0	6.0	5.5	7.0	6.5
2	18.0	16.5	13.5	12.0	8.0	6.5	4.0	3.5	6.0	5.0	8.0	6.5
3	18.0	16.5	12.0	12.0	7.0	6.5	4.5	4.0	5.5	4.0	8.5	8.0
4	18.5	16.5	12.0	11.0	6.5	6.0	4.5	4.0	6.0	4.5	8.5	8.0
5	18.5	17.0	12.0	11.0	6.0	5.0	4.0	3.5	5.5	5.0	9.5	8.5
6	18.0	18.0	13.0	11.5	5.0	4.0	3.5	3.5	5.5	5.5	9.0	9.0
7	18.0	17.0	13.0	12.0	4.5	4.0	3.5	3.0	5.5	4.0	11.0	8.5
8	18.0	16.0	12.0	11.0	5.0	4.5	3.5	3.0	4.0	3.5	10.0	8.5
9	18.0	16.5	12.0	11.0	4.5	4.0	3.5	3.0	4.5	3.5	10.0	9.5
10	17.0	16.5	11.5	11.0	4.0	4.0	3.5	3.0	4.5	3.5	10.5	9.5
11	19.0	17.0	11.0	10.5	4.0	3.0	3.5	2.0	5.0	4.5	10.0	9.5
12	19.0	18.0	10.5	10.0	4.0	3.5	3.0	2.0	5.0	4.5	11.5	8.5
13	18.0	17.0	10.5	9.5	4.0	3.0	4.0	3.0	5.0	4.5	11.0	10.0
14	17.0	16.5	10.5	9.5	4.0	4.0	4.5	3.5	5.0	4.5	13.0	10.5
15	16.5	15.5	9.5	9.0	4.0	3.5	5.0	4.0	4.5	4.0	13.0	10.0
16	17.0	15.5	9.0	8.5	3.5	3.0	5.5	4.0	4.5	3.5	11.0	9.0
17	16.5	15.5	9.0	9.0	4.0	3.0	6.0	5.5	3.5	3.5	11.0	8.5
18	15.5	14.0	9.0	8.5	4.5	4.0	7.0	6.0	4.5	3.5	11.5	8.5
19	14.0	13.5	8.5	7.0	4.5	3.5	6.5	5.5	5.5	4.5	10.5	10.0
20	13.5	13.5	8.5	7.0	4.5	3.5	6.5	6.0	6.5	4.5	10.0	9.0
21	14.0	13.5	8.5	8.0	4.0	4.0	6.5	6.0	6.5	5.0	11.0	8.0
22	14.5	14.0	8.0	7.0	4.5	4.0	6.0	5.5	6.5	4.5	10.5	8.5
23	14.5	14.0	8.5	7.0	4.5	4.0	5.5	5.0	7.0	5.0	10.0	9.5
24	14.0	13.5	7.0	6.5	4.5	4.5	6.0	4.5	8.0	5.0	10.0	9.5
25	13.5	13.0	7.0	7.0	4.5	4.5	6.0	5.0	7.0	6.0	9.5	9.5
26	14.0	12.0	7.0	7.0	4.5	4.0	6.0	6.0	7.0	6.5	9.5	9.5
27	13.5	13.5	7.0	6.5	4.5	4.0	6.0	6.0	6.5	6.0	10.5	9.5
28	13.5	13.0	7.0	6.5	5.0	4.0	6.0	4.0	8.0	5.0	11.5	10.5
29	13.5	13.5	6.5	6.0	6.5	5.0	4.0	3.0	---	---	11.5	10.5
30	14.0	13.5	6.5	6.0	7.0	6.0	4.5	3.0	---	---	11.5	10.0
31	14.0	14.0	---	---	6.0	4.5	5.5	4.0	---	---	11.0	10.0
MONTH	19.0	12.0	14.0	6.0	8.0	3.0	7.0	2.0	8.0	3.5	13.0	6.5

06922800 BIG BUFFALO CREEK NEAR STOVER, MO.--Continued

PERIOD OF RECORD.--Water temperatures: April 1965 to September 1973.

EXTREMES, 1972-73.--Water temperatures: Maximum, 23.5°C July 26, 27; minimum, 2.0°C Jan. 11, 12.

EXTREMES, 1965-73.--Water temperatures: Maximum, 27°C July 12, 13, 14, 18, 1966; minimum, 1.0°C Jan. 21, 1970.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CONTINUOUS ETHYL-ALCOHOL-ACTUATED THERMOGRAPH)

DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	10.0	9.5	15.5	14.0	18.0	15.5	21.5	20.5	21.5	20.5	22.0	21.5
2	10.5	9.0	15.5	13.0	17.0	16.5	21.5	21.0	21.5	20.0	22.0	21.5
3	10.0	9.0	15.5	11.5	18.0	16.5	22.0	21.0	21.0	20.0	21.5	21.0
4	9.0	9.0	16.0	12.0	18.0	16.5	23.5	21.0	21.5	20.5	21.5	21.0
5	11.5	9.0	15.5	13.5	18.0	16.0	22.0	21.0	21.5	20.5	22.0	21.5
6	13.0	9.0	15.0	14.5	19.0	15.5	23.0	21.0	21.5	20.5	22.0	21.5
7	11.0	10.0	14.5	13.5	19.5	16.0	23.0	21.0	22.0	20.5	22.0	21.5
8	10.5	9.0	16.5	13.5	20.5	17.0	22.0	21.0	22.0	21.5	22.0	21.5
9	9.0	6.5	16.0	13.5	20.5	18.5	23.0	21.0	22.0	21.5	22.0	21.5
10	9.5	6.5	18.0	14.5	20.5	19.0	22.0	21.0	22.0	21.5	22.0	21.5
11	10.0	6.5	16.5	14.5	20.5	19.0	23.0	21.0	22.0	21.0	22.0	21.5
12	12.0	9.0	17.0	14.0	20.5	19.5	23.0	21.0	22.0	21.5	22.0	21.0
13	12.0	8.5	16.5	13.5	20.5	19.5	23.0	21.0	22.0	21.5	21.5	21.5
14	10.5	9.0	15.5	13.5	20.0	19.5	22.0	21.0	22.0	21.0	21.5	21.0
15	10.0	9.0	15.5	13.5	21.0	20.0	21.5	20.5	22.0	20.5	21.0	20.5
16	11.0	10.0	16.5	13.5	21.5	20.0	22.0	20.5	22.0	21.0	21.0	20.5
17	13.5	9.0	16.0	13.5	21.5	20.0	21.5	20.5	22.0	21.0	20.5	19.5
18	13.5	10.5	16.5	13.5	21.0	20.0	22.0	21.0	22.0	21.0	19.5	19.0
19	13.5	11.0	17.0	14.5	21.0	20.0	22.0	21.0	22.0	21.0	19.0	19.0
20	15.0	12.0	18.0	15.0	21.0	19.5	23.0	21.0	22.0	21.5	19.0	19.0
21	15.5	13.5	18.0	15.5	21.0	19.5	22.0	21.5	22.0	21.0	20.5	19.0
22	16.0	13.0	18.0	16.5	21.0	19.5	23.0	21.0	22.0	21.0	20.5	20.5
23	16.0	13.0	17.0	16.0	21.0	19.5	22.0	21.5	22.0	21.0	21.0	20.5
24	14.5	13.0	18.0	15.0	21.0	20.0	23.0	21.0	22.0	21.5	21.0	20.5
25	14.0	13.5	18.0	15.5	21.5	20.0	22.0	21.5	22.0	21.5	21.0	20.5
26	13.5	13.0	16.5	15.5	21.5	20.5	23.5	21.0	23.0	21.5	21.0	21.0
27	14.5	12.0	16.5	15.5	22.0	20.5	23.5	21.0	23.0	21.5	21.0	21.0
28	15.0	11.0	15.5	15.5	21.5	20.0	22.0	21.5	22.0	21.5	21.0	20.5
29	15.5	12.0	16.5	14.5	21.0	20.0	23.0	21.0	22.0	21.5	21.0	20.0
30	14.5	13.5	16.5	15.5	21.5	20.0	23.0	21.5	22.0	21.5	20.0	20.0
31	---	---	18.0	15.5	---	---	22.0	21.0	22.0	21.5	---	---
MONTH	16.0	6.5	18.0	11.5	22.0	15.5	23.5	20.5	23.0	20.0	22.0	19.0

06934500 MISSOURI RIVER AT HERMANN, MO.

LOCATION.--Lat 38°42'36", long 91°26'21", Gasconade County, at gaging station at bridge on State Highway 19 at Hermann and at mile 97.9 (157.5 km).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
JAN. 24...	209000	8.5	140	40	36	10	14	5.0	124	0	39	16
FEB. 26...	79000	13	0	10	66	17	36	7.2	228	0	95	20
MAR. 26...	282000	9.7	100	30	46	11	14	5.2	148	0	52	9.5
APR. 16...	270000	8.8	110	20	46	11	19	4.8	154	0	61	11
MAY 29...	177000	7.7	50	0	46	13	27	4.4	152	0	77	17
JUNE 18...	94200	12	100	20	62	17	41	5.9	208	0	110	22
JULY 23...	180000	8.9	160	30	48	14	42	5.3	174	0	110	25
AUG. 20...	66100	9.4	140	0	56	15	45	5.9	182	0	120	21
SEP. 20...	78400	10	--	--	54	17	46	4.8	192	0	130	20

DATE	PH (UNITS)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (MG/L)	SUS- PEN- DED SEDI- MENT (MG/L)	TEMPER- ATURE (DEG C)	CHEM- ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	IMME- DIATE COLI- FORM (COL. PER 100 ML)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)
JAN. 24...	7.8	--	390	1230	2.0	--	24	9.4	68	38000	3500	16000
FEB. 26...	7.9	15	140	410	4.5	--	--	9.6	74	37000	1800	1000
MAR. 26...	7.7	150	--	--	9.0	--	--	7.1	61	20000	4200	4100
APR. 16...	7.8	160	240	--	10.0	--	15	8.4	74	22000	1900	1600
MAY 29...	7.8	20	--	--	19.5	--	--	6.1	66	64000	5600	7600
JUNE 18...	8.0	9	--	468	26.5	--	--	5.4	67	79000	3100	350
JULY 23...	7.9	7	--	2902	26.0	140	--	3.0	37	56000	12000	9500
AUG. 20...	7.8	--	--	845	28.0	--	--	6.2	78	19000	1450	220
SEP. 20...	8.1	--	--	402	18.0	--	--	7.2	75	12000	1600	1400

06934500 MISSOURI RIVER AT HERMANN, MO.--Continued

DRAINAGE AREA.--528,200 mi² (1,368,038 km²), approximately.

PERIOD OF RECORD.--Chemical analyses: July 1969 to September 1973.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	DIS- SOL- VED- PHOS- PHORUS (P) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)
JAN. 24...	.3	2.1	.34	1.9	--	.11	--	218	130	30	102	360
FEB. 26...	.3	1.8	.00	.41	.09	.43	.05	383	230	48	187	620
MAR. 26...	.4	2.2	.13	2.1	.07	.07	.02	230	160	39	121	350
APR. 16...	.3	1.6	--	--	--	.56	--	238	160	34	126	410
MAY 29...	.3	.28	.03	2.1	.02	.64	.00	290	170	45	125	460
JUNE 18...	.4	1.5	.03	.78	.16	.35	.02	392	220	49	171	610
JULY 23...	.1	1.6	.17	6.0	.11	1.6	--	343	180	37	143	640
AUG. 20...	.2	4.9	--	--	--	.33	--	348	200	52	149	585
SEP. 20...	.5	--	--	--	--	.34	--	389	200	47	157	620

DATE	TOTAL CADMIUM IN BOTTOM DE- POSIT (UG/G)	TOTAL CHRO- MIUM IN BOTTOM DE- POSIT (UG/G)	TOTAL COBALT IN BOTTOM DE- POSIT (UG/G)	TOTAL COPPER IN BOTTOM DE- POSIT (UG/G)	TOTAL IRON IN BOTTOM DE- POSIT (UG/G)	TOTAL LEAD IN BOTTOM DE- POSIT (UG/G)	TOTAL MANGA- NESE IN BOTTOM DE- POSIT (UG/G)	TOTAL MERCURY IN BOTTOM DE- POSIT (UG/G)	TOTAL SELE- NIUM IN BOTTOM DE- POSIT (UG/G)	TOTAL ZINC IN BOTTOM DE- POSIT (UG/G)	TOTAL ARSENIC IN BOTTOM DE- POSIT (UG/G)
JAN. 24...	--	--	--	--	--	--	--	--	--	--	--
APR. 16...	--	--	--	--	--	--	--	--	--	--	--
AUG. 20...	0	0	<2	0	1400	<5	70	.0	0	8	2

DATE	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	DIS- SOLVED SELE- NIUM (SE) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	TOTAL CAD- MIUM (CD) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)
JAN. 24...	0	<10	5	14	0	1.2	2	150	<10	2	20	16
APR. 16...	1	<10	9	10	3	<.5	--	50	<10	3	10	16
AUG. 20...	0	0	1	22	4	.0	6	60	4	<10	0	<25

DATE	TOTAL COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL SELE- NIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	ORGANIC CARBON IN BED MA- TERIAL (C) (G/KG)	TOTAL PHOS- PHORUS IN BOT- TOM DE- POSIT (MG/KG)	TOTAL NITRITE PLUS NITRATE IN BOT. DEP. (MG/KG)	TOTAL KJEL. NITRO- GEN IN BOTTOM DEP. (MG/KG)
JAN. 24...	40	6300	35	620	2.6	3	300	<10	--	--	--	--
APR. 16...	20	4200	20	400	<.5	2	130	12	--	--	--	--
AUG. 20...	30	7200	50	410	.3	6	160	4	2.0	59	.2	.2

MISSOURI RIVER BASIN

06935840 MISSOURI RIVER NEAR ST. LOUIS, MO.

LOCATION.--Lat 38°40'54", long 90°32'43", St. Louis County, multi-parameter digital recorder at raw-water inlet at the City of St. Louis Howard Bend water treatment plant near St. Louis, and at mile 36.6 (58.9 km).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT. 04...	67600	8.2	70	10	60	18	53	6.8	184	0	170	16
NOV. 09...	111000	8.0	10	10	59	17	39	6.0	188	0	130	13
DEC. 06...	82000	9.7	10	70	64	16	38	6.7	222	0	110	14
JAN. 10...	80300	8.2	50	10	44	11	20	6.2	156	0	64	11
FEB. 28...	112000	12	10	20	61	16	34	7.2	218	0	90	21
MAR. 22...	221000	11	30	40	47	12	16	5.5	164	0	53	9.7
APR. 05...	403000	8.2	200	10	39	7.7	11	5.0	124	0	42	8.7
MAY 01...	203000	8.3	30	10	23	6.2	15	5.0	28	8	52	20
JUNE 05...	143000	11	60	10	50	14	29	5.2	176	0	76	17
JULY 24...	187000	8.8	60	10	45	13	36	5.2	168	0	89	23
AUG. 21...	64600	9.6	180	0	56	15	43	5.7	184	0	120	20
SEP. 18...	62600	9.9	70	10	54	18	51	5.9	196	0	140	24

DATE	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	ALKA- LINITAS AS CaCO ₃ (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	COLOR (PLAT- INUM- COBALT UNITS)	TEMPER- ATURE (DEG C)	CHEM- ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)
OCT. 04...	220	72	151	710	8.3	15	19.0	23	6.4	68	1000	160
NOV. 09...	220	63	154	550	8.1	10	10.0	17	7.6	67	1800	7400
DEC. 06...	220	44	182	625	8.2	15	2.0	22	9.2	67	2700	19000
JAN. 10...	160	27	128	450	8.0	25	.0	24	7.8	53	1000	10000
FEB. 28...	220	40	179	620	8.0	15	4.5	18	9.0	69	2100	2100
MAR. 22...	170	32	134	405	7.6	100	9.0	48	8.9	77	1800	2200
APR. 05...	130	28	102	308	7.6	30	10.0	58	7.7	68	1100	6000
MAY 01...	83	60	36	275	9.1	15	17.0	2	8.2	85	<25	<25
JUNE 05...	180	36	144	510	7.8	20	21.0	31	6.2	69	7800	23000
JULY 24...	170	32	138	570	7.5	20	26.0	98	1.8	22	13000	16000
AUG. 21...	200	49	151	580	7.9	7	28.0	22	6.2	78	650	220
SEP. 18...	210	49	161	650	8.0	20	21.5	18	7.0	79	900	200

06935840 MISSOURI RIVER NEAR ST. LOUIS, MO.--Continued

PERIOD OF RECORD.--Chemical analyses: May 1969 to September 1973.

REMARKS.--Records of discharge are given for gaging station at Hermann, Mo. Recorder inoperative during the year.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	DIS- SOL- VED- PHOS- PHORUS (P) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	SODIUM AD- SORP- TION RATIO	PERCENT SODIUM
OCT. 04...	.4	.77	.01	.69	.10	.11	.03	431	.59	78700	1.5	33
NOV. 09...	.2	1.7	.00	.01	.04	.28	.10	358	.49	107000	1.2	27
DEC. 06...	.3	1.2	.04	.62	.09	.24	.03	367	.50	81300	1.1	26
JAN. 10...	.2	.90	.27	.69	.05	.10	.03	257	.35	55700	.7	21
FEB. 28...	.3	2.1	.00	.21	.11	.59	.04	369	.50	112000	1.0	25
MAR. 22...	.3	3.2	.21	.00	.06	.08	.09	249	.34	149000	.5	17
APR. 05...	.2	1.1	.01	.07	.02	.73	.05	192	.26	209000	.4	15
MAY 01...	.8	1.2	.13	.45	.02	.04	.11	163	.22	89300	.7	27
JUNE 05...	.4	1.6	.02	1.7	.13	.54	.00	313	.43	121000	.9	25
JULY 24...	.3	1.5	.07	4.0	.09	1.0	--	317	.43	160000	1.2	31
AUG. 21...	.2	.79	.05	.22	.12	.34	--	366	.50	63800	1.3	31
SEP. 18...	.4	.57	.00	.69	.15	.33	--	400	.54	67600	1.5	34

DATE	ALDRIN (UG/L)	LINDANE (UG/L)	CHLOR- DANE (UG/L)	DDD (UG/L)	DDE (UG/L)	DDT (UG/L)	DI- ELDRIN (UG/L)
OCT. 04...	.00	.00	.0	.00	.00	.00	.01
APR. 05...	.00	.00	.0	.00	.00	.00	.02
JUNE 05...	.00	.00	.0	.00	.00	.00	.02

DATE	ENDRIN (UG/L)	HEPTA- CHLOR (UG/L)	HEPTA- CHLOR EPOXIDE (UG/L)	2,4-D (UG/L)	2,4,5-T (UG/L)	SILVEX (UG/L)
OCT. 04...	.00	.00	.00	.03	.00	.02
APR. 05...	.00	.00	.00	.07	.02	.02
JUNE 05...	.00	.00	.00	.14	.03	.00

LOCATION.--Lat 38°46'33", long 90°09'35", Madison County, at raw-water intake of East St. Louis and Interurban Water Company, at head of Choteau Island, and at river mile 192.1 (309.1 km).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	DIS- SOL- VED- PHOS- PHORUS (P) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	HARD- NESS (CA,MG) (MG/L)
OCT.												
02...	--	--	--	--	30	--	--	--	--	--	--	246
11...	--	--	--	--	26	--	--	--	--	--	--	256
18...	--	--	--	--	32	--	--	--	--	--	--	260
25...	--	--	--	--	30	--	--	--	--	--	--	256
NOV.												
01...	--	--	--	--	35	--	3.8	.00	.90	.13	.52	280
07...	--	--	--	--	33	--	--	--	--	--	--	276
13...	--	--	--	--	32	--	--	--	--	--	--	270
17...	--	--	--	--	28	--	--	--	--	--	--	252
20...	--	--	--	--	36	--	--	--	--	--	--	270
22...	--	--	--	--	28	--	--	--	--	--	--	264
29...	--	--	--	56	20	.2	3.6	.00	.67	.14	.27	--
DEC.												
04...	--	--	--	--	--	--	--	--	--	--	--	290
11...	--	--	--	--	--	--	--	--	--	--	--	290
14...	--	--	--	--	34	--	--	--	--	--	--	328
18...	--	--	--	--	--	--	--	--	--	--	--	310
21...	--	--	--	62	--	.4	3.6	.00	.88	.18	.35	--
28...	--	--	--	--	--	--	--	--	--	--	--	288
JAN.												
05...	--	--	--	--	28	--	--	--	--	--	--	244
17...	--	--	--	--	24	--	--	--	--	--	--	248
30...	--	--	--	--	26	--	--	--	--	--	--	248
31...	--	11	6.0	48	--	.3	2.5	.00	1.4	.18	.41	--
FEB.												
08...	--	--	--	--	28	--	--	--	--	--	--	224
15...	--	--	--	--	34	--	--	--	--	--	--	224
21...	--	--	--	--	30	--	--	--	--	--	--	236
MAR.												
01...	11	15	3.0	53	22	.3	3.5	.02	.73	.23	.30	250
02...	--	--	--	--	34	--	--	--	--	--	--	300
06...	--	--	--	--	32	--	--	--	--	--	--	284
13...	--	--	--	--	32	--	--	--	--	--	--	240
21...	--	--	--	--	26	--	--	--	--	--	--	200
27...	--	--	--	--	28	--	--	--	--	--	--	225
29...	9.2	10	3.1	39	17	.3	3.6	.03	1.6	.11	.28	180
APR.												
02...	--	--	--	--	26	--	--	--	--	--	--	180
09...	--	--	--	--	29	--	--	--	--	--	--	210
14...	--	--	--	--	32	--	--	--	--	--	--	186
APR.												
18...	--	--	--	--	33	--	--	--	--	--	--	260
25...	--	--	--	--	18	--	--	--	--	--	--	216
MAY												
02...	--	--	--	--	26	--	--	--	--	--	--	200
03...	7.3	9.5	2.8	44	16	.4	3.7	.02	.72	.19	--	190
09...	--	--	--	--	27	--	--	--	--	--	--	308
15...	--	--	--	--	22	--	--	--	--	--	--	232

07001000 MISSISSIPPI RIVER AT EAST ST. LOUIS, ILL.--Continued

REMARKS.--Analyses are considered representative of water quality of Mississippi River above the Missouri River. Weekly records of hardness, alkalinity, water temperature, pH, turbidity, and total coliform furnished by East St. Louis and Interurban Water Company. No discharge records available.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	ALKA- LINIT- Y AS CACO3 (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (MG/L)	TEMPER- ATURE (DEG C)	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	IMME- DIATE COLI- FORM (COL. PER 100 ML)	FECAL COLI- FORM (COL. PER 100 ML)
OCT.												
02...	--	172	--	7.6	28	180	20.6	--	--	--	--	--
11...	--	170	--	7.9	33	200	17.2	--	--	--	--	--
18...	--	170	--	7.3	37	190	14.4	--	--	--	--	--
25...	--	188	--	7.9	34	115	11.7	--	--	--	--	--
NOV.												
01...	--	188	560	7.7	30	140	8.0	2.2	10.5	88	--	500
07...	--	188	--	8.0	38	195	12.2	--	--	--	--	--
13...	--	196	--	7.6	36	160	10.6	--	--	--	--	--
17...	--	192	--	7.6	34	235	7.8	--	--	--	--	--
20...	--	172	--	7.6	34	180	7.8	--	--	--	--	--
22...	--	192	--	7.8	33	180	7.8	--	--	--	--	--
29...	340	--	--	--	--	--	8.0	--	--	--	--	--
DEC.												
04...	--	200	--	7.5	27	75	7.5	--	--	--	3000	--
11...	--	222	--	7.7	32	55	2.0	--	--	--	31000	--
14...	--	220	--	7.7	28	90	2.0	--	--	--	14000	--
18...	--	214	--	8.0	30	75	3.0	--	--	--	18000	--
21...	388	--	--	--	--	--	5.5	2.8	8.5	93	--	900
28...	--	188	--	7.9	31	75	2.0	--	--	--	22000	--
JAN.												
05...	--	168	--	7.1	--	300	3.0	--	--	--	24000	--
17...	--	156	--	6.8	--	100	2.5	--	--	--	4000	--
30...	--	168	--	7.1	--	180	3.0	--	--	--	3000	--
31...	300	--	--	--	--	--	5.0	4.1	11.4	89	--	500
FEB.												
08...	--	160	--	7.3	40	250	4.0	--	--	--	1000	--
15...	--	152	--	7.5	34	160	2.5	--	--	--	2000	--
21...	--	176	--	7.4	30	90	3.0	--	--	--	6000	--
MAR.												
01...	349	--	552	--	6	--	6.5	2.1	12.0	98	--	200
02...	--	196	--	7.5	--	90	4.5	--	--	--	3000	--
06...	--	176	--	7.4	--	340	8.5	--	--	--	12000	--
13...	--	136	--	7.4	--	475	10.0	--	--	--	5000	--
21...	--	164	--	7.5	--	270	9.5	--	--	--	6000	--
27...	--	--	--	7.7	--	125	9.5	--	--	--	4000	--
29...	257	--	403	7.7	20	--	12.0	2.0	8.4	78	--	540
APR.												
02...	--	140	--	7.6	32	130	11.5	--	--	--	3000	--
09...	--	152	--	7.5	36	90	9.5	--	--	--	4000	--
14...	--	136	--	7.6	31	100	9.5	--	--	--	8000	--
APR.												
18...	--	192	--	7.1	27	100	11.5	--	--	--	2000	--
25...	--	136	--	7.6	30	320	15.5	--	--	--	3000	--
MAY												
02...	--	116	--	7.4	29	350	17.0	--	--	--	3000	--
03...	275	--	404	7.6	--	--	16.0	1.2	8.5	92	--	150
09...	--	140	--	7.3	31	190	15.5	--	--	--	5000	--
15...	--	184	--	7.5	29	100	17.0	--	--	--	3000	--
23...	--	162	--	7.7	30	100	18.0	--	--	--	5000	--
29...	--	192	--	7.6	29	110	19.0	--	--	--	10000	--
JUNE												
04...	--	176	--	7.5	28	210	19.0	--	--	--	--	--
11...	--	172	--	7.4	26	150	23.5	--	--	--	--	--
13...	286	--	476	--	--	--	25.0	--	7.2	68	--	--
18...	--	172	--	7.6	29	390	25.5	--	--	--	--	--
25...	--	156	--	7.7	27	400	25.0	--	--	--	--	--
JULY												
03...	--	164	--	7.5	37	300	25.5	--	--	--	3000	--
05...	672	--	492	--	--	--	26.5	5.1	5.5	68	--	150
11...	--	180	--	7.5	40	400	28.0	--	--	--	12000	--
16...	--	200	--	7.0	35	120	28.0	--	--	--	13000	--
23...	--	164	--	7.8	39	80	28.0	--	--	--	14000	--
AUG.												
03...	--	180	--	7.6	35	150	26.5	--	--	--	33000	--
10...	--	166	--	8.0	31	110	27.5	--	--	--	10000	--
17...	--	126	--	7.4	38	200	27.0	--	--	--	14000	--
23...	--	188	--	8.0	30	80	27.5	--	--	--	18000	--
SEP.												
01...	--	188	--	7.9	32	70	28.0	--	--	--	3000	--
10...	--	180	--	7.8	40	100	25.5	--	--	--	1000	--
17...	--	164	--	7.8	32	110	23.5	--	--	--	--	--
24...	--	176	--	7.7	35	110	22.5	--	--	--	10000	--
29...	--	162	--	7.8	40	500	23.0	--	--	--	--	--

07010000 MISSISSIPPI RIVER AT ST. LOUIS, MO.--Continued

PARTICLE SIZE, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TEMPER- ATURE (DEG C)	DIS- CHARGE (CFS)	SUS- PENDE SEDIM- ENT (MG/L)	SUS- PENDE SEDIM- ENT DIS- CHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. FALL DIAM. % FINER THAN .062 MM	SUS. SED. FALL DIAM. % FINER THAN .125 MM	SUS. SED. FALL DIAM. % FINER THAN .250 MM
JAN. 31...	2.0	336000	491	445000	30	35	39	46	60	67	72	95
JULY 02...	27.0	233000	364	229000	--	--	--	--	--	--	--	--
SEP. 04...	27.0	117000	211	66700	--	--	--	--	--	--	--	--

DATE	SUS. SED. FALL DIAM. % FINER THAN .500 MM	SUS. SED. FALL DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM
JAN. 31...	99	100	0	0	5	29	75	90	95	97	99	100
JULY 02...	--	--	0	0	3	16	56	74	80	84	89	97
SEP. 04...	--	--	0	3	13	23	56	69	77	79	84	100

07010000 MISSISSIPPI RIVER AT ST. LOUIS, MO.--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCTOBER			NOVEMBER			DECEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	204000	290	160000	216000	348	203000	238000	189	121000
2	219000	362	214000	241000	426	277000	227000	184	113000
3	233000	539	339000	276000	546	407000	210000	200	113000
4	231000	380	237000	294000	659	523000	200000	191	103000
5	230000	351	218000	301000	600	488000	197000	201	107000
6	228000	352	217000	300000	499	404000	190000	212	109000
7	227000	310	190000	292000	535	422000	166000	205	91900
8	225000	278	169000	274000	481	356000	151000	185	75400
9	228000	303	187000	260000	435	305000	147000	177	70300
10	235000	281	178000	260000	366	257000	138000	171	63700
11	236000	278	177000	260000	368	258000	123000	167	55500
12	236000	275	175000	260000	374	263000	125000	166	56000
13	235000	274	174000	271000	370	271000	134000	179	64800
14	228000	276	170000	318000	382	328000	125000	180	60800
15	218000	259	152000	365000	287	283000	127000	119	40800
16	206000	236	131000	392000	342	362000	130000	135	47400
17	193000	248	129000	400000	538	581000	124000	175	58600
18	182000	265	130000	394000	621	661000	123000	137	45500
19	179000	269	130000	372000	544	546000	130000	144	50500
20	168000	244	111000	344000	491	456000	140000	178	67300
21	164000	266	118000	327000	374	330000	182000	234	115000
22	167000	234	106000	316000	335	286000	184000	244	121000
23	169000	242	110000	301000	286	232000	183000	286	141000
24	161000	252	110000	280000	243	184000	178000	285	137000
25	170000	245	112000	255000	252	174000	167000	214	96500
26	183000	270	133000	258000	195	136000	161000	149	64800
27	193000	262	137000	260000	245	172000	161000	151	65600
28	203000	262	144000	248000	209	140000	165000	126	56100
29	203000	256	140000	243000	197	129000	175000	227	107000
30	204000	285	157000	238000	184	118000	211000	258	147000
31	212000	344	197000	--	--	--	241000	261	170000
TOTAL	6370000	--	5052000	8816000	--	9552000	5153000	--	2735500
DAY	JANUARY			FEBRUARY			MARCH		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	291000	634	498000	323000	415	362000	244000	1340	883000
2	346000	782	731000	318000	632	543000	243000	1950	1280000
3	340000	783	719000	344000	481	447000	233000	716	450000
4	348000	2100	1970000	394000	383	407000	238000	806	518000
5	359000	1060	1030000	435000	546	641000	267000	635	458000
6	352000	1260	1200000	442000	1740	2080000	309000	2770	2310000
7	334000	919	829000	429000	3390	3930000	406000	753	825000
8	325000	685	601000	414000	1700	1900000	484000	1370	1790000
9	298000	664	534000	400000	1210	1310000	511000	1600	2210000
10	224000	477	288000	380000	773	793000	528000	1400	2000000
11	190000	268	137000	348000	850	799000	552000	937	1400000
12	175000	226	107000	312000	455	383000	576000	981	1530000
13	170000	205	94100	278000	814	611000	594000	822	1320000
14	175000	182	86000	283000	657	502000	614000	700	1160000
15	179000	181	87500	319000	248	214000	631000	645	1100000
16	181000	117	57200	331000	342	306000	641000	597	1030000
17	191000	122	62900	309000	378	315000	646000	596	1040000
18	239000	146	94200	269000	445	323000	626000	564	953000
19	256000	199	138000	227000	457	280000	598000	612	988000
20	369000	223	222000	204000	424	234000	588000	694	1100000
21	410000	770	852000	203000	295	162000	574000	491	761000
22	418000	942	1060000	206000	243	135000	559000	470	709000
23	427000	925	1070000	199000	219	118000	549000	469	695000
24	427000	845	974000	193000	212	110000	542000	416	609000
25	412000	935	1040000	193000	205	107000	537000	362	525000
26	388000	717	751000	200000	224	121000	554000	374	559000
27	363000	504	494000	204000	194	107000	594000	352	565000
28	342000	308	284000	219000	297	176000	638000	470	810000
29	338000	401	366000	--	--	--	672000	572	1040000
30	338000	382	349000	--	--	--	703000	526	998000
31	336000	390	354000	--	--	--	724000	519	1010000
TOTAL	9541000	--	17079900	8376000	--	17416000	6175000	--	32626000

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	JULY			AUGUST			SEPTEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	242000	380	248000	200000	186	100000	139000	163	61200
2	233000	364	229000	187000	206	104000	135000	169	61600
3	224000	402	243000	173000	162	75700	125000	180	60800
4	205000	317	175000	165000	168	74800	117000	211	66700
5	204000	242	133000	165000	148	65900	121000	308	101000
6	232000	239	150000	164000	136	60200	133000	348	125000
7	282000	272	207000	152000	162	66500	138000	306	114000
8	292000	488	385000	138000	123	45800	135000	279	102000
9	258000	1010	704000	139000	116	43500	148000	212	84700
10	235000	1220	774000	166000	92	41200	152000	354	145000
11	217000	1210	709000	190000	190	97500	152000	400	164000
12	206000	883	491000	197000	126	67000	137000	603	223000
13	201000	824	447000	203000	190	104000	127000	357	122000
14	191000	578	298000	213000	334	192000	134000	296	107000
15	180000	316	154000	209000	590	333000	132000	260	92700
16	169000	319	146000	218000	603	355000	137000	147	54400
17	169000	164	74800	204000	522	288000	137000	126	46600
18	154000	130	54100	173000	1010	472000	129000	146	50900
19	146000	152	59900	161000	645	280000	135000	113	41200
20	137000	253	93600	160000	422	182000	146000	113	44500
21	143000	306	118000	154000	230	95600	143000	132	51000
22	165000	253	113000	147000	143	56800	137000	156	57700
23	232000	318	199000	144000	105	40800	129000	155	54000
24	326000	625	550000	136000	139	51000	133000	134	48100
25	334000	1440	1300000	136000	74	27200	148000	133	53100
26	302000	1900	1550000	138000	73	27200	165000	152	67700
27	246000	1120	744000	148000	77	30800	210000	426	242000
28	226000	632	386000	149000	68	27400	276000	478	356000
29	217000	511	299000	147000	92	36500	317000	932	798000
30	207000	372	208000	153000	123	50800	349000	1620	1530000
31	204000	288	159000	148000	153	61100	--	--	--
TOTAL	6779000	--	11401400	5177000	--	3553300	4716000	--	5125900

TOTAL DISCHARGE FOR YEAR (CFS-DAYS)	121145000
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS)	165031000

MERAMEC RIVER BASIN

07014500 MERAMEC RIVER NEAR SULLIVAN, MO.

LOCATION.--Lat 38°09'30", long 91°06'30", SE¼NE¼ sec.35, T.40 N., R.2 W., Franklin County, at gaging station on right bank at Sappington Bridge, 3.8 mi (6.1 km) downstream from Brazil Creek, 4 mi (6.4 km) southeast of Sullivan, and at mile 113.2 (182.1 km).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT.												
05...	385	6.8	20	10	41	22	4.4	1.3	228	0	13	4.5
NOV.												
10...	920	7.8	10	10	38	18	4.0	1.9	192	0	15	4.3
DEC.												
07...	910	6.9	0	10	34	18	3.2	1.4	184	0	14	4.5
JAN.												
11...	1060	6.6	20	10	29	15	3.1	1.2	152	0	14	3.4
FEB.												
28...	656	4.8	0	20	34	17	3.1	1.4	180	0	12	5.2
MAR.												
21...	8000	6.6	40	40	18	8.9	2.5	1.5	86	0	10	1.5
APR.												
05...	3580	7.1	30	10	26	11	2.3	1.2	124	0	11	2.0
MAY												
02...	1740	7.3	40	10	28	14	2.8	1.4	150	0	10	2.8
JUNE												
04...	1380	5.0	140	10	33	18	2.5	1.2	180	0	9.5	3.4
JULY												
24...	1850	5.9	130	0	21	12	1.9	2.4	120	0	6.5	3.0
AUG.												
22...	488	7.0	190	0	35	21	2.8	1.3	214	0	8.8	3.7
SEP.												
19...	432	8.5	80	10	37	22	2.7	1.8	216	0	7.9	3.5

DATE	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	ALKA- LINITY AS CaCO3 (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	COLOR (PLAT- INUM- COBALT UNITS)	TEMPER- ATURE (DEG C)	CHEM- ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)
OCT.												
05...	190	6	187	385	8.2	5	19.0	0	9.4	100	17	27
NOV.												
10...	170	12	157	270	8.1	5	10.5	0	7.2	64	68	100
DEC.												
07...	160	8	151	325	8.1	5	1.0	9	10.4	73	4	38
JAN.												
11...	130	10	125	290	8.1	10	1.0	1	9.8	69	3	5
FEB.												
28...	160	8	148	312	8.3	5	5.0	4	10.6	83	2	1
MAR.												
21...	82	11	71	175	7.5	100	9.5	25	9.0	78	1100	1100
APR.												
05...	110	8	102	224	7.7	10	10.0	7	10.2	90	65	160
MAY												
02...	130	4	123	252	8.1	5	15.0	7	7.8	77	100	76
JUNE												
04...	157	9	148	312	8.1	2	20.0	0	7.5	82	280	1300
JULY												
24...	100	2	98	222	7.6	40	24.0	19	5.0	59	8400	30000
AUG.												
22...	170	0	176	337	8.2	1	23.5	6	8.0	93	26	88
SEP.												
19...	180	3	177	368	8.0	2	16.0	0	8.4	85	12	50

07014500 MERAMEC RIVER NEAR SULLIVAN, MO.--Continued

DRAINAGE AREA.--1,475 mi² (3,820 km²).

PERIOD OF RECORD.--Chemical analyses: August 1963 to September 1973.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	DIS- SOL- VED- PHOS- PHORUS (P) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	SODIUM AD- SORP- TION RATIO	PERCENT SODIUM
OCT. 05...	.2	.02	.00	.01	.00	.00	.02	194	.26	202	.1	5
NOV. 10...	.0	.66	.00	.00	.00	.00	.07	172	.23	427	.1	5
DEC. 07...	.0	.54	.01	.20	.01	.02	.02	175	.24	430	.1	4
JAN. 11...	.1	.20	.00	.12	.00	.02	.03	148	.20	424	.1	5
FEB. 28...	.0	.27	.00	.02	.03	.04	.03	169	.23	299	.1	4
MAR. 21...	.0	.61	.00	.02	.02	.19	.02	100	.14	2160	.1	6
APR. 05...	.0	.29	.01	.02	.01	.03	.03	121	.16	1170	.1	4
MAY 02...	.0	.27	.00	.09	.01	.02	.02	142	.19	667	.1	5
JUNE 04...	.1	.13	.00	.39	.01	.03	.04	180	.24	671	.1	3
JULY 24...	.1	.33	.07	.70	.16	.30	--	115	.16	574	.1	4
AUG. 22...	.0	.12	.17	.02	.00	.00	--	194	.26	256	.1	3
SEP. 19...	.1	.15	.06	.04	.04	.05	--	212	.29	247	.1	3

MERAMEC RIVER BASIN

07016400 BOURBEUSE RIVER ABOVE UNION, MO.

LOCATION.--Lat 38°25'55", long 91°01'11", Franklin County, at bridge on county road, 5 mi (8.0 km) upstream from gaging station, and 0.5 mi (0.8 km) south of Union.

DRAINAGE AREA.--808 mi² (2,092 km²), including Flat Creek (at gaging station).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT.												
05...	46	5.2	40	20	32	18	4.6	1.8	180	0	16	3.8
NOV.												
09...	369	8.7	80	20	19	10	4.5	3.2	88	0	22	2.8
DEC.												
07...	264	8.9	170	90	23	12	5.5	1.8	102	0	28	6.4
JAN.												
11...	442	7.8	110	130	18	8.3	4.7	2.6	76	0	23	5.2
FEB.												
27...	255	8.0	90	40	20	12	5.3	1.6	94	0	28	5.2
MAR.												
21...	3820	6.0	130	50	12	6.4	3.7	2.1	46	0	17	2.7
APR.												
05...	855	8.3	200	10	15	6.9	3.4	1.6	64	0	18	3.3
MAY												
02...	397	8.2	300	40	20	10	4.4	1.7	96	0	20	3.4
JUNE												
04...	186	2.3	100	40	24	13	4.2	1.6	121	0	19	3.8
JULY												
24...	112	6.2	50	30	25	14	4.3	2.1	134	0	18	4.1
AUG.												
22...	60	7.0	140	0	28	17	4.7	1.9	162	0	15	4.5
SEP.												
19...	138	7.9	150	40	22	13	4.7	3.0	122	0	18	5.1

DATE	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	ALKA- LITY AS CaCO ₃ (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	COLOR (PLAT- INUM- COBALT UNITS)	TEMPER- ATURE (DEG C)	CHEM- ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)
OCT.												
05...	150	6	148	315	8.2	10	19.0	2	8.5	90	14	18
NOV.												
09...	88	16	72	205	7.7	30	9.5	13	8.4	73	50	120
DEC.												
07...	110	24	84	250	7.6	15	.0	9	11.6	79	110	350
JAN.												
11...	79	17	62	190	7.3	30	.0	7	11.4	78	20	160
FEB.												
27...	100	22	77	227	7.4	15	6.5	6	11.1	90	15	10
MAR.												
21...	56	19	38	131	7.2	100	9.0	31	9.2	79	3600	4400
APR.												
05...	66	13	52	150	7.2	35	10.5	12	7.0	63	70	80
MAY												
02...	91	12	79	204	7.6	5	17.0	12	7.8	80	40	48
JUNE												
04...	110	14	99	248	7.7	2	21.0	5	5.6	62	30	95
JULY												
24...	120	10	110	273	7.7	3	27.5	7	6.0	75	1600	3600
AUG.												
22...	140	7	133	294	8.1	2	25.0	12	6.8	82	24	270
SEP.												
19...	110	10	100	237	7.7	30	17.5	11	6.9	72	120	200

07016400 BOURBEUSE RIVER ABOVE UNION, MO.--Continued

PERIOD OF RECORD.--Chemical analyses: August 1963 to September 1973.

REMARKS.--Records of discharge are given for gaging station at Union. No appreciable inflow between sampling point and gaging station.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	DIS- SOL- VED- PHOS- PHORUS (P) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	SODIUM AD- SORP- TION RATIO	PERCENT SODIUM
OCT.												
05...	.2	.02	.00	.13	.00	.01	.04	170	.23	21.1	.2	6
NOV.												
09...	.1	.86	.00	.34	.00	.09	.09	115	.16	115	.2	10
DEC.												
07...	.1	.77	.00	.63	.01	.07	.02	140	.19	99.8	.2	10
JAN.												
11...	.1	.27	.01	.35	.03	.24	.02	111	.15	132	.2	11
FEB.												
27...	.0	.47	.00	.03	.00	.04	.04	135	.18	92.9	.2	10
MAR.												
21...	.0	1.3	.00	.03	.05	.24	.02	89	.12	918	.2	12
APR.												
05...	.0	.38	.01	.06	.01	.01	.02	93	.13	215	.2	10
MAY												
02...	.0	.32	.00	.08	.00	.02	.03	124	.17	133	.2	9
JUNE												
04...	.1	.22	.02	.19	.02	.03	.06	136	.18	68.3	.2	7
JULY												
24...	.1	.08	.02	.31	.01	.09	--	153	.21	46.3	.2	7
AUG.												
22...	.1	.21	.05	.09	.00	.03	--	144	.20	23.3	.2	7
SEP.												
19...	.2	.25	.08	.25	.03	.09	--	136	.19	50.7	.2	8

07018000 BIG RIVER NEAR DE SOTO, MO.

LOCATION.--Lat 38°07'20", long 90°40'30", SW¼NW¼ sec.11, T.39 N., R.3 E., Jefferson County, at gaging station near right bank on downstream side of pier of Mammoth Bridge, 300 ft (91.4 m) upstream from Mammoth Creek, 1.5 mi (2.4 km) downstream from Mineral Fork, 6.5 mi (10.5 km) west of De Soto, and at mile 59.2 (95.3 km).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT.												
05...	312	7.5	10	20	46	28	6.0	1.8	240	0	38	6.6
NOV.												
09...	685	8.0	10	30	50	23	5.1	2.5	230	0	33	5.8
DEC.												
06...	1680	6.4	20	40	44	21	4.8	2.0	204	0	35	6.0
JAN.												
05...	1310	7.0	60	40	30	18	3.2	1.9	156	0	24	4.2
FEB.												
23...	542	5.6	20	40	41	25	4.0	1.6	224	0	28	4.6
MAR.												
21...	1910	7.0	30	50	30	16	3.4	1.5	156	0	19	2.5
APR.												
06...	1570	6.8	60	10	35	14	3.2	1.5	160	0	21	2.7
MAY												
02...	730	6.8	30	20	46	20	3.8	1.5	224	0	21	3.0
JUNE												
04...	844	5.6	70	30	40	22	3.6	1.2	216	0	18	4.0
JULY												
24...	336	8.1	30	30	49	29	4.3	1.4	280	0	18	4.8
AUG.												
21...	172	7.1	140	20	47	29	5.1	1.6	274	0	19	5.7
SEP.												
18...	142	8.4	70	80	47	29	4.4	2.1	268	0	21	5.1

DATE	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	COLOR (PLAT- INUM- COBALT UNITS)	TEMPER- ATURE (DEG C)	CHEM- ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)
OCT.												
05...	230	34	197	475	8.2	5	17.0	2	7.0	72	180	120
NOV.												
09...	220	31	189	435	7.9	10	10.0	2	8.0	71	80	370
DEC.												
06...	200	30	167	415	7.5	20	2.5	19	9.8	72	780	4600
JAN.												
05...	150	21	128	305	8.0	25	2.5	7	11.0	81	420	380
FEB.												
23...	200	22	184	407	8.1	5	5.0	9	12.1	94	10	4
MAR.												
21...	140	13	128	290	7.8	15	9.5	9	10.2	89	1100	820
APR.												
06...	140	14	131	292	7.9	15	12.0	8	10.0	93	80	160
MAY												
02...	200	14	184	347	8.0	5	15.5	8	8.0	80	56	48
JUNE												
04...	190	13	177	380	8.1	2	20.5	0	7.2	80	150	580
JULY												
24...	240	10	230	495	7.9	2	25.5	1	6.0	73	160	780
AUG.												
21...	240	12	225	440	8.1	1	23.5	7	6.3	73	66	130
SEP.												
18...	240	20	220	435	8.2	5	17.0	11	7.4	76	44	160

07018000 BIG RIVER NEAR DE SOTO, MO.--Continued

DRAINAGE AREA.--718 mi² (1,860 km²), including Mammoth Creek.

PERIOD OF RECORD.--Chemical analyses: August 1963 to September 1973.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	DIS- SOL- VED- PHOS- PHORUS (P) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	SODIUM AD- SORP- TION RATIO	PERCENT SODIUM
OCT.												
05...	.2	.43	.00	.01	.01	.02	.02	263	.36	222	.2	5
NOV.												
09...	.0	1.1	.00	.01	.00	.04	.08	231	.31	427	.1	5
DEC.												
06...	.2	.47	.00	.83	.04	.14	.02	222	.30	1010	.1	5
JAN.												
05...	.4	.16	.00	.39	.02	.13	.03	165	.22	584	.1	4
FEB.												
23...	.0	.45	.18	.16	.00	.01	.02	239	.33	350	.1	4
MAR.												
21...	.0	.50	.00	.53	.02	.07	.07	161	.22	830	.1	5
APR.												
06...	.0	.32	.00	.02	.00	.06	.01	158	.21	670	.1	5
MAY												
02...	.0	.32	.02	.16	.00	.02	.02	213	.29	420	.1	4
JUNE												
04...	.0	.10	.02	.30	.03	.03	.04	219	.30	499	.1	4
JULY												
24...	.1	.20	.06	.20	.01	.06	--	252	.34	229	.1	4
AUG.												
21...	.1	.09	.01	.12	.00	.00	--	236	.32	110	.1	4
SEP.												
18...	.2	.04	.09	.12	.05	.06	--	238	.32	91.2	.1	4

MERAMEC RIVER BASIN

07019280 MERAMEC RIVER AT PAULINA HILLS, MO.

LOCATION.--Lat 38°27'46", long 90°24'53", Jefferson County, at bridge on State Highway 21 at Paulina Hills, 0.3 mi (0.5 km) downstream from Saline Creek, and 10 mi (16 km) upstream from mouth.

DRAINAGE AREA.--3,950 mi² (10,230 km²), approximately.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT.												
05...	939	7.0	30	10	43	22	9.2	2.0	216	0	26	11
NOV.												
09...	2900	8.0	30	10	35	15	6.1	3.0	160	0	23	7.5
DEC.												
06...	2400	8.0	10	120	45	17	10	2.4	192	0	28	14
JAN.												
11...	2900	7.3	20	40	33	14	7.4	1.8	152	0	23	8.4
FEB.												
23...	2390	7.1	10	60	39	16	8.5	1.9	176	0	24	13
MAR.												
22...	13600	8.0	70	40	25	12	4.5	1.7	120	0	18	4.1
APR.												
05...	11100	6.9	90	10	22	9.7	3.5	1.9	102	0	20	1.6
MAY												
01...	8510	8.6	90	20	28	11	3.8	2.0	128	0	16	3.9
JUNE												
05...	6640	4.8	70	90	34	17	5.5	1.5	175	0	17	7.2
JULY												
24...	2290	6.9	30	80	40	21	9.2	1.8	210	0	18	13
AUG.												
21...	993	7.3	220	20	38	19	8.0	2.0	196	0	15	11
SEP.												
18...	966	8.8	80	40	35	19	6.9	2.4	188	0	15	9.9

DATE	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	ALKA- LINITY AS CACO ₃ (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	COLOR (PLAT- INUM- COBALT UNITS)	TEMPER- ATURE (DEG C)	CHEM- ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)
OCT.												
05...	200	20	177	400	8.3	5	18.5	5	7.2	76	65	90
NOV.												
09...	150	18	131	270	7.8	25	10.5	13	8.0	71	170	470
DEC.												
06...	180	24	157	405	8.1	10	3.5	10	10.2	77	840	9700
JAN.												
11...	140	16	125	333	7.9	10	.0	4	10.7	73	160	340
FEB.												
23...	160	20	144	358	7.7	5	7.0	15	10.2	84	40	24
MAR.												
22...	110	14	98	240	7.6	40	9.0	15	9.4	81	750	1200
APR.												
05...	95	12	81	212	7.6	25	12.0	10	8.6	80	180	210
MAY												
01...	120	10	105	255	7.9	15	17.0	0	7.3	75	10	60
JUNE												
05...	160	11	144	325	8.1	4	21.5	4	6.3	71	1200	7800
JULY												
24...	190	18	172	430	7.8	2	28.5	25	6.6	85	400	1200
AUG.												
21...	170	9	161	364	8.0	4	27.0	9	6.4	80	80	36
SEP.												
18...	170	16	154	343	7.9	20	21.0	11	6.0	67	400	200

07019280 MERAMEC RIVER AT PAULINA HILLS, MO.--Continued

PERIOD OF RECORD.--Chemical analyses: August 1963 to September 1973.

REMARKS.--Records of discharge are given for gaging station near Eureka, Mo.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	DIS- SOL- VED- PHOS- PHORUS (P) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	SODIUM AD- SORP- TION RATIO	PERCENT SODIUM
OCT.												
05...	.2	.20	.02	.24	.06	.08	.05	220	.30	558	.3	9
NOV.												
09...	.0	.72	.00	.00	.00	.05	.10	171	.23	1340	.2	8
DEC.												
06...	.0	.90	.13	.69	.12	.17	.04	217	.30	1410	.3	11
JAN.												
11...	.0	.50	.09	.26	.03	.27	.02	180	.24	1410	.3	10
FEB.												
23...	.0	.97	.04	.10	.04	.09	.05	207	.28	1340	.3	10
MAR.												
22...	.2	.68	.04	.44	.04	.18	.07	140	.19	5140	.2	8
APR.												
05...	.0	.38	.01	.07	.01	.07	.02	122	.17	3660	.2	7
MAY												
01...	.0	.45	.01	.19	.02	.04	.03	145	.20	3330	.2	7
JUNE												
05...	.1	.22	.02	1.6	.04	.13	.01	187	.25	3350	.2	7
JULY												
24...	.1	.00	.13	.33	.05	.10	--	228	.31	1410	.3	10
AUG.												
21...	.1	.34	.08	.07	.08	.09	--	202	.27	542	.3	9
SEP.												
18...	.2	.27	.06	.36	.12	.17	--	193	.26	503	.2	8

07020150 MISSISSIPPI RIVER AT STE. GENEVIEVE, MO.

LOCATION.--Lat 38°00'23", long 90°03'39", Ste. Genevieve County, at Little Rock Landing at Ste. Genevieve.

PERIOD OF RECORD.--Chemical analyses: July 1972 to September 1973 (discontinued).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS- CHARGE (CFS)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	DIS- SOL- VED- PHOS- PHORUS (P) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)
OCT. 11...	179000	196	0	98	14	.1	2.0	.00	.03	.11	.29	338
NOV. 22...	327000	194	0	66	17	.1	2.7	.06	.74	.09	.67	268
DEC. 07...	190000	216	0	90	17	.2	1.8	.04	.85	.10	.31	361
JAN. 05...	372000	176	0	52	14	.5	.59	.03	3.4	.06	1.0	251
FEB. 23...	216000	209	0	62	20	.3	2.7	.00	.10	.11	.34	322
MAR. 22...	610000	156	0	38	10	.3	2.9	.02	2.2	.06	.53	229
APR. 06...	799000	134	0	48	11	.3	2.0	.00	.02	.05	.50	197
MAY 24...	490000	188	0	64	15	.4	2.5	.00	1.1	.09	.27	300
JUNE 06...	464000	172	0	56	15	.3	2.3	1.6	1.7	.09	--	277
JULY 19...	164000	220	0	98	21	.3	2.7	.04	.93	.16	.30	371
AUG. 21...	166000	174	0	64	14	.2	1.6	.06	.86	.12	.41	256
SEP. 13...	140000	176	0	89	19	.2	.99	.01	.76	.10	.29	320

DATE	ALDRIN (UG/L)	LINDANE (UG/L)	CHLOR- DANE (UG/L)	DDD (UG/L)	DDE (UG/L)	DDT (UG/L)	DI- ELDRIN (UG/L)
OCT. 11...	.00	.00	.0	.00	.00	.00	.01
APR. 06...	.00	.00	.0	.00	.00	.00	.02
JUNE 06...	.00	.00	.0	.00	.00	.00	.02

07020150 MISSISSIPPI RIVER AT STE. GENEVIEVE, MO.--Continued

REMARKS.--Records of discharge are given for gaging station at Chester, Ill.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS- SOLVED SOLIDS (TOMS PER AC-FT)	DIS- SOLVED SOLIDS (TOMS PER DAY)	ALKA- LITY AS CACO3 (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	CHEM- ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)
OCT. 11...	.46	163000	161	522	7.9	17.0	0	2.1	7.0	72	8400	200
NOV. 22...	.36	237000	159	505	8.0	5.0	22	1.2	7.4	58	4000	4800
DEC. 07...	.49	185000	177	578	7.7	3.0	--	3.0	9.0	67	2000	3000
JAN. 05...	.34	252000	144	430	7.7	.5	--	4.8	9.4	65	4400	16000
FEB. 23...	.44	188000	167	515	7.7	2.5	33	4.8	8.6	63	950	900
MAR. 22...	.31	377000	128	385	7.8	8.5	33	2.2	5.2	44	1200	5400
APR. 06...	.27	425000	110	336	7.6	11.0	44	1.8	7.4	67	1500	2200
MAY 24...	.41	397000	154	542	7.9	19.0	23	2.4	6.6	70	1600	1400
JUNE 06...	.38	347000	141	445	7.5	20.5	26	2.6	5.2	58	2600	4300
JULY 19...	.50	164000	180	675	7.8	28.0	--	2.5	5.4	68	13000	850
AUG. 21...	.35	115000	143	490	7.7	27.5	--	2.1	5.6	70	18000	850
SEP. 13...	.44	121000	144	590	7.7	25.0	--	2.5	4.7	57	300000	3200

DATE	ENDRIN (UG/L)	HEPTA- CHLOR (UG/L)	HEPTA- CHLOR EPOXIDE (UG/L)	2,4-D (UG/L)	2,4,5-T (UG/L)	SILVEX (UG/L)
OCT. 11...	.00	.00	.00	.12	.00	.00
APR. 06...	.00	.00	.00	.06	.02	.00
JUNE 06...	.00	.00	.00	.09	.02	.00

07020850 MISSISSIPPI RIVER AT CAPE GIRARDEAU, MO.

LOCATION.--Lat 37°19'49", long 89°29'39", Cape Girardeau County, multi-parameter digital recorder at raw-water intake of Missouri Utilities Company water treatment plant at river mile 54.3 (87.4 km).

PERIOD OF RECORD.--Chemical analyses: June 1969 to September 1973.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS- CHARGE (CFS)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	DIS- SOL- VED- PHOS- PHORUS (P) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)
OCT.											
01...	199000	--	--	--	18	--	--	--	--	--	--
08...	235000	--	--	--	24	--	--	--	--	--	--
11...	239000	188	0	97	15	.2	2.2	.01	.66	.13	.15
15...	235000	--	--	--	20	--	--	--	--	--	--
22...	173000	--	--	--	20	--	--	--	--	--	--
29...	209000	--	--	--	18	--	--	--	--	--	--
NOV.											
05...	335000	--	--	--	20	--	--	--	--	--	--
12...	290000	--	--	--	16	--	--	--	--	--	--
19...	436000	--	--	--	18	--	--	--	--	--	--
22...	368000	184	0	55	14	.1	3.2	.00	.02	.12	.54
26...	295000	--	--	--	20	--	--	--	--	--	--
DEC.											
03...	245000	--	--	--	22	--	--	--	--	--	--
07...	203000	224	0	76	19	.3	3.2	.00	1.2	.10	.27
10...	170000	--	--	--	20	--	--	--	--	--	--
17...	156000	--	--	--	22	--	--	--	--	--	--
24...	211000	--	--	--	24	--	--	--	--	--	--
31...	252000	--	--	--	27	--	--	--	--	--	--
JAN.											
07...	377000	--	--	--	22	--	--	--	--	--	--
14...	219000	--	--	--	24	--	--	--	--	--	--
21...	380000	--	--	--	23	--	--	--	--	--	--
28...	401000	--	--	--	24	--	--	--	--	--	--
FEB.											
04...	377000	--	--	--	26	--	--	--	--	--	--
11...	414000	--	--	--	28	--	--	--	--	--	--
18...	339000	--	--	--	20	--	--	--	--	--	--
20...	266000	156	0	54	15	.2	3.6	.01	.27	.08	.54
25...	214000	--	--	--	23	--	--	--	--	--	--
MAR.											
04...	255000	--	--	--	21	--	--	--	--	--	--
11...	572000	--	--	--	20	--	--	--	--	--	--
18...	675000	--	--	--	14	--	--	--	--	--	--
22...	641000	--	--	32	9.5	.4	1.9	.00	1.4	.07	.44
25...	604000	--	--	--	18	--	--	--	--	--	--
APR.											
01...	750000	--	--	--	21	--	--	--	--	--	--
08...	812000	--	--	--	20	--	--	--	--	--	--
15...	631000	--	--	--	18	--	--	--	--	--	--
18...	606000	168	0	56	14	.2	2.9	--	--	.06	.37
22...	670000	--	--	--	30	--	--	--	--	--	--
29...	851000	--	--	--	24	--	--	--	--	--	--
MAY											
06...	726000	--	--	--	22	--	--	--	--	--	--
13...	728000	--	--	--	16	--	--	--	--	--	--
20...	594000	--	--	--	20	--	--	--	--	--	--
24...	521000	--	--	52	14	.3	1.9	.08	.00	.02	.21
27...	522000	--	--	--	18	--	--	--	--	--	--
JUNE											
03...	512000	--	--	--	17	--	--	--	--	--	--
10...	476000	--	--	--	18	--	--	--	--	--	--
17...	404000	--	--	--	23	--	--	--	--	--	--
21...	406000	--	--	58	15	.3	2.3	.02	.95	.14	.46
24...	402000	--	--	--	21	--	--	--	--	--	--
JULY											
01...	285000	--	--	--	20	--	--	--	--	--	--
08...	282000	--	--	--	16	--	--	--	--	--	--
15...	212000	--	--	--	26	--	--	--	--	--	--
19...	172000	216	0	86	21	.4	2.7	.02	.93	.15	.29
22...	151000	--	--	--	22	--	--	--	--	--	--
29...	247000	--	--	--	20	--	--	--	--	--	--
AUG.											
05...	181000	--	--	--	26	--	--	--	--	--	--
12...	145000	--	--	--	26	--	--	--	--	--	--
13...	199000	212	0	40	17	.4	2.0	.79	--	.12	.16
SEP.											
13...	154000	194	0	82	20	.2	.9	.02	.52	.15	.28

07020850 MISSISSIPPI RIVER AT CAPE GIRARDEAU, MO.--Continued

REMARKS.--Records of discharge are given for gaging station near Thebes, Ill. Weekly records of hardness, alkalinity, chloride, pH, turbidity, and water temperature are furnished by the Missouri Utilities Company. Recorder inoperative on many days during the year.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	HARD- NESS (CA,MG) (MG/L)	ALKA- LITY AS CACO3 (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TUR- BID- ITY (MG/L)	TEMPER- ATURE (DEG C)	CHEM- ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION
OCT.											
01...	--	196	156	--	7.8	220	21.1	--	--	--	--
08...	--	220	164	--	7.7	220	18.9	--	--	--	--
11...	315	220	154	495	7.8	--	17.0	20	1.4	7.4	76
15...	--	208	162	--	7.7	180	17.2	--	--	--	--
22...	--	212	166	--	7.6	180	14.2	--	--	--	--
29...	--	220	160	--	7.8	140	11.7	--	--	--	--
NOV.											
05...	--	210	160	--	7.7	260	11.7	--	--	--	--
12...	--	222	168	--	7.7	220	10.6	--	--	--	--
19...	--	210	172	--	7.7	260	8.3	--	--	--	--
22...	260	190	151	470	7.8	--	5.0	29	1.6	7.2	56
26...	--	212	160	--	7.9	180	5.0	--	--	--	--
DEC.											
03...	--	240	176	--	7.8	140	5.0	--	--	--	--
07...	349	240	184	555	7.8	--	2.5	32	2.1	11.2	82
10...	--	240	184	--	7.7	140	2.0	--	--	--	--
17...	--	236	188	--	7.6	140	1.0	--	--	--	--
24...	--	250	194	--	7.9	120	1.5	--	--	--	--
31...	--	260	194	--	7.8	140	3.3	--	--	--	--
JAN.											
07...	--	184	142	--	7.7	640	1.0	--	--	--	--
14...	--	188	146	--	7.7	180	1.0	--	--	--	--
21...	--	216	160	--	7.7	220	2.0	--	--	--	--
28...	--	220	136	--	7.7	340	3.0	--	--	--	--
FEB.											
04...	--	192	150	--	7.8	220	3.9	--	--	--	--
11...	--	186	146	--	7.7	600	2.0	--	--	--	--
18...	--	188	140	--	7.7	260	1.7	--	--	--	--
20...	270	--	128	450	7.7	--	2.0	45	2.2	8.5	62
25...	--	220	170	--	7.8	180	3.3	--	--	--	--
MAR.											
04...	--	230	182	--	7.8	220	6.0	--	--	--	--
11...	--	210	176	--	7.6	840	10.0	--	--	--	--
18...	--	144	110	--	7.7	680	9.4	--	--	--	--
22...	220	--	--	382	7.8	--	9.0	45	2.8	8.2	71
25...	--	180	134	--	7.6	300	9.0	--	--	--	--
APR.											
01...	--	160	118	--	7.7	600	10.5	--	--	--	--
08...	--	156	120	--	7.6	380	10.0	--	--	--	--
15...	--	182	130	--	7.8	240	9.5	--	--	--	--
18...	262	--	138	418	7.7	--	11.0	--	2.3	7.4	67
22...	--	176	136	--	7.7	380	14.0	--	--	--	--
29...	--	142	104	--	7.6	600	16.0	--	--	--	--
MAY											
06...	--	146	120	--	7.6	220	16.5	--	--	--	--
13...	--	160	116	--	7.6	300	17.0	--	--	--	--
20...	--	182	152	--	7.7	180	18.0	--	--	--	--
24...	268	--	--	450	7.8	--	18.5	20	1.3	6.4	67
27...	--	184	142	--	7.6	260	20.0	--	--	--	--
JUNE											
03...	--	188	140	--	7.6	500	20.0	--	--	--	--
10...	--	190	140	--	7.7	260	23.0	--	--	--	--
17...	--	210	166	--	7.7	180	26.0	--	--	--	--
21...	291	--	--	515	7.7	--	25.5	12	1.1	4.8	59
24...	--	184	140	--	7.7	380	25.5	--	--	--	--
JULY											
01...	--	188	144	--	7.6	260	26.0	--	--	--	--
08...	--	226	168	--	7.9	180	36.0	--	--	--	--
15...	--	220	170	--	7.7	340	28.5	--	--	--	--
19...	371	--	177	650	7.7	--	28.0	--	1.5	5.3	67
22...	--	250	190	--	7.8	180	29.0	--	--	--	--
29...	--	240	186	--	7.7	500	27.0	--	--	--	--
AUG.											
05...	--	208	152	--	8.0	260	27.0	--	--	--	--
12...	--	230	176	--	7.7	220	28.0	--	--	--	--
13...	310	--	174	520	8.0	--	27.0	--	1.4	5.8	72
SEP.											
13...	328	--	159	600	7.8	--	25.0	--	1.7	5.4	65

LOWER MISSISSIPPI RIVER BASIN

07020850 MISSISSIPPI RIVER AT CAPE GIRARDEAU, MO.--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS- SOLVED NATURAL URANIUM (U) (UG/L)	DIS- SOLVED RA-226 (RADON) METHOD (PC/L)	DIS- SOLVED GROSS ALPHA AS U-NAT. (UG/L)	DIS- SOLVED GROSS BETA AS SR90 (PC/L)	DIS- SOLVED GROSS BETA AS CS-137 (PC/L)	SUS- PENDE GROSS ALPHA AS U-NAT. (UG/L)	SUS- PENDE GROSS BETA AS SR90 (PC/L)	SUS- PENDE GROSS BETA AS CS-137 (PC/L)	TOTAL FILT- RABLE RESIDUE (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)
OCT. 11...	2.1	--	6.1	5.3	6.5	2.9	6.4	7.5	320	180
NOV. 22...	2.9	.09	7.1	6.0	7.0	21	11	13	320	280
DEC. 07...	2.1	.07	7.5	5.3	6.3	7.5	4.7	5.9	380	110
JAN. 29...	1.5	.06	<3.7	5.5	6.7	22	8.7	11	270	320

DATE	DIS- SOLVED SILICA (SIO2) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	COLOR (PLAT- INUM- COBALT UNITS)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)
OCT. 11...	10	90	20	58	18	24	5.0	.06	64	25	2000	600
NOV. 22...	9.4	60	40	50	16	17	4.5	.05	40	30	2500	6400
DEC. 07...	10	20	10	67	19	22	4.7	.05	62	20	2300	850

DATE	ALDRIN (UG/L)	LINDANE (UG/L)	CHLOR- DANE (UG/L)	DDD (UG/L)	DDE (UG/L)	DDT (UG/L)	D1- ELDRIN (UG/L)
OCT. 11...	.00	.00	.0	.00	.00	.00	.01
APR. 18...	.00	.00	.0	.00	.00	.00	.02
JUNE 21...	.00	.00	.0	.00	.00	.00	.03

DATE	ENDRIN (UG/L)	HEPTA- CHLOR (UG/L)	HEPTA- CHLOR EPOXIDE (UG/L)	2,4-D (UG/L)	2,4,5-T (UG/L)	SILVEX (UG/L)
OCT. 11...	.00	.00	.00	.20	.00	.00
APR. 18...	.00	.00	.00	.06	.03	.01
JUNE 21...	.00	.00	.00	.05	.01	.01

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

MONTH

07020850 MISSISSIPPI RIVER AT CAPE GIRARDEAU, MO.--Continued

PH, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.8	7.7	8.1	8.0	8.1	8.0	---	---	8.1	7.9	---	---
2	7.8	7.7	8.1	8.0	8.1	8.0	---	---	8.0	7.9	---	---
3	7.8	7.7	8.0	8.0	8.1	8.0	---	---	8.0	7.9	---	---
4	7.8	7.7	8.1	8.0	8.1	8.1	---	---	7.9	7.9	---	---
5	7.8	7.7	8.1	8.0	8.1	7.9	---	---	7.9	7.8	---	---
6	7.8	7.7	8.0	8.0	8.2	7.9	---	---	7.8	7.8	---	---
7	7.8	7.8	8.0	8.0	8.2	7.7	---	---	7.8	7.8	8.0	7.9
8	7.8	7.8	8.1	8.0	7.8	7.7	---	---	7.8	7.7	8.1	8.0
9	7.8	7.8	8.1	8.0	---	---	---	---	7.8	7.8	8.0	7.8
10	7.8	7.8	8.1	8.1	---	---	7.8	7.7	7.8	7.8	7.8	7.7
11	7.8	7.8	8.1	8.0	---	---	7.8	7.7	7.8	7.8	7.8	7.7
12	---	---	8.1	8.1	---	---	7.8	7.7	7.8	7.8	7.8	7.7
13	---	---	8.1	8.0	---	---	7.8	7.8	7.8	7.8	7.7	7.7
14	---	---	8.1	8.0	---	---	7.8	7.7	7.8	7.8	7.7	7.6
15	---	---	8.1	8.1	---	---	---	---	7.8	7.8	7.7	7.7
16	---	---	8.1	8.0	---	---	---	---	7.8	7.7	7.7	7.6
17	---	---	8.0	8.0	---	---	---	---	7.8	7.8	7.8	7.7
18	---	---	8.0	7.9	---	---	---	---	7.8	7.7	7.8	7.7
19	---	---	8.0	7.9	---	---	---	---	7.8	7.7	7.8	7.7
20	8.3	8.2	8.0	8.0	---	---	---	---	7.8	7.7	7.7	7.6
21	8.3	8.3	---	---	---	---	---	---	7.8	7.8	7.8	7.7
22	8.3	8.3	---	---	---	---	---	---	7.8	7.8	8.1	7.8
23	8.3	8.3	---	---	---	---	---	---	7.8	7.8	7.9	7.8
24	8.3	8.3	---	---	---	---	---	---	7.8	7.7	7.9	7.9
25	8.3	8.3	---	---	---	---	---	---	7.8	7.7	7.9	7.9
26	8.3	8.2	---	---	---	---	---	---	7.8	7.7	7.9	7.9
27	8.3	8.2	8.0	7.9	---	---	---	---	---	---	7.9	7.9
28	8.2	8.2	8.0	8.0	---	---	---	---	---	---	7.9	7.8
29	8.2	8.2	8.1	8.0	---	---	8.0	7.9	---	---	7.8	7.7
30	8.2	8.2	8.0	8.0	---	---	8.0	7.9	---	---	7.7	7.7
31	8.2	8.1	---	---	---	---	8.0	7.9	---	---	7.8	7.7
MONTH	---	---	8.1	7.9	---	---	---	---	8.1	7.7	8.1	7.6

[illegible]

DISSOLVED OXYGEN (MG/L), WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

[illegible]

07020850 MISSISSIPPI RIVER AT CAPE GIRARDEAU, MO.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	20.5	20.0	12.0	11.0	4.5	4.5	---	---	2.0	1.5	6.5	6.5
2	20.5	19.5	12.0	11.0	4.5	4.0	---	---	2.0	2.0	6.5	6.5
3	20.0	19.5	11.5	11.0	4.5	4.5	---	---	2.0	2.0	7.5	6.5
4	20.0	19.5	11.0	10.5	4.5	4.0	---	---	2.5	2.0	7.5	7.0
5	19.5	19.0	11.0	10.5	4.0	4.0	---	---	2.5	2.0	7.5	7.5
6	19.0	18.5	11.0	10.5	4.0	3.0	---	---	2.5	2.5	---	---
7	18.5	18.0	10.5	10.5	3.0	2.5	---	---	2.5	2.0	6.5	6.0
8	18.0	17.5	10.5	10.0	---	---	---	---	2.5	2.0	7.5	6.5
9	17.5	17.0	10.0	9.5	---	---	---	---	2.0	2.0	7.5	7.0
10	17.0	16.5	9.5	9.0	---	---	0.5	0.0	2.0	1.5	8.5	7.5
11	17.0	16.5	9.0	9.0	---	---	0.5	0.5	2.0	1.5	9.5	8.5
12	17.5	17.0	9.0	8.5	---	---	0.5	0.5	1.5	1.5	9.0	8.5
13	17.0	17.0	9.0	8.5	---	---	---	---	1.5	1.5	9.0	8.5
14	17.0	16.5	8.5	8.0	---	---	---	---	2.0	1.5	9.5	9.0
15	---	---	8.0	7.5	---	---	---	---	2.0	1.5	10.0	9.5
16	---	---	8.0	7.0	---	---	---	---	2.0	2.0	10.0	9.5
17	---	---	7.0	7.0	---	---	---	---	2.0	1.5	9.5	8.5
18	---	---	7.0	6.5	---	---	---	---	1.5	1.5	9.5	8.0
19	---	---	6.5	6.0	---	---	3.0	2.0	2.0	1.5	9.5	8.5
20	14.0	13.5	5.5	5.0	---	---	2.0	1.0	2.0	1.5	9.0	8.0
21	13.5	13.0	---	---	---	---	2.0	1.0	2.5	1.5	9.0	8.5
22	13.0	12.5	---	---	---	---	2.0	1.0	3.0	2.0	10.0	8.5
23	13.0	12.5	---	---	---	---	2.0	1.5	3.5	2.5	9.5	9.0
24	12.5	11.5	---	---	---	---	2.5	2.0	4.0	2.5	9.5	9.0
25	11.5	11.0	---	---	---	---	2.0	1.5	4.5	3.5	9.0	9.0
26	11.5	11.0	---	---	---	---	2.0	2.0	5.0	4.0	9.0	9.0
27	11.0	10.5	4.0	4.0	---	---	2.0	2.0	---	---	10.0	9.0
28	10.5	10.5	4.5	4.0	---	---	2.0	2.0	---	---	10.5	9.0
29	10.5	10.5	5.0	4.0	---	---	2.0	1.5	---	---	11.0	10.0
30	10.5	10.0	5.5	4.5	---	---	1.5	1.5	---	---	11.5	10.5
31	11.0	10.5	---	---	---	---	1.5	1.5	---	---	12.0	11.0
MONTH	20.5	10.0	12.0	4.0	---	---	---	---	5.0	1.5	12.0	6.0

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

[illegible]

HEADWATER DIVERSION CHANNEL BASIN

07021800 HEADWATER DIVERSION CHANNEL NEAR ALLENVILLE, MO.

LOCATION.--Lat 37°12'55", long 89°46'00", Cape Girardeau County, at bridge on county road at Allenville.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SIO ₂) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT.												
11...	482	10	30	220	38	14	3.7	1.7	164	0	22	3.6
NOV.												
21...	5200	8.3	120	100	19	7.6	2.8	1.8	88	0	10	3.2
DEC.												
07...	460	6.7	110	100	22	9.1	3.2	2.3	100	0	12	5.6
JAN.												
04...	5440	5.7	300	60	12	4.9	2.1	2.5	50	0	10	3.2
FEB.												
20...	740	7.3	40	110	22	10	3.7	1.2	104	0	12	5.4
MAR.												
21...	3600	6.3	100	80	12	5.4	2.3	1.5	58	0	9.6	1.1
APR.												
18...	2000	4.8	60	20	19	6.0	3.7	1.6	78	0	11	2.5
MAY												
23...	1540	6.8	100	210	22	11	2.9	1.4	110	0	10	3.3
JUNE												
20...	5000	8.7	100	160	24	11	3.4	1.6	120	0	9.9	3.3
JULY												
18...	202	11	40	610	31	15	3.9	1.5	172	0	8.1	3.3
AUG.												
13...	250	9.6	260	420	26	12	3.4	2.3	142	0	6.5	3.8
SEP.												
11...	172	12	10	390	35	18	3.5	1.7	188	0	6.1	.3

DATE	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	ALKA- LINITY AS CACO ₃ (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	COLOR (PLAT- INUM- COBALT UNITS)	TEMPER- ATURE (DEG C)	CHEM- ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)
OCT.												
11...	150	18	134	264	7.7	5	17.0	0	7.6	78	120	50
NOV.												
21...	78	6	72	173	7.8	15	7.0	0	7.8	64	620	10000
DEC.												
07...	92	10	82	183	7.3	80	3.0	18	10.2	76	6200	19000
JAN.												
04...	50	9	41	113	7.5	150	5.0	15	9.7	76	1300	2800
FEB.												
20...	96	11	85	217	7.4	5	5.0	11	10.2	80	4	16
MAR.												
21...	52	4	48	119	7.4	100	10.0	11	6.0	53	1800	3100
APR.												
18...	72	8	64	155	7.3	10	16.0	0	8.0	81	1300	1200
MAY												
23...	100	10	90	211	7.4	9	19.0	8	5.5	58	4200	3900
JUNE												
20...	105	7	98	217	7.4	3	25.0	6	5.5	66	260	180
JULY												
18...	140	0	141	313	7.8	2	26.0	2	8.0	98	20	50
AUG.												
13...	110	0	116	252	7.6	9	26.5	13	5.0	62	820	2800
SEP.												
11...	160	6	154	338	7.8	3	24.5	3	7.4	88	120	40

07021800 HEADWATER DIVERSION CHANNEL NEAR ALLENVILLE, MO.--Continued

PERIOD OF RECORD.--Chemical analyses: July 1969 to September 1973.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	DIS- SOL- VED- PHOS- PHORUS (P) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	SODIUM AD- SORP- TION RATIO	PERCENT SODIUM
OCT. 11...	.1	.25	.00	.10	.00	.01	.03	167	.23	217	.1	5
NOV. 21...	.0	.54	.00	.18	.12	.26	.02	99	.13	1390	.1	7
DEC. 07...	.2	.50	.04	.58	.03	.16	.02	111	.15	138	.1	7
JAN. 04...	.3	.22	.05	.80	.05	.35	.02	75	.10	1100	.1	8
FEB. 20...	.0	.52	.00	.00	.00	.02	.03	120	.16	240	.2	8
MAR. 21...	.0	.50	.36	1.3	.02	.08	.04	70	.10	680	.1	8
APR. 18...	.0	.22	.01	.10	.00	.06	.02	92	.13	497	.2	10
MAY 23...	.0	.21	.04	.33	.01	.11	.06	121	.16	503	.1	6
JUNE 20...	.1	.36	.00	.19	.03	.06	.01	129	.18	1740	.1	6
JULY 18...	.1	.05	.01	.32	.01	.10	--	164	.22	89.4	.1	6
AUG. 13...	.2	.38	.03	.11	.04	.05	--	156	.21	105	.1	6
SEP. 11...	.0	.00	.00	.26	.03	.08	--	178	.24	82.7	.1	4

MISSISSIPPI RIVER MAIN STEM

07022000 MISSISSIPPI RIVER AT THEBES, ILL.

LOCATION.--Lat 37°13'00", long 89°27'50", in NW¼ sec.17, T.15 S., R. 3 W., Alexander County, at gaging station on downstream side of railroad bridge at Thebes, 5 mi (8.0 km) downstream from Headwater Diversion Channel, and at mile 43.7 (70.3 km) above Ohio River.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SI02) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)
JAN. 30...	375000	9.3	170	20	45	15	13	5.0	160	0	43	17
FEB. 21...	236000	9.0	20	10	51	14	17	5.3	170	0	56	17
MAR. 21...	699000	9.2	70	50	39	12	11	4.4	146	0	37	9.6
APR. 19...	625000	7.5	140	10	51	15	13	4.0	168	0	54	14
MAY 23...	535000	7.5	230	0	48	17	13	3.0	176	0	52	13
JUNE 21...	408000	6.9	30	10	51	18	17	3.5	188	0	51	15
JULY 18...	178000	9.1	400	60	60	21	24	4.4	208	0	80	20
AUG. 14...	208000	7.3	150	0	57	20	25	3.6	210	0	74	18
SEP. 12...	167000	6.9	50	110	50	18	28	4.0	188	0	71	18

DATE	PH (UNITS)	COLOR (PLATINUM-COBALT) (UNITS)	TURBIDITY (MG/L)	SUSPENDED SEDIMENT (MG/L)	TEMPERATURE (DEG C)	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	DIS-SOLVED OXYGEN (MG/L)	PERCENT SATURATION	IMMEDIATE COLIFORM (COL. PER 100 ML)	FECAL COLIFORM (COL. PER 100 ML)	STREPTOCOCCI (COLONIES PER 100 ML)
JAN. 30...	7.8	--	120	306	1.5	--	13	9.8	70	13000	550	4600
FEB. 21...	7.7	15	180	436	2.0	0	--	9.8	71	58000	1500	2500
MAR. 21...	7.9	50	--	--	8.0	0	--	8.2	69	17000	750	1500
APR. 19...	7.7	25	120	--	11.5	11	10	--	--	9000	700	950
MAY 23...	7.7	20	--	--	19.0	21	--	6.8	72	11000	1200	400
JUNE 21...	7.8	20	--	468	25.5	31	--	4.8	59	150000	4000	1300
JULY 18...	7.8	8	--	227	28.0	18	--	5.6	71	11000	1600	60
AUG. 14...	8.1	10	--	211	26.0	--	6.0	5.8	71	20000	1300	500
SEP. 12...	8.0	20	--	301	24.5	19	--	5.3	63	27000	3900	1600

DATE	DIS-SOLVED CADMIUM (CD) (UG/L)	DIS-SOLVED CHROMIUM (CR) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	DIS-SOLVED SELENIUM (SE) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)
JAN. 30...	1	<10	4	24	0	.0	0	100	<10	2	10	10
APR. 19...	2	<10	5	10	6	<.5	--	60	<10	2	<10	13
AUG. 14...	0	0	0	25	4	.1	6	70	2	<10	0	<25

07022000 MISSISSIPPI RIVER AT THEBES, ILL.--Continued

DRAINAGE AREA.--717,200 mi² (1,858,000 km²), approximately.

PERIOD OF RECORD.--Chemical analyses: January 1973 to September 1973.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	DIS- SOL- VED- PHOS- PHORUS (P) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	ALKA- LITY AS CAO3 (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)
JAN. 30...	.3	2.2	.34	.87	--	.12	--	252	170	42	131	435
FEB. 21...	.2	3.6	.07	.64	.08	.46	.06	275	180	45	139	430
MAR. 21...	.2	2.9	.16	1.4	.06	.53	.05	214	150	28	120	376
APR. 19...	.2	2.7	.01	.50	.05	.32	.04	259	190	51	138	418
MAY 23...	.3	2.1	.01	.77	.03	.22	.09	292	190	46	144	440
JUNE 21...	.4	2.4	.01	2.1	.03	.62	--	290	200	46	154	435
JULY 18...	.4	2.7	.03	.97	.14	.33	--	341	240	66	171	640
AUG. 14...	.3	--	.10	--	--	.19	--	345	220	52	172	545
SEP. 12...	.2	1.1	.05	.94	.15	.37	--	340	200	45	154	595

DATE	DIS- SOLVED NATURAL URANIUM (U) (UG/L)	DIS- SOLVED RA-226 (RADON METHOD) (PC/L)	DIS- SOLVED GROSS ALPHA AS U-NAT. (UG/L)	DIS- SOLVED GROSS BETA AS SR90 /Y90 (PC/L)	DIS- SOLVED GROSS BETA AS CS-137 (PC/L)	SUS- PENDE GROSS ALPHA AS U-NAT. (UG/L)	SUS- PENDE GROSS BETA AS SR90 /Y90 (PC/L)	SUS- PENDE GROSS BETA AS CS-137 (PC/L)	TOTAL FILT- RABLE RESIDUE (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)
FEB. 21...	1.7	.08	8.1	5.6	6.8	28	16	20	290	420
MAR. 21...	1.2	.06	6.6	5.9	7.4	40	15	18	240	510
APR. 19...	2.0	.09	9.4	5.6	6.8	14	8.7	10	280	250
MAY 23...	1.5	.08	6.2	6.9	8.3	5.3	5.3	6.3	280	130
JUNE 21...	2.3	.08	7.5	5.4	6.7	27	18	22	310	520
JULY 18...	2.5	.07	6.2	7.4	8.9	13	9.0	10	370	210
AUG. 14...	2.7	.08	15	6.4	8.0	8.3	5.7	7.2	330	130
SEP. 12...	2.1	.07	8.1	8.0	9.9	10	9.3	11	330	260

DATE	TOTAL COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	TOTAL SELE- NIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	ORGANIC CARBON IN BED MA- TERIAL (C) (G/KG)	TOTAL PHOS- PHORUS IN BOT- TOM DE- POSITS (MG/KG)	TOTAL NITRITE PLUS NITRATE IN BOT. DEP. (MG/KG)
JAN. 30...	55	2400	4	200	1.6	2	100	<10	--	--	--
APR. 19...	20	2600	78	200	<.5	2	120	<10	--	--	--
AUG. 14...	30	2900	50	230	3.5	6	110	5	.9	23	.5

DATE	TOTAL CADMIUM IN BOTTOM DE- POSITS (UG/G)	TOTAL CHRO- MIUM IN BOTTOM DE- POSITS (UG/G)	TOTAL COBALT IN BOTTOM DE- POSITS (UG/G)	TOTAL COPPER IN BOTTOM DE- POSITS (UG/G)	TOTAL IRON IN BOTTOM DE- POSITS (UG/G)	TOTAL LEAD IN BOTTOM DE- POSITS (UG/G)	TOTAL MANGA- NESE IN BOTTOM DE- POSITS (UG/G)	TOTAL MERCURY IN BOTTOM DE- POSITS (UG/G)	TOTAL SELE- NIUM IN BOTTOM DE- POSITS (UG/G)	TOTAL ZINC IN BOTTOM DE- POSITS (UG/G)	TOTAL ARSENIC IN BOTTOM DE- POSITS (UG/G)
JAN. 30...	--	--	--	--	--	--	--	--	--	--	--
APR. 19...	--	--	--	--	--	--	--	--	--	--	--
AUG. 14...	0	15	<2	0	820	<5	43	.0	0	5	1

07040100 ST. FRANCIS RIVER AT ST. FRANCIS, ARK.

LOCATION.--Lat 36°27'20", long 90°08'13", Clay County, at gaging station at bridge on U.S. Highway 62 at St. Francis.

CHEMICAL ANALYSIS, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT. 10...	472	9.0	100	60	21	8.7	3.7	1.8	110	0	8.5	3.2
DEC. 06...	3520	6.8	120	60	13	5.8	2.7	2.6	60	0	13	3.2
FEB. 22...	2700	6.5	50	50	15	7.9	3.5	1.4	74	0	12	3.5
APR. 20...	10000	4.0	160	20	8.0	4.5	2.7	1.8	44	0	8.4	1.6
JUNE 22...	5900	5.1	120	30	11	5.0	1.6	1.5	48	0	7.7	2.1
AUG. 15...	448	8.1	210	80	20	9.7	3.0	1.8	112	0	7.6	3.1

DATE	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	ALKA- LINITY AS CaCO ₃ (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	COLOR (PLAT- INUM- COBALT UNITS)	TEMPER- ATURE (DEG C)	CHEM- ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)
OCT. 10...	88	0	90	193	7.6	20	17.5	10	7.0	73	130	180
DEC. 06...	56	8	49	136	7.1	100	5.5	18	10.0	79	140	100
FEB. 22...	70	10	61	155	7.3	5	4.5	0	11.2	86	16	28
APR. 20...	38	2	36	97	7.0	50	16.0	9	7.0	71	1900	14000
JUNE 22...	48	9	39	108	7.1	30	24.0	7	5.0	59	100	200
AUG. 15...	90	0	92	202	7.7	10	24.0	13	6.2	73	80	160

07040100 ST. FRANCIS RIVER AT ST. FRANCIS, ARK.--Continued

PERIOD OF RECORD.--Chemical analyses: July 1969 to September 1973.

REMARKS.--Discharge obtained from rating curves furnished by Memphis District, Corps of Engineers.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	DIS- SOL- VED- PHOS- PHORUS (P) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	SODIUM AD- SORP- TION RATIO	PERCENT SODIUM
OCT. 10...	.0	.20	.02	.30	.00	.04	.03	110	.15	140	.2	8
DEC. 06...	.1	.27	.06	.66	.02	.12	.03	83	.11	789	.2	9
FEB. 22...	.1	.36	.00	.00	.00	.25	.03	81	.11	590	.2	10
APR. 20...	.0	.14	.01	.36	.02	.24	.01	55	.07	1490	.2	13
JUNE 22...	.1	.16	.04	.41	.02	.12	.00	66	.09	1050	.1	7
AUG. 15...	.2	.28	.05	.51	.01	.07	--	114	.16	138	.1	7

DATE	ALDRIN (UG/L)	LINDANE (UG/L)	CHLOR- DANE (UG/L)	DDD (UG/L)	DDE (UG/L)	DDT (UG/L)	DI- ELDRIN (UG/L)
OCT. 10...	.00	.00	.0	.00	.00	.00	.00
APR. 20...	.00	.00	.0	.00	.00	.00	.00
JUNE 22...	.00	.00	.0	.00	.00	.00	.00
AUG. 15...	.00	.00	.0	.00	.00	.00	.01

DATE	ENDRIN (UG/L)	HEPTA- CHLOR (UG/L)	HEPTA- CHLOR EPOXIDE (UG/L)	2,4-D (UG/L)	2,4,5-T (UG/L)	SILVEX (UG/L)
OCT. 10...	.00	.00	.00	.04	.01	.04
APR. 20...	.00	.00	.00	.00	.00	.00
JUNE 22...	.00	.00	.00	.00	.01	.00
AUG. 15...	.00	.00	.00	.00	.00	.00

ST. FRANCIS RIVER BASIN

07046001 LITTLE RIVER DITCHES NEAR KENNETT, MO.

LOCATION.--Lat 36°14'08", long 89°58'41", in NW¼ sec.3, T.18 N., R.10 E., Dunklin County, at bridges on State Highway 84, 4 mi (6.4 km) east of Kennett.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)
OCT. 10...	564	19	192	0	19	11	.1	.04
DEC. 06...	1530	--	170	0	19	12	.0	.45
FEB. 21...	1450	--	186	0	19	19	.2	.27
APR. 19...	16300	--	40	0	8.8	3.7	.0	.45
JUNE 22...	1380	--	160	0	16	10	.2	.34
AUG. 14...	2620	--	100	0	11	8.3	.3	.53

DATE	PH (UNITS)	TEMPER- ATURE (DEG C)	CHEM- ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)
OCT. 10...	8.0	20.7	0	.7	8.7	97	84	56
DEC. 06...	7.7	7.0	--	.7	9.0	74	68	450
FEB. 21...	7.8	11.0	18	1.0	9.0	82	<4	20
APR. 19...	7.1	16.5	--	2.6	6.3	64	2300	21000
JUNE 22...	7.8	23.5	12	2.2	6.1	71	900	760
AUG. 14...	7.4	25.9	--	3.3	6.3	77	1250	33000

07046001 LITTLE RIVER DITCHES NEAR KENNETT, MO.--Continued

PERIOD OF RECORD.--Chemical analyses: November 1969 to June 1970; August 1972 to September 1973 (discontinued).

REMARKS.--Analyses represent a composite of water from five ditches.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	DIS- SOL- VED- PHOS- PHORUS (P) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	ALKA- LINITY AS CaCO3 (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)
OCT. 10...	.00	.00	.07	.13	224	.30	341	157	361
DEC. 06...	.00	.74	.06	.21	200	.27	826	139	325
FEB. 21...	.00	.02	.06	.20	225	.31	881	153	363
APR. 19...	--	--	.12	.85	72	.10	3170	33	99
JUNE 22...	.00	1.9	.08	--	196	.27	730	131	320
AUG. 14...	.01	1.2	.13	.40	120	.16	849	82	216

DATE	ALDRIN (UG/L)	LINDANE (UG/L)	CHLOR- DANE (UG/L)	DDD (UG/L)	DDE (UG/L)	DDT (UG/L)	DI- ELDRIN (UG/L)
OCT. 10...	.00	.00	.0	.00	.00	.00	.00
APR. 19...	.00	.00	.0	.00	.00	.00	.02
JUNE 22...	.00	.00	.0	.00	.00	.00	.01

DATE	ENDRIN (UG/L)	HEPTA- CHLOR (UG/L)	HEPTA- CHLOR EPOXIDE (UG/L)	2,4-D (UG/L)	2,4,5-T (UG/L)	SILVEX (UG/L)
OCT. 10...	.00	.00	.00	.05	.06	.00
APR. 19...	.00	.00	.00	.00	.00	.00
JUNE 22...	.00	.00	.00	.02	.01	.00

WHITE RIVER BASIN

07050750 JAMES RIVER NEAR NIXA, MO.

LOCATION.--Lat 37°06'13", long 93°15'49", in SE¼NE¼ sec.30, T.28 N., R.21 W., Greene County, temperature recorder at gaging station on left bank, 0.5 mi (0.8 km) downstream from Springfield Utilities Dam, and 4.5 mi (7.2 km) northeast of Nixa.

DRAINAGE AREA.--273 mi² (707 km²).

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CONTINUOUS ETHYL-ALCOHOL-ACTUATED THERMOGRAPH)

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	23.0	21.5	18.5	15.0	10.5	9.5	11.0	10.5	9.5	9.0	15.0	14.5
2	23.0	21.0	15.0	14.0	11.5	10.5	11.0	10.5	9.5	9.0	15.5	15.0
3	23.5	21.5	14.5	13.5	13.0	11.0	11.0	8.5	9.0	8.0	16.0	14.5
4	24.0	22.0	14.5	13.5	12.0	10.5	8.5	8.0	9.5	9.0	16.0	14.5
5	24.5	23.0	14.5	13.5	11.5	10.5	8.0	6.5	10.5	9.0	16.5	14.5
6	24.5	24.0	14.5	14.0	11.0	9.5	6.5	5.5	11.0	10.5	16.5	14.5
7	24.5	23.5	14.5	14.0	9.5	9.0	6.0	4.5	11.0	10.5	14.5	13.5
8	23.5	22.0	14.5	14.0	10.0	8.5	7.0	5.0	10.5	8.0	14.5	14.0
9	23.5	21.5	14.5	14.0	10.0	9.0	7.0	6.0	8.0	6.5	15.0	14.0
10	23.5	21.5	14.0	13.5	9.0	8.0	8.0	6.0	8.5	7.0	15.0	14.0
11	23.5	21.5	14.5	13.5	8.5	6.5	8.5	7.0	9.0	8.0	14.0	13.0
12	24.0	22.0	14.0	13.5	8.0	6.5	9.0	8.0	9.5	8.5	14.0	13.0
13	24.5	24.0	13.5	11.5	8.0	6.5	9.0	8.0	10.0	9.0	14.5	13.5
14	24.5	23.0	11.5	11.0	8.0	7.0	9.5	8.5	9.5	9.0	14.5	14.0
15	23.5	21.5	11.0	10.5	7.0	6.5	10.5	9.0	10.0	9.0	14.5	14.0
16	23.5	21.5	11.0	10.5	8.0	6.5	10.5	9.0	9.5	9.0	14.0	13.0
17	23.5	22.0	12.0	11.0	8.0	6.5	10.5	9.5	9.0	8.5	13.0	11.5
18	23.5	23.0	11.0	10.5	9.0	7.0	10.5	9.0	9.0	8.5	13.0	11.5
19	23.0	20.5	10.5	9.5	9.0	6.5	9.0	8.5	9.5	8.5	14.0	12.0
20	20.5	19.0	11.0	9.5	9.0	6.5	9.5	9.0	11.0	9.5	14.0	13.0
21	19.0	18.0	11.0	10.0	9.0	8.0	9.5	9.0	13.5	10.5	14.0	12.0
22	18.0	16.0	10.5	10.0	8.5	8.0	9.0	8.0	12.0	11.5	13.0	12.0
23	16.0	16.0	10.5	10.0	9.0	8.0	8.0	7.0	14.0	11.5	13.0	11.5
24	16.0	15.5	10.5	10.5	8.5	8.0	9.5	8.0	14.0	13.0	12.0	11.0
25	15.5	15.0	10.5	9.5	9.0	8.0	10.0	9.0	14.0	13.5	11.0	10.0
26	16.5	15.5	9.5	9.0	9.5	8.5	11.0	10.0	15.0	14.0	11.0	11.0
27	18.0	16.0	10.0	9.0	9.5	9.0	11.0	10.0	14.5	14.0	11.0	10.5
28	17.0	16.0	10.5	10.0	11.0	9.5	11.0	9.0	15.0	14.0	11.0	10.5
29	17.0	16.5	10.5	10.0	12.0	10.5	9.0	8.0	---	---	13.0	11.5
30	19.0	17.0	10.5	9.5	12.0	10.0	8.5	8.0	---	---	13.0	11.5
31	19.0	17.0	---	---	11.0	10.5	9.5	8.5	---	---	12.0	11.0
MONTH	24.5	15.0	18.5	9.0	13.0	6.5	11.0	4.5	15.0	6.5	16.5	10.0

07050750 JAMES RIVER NEAR NIXA, MO.--Continued

PERIOD OF RECORD.--Water temperatures: November 1966 to September 1973.

EXTREMES, 1972-73.--Water temperatures: Maximum, 38.0°C Aug. 21; minimum, 4.5°C Jan. 7.

EXTREMES, 1966-73.--Water temperatures: Maximum, 38.0°C Aug. 23, 1971, Aug. 21, 1973; minimum, 4°C Jan. 1, 2, 26, 1969.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CONTINUOUS ETHYL-ALCOHOL-ACTUATED THERMOGRAPH)

DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	11.0	10.5	18.0	16.5	26.0	23.0	30.0	28.0	31.5	26.5	35.5	24.0
2	11.0	10.0	17.0	16.0	24.5	23.5	32.0	28.5	30.5	25.5	31.0	24.0
3	11.5	10.5	17.0	15.5	24.5	23.5	34.0	29.5	32.0	26.5	31.5	24.0
4	10.5	9.5	18.0	16.0	25.5	24.0	33.0	29.5	31.0	25.0	26.0	22.0
5	10.5	9.0	19.0	17.0	25.0	24.0	33.0	28.0	33.0	25.5	22.0	21.0
6	11.5	10.5	19.0	18.0	25.0	23.5	33.5	28.0	32.0	25.0	26.0	21.5
7	11.5	11.5	18.0	14.0	26.5	23.5	33.0	27.0	35.5	25.5	24.0	23.0
8	11.5	11.0	15.5	14.5	26.5	24.0	31.5	28.0	37.0	28.0	33.0	24.0
9	11.0	8.5	15.5	15.5	29.0	25.0	31.0	28.0	36.0	28.5	34.0	26.0
10	8.5	7.0	19.0	15.5	29.0	26.5	30.5	29.0	35.5	27.0	31.0	25.5
11	10.0	8.5	19.0	18.0	31.0	28.0	33.0	28.0	35.0	26.5	32.0	23.5
12	12.0	10.0	18.0	18.0	31.0	29.0	32.0	28.5	36.0	26.5	29.5	23.0
13	13.5	12.0	18.0	17.0	32.0	29.0	33.5	28.5	31.5	29.0	30.0	23.5
14	13.5	13.0	18.5	17.0	31.0	28.0	29.5	26.5	33.5	26.5	23.5	20.0
15	13.5	13.5	18.5	18.0	28.5	25.5	29.0	26.5	34.0	25.0	30.0	19.5
16	14.0	13.5	19.5	18.0	29.5	26.5	30.5	26.5	35.0	24.5	29.5	20.5
17	15.0	14.0	19.5	18.5	30.5	28.0	29.5	27.0	36.0	25.0	23.0	18.5
18	16.5	14.5	20.5	19.0	31.0	28.5	33.0	28.5	36.5	24.5	28.5	16.0
19	17.0	16.5	21.0	19.5	31.0	29.0	33.0	29.0	34.0	24.5	23.5	18.5
20	18.0	16.5	21.5	20.5	30.0	28.0	35.0	30.0	36.5	24.0	23.0	20.0
21	19.0	18.0	23.5	21.0	31.0	27.0	33.0	29.0	38.0	25.0	30.0	21.5
22	19.0	16.5	24.5	22.0	31.0	28.0	34.0	26.5	35.5	23.5	31.5	22.0
23	16.5	16.0	24.0	23.0	32.0	28.0	30.5	28.0	30.5	24.0	30.5	21.0
24	16.5	15.5	23.5	21.5	32.0	28.5	34.5	28.5	37.0	23.0	23.5	21.5
25	15.5	14.0	23.5	21.5	33.5	29.5	32.0	28.0	37.0	24.0	29.0	22.0
26	14.0	14.0	23.5	22.0	30.5	29.5	33.5	27.0	37.0	23.5	30.0	25.5
27	14.5	13.5	23.0	21.5	32.0	29.0	34.0	26.5	35.5	24.0	28.0	26.0
28	14.5	14.0	21.5	21.0	31.0	27.0	33.5	26.5	35.5	24.0	29.5	24.0
29	15.0	14.5	22.0	20.5	29.5	27.0	31.5	28.0	36.0	23.5	29.5	25.0
30	17.0	15.0	23.5	21.0	33.5	27.0	31.5	28.0	30.5	24.0	26.0	24.0
31	---	---	24.5	23.0	---	---	32.0	27.0	33.5	24.0	---	---
MONTH	19.0	7.0	24.5	14.0	33.5	23.0	35.0	26.5	38.0	23.0	35.5	16.0

WHITE RIVER BASIN

07051600 JAMES RIVER NEAR WILSON CREEK, MO.

LOCATION.--Lat 37°04'35", long 93°22'15", Christian County, at Nelson Mill Bridge on county road 2.5 mi (4.0 km) southeast of Wilson Creek, and 2 mi (3.2 km) upstream from Wilson Creek.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT.												
05...	65	7.3	20	0	60	6.6	5.1	2.2	200	0	13	9.0
NOV.												
14...	2200	8.3	20	10	32	4.2	2.9	2.7	106	0	9.0	4.3
DEC.												
11...	170	7.2	10	20	56	6.3	4.8	1.6	186	0	12	7.5
JAN.												
15...	193	4.5	10	10	52	6.4	4.8	1.6	172	0	12	13
FEB.												
12...	477	6.4	0	10	47	5.7	4.3	1.6	158	0	9.6	7.0
MAR.												
13...	1100	9.3	20	50	42	5.2	3.1	4.1	138	0	11	4.6
APR.												
16...	465	6.7	40	30	45	5.7	3.7	1.4	152	0	9.6	5.8
MAY												
15...	438	7.3	0	20	48	6.1	4.2	1.7	164	0	7.6	5.8
JUNE												
11...	169	8.1	20	20	55	7.2	4.1	1.5	184	0	9.2	7.9
JULY												
10...	110	10	130	40	60	6.0	4.4	1.6	196	0	9.2	7.4
AUG.												
06...	25	9.1	30	40	59	7.2	5.0	1.7	196	0	12	9.5
SEP.												
04...	27	9.4	30	40	66	5.7	6.6	2.0	204	0	15	11

DATE	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	ALKA- LINITY AS CaCO ₃ (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	COLOR (PLAT- INUM- COBALT UNITS)	TEMPER- ATURE (DEG C)	CHEM- ICAL OXYGEN DEMAND (LOW LFVEL) (MG/L)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)
OCT.												
05...	180	12	164	368	7.8	10	20.0	8	7.7	84	270	290
NOV.												
14...	97	10	87	222	7.4	30	11.0	0	10.0	41	550	8000
DEC.												
11...	160	13	153	342	7.7	5	5.0	0	10.0	78	22	14
JAN.												
15...	160	15	141	324	8.2	5	8.0	0	12.3	103	<2	6
FEB.												
12...	140	11	130	305	7.8	5	8.0	0	11.1	93	4	6
MAR.												
13...	130	14	113	265	7.3	10	13.0	0	9.2	87	370	600
APR.												
16...	140	11	125	300	7.9	3	14.0	6	9.8	94	76	122
MAY												
15...	140	10	134	295	7.8	5	17.0	5	8.2	85	92	110
JUNE												
11...	170	19	151	325	7.7	2	25.5	28	6.0	73	52	58
JULY												
10...	170	9	161	353	7.7	1	23.0	4	6.7	77	240	370
AUG.												
06...	180	19	161	390	7.7	2	23.0	3	7.6	87	80	150
SEP.												
04...	190	21	167	418	7.9	2	24.0	9	6.7	79	180	120

07051600 JAMES RIVER NEAR WILSON CREEK, MO.--Continued

PERIOD OF RECORD.--Chemical analyses: August 1967 to September 1973.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	DIS- SOL- VED- PHOS- PHORUS (P) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	SODIUM AD- SORP- TION RATIO	PERCENT SODIUM
OCT. 05...	.1	1.4	.01	.16	.00	.00	.06	200	.27	35.1	.2	6
NOV. 14...	.2	1.4	.01	.27	.06	.30	.07	130	.18	772	.1	6
DEC. 11...	.0	2.0	.02	.17	.03	.04	.03	197	.27	90.4	.2	6
JAN. 15...	.0	.99	.00	.11	.00	.00	.03	186	.25	96.9	.2	6
FEB. 12...	.0	1.4	.00	.12	--	.02	.06	170	.23	219	.2	6
MAR. 13...	.0	2.0	.03	.08	.11	.11	.06	150	.20	445	.1	5
APR. 16...	.0	1.7	.01	.00	.00	.01	.06	150	.20	188	.1	6
MAY 15...	.0	1.8	.00	.08	.02	.03	.04	162	.22	192	.2	6
JUNE 11...	.1	1.6	.01	.22	.04	.05	.11	202	.27	92.2	.1	5
JULY 10...	.0	1.4	.00	.39	.04	.09	--	209	.28	62.1	.1	5
AUG. 06...	1.3	1.0	.26	.16	.00	.01	--	215	.29	14.5	.2	6
SEP. 04...	.0	1.2	.09	.00	.01	.05	--	241	.33	17.6	.2	7

07052100 WILSON CREEK NEAR SPRINGFIELD, MO.

LOCATION.--Lat 37°10'06", long 93°22'14", in NE¼NE¼ sec.6, T.28 N., R.22 W., Greene County, multi-parameter recorder at gaging station on right bank just downstream from bridge on county road, 1 mi (1.6 km) upstream from Southwest Sewage Treatment Plant of Springfield and South Creek.

DRAINAGE AREA.--31.4 mi² (81.3 km²).

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	356	126	618	574	608	590	538	464	628	220
2	680	622	---	---	640	576	610	604	630	505	---	---
3	642	622	---	---	648	594	610	200	640	580	---	---
4	684	620	---	---	604	590	582	420	652	594	---	---
5	682	642	---	---	600	590	630	586	614	580	---	---
6	688	624	---	---	612	610	692	596	600	558	---	---
7	682	654	700	492	680	640	724	630	642	266	---	---
8	702	652	640	580	702	648	680	654	552	344	---	---
9	682	638	660	605	736	666	658	638	602	542	584	470
10	650	164	620	322	728	644	698	638	620	572	544	170
11	564	362	604	580	670	620	692	660	648	566	496	362
12	620	550	636	142	1130	600	692	656	592	568	580	498
13	660	595	444	152	900	770	684	640	596	560	580	282
14	640	130	550	448	820	700	898	662	676	572	536	240
15	---	---	586	542	720	640	1060	766	652	560	578	510
16	---	---	606	558	740	640	752	626	626	564	612	542
17	644	632	604	566	710	620	682	598	626	572	614	548
18	630	220	640	574	1160	660	660	190	612	578	566	530
19	540	480	754	532	760	560	572	402	620	558	574	354
20	660	540	604	534	630	560	612	536	588	544	556	360
21	640	140	592	486	600	568	584	176	674	580	602	526
22	500	220	606	486	638	568	476	314	608	558	602	524
23	620	500	570	558	614	570	574	480	584	562	650	236
24	625	610	586	538	634	570	588	532	576	540	484	142
25	680	625	596	492	582	565	606	552	582	538	438	238
26	720	660	538	476	594	560	602	558	586	566	482	444
27	740	660	566	542	590	564	602	568	598	558	552	482
28	720	660	582	566	616	562	592	536	614	576	550	466
29	700	660	616	584	686	610	584	560	---	---	448	240
30	720	660	644	586	682	420	622	572	---	---	538	426
31	450	160	---	---	614	554	614	584	---	---	410	148
MONTH	740	130	754	126	1160	420	1060	176	676	266	---	---
DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	478	436	494	182	588	540	778	124	516	486	718	604
2	516	490	512	286	544	362	520	240	592	486	686	646
3	540	520	558	492	500	142	540	520	610	564	688	390
4	566	516	610	550	552	490	540	480	---	---	496	182
5	580	510	612	556	536	172	540	500	---	---	332	162
6	572	534	584	350	544	436	540	510	---	---	456	340
7	580	550	488	148	636	550	544	506	---	---	512	340
8	608	520	546	414	624	558	548	494	---	---	532	340
9	---	---	556	520	576	520	640	256	---	---	536	522
10	550	490	610	548	516	460	550	220	---	---	568	522
11	556	508	592	308	524	480	460	260	---	---	604	570
12	580	494	750	478	580	530	732	530	---	---	642	608
13	580	478	824	580	608	186	732	686	---	---	640	566
14	580	478	590	562	378	166	748	718	---	---	592	572
15	580	452	592	564	470	210	754	192	---	---	608	582
16	436	192	652	580	536	434	618	418	---	---	602	582
17	502	442	638	570	526	540	620	580	---	---	634	610
18	544	490	640	564	564	554	610	560	---	---	656	640
19	500	470	626	564	560	300	600	570	---	---	644	632
20	---	---	612	580	468	300	596	534	---	---	630	606
21	---	---	600	550	598	474	604	542	---	---	626	604
22	404	110	522	420	702	580	616	562	---	---	620	544
23	476	408	550	208	702	626	664	562	---	---	600	578
24	514	468	582	292	726	646	642	232	---	---	644	542
25	450	298	720	310	692	580	420	238	---	---	600	166
26	454	385	520	456	620	560	564	420	---	---	436	288
27	506	456	518	268	660	562	558	506	---	---	502	440
28	524	472	570	372	700	660	620	518	---	---	520	170
29	524	476	566	510	790	700	720	626	---	---	490	360
30	492	472	522	510	884	612	808	560	744	648	570	180
31	---	---	600	518	---	---	600	526	660	586	---	---
MONTH	608	110	824	148	884	142	808	124	---	---	718	162

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PERIOD OF RECORD: October 1972 to September 1973.

REMARKS.--Recorder inoperative on many days during the year.

PH, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH		
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	---	---	8.6	8.1	8.2	7.9	8.0	7.8	8.8	8.0
2	---	---	---	---	8.7	8.1	8.1	7.8	8.0	7.8	---	---
3	---	---	---	---	8.5	8.1	8.1	7.7	8.4	8.0	8.8	---
4	---	---	---	---	8.5	8.0	7.9	7.7	8.6	8.0	8.7	---
5	---	---	---	---	8.2	8.1	7.9	7.8	8.5	7.9	9.1	---
6	---	---	---	---	8.2	7.8	8.0	7.9	8.6	8.0	8.8	---
7	---	---	8.0	7.8	7.9	7.8	8.1	8.0	8.2	7.8	---	---
8	---	---	8.0	7.9	---	---	8.1	8.0	8.4	8.0	8.1	7.8
9	---	---	8.0	7.8	---	---	8.1	7.9	8.5	8.0	7.9	7.7
10	---	---	7.8	7.7	---	---	8.1	8.0	8.6	8.0	8.0	7.7
11	---	---	7.9	7.8	8.5	8.2	8.2	8.0	8.7	8.1	8.1	7.8
12	---	---	8.0	7.7	8.4	8.0	8.4	7.9	8.6	8.1	8.6	7.9
13	---	---	7.7	7.5	8.6	8.2	8.2	8.0	8.7	8.0	8.7	8.3
14	---	---	7.7	7.6	8.3	7.9	8.3	8.0	8.6	8.1	8.7	8.2
15	---	---	7.8	7.7	8.7	8.1	8.1	7.8	8.8	8.1	8.5	7.7
16	---	---	7.8	7.8	8.7	8.1	8.3	7.9	8.8	8.1	7.9	7.6
17	---	---	7.8	7.7	8.7	8.1	8.2	7.8	8.8	8.1	8.1	7.5
18	---	---	7.9	7.8	8.7	7.7	8.8	7.6	9.0	8.1	8.3	7.5
19	---	---	7.8	7.7	7.8	7.7	7.8	7.6	9.0	8.1	8.4	7.5
20	---	---	7.8	7.7	8.4	7.7	8.0	7.8	9.2	8.0	8.2	7.4
21	---	---	7.8	7.7	8.1	7.7	7.9	7.5	9.2	8.0	8.8	7.8
22	---	---	7.9	7.7	8.4	7.8	7.8	7.5	9.1	8.1	8.9	8.0
23	---	---	8.0	7.9	8.5	7.9	7.9	7.7	9.2	8.1	8.6	7.9
24	---	---	8.1	7.9	8.4	7.9	8.0	7.8	9.2	8.1	8.2	7.8
25	---	---	8.0	7.9	8.8	8.1	8.3	7.9	9.2	8.0	7.9	7.6
26	---	---	8.3	7.9	8.8	8.0	8.2	8.0	9.1	8.3	7.6	7.4
27	---	---	8.3	8.1	8.6	8.0	8.2	8.0	8.9	8.3	8.3	7.5
28	---	---	8.3	8.1	8.6	8.0	8.4	8.0	9.2	8.0	8.4	8.0
29	---	---	8.2	7.8	8.4	7.8	8.2	8.0	---	---	8.2	7.7
30	---	---	8.4	8.1	8.1	7.7	8.3	8.1	---	---	8.6	7.9
31	---	---	---	---	8.1	7.7	8.2	8.0	---	---	7.9	7.3
MONTH	---	---	8.4	7.5	8.8	7.7	8.8	7.5	9.2	7.8	9.1	7.3
APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.8	7.6	8.1	7.7	8.9	8.5	---	---	---	---	---	---
2	8.1	7.8	7.8	7.6	8.4	8.1	---	---	---	---	---	---
3	7.9	7.8	8.0	7.7	8.4	8.0	---	---	---	---	---	---
4	8.3	7.9	8.1	7.7	8.3	8.0	---	---	---	---	---	---
5	8.2	7.8	8.2	7.7	8.2	7.6	---	---	---	---	---	---
6	8.4	7.8	7.8	7.4	8.0	7.8	---	---	---	---	---	---
7	8.2	7.7	7.6	7.4	8.0	7.8	---	---	---	---	---	---
8	8.1	7.7	7.8	7.4	8.0	7.9	---	---	---	---	---	---
9	7.9	7.5	8.0	7.7	8.0	7.8	---	---	---	---	---	---
10	8.1	6.8	8.2	7.8	8.0	7.7	---	---	---	---	---	---
11	8.4	7.6	8.2	7.5	8.0	7.6	---	---	---	---	---	---
12	8.5	7.6	8.0	7.7	8.1	7.7	---	---	---	---	---	---
13	8.5	7.5	8.2	7.9	8.2	7.6	---	---	---	---	---	---
14	8.6	7.5	8.3	8.0	7.6	7.3	---	---	---	---	---	---
15	8.4	7.4	8.0	7.9	7.6	7.2	---	---	---	---	---	---
16	7.8	7.2	8.1	7.9	7.9	7.6	---	---	---	---	---	---
17	8.6	7.4	8.2	7.9	8.1	7.9	---	---	---	---	---	---
18	8.4	7.5	8.3	7.9	8.1	7.9	---	---	---	---	---	---
19	---	---	8.5	8.0	8.1	7.9	---	---	---	---	---	---
20	---	---	8.4	7.9	---	---	---	---	---	---	---	---
21	---	---	8.4	7.9	---	---	---	---	---	---	---	---
22	---	---	8.0	7.6	---	---	---	---	---	---	---	---
23	---	---	7.9	7.4	---	---	---	---	---	---	---	---
24	---	---	8.3	7.4	---	---	---	---	---	---	---	---
25	---	---	8.5	7.4	---	---	---	---	---	---	---	---
26	---	---	8.7	8.4	---	---	---	---	---	---	---	---
27	8.2	7.8	8.5	8.2	---	---	---	---	---	---	---	---
28	8.1	7.8	8.5	8.3	---	---	---	---	---	---	---	---
29	8.3	7.8	8.7	8.4	---	---	---	---	---	---	---	---
30	8.3	7.9	8.6	8.4	---	---	---	---	---	---	---	---
31	---	---	8.7	8.4	---	---	---	---	---	---	---	---
MONTH	---	---	8.7	7.4	---	---	---	---	---	---	---	---

WHITE RIVER BASIN

07052100 WILSON CREEK NEAR SPRINGFIELD, MO.--Continued

DISSOLVED OXYGEN (MG/L), WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	---	---	14.2	8.9	14.5	11.0	9.2	8.8	17.0	5.9
2	---	---	---	---	14.9	8.1	13.5	11.1	12.0	9.2	---	---
3	---	---	---	---	13.8	7.8	11.8	8.3	14.0	9.9	---	---
4	9.4	7.9	---	---	---	---	11.2	9.2	13.4	8.6	---	---
5	9.7	7.6	---	---	---	---	12.6	11.1	14.9	8.5	---	---
6	8.1	6.9	---	---	---	---	14.1	11.7	15.7	8.8	---	---
7	9.3	7.6	8.4	7.8	12.4	9.4	14.9	12.5	12.5	9.4	---	---
8	9.7	7.8	9.3	7.9	9.4	8.4	13.5	12.0	15.4	12.0	---	---
9	9.3	7.2	8.7	7.9	10.8	8.7	14.7	12.3	16.0	10.8	10.0	4.3
10	8.9	7.2	8.2	7.0	11.2	9.3	15.8	13.0	14.4	9.5	8.6	7.7
11	6.8	5.4	8.7	7.7	13.3	8.2	15.7	12.9	14.7	9.3	10.2	8.2
12	7.8	5.8	9.6	8.4	12.7	6.9	16.3	13.9	14.8	9.0	12.0	7.9
13	8.3	6.8	9.5	7.1	11.1	6.2	14.3	10.3	13.2	7.2	11.8	7.9
14	7.2	4.8	9.2	7.6	10.3	8.6	11.4	7.5	14.2	7.1	11.0	8.8
15	---	---	9.2	8.6	12.3	10.1	9.9	7.3	17.8	11.2	---	---
16	---	---	9.0	8.4	12.0	10.1	10.9	7.4	17.0	10.8	---	---
17	8.8	7.5	9.1	8.5	10.2	9.4	10.5	7.0	19.4	11.7	---	---
18	7.0	6.8	10.1	8.9	10.0	8.0	8.5	6.4	17.0	9.6	---	---
19	7.7	6.8	10.1	9.6	9.0	7.9	9.4	7.9	16.6	8.5	---	---
20	8.6	7.4	9.7	9.0	10.8	7.9	8.3	6.8	15.5	7.2	---	---
21	7.4	6.0	9.7	8.5	11.1	8.3	8.2	6.9	17.7	7.3	---	---
22	6.3	5.7	9.6	8.7	14.4	9.5	8.2	7.4	16.9	8.1	---	---
23	7.1	5.8	9.7	8.6	13.5	9.2	8.4	7.4	17.2	7.3	---	---
24	7.6	7.1	10.2	8.5	13.9	8.9	8.5	6.7	17.5	7.6	---	---
25	8.1	6.9	9.1	8.6	13.9	11.0	8.4	6.4	16.6	5.8	---	---
26	9.4	6.8	10.0	8.5	13.6	10.8	7.6	6.3	14.5	5.8	---	---
27	8.9	7.9	10.4	8.2	14.1	10.0	7.7	6.4	18.0	7.0	10.4	8.2
28	9.4	7.7	11.6	8.2	13.9	9.4	10.7	7.0	17.7	8.1	10.9	7.2
29	9.5	7.6	13.1	8.6	12.6	8.4	13.5	10.5	---	---	11.9	9.3
30	8.6	6.0	13.1	8.6	8.6	4.2	13.0	10.1	---	---	14.1	8.9
31	7.4	6.6	---	---	13.6	8.3	11.5	10.0	---	---	---	---
MONTH	9.7	4.8	13.1	7.0	14.9	4.2	16.3	6.3	19.4	5.8	---	---
DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	9.4	5.8	8.6	6.3	---	---	7.1	4.7	7.3	5.7
2	---	---	9.1	6.1	6.2	5.1	---	---	7.6	5.5	7.8	5.7
3	---	---	9.8	7.6	6.8	5.6	---	---	8.3	6.0	7.6	5.6
4	11.3	8.0	10.3	7.1	7.3	5.5	---	---	8.0	6.3	6.1	3.9
5	11.7	8.0	10.4	7.0	6.8	6.0	---	---	8.2	6.2	6.7	6.2
6	14.0	8.0	8.0	6.7	7.5	6.2	---	---	8.2	6.1	7.9	6.1
7	14.2	8.0	8.2	6.8	7.3	5.9	---	---	7.9	6.0	7.0	5.4
8	12.5	7.6	8.0	6.7	7.0	5.7	---	---	7.2	5.3	5.7	4.9
9	8.5	7.2	8.2	6.7	---	---	---	---	7.0	5.2	5.6	4.3
10	13.1	8.2	7.9	6.5	---	---	---	---	7.3	5.2	6.5	4.9
11	11.3	6.4	7.7	6.4	---	---	5.3	4.3	7.3	5.3	7.0	5.5
12	11.6	5.6	8.6	6.3	7.1	5.9	6.0	4.4	6.8	5.2	6.5	5.4
13	11.8	5.5	9.2	7.5	7.3	4.3	7.0	5.1	6.5	4.9	6.8	4.7
14	12.9	5.6	9.3	7.7	6.0	5.4	7.6	5.6	6.7	4.9	5.6	4.1
15	11.9	4.9	9.0	7.2	4.8	4.1	7.0	5.6	7.2	5.4	5.2	4.1
16	8.4	5.0	9.1	7.3	6.4	3.5	7.1	5.4	7.1	5.5	5.4	3.6
17	12.1	5.0	9.4	7.1	6.8	5.2	7.5	5.9	7.4	5.5	5.7	4.1
18	---	---	9.1	7.1	6.3	5.3	7.5	5.8	---	---	7.0	5.7
19	---	---	8.5	6.0	6.8	5.1	7.6	5.4	---	---	8.1	6.0
20	---	---	8.3	5.7	7.0	4.8	---	---	---	---	7.5	6.2
21	---	---	8.2	5.5	6.9	5.2	---	---	6.6	5.0	7.1	5.9
22	---	---	7.6	4.4	7.4	5.6	---	---	6.9	5.2	6.5	5.4
23	---	---	5.7	5.0	6.6	5.5	---	---	6.8	5.1	6.2	5.0
24	---	---	7.2	5.0	---	4.8	---	---	7.7	5.8	5.8	4.7
25	---	---	6.7	5.0	---	---	---	---	7.2	5.8	5.4	3.7
26	---	---	7.8	5.8	---	---	---	---	7.1	5.4	5.9	3.3
27	8.8	7.5	7.2	5.6	---	---	---	---	6.7	5.3	5.9	4.7
28	9.8	7.1	8.3	6.5	---	---	---	---	6.9	5.2	6.6	5.0
29	10.2	6.8	8.9	6.8	---	---	---	---	6.9	5.1	5.7	5.0
30	10.4	6.7	8.8	6.7	---	---	---	---	7.7	5.7	6.4	5.0
31	---	---	8.5	6.8	---	---	---	---	7.4	5.6	---	---
MONTH	---	---	10.4	4.4	---	---	---	---	8.3	4.7	8.1	3.3

07052100 WILSON CREEK NEAR SPRINGFIELD, MO.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	14.5	7.5	---	---	10.5	6.0	4.5	1.5	9.5	8.5	10.0	7.5
2	20.5	10.5	---	---	12.0	7.5	3.5	1.0	8.0	5.0	---	---
3	19.5	17.5	---	---	10.5	8.0	4.0	2.0	9.0	4.0	---	---
4	20.5	15.5	---	---	8.5	6.0	3.5	2.0	11.0	5.5	---	---
5	19.5	16.0	---	---	7.0	4.5	2.0	1.0	10.5	7.0	---	---
6	19.5	17.0	13.5	12.0	4.0	1.5	2.0	0.0	9.0	7.5	---	---
7	17.0	15.5	14.5	11.5	4.0	1.0	1.0	0.0	7.5	3.5	---	---
8	17.0	13.5	14.0	9.5	5.5	4.0	2.0	0.5	4.5	1.0	14.0	12.0
9	17.5	15.5	13.0	11.0	4.5	3.0	1.0	0.0	6.0	1.0	14.0	12.0
10	17.5	13.5	13.0	11.0	4.0	2.0	1.0	0.0	7.5	2.0	15.5	12.5
11	18.5	15.5	11.5	11.0	5.5	1.0	0.5	0.0	7.5	3.0	14.5	11.0
12	19.0	15.5	12.0	9.5	3.5	1.0	0.0	0.0	6.0	4.0	16.0	9.5
13	18.0	15.5	14.0	9.5	5.5	2.0	2.5	0.0	10.0	6.0	14.5	11.5
14	17.0	15.0	12.5	9.5	5.0	3.0	5.5	1.5	8.5	3.5	15.5	11.5
15	---	---	10.0	9.0	4.5	1.5	7.0	3.0	4.0	2.0	14.0	10.0
16	---	---	10.0	9.0	3.5	2.0	9.0	4.5	5.0	0.5	12.0	8.5
17	16.0	14.0	9.5	9.0	4.5	2.5	11.0	8.0	3.5	0.5	12.0	6.0
18	15.5	10.0	9.0	6.5	6.0	3.0	11.5	9.5	6.0	3.0	14.0	7.0
19	11.5	8.5	7.5	6.0	6.5	5.0	11.5	8.0	7.5	3.5	14.5	10.5
20	10.5	8.5	8.5	6.5	8.5	6.0	12.0	9.0	9.5	4.5	13.0	8.5
21	14.0	10.5	8.0	6.5	6.5	5.5	10.0	7.5	9.5	4.5	14.0	6.5
22	16.5	14.0	9.5	6.5	7.5	4.5	8.0	6.5	9.0	3.0	11.5	8.5
23	16.0	12.0	10.5	7.5	8.0	5.0	9.0	6.5	11.0	5.0	11.0	9.0
24	12.0	11.5	9.5	6.5	7.0	6.0	11.0	6.5	12.0	5.0	11.0	10.0
25	13.5	10.0	8.5	7.5	8.5	6.5	10.5	6.5	11.5	8.5	12.5	10.0
26	14.0	10.0	9.0	6.5	8.0	6.0	11.5	9.5	10.5	7.5	11.0	10.0
27	14.0	11.5	10.0	8.0	8.0	4.5	11.5	10.0	8.0	6.0	13.0	9.5
28	13.5	11.0	10.0	7.5	8.5	4.5	10.5	3.5	16.0	5.0	16.0	11.0
29	14.5	13.0	9.5	6.0	10.5	7.5	6.0	1.5	---	---	14.5	10.5
30	14.5	14.0	8.5	6.5	11.5	7.0	8.5	3.5	---	---	16.5	10.5
31	16.0	15.0	---	---	6.5	4.0	10.0	6.5	---	---	14.0	12.0
MONTH	20.5	7.5	14.5	6.0	12.0	1.0	12.0	0.0	16.0	0.5	16.5	6.0
DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	11.5	10.0	18.0	15.5	22.0	17.0	25.0	21.0	25.0	22.0	25.5	24.0
2	15.5	9.0	16.5	12.5	20.5	19.0	24.5	20.0	23.0	20.0	26.0	24.0
3	12.5	10.5	18.0	10.5	23.0	17.5	26.0	21.0	23.0	19.5	25.5	24.0
4	10.0	9.0	20.0	12.0	22.0	19.0	26.5	22.0	23.5	20.5	24.5	23.0
5	16.0	8.5	19.5	14.5	21.5	18.5	26.0	21.5	23.5	21.0	23.0	21.0
6	16.5	9.5	17.5	15.0	22.5	16.0	26.5	21.5	23.5	20.5	22.5	21.0
7	14.5	12.0	17.0	15.0	23.5	17.0	26.5	22.0	25.0	21.0	22.5	21.0
8	13.0	11.5	20.0	14.5	24.5	18.0	26.0	23.0	26.5	24.0	24.5	21.5
9	13.5	9.5	19.5	14.0	25.0	19.0	27.0	23.0	26.5	24.5	25.0	24.0
10	12.0	9.5	22.5	16.0	25.5	20.5	25.0	23.0	26.0	24.5	25.0	23.5
11	14.5	6.5	21.0	15.5	26.0	21.0	27.0	21.5	25.5	23.5	23.5	22.0
12	17.5	10.5	19.5	14.5	24.5	21.5	27.0	22.0	26.0	24.0	23.0	22.0
13	17.0	10.0	19.0	13.0	25.5	21.0	27.0	22.0	26.0	22.0	23.0	22.0
14	16.0	10.5	19.0	12.5	24.5	21.5	25.5	22.0	25.0	22.5	21.5	19.0
15	15.5	12.5	19.0	12.5	26.5	22.0	24.0	21.0	25.0	21.5	20.0	17.5
16	14.5	11.5	20.5	13.0	27.0	23.0	24.5	21.0	25.5	23.5	21.0	18.5
17	19.0	10.0	20.0	13.0	27.0	22.0	23.0	21.0	26.0	23.0	20.0	16.5
18	19.0	15.0	20.0	13.5	26.0	23.0	26.5	21.0	26.5	24.0	16.0	14.0
19	17.5	14.5	21.0	16.0	24.5	20.5	26.5	23.5	26.5	24.0	17.0	15.0
20	---	---	21.5	15.5	24.5	19.5	28.0	23.5	26.5	23.5	19.0	16.5
21	---	---	21.5	16.5	24.5	19.5	27.5	24.5	26.5	24.5	22.0	19.0
22	19.5	16.5	21.5	18.0	24.5	20.0	26.5	22.5	25.5	22.5	22.0	21.0
23	20.0	14.5	18.5	17.5	25.5	19.5	26.0	24.5	24.5	23.0	22.0	20.0
24	17.0	14.5	21.5	15.0	26.0	22.0	27.0	24.0	26.0	22.5	29.0	21.0
25	15.5	14.5	21.5	18.0	26.5	23.0	26.5	24.0	26.0	23.5	22.5	20.5
26	15.5	13.5	20.5	17.5	26.0	23.5	27.0	23.0	26.5	23.5	23.0	21.0
27	17.0	11.5	19.5	17.0	26.0	22.5	26.5	23.0	27.0	24.0	22.5	22.0
28	18.0	10.0	17.0	15.0	24.5	21.5	26.5	23.5	27.0	24.0	22.0	20.0
29	18.5	13.0	20.5	14.0	23.5	20.5	26.5	24.0	25.5	23.5	20.5	17.5
30	17.5	15.5	20.5	16.0	25.0	20.0	25.5	24.5	25.0	23.0	20.0	18.5
31	---	---	20.0	16.5	---	---	25.0	22.5	25.0	23.5	---	---
MONTH	20.0	6.5	22.5	10.5	27.0	16.0	28.0	20.0	27.0	19.5	29.0	14.0

WHITE RIVER BASIN

07052160 WILSON CREEK NEAR BATTLEFIELD, MO.

LOCATION.--Lat 37°07'02", long 93°24'14", in SW¼NW¼ sec.24, T 28 N., R.23 W., Greene County, multi-parameter recorder at gaging station on left bank 300 ft (91 m) downstream from bridge on county road, 0.3 mi (0.5 km) upstream from McElhane Branch, and 1.8 mi (2.9 km) west of Battlefield.

DRAINAGE AREA.--55.0 mi² (142 km²).

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	---	---	554	526	584	552	538	504	754	528
2	---	---	---	---	552	528	576	534	572	510	566	422
3	---	---	---	---	560	530	612	434	564	516	604	552
4	---	---	---	---	566	534	642	488	566	540	596	560
5	---	---	---	---	580	548	598	570	574	530	550	510
6	---	---	---	---	602	564	592	556	572	544	550	306
7	---	---	---	---	618	580	588	564	634	434	414	374
8	---	---	---	---	622	582	586	560	520	466	478	412
9	---	---	---	---	636	600	580	546	536	508	492	474
10	---	---	---	---	640	610	576	540	544	514	498	288
11	---	---	---	---	634	598	588	552	538	520	416	358
12	---	---	---	---	612	578	610	555	532	504	480	416
13	---	---	---	---	596	566	620	585	554	528	500	446
14	---	---	---	---	588	560	665	590	576	542	542	416
15	---	---	---	---	---	---	680	515	582	556	508	480
16	---	---	---	---	---	---	770	654	574	544	520	496
17	---	---	---	---	---	---	650	620	566	530	520	506
18	---	---	---	---	580	546	682	320	556	534	518	496
19	---	---	---	---	588	534	462	374	568	538	546	494
20	---	---	---	---	534	490	482	456	598	554	526	480
21	---	---	564	536	528	508	524	304	600	572	558	522
22	---	---	558	510	534	500	404	330	620	590	574	544
23	---	---	530	516	544	510	442	406	635	595	634	486
24	---	---	518	492	544	530	468	438	625	595	534	268
25	---	---	506	496	552	532	484	464	620	590	400	326
26	---	---	508	476	546	526	508	484	635	580	446	400
27	---	---	504	480	590	528	536	508	635	580	478	444
28	---	---	530	506	628	592	544	532	678	600	490	466
29	---	---	546	518	648	600	596	534	---	---	490	392
30	---	---	552	530	690	598	---	---	---	---	478	458
31	---	---	---	---	616	564	---	---	---	---	480	254
MONTH	---	---	---	---	690	490	770	304	678	434	754	254
DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	422	388	500	360	700	660	666	112	738	700	826	750
2	454	422	490	415	780	710	414	318	746	720	814	720
3	482	450	514	484	735	330	482	412	772	698	838	724
4	484	458	534	506	560	505	516	476	752	688	722	621
5	496	478	540	516	620	340	546	502	748	692	650	380
6	494	478	580	500	538	410	592	528	742	688	---	---
7	496	482	490	260	558	510	604	566	738	672	---	---
8	504	334	474	420	562	520	638	578	746	694	---	---
9	446	362	460	440	564	526	712	490	792	724	---	---
10	506	456	520	486	562	532	572	424	806	768	---	---
11	522	500	606	498	580	536	588	490	804	726	---	---
12	522	512	562	494	580	538	626	561	796	240	---	---
13	524	510	564	550	642	514	636	588	578	256	---	---
14	536	506	570	542	522	348	678	582	628	566	---	---
15	532	508	578	556	582	438	550	332	690	612	---	---
16	542	354	590	564	570	534	560	490	740	656	---	---
17	498	474	598	576	562	528	588	540	742	612	898	814
18	514	488	650	595	620	554	648	568	702	634	898	792
19	514	320	656	624	728	552	700	640	698	640	880	790
20	590	396	672	610	628	532	702	654	810	732	898	820
21	436	402	648	618	650	579	702	648	806	718	900	814
22	426	194	588	560	730	635	698	650	790	720	904	824
23	412	370	700	430	740	658	706	648	804	732	884	790
24	440	410	550	480	730	676	718	642	866	770	890	808
25	460	400	645	480	740	668	630	452	866	780	900	448
26	460	440	575	510	744	652	680	612	832	766	740	640
27	490	418	740	520	700	620	726	606	834	764	790	706
28	490	462	565	515	734	648	732	694	834	742	800	380
29	460	445	605	560	728	656	702	636	832	734	660	520
30	460	440	650	600	704	634	768	630	794	708	728	524
31	---	---	690	635	---	---	720	664	822	736	---	---
MONTH	590	194	740	260	780	330	768	112	866	240	---	---

07052160 WILSON CREEK NEAR BATTLEFIELD, MO.--Continued

PERIOD OF RECORD.--November 1972 to September 1973.

REMARKS.--Recorder inoperative on many days during the year.

PH, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	---	---	---	---	---	---	---	---	7.7	7.3
2	---	---	---	---	---	---	---	---	---	---	7.7	7.4
3	---	---	---	---	---	---	---	---	---	---	7.8	7.7
4	---	---	---	---	---	---	---	---	---	---	7.8	7.5
5	---	---	---	---	---	---	---	---	---	---	7.6	7.4
6	---	---	---	---	---	---	---	---	---	---	7.6	7.2
7	---	---	---	---	---	---	---	---	---	---	7.3	7.3
8	---	---	---	---	---	---	---	---	---	---	7.4	7.3
9	---	---	---	---	---	---	---	---	---	---	7.5	7.3
10	---	---	---	---	---	---	---	---	---	---	7.6	7.4
11	---	---	---	---	---	---	---	---	---	---	7.5	7.4
12	---	---	---	---	---	---	---	---	---	---	7.5	7.2
13	---	---	---	---	---	---	---	---	---	---	7.3	7.2
14	---	---	---	---	---	---	---	---	---	---	7.3	7.2
15	---	---	---	---	---	---	---	---	---	---	7.4	7.2
16	---	---	---	---	---	---	---	---	---	---	7.5	7.4
17	---	---	---	---	---	---	---	---	---	---	7.5	7.4
18	---	---	---	---	---	---	---	---	---	---	7.5	7.4
19	---	---	---	---	---	---	---	---	---	---	7.5	7.3
20	---	---	---	---	---	---	---	---	---	---	7.3	7.1
21	---	---	---	---	---	---	---	---	---	---	7.4	7.2
22	---	---	---	---	---	---	---	---	---	---	7.6	7.4
23	---	---	---	---	---	---	---	---	---	---	7.8	7.5
24	---	---	---	---	---	---	---	---	---	---	7.9	7.6
25	---	---	---	---	---	---	---	---	---	---	7.6	7.4
26	---	---	---	---	---	---	---	---	---	---	7.6	7.4
27	---	---	---	---	---	---	---	---	---	---	7.7	7.5
28	---	---	---	---	---	---	---	---	7.6	7.4	7.7	7.6
29	---	---	---	---	---	---	---	---	---	---	7.8	7.6
30	---	---	---	---	---	---	---	---	---	---	7.8	7.7
31	---	---	---	---	---	---	---	---	---	---	7.8	7.5
MONTH	---	---	---	---	---	---	---	---	---	---	7.9	7.1
DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.5	7.4	7.4	7.2	7.6	7.3	7.6	7.4	7.5	7.3	7.6	7.5
2	7.5	7.4	7.4	7.2	7.5	7.1	7.4	7.3	7.5	7.3	7.5	7.4
3	7.5	7.2	7.6	7.2	7.5	7.1	7.3	7.2	7.5	7.3	7.5	7.3
4	7.4	7.3	7.9	7.5	7.3	7.2	7.4	7.3	7.5	7.3	7.4	7.3
5	7.6	7.4	8.1	8.0	7.4	7.2	7.4	7.3	7.5	7.3	7.3	7.2
6	7.6	7.4	8.0	7.5	7.3	7.2	7.3	7.1	7.5	7.3	---	---
7	7.6	7.5	7.8	7.1	7.5	7.3	7.5	7.3	7.5	7.4	---	---
8	7.6	7.4	7.4	7.2	7.4	7.0	7.5	7.4	7.5	7.4	---	---
9	7.4	7.3	7.5	7.3	7.1	6.9	7.4	7.1	7.6	7.4	---	---
10	7.4	7.3	7.6	7.3	7.3	7.1	7.5	7.2	7.6	7.4	---	---
11	7.6	7.4	7.7	7.3	7.2	7.1	7.3	7.2	7.6	7.4	---	---
12	7.6	7.5	7.5	7.3	7.3	7.1	7.4	7.3	7.7	7.4	---	---
13	7.6	7.5	7.5	7.3	7.6	7.2	7.4	7.2	7.7	7.5	---	---
14	7.6	7.3	7.4	7.3	7.6	7.2	7.5	7.2	7.5	7.4	---	---
15	7.3	7.2	7.4	7.3	7.7	7.3	7.4	7.3	7.5	7.4	---	---
16	7.4	7.2	7.5	7.4	7.7	7.3	7.3	7.1	7.5	7.4	---	---
17	7.5	7.3	7.6	7.5	7.3	7.1	7.2	7.1	7.5	7.5	7.4	7.4
18	7.6	7.5	7.6	7.3	7.6	7.1	7.4	7.1	7.5	7.4	7.4	7.4
19	7.7	7.5	7.6	7.4	7.7	7.1	7.4	7.1	7.5	7.3	7.5	7.4
20	7.7	7.2	7.5	7.2	7.6	7.3	7.5	7.2	7.6	7.4	7.5	7.4
21	7.4	7.3	7.5	7.4	7.6	7.3	7.6	7.3	7.7	7.5	7.5	7.4
22	7.5	7.3	7.6	7.4	---	---	7.5	7.2	7.6	7.5	7.5	7.4
23	7.4	7.3	8.0	7.5	---	---	7.6	7.3	7.6	7.5	7.6	7.4
24	7.3	7.2	7.7	7.3	---	---	7.7	7.3	7.6	7.5	7.7	7.5
25	7.3	7.3	7.7	7.3	---	---	7.7	7.5	7.7	7.5	7.7	7.4
26	7.3	7.3	7.7	7.6	---	---	7.9	7.2	7.7	7.5	7.5	7.4
27	7.4	7.3	7.6	7.1	7.7	7.3	7.5	7.1	7.7	7.5	7.5	7.4
28	7.5	7.4	7.2	7.1	7.8	7.3	7.6	7.3	7.7	7.5	7.5	7.4
29	7.5	7.5	7.4	7.1	7.8	7.3	7.3	7.0	7.7	7.5	7.5	7.4
30	7.6	7.2	7.5	7.3	7.7	7.3	7.5	7.0	7.6	7.4	7.5	7.4
31	---	---	7.6	7.5	---	---	7.6	7.3	7.6	7.5	---	---
MONTH	7.7	7.2	8.1	7.1	7.8	6.9	7.9	7.0	7.7	7.3	---	---

WHITE RIVER BASIN

07052160 WILSON CREEK NEAR BATTLEFIELD, MO.--Continued

DISSOLVED OXYGEN (MG/L), WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	---	---	2.3	1.3	5.2	3.8	4.0	3.3	7.7	0.9
2	---	---	---	---	2.0	0.8	6.1	4.4	4.6	3.8	8.1	2.2
3	---	---	---	---	1.9	0.9	7.4	2.1	5.4	4.6	2.2	1.2
4	---	---	---	---	3.4	1.7	---	---	5.5	4.7	3.6	1.4
5	---	---	---	---	3.2	2.5	5.2	4.8	5.5	4.7	4.1	2.0
6	---	---	---	---	3.7	2.2	5.5	4.8	5.2	2.9	7.5	1.1
7	---	---	---	---	4.7	3.4	5.7	5.1	9.7	0.4	7.2	5.6
8	---	---	---	---	3.7	2.2	5.9	5.4	8.4	4.5	6.3	4.5
9	---	---	---	---	2.9	2.1	5.5	4.6	5.3	4.0	5.0	3.8
10	---	---	---	---	3.9	2.2	4.6	3.7	4.4	3.6	9.1	3.6
11	---	---	---	---	4.5	3.2	4.0	3.3	4.3	3.5	10.4	7.2
12	---	---	---	---	---	---	3.9	2.1	5.1	4.3	10.3	5.9
13	---	---	---	---	---	---	---	---	4.7	1.9	5.8	4.2
14	---	---	---	---	---	---	---	---	2.1	1.5	5.3	3.6
15	---	---	---	---	---	---	---	---	3.3	1.7	4.2	2.5
16	---	---	---	---	---	---	4.3	3.0	4.1	2.6	---	---
17	---	---	---	---	---	---	3.2	1.8	3.6	1.8	---	---
18	---	---	---	---	---	---	9.0	0.5	3.4	2.4	---	---
19	---	---	---	---	---	---	9.1	7.0	3.8	1.9	---	---
20	---	---	---	---	---	---	8.0	6.4	2.9	1.9	3.8	2.6
21	---	---	5.1	4.1	3.7	3.3	11.1	7.2	3.0	2.9	3.4	1.7
22	---	---	4.7	3.6	4.7	3.0	11.3	9.6	---	---	1.7	0.8
23	---	---	4.2	3.7	3.5	2.6	9.6	7.7	---	---	5.3	1.0
24	---	---	5.9	4.2	3.2	2.7	8.0	6.8	---	---	8.0	1.1
25	---	---	5.3	4.6	3.9	2.7	7.2	5.2	---	---	8.2	7.5
26	---	---	5.7	5.3	5.1	3.9	5.2	4.3	---	---	8.1	6.5
27	---	---	5.8	4.9	5.1	3.0	4.4	4.0	---	---	6.5	4.0
28	---	---	4.7	3.3	3.7	2.5	7.2	4.3	3.0	2.3	5.3	2.8
29	---	---	3.5	2.4	3.2	1.7	8.6	6.6	---	---	5.8	2.9
30	---	---	2.6	1.7	2.8	1.2	6.6	3.6	---	---	4.9	3.4
31	---	---	---	---	4.2	2.3	3.9	3.4	---	---	9.5	5.2
MONTH	---	---	---	---	---	---	11.3	0.5	9.7	0.4	10.4	0.8

DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	9.0	8.1	3.7	0.0	1.4	0.1	6.0	0.8	5.9	1.4	4.0	0.8
2	8.9	5.9	2.2	2.0	2.0	0.0	5.6	4.5	6.6	1.3	4.7	0.8
3	6.3	4.9	3.1	0.1	5.8	0.0	5.5	3.2	4.9	0.9	4.0	0.8
4	5.2	4.6	0.3	0.1	4.3	1.9	3.4	2.4	4.4	0.9	3.3	1.1
5	4.9	3.1	0.2	0.1	5.4	0.0	2.7	1.4	3.6	0.9	2.3	1.1
6	3.6	1.8	1.6	0.1	2.6	0.8	2.1	0.8	4.0	0.9	---	---
7	1.9	1.4	9.8	0.1	1.8	0.4	1.7	0.7	3.6	0.7	---	---
8	6.0	1.2	4.1	2.1	2.1	0.3	2.2	0.7	3.3	0.6	---	---
9	6.4	5.1	3.2	1.4	1.5	0.1	3.4	1.2	2.6	0.6	---	---
10	5.9	3.4	2.4	0.3	1.2	0.0	2.7	1.2	2.2	0.6	---	---
11	3.7	1.6	4.4	0.2	2.5	0.3	2.0	0.5	2.8	0.6	---	---
12	1.9	1.0	1.6	0.5	2.3	0.7	1.8	0.3	2.2	0.7	---	---
13	1.2	0.9	2.0	0.4	3.0	0.0	2.6	0.4	3.2	1.0	---	---
14	2.0	0.9	2.4	0.3	5.2	2.2	3.2	0.1	3.0	1.1	---	---
15	2.7	1.4	1.7	0.3	4.0	0.0	3.6	1.8	5.0	1.4	---	---
16	4.7	1.1	1.3	0.2	2.0	0.0	3.8	0.8	4.2	1.3	---	---
17	2.9	0.6	1.0	0.2	3.3	1.0	3.0	0.8	4.0	1.2	3.1	1.2
18	0.7	0.2	1.2	0.2	4.0	0.0	3.3	0.9	5.0	1.0	5.2	1.7
19	2.7	0.1	1.4	0.1	4.4	0.0	3.2	0.3	5.2	1.0	5.1	1.3
20	3.0	1.2	---	---	2.4	0.0	3.0	0.1	3.6	0.7	3.4	1.0
21	2.3	1.3	---	---	4.0	0.1	2.7	0.1	2.8	0.6	4.0	0.8
22	9.2	1.9	1.4	0.2	4.4	0.6	2.8	0.1	2.5	0.5	3.2	0.8
23	10.0	8.0	3.1	0.0	3.5	0.5	2.8	0.4	1.7	0.4	3.7	0.8
24	8.9	6.3	0.6	0.0	4.1	0.8	3.2	0.0	4.8	0.4	1.8	0.8
25	6.5	5.5	1.3	0.0	4.3	0.2	2.5	0.4	3.7	0.7	3.5	0.9
26	5.7	3.6	0.4	0.1	3.3	0.2	2.3	0.3	3.3	0.6	3.6	1.2
27	4.5	2.5	3.9	0.1	3.5	0.4	2.9	0.6	2.9	0.6	2.8	1.3
28	3.4	1.2	2.7	0.9	3.1	0.4	2.7	0.9	2.5	0.5	3.6	1.2
29	1.8	0.7	1.8	0.0	3.4	0.6	3.2	1.5	4.0	0.5	2.9	1.2
30	2.7	0.4	---	---	3.7	1.0	3.5	1.5	3.4	0.8	3.6	1.2
31	---	---	---	---	---	---	4.9	1.8	3.6	0.8	---	---
MONTH	10.0	0.1	9.8	0.0	5.8	0.0	6.0	0.0	6.6	0.4	---	---

07052160 WILSON CREEK NEAR BATTLEFIELD, MO.--Continued

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	---	---	13.0	11.5	10.5	9.5	12.5	11.0	12.5	11.0
2	---	---	---	---	13.5	12.0	10.0	8.5	11.0	10.0	13.0	11.5
3	---	---	---	---	13.0	12.0	12.0	8.0	12.0	9.5	15.0	12.5
4	---	---	---	---	12.0	11.5	9.0	8.5	13.5	10.5	14.0	13.0
5	---	---	---	---	12.5	11.0	10.5	9.0	13.5	11.0	15.5	12.5
6	---	---	---	---	10.5	9.0	11.5	8.0	13.5	10.5	14.0	12.5
7	---	---	---	---	10.0	9.0	10.0	8.5	11.5	8.0	14.5	12.5
8	---	---	---	---	10.0	9.5	9.5	8.5	9.5	8.0	14.5	13.0
9	---	---	---	---	9.5	9.0	9.0	8.0	10.5	8.0	14.5	13.5
10	---	---	---	---	9.0	8.0	9.5	8.0	11.0	8.5	15.5	14.0
11	---	---	---	---	9.5	8.0	9.5	8.0	11.0	9.0	14.5	13.0
12	---	---	---	---	9.5	8.5	11.5	8.0	10.5	9.5	15.5	12.5
13	---	---	---	---	11.5	8.0	12.0	8.0	12.0	10.0	15.5	14.0
14	---	---	---	---	10.5	9.0	10.5	9.0	11.5	9.5	15.0	13.0
15	---	---	---	---	---	---	11.0	8.5	10.0	9.0	14.5	12.5
16	---	---	---	---	---	---	12.5	9.0	10.5	8.0	13.5	12.0
17	---	---	---	---	---	---	12.5	9.5	10.0	8.0	13.5	11.0
18	---	---	---	---	12.5	10.5	12.5	11.5	10.5	9.0	14.0	11.5
19	---	---	---	---	11.5	10.5	12.5	12.0	11.5	9.0	14.5	13.0
20	---	---	---	---	12.0	11.0	12.0	12.0	12.5	9.5	13.5	12.0
21	---	---	12.5	11.5	12.0	10.5	12.0	10.5	12.0	10.0	14.5	11.5
22	---	---	13.5	11.5	12.0	10.5	12.0	10.0	12.5	10.0	13.5	12.0
23	---	---	13.5	12.0	12.0	10.0	12.5	10.0	13.5	10.0	14.0	12.5
24	---	---	12.5	11.5	11.5	10.0	13.0	10.5	13.5	10.0	13.0	11.5
25	---	---	12.5	11.5	11.5	11.5	13.0	11.0	13.0	11.5	13.5	11.5
26	---	---	12.5	11.5	11.5	11.5	13.0	12.5	12.0	11.0	13.0	12.5
27	---	---	13.5	12.0	12.0	10.5	13.5	12.5	12.0	10.5	14.0	12.5
28	---	---	13.0	12.0	12.0	10.0	12.5	9.0	13.0	11.5	15.5	13.0
29	---	---	13.0	11.5	12.5	11.5	10.5	8.0	---	---	14.5	12.5
30	---	---	12.5	12.0	12.5	11.5	12.0	9.0	---	---	15.5	13.0
31	---	---	---	---	11.5	10.0	11.5	11.0	---	---	14.5	13.0
MONTH	---	---	---	---	13.5	8.0	13.5	8.0	13.5	8.0	15.5	11.0
DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	13.0	12.5	17.0	15.0	20.5	17.0	21.5	18.0	23.0	20.0	24.5	22.5
2	14.5	12.0	16.5	14.0	19.0	17.5	18.5	17.0	22.5	19.0	25.0	22.5
3	13.5	12.5	16.5	13.0	19.5	17.5	19.5	17.0	23.0	19.0	24.5	22.5
4	12.5	12.0	17.5	13.5	19.0	17.5	20.0	18.0	23.5	19.0	24.0	22.0
5	15.0	11.5	17.0	14.5	19.0	17.0	20.5	18.0	23.0	19.5	23.0	21.0
6	15.5	12.5	15.5	15.0	19.0	16.0	22.0	18.5	23.0	19.0	---	---
7	14.5	13.5	15.5	15.0	19.5	16.5	22.5	19.5	24.0	20.0	---	---
8	13.5	12.0	17.0	14.5	20.0	16.5	22.0	20.0	24.5	21.5	---	---
9	11.5	10.5	16.5	14.5	21.0	17.5	24.0	20.5	24.5	22.0	---	---
10	13.0	9.5	18.0	15.5	21.5	18.0	23.0	20.5	24.5	22.0	---	---
11	14.5	11.0	17.5	15.5	21.0	18.5	23.0	20.0	24.5	21.5	---	---
12	16.0	13.0	17.5	15.0	21.5	18.5	23.5	20.0	24.5	21.5	---	---
13	16.0	13.0	17.0	14.5	23.0	18.5	23.5	20.0	23.0	20.5	---	---
14	16.0	13.0	17.5	14.0	23.0	20.0	21.5	20.0	24.0	20.5	---	---
15	15.0	14.0	17.5	14.0	22.5	20.0	22.0	20.0	24.0	20.0	---	---
16	14.5	13.5	18.0	14.5	22.0	19.5	22.5	20.0	24.5	21.0	---	---
17	16.5	12.5	18.0	14.5	22.5	19.0	21.5	20.0	24.5	21.0	19.0	19.0
18	17.0	15.0	18.5	14.5	22.0	19.5	23.5	20.5	25.5	21.0	20.0	17.0
19	17.0	15.0	19.0	16.0	21.0	19.0	23.0	21.0	24.5	21.0	20.0	18.0
20	18.0	15.5	19.5	16.0	22.5	18.5	24.5	22.0	25.0	21.0	21.0	19.0
21	17.0	16.0	19.5	16.5	22.5	18.5	23.5	21.5	25.0	22.0	23.0	20.5
22	17.0	15.5	19.5	18.0	22.0	18.5	24.0	20.5	24.5	20.5	22.5	21.0
23	16.5	14.5	18.5	17.0	22.5	18.0	23.0	21.0	23.5	21.5	22.0	20.0
24	15.5	14.5	19.5	16.0	23.0	19.0	25.0	21.0	25.0	21.0	22.0	21.0
25	15.0	14.5	19.5	17.0	23.0	19.5	24.5	22.0	25.0	21.5	22.5	21.0
26	15.0	14.0	19.0	17.0	21.5	20.0	24.5	21.5	25.0	21.5	23.0	21.0
27	15.5	13.5	18.5	16.5	23.0	20.0	24.0	21.0	25.5	22.0	22.5	21.5
28	16.0	13.0	17.0	16.0	23.0	19.5	24.0	20.5	25.0	22.0	22.0	21.0
29	18.0	14.0	19.0	15.5	21.0	19.5	23.0	21.0	25.0	22.0	21.5	19.0
30	18.0	15.5	19.5	16.0	22.5	19.0	22.5	21.0	24.0	22.0	21.0	19.5
31	---	---	19.0	17.0	---	---	23.5	21.0	24.5	22.0	---	---
MONTH	18.0	9.5	19.5	13.0	23.0	16.0	25.0	17.0	25.5	19.0	---	---

WHITE RIVER BASIN

07052250 JAMES RIVER NEAR BOAZ, MO.

LOCATION.--Lat 37°00'25", long 93°21'50", Christian County, multi-parameter recorder at gaging station on left bank, 150 ft (46 m) downstream from Frazier bridge, 0.2 mi (0.3 km) upstream from Turkey Hollow, and 2 mi (3.2 km) southeast of Boaz.

DRAINAGE AREA.--462 mi² (1,196 km²).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT. 05...	228	8.7	20	20	68	5.4	12	3.1	220	0	16	16
NOV. 14...	5000	8.2	30	10	38	3.7	3.7	3.0	116	0	8.4	5.6
DEC. 11...	350	7.2	10	30	65	5.2	11	2.2	208	0	14	15
JAN. 15...	357	4.4	30	40	58	5.1	13	2.6	184	0	17	17
FEB. 12...	673	6.5	0	30	54	5.0	7.3	1.9	178	0	11	11
MAR. 13...	2250	9.7	10	60	49	4.3	4.5	1.8	156	0	11	6.8
APR. 16...	1020	6.7	10	60	51	4.4	6.1	2.3	162	0	10	9.2
MAY 15...	601	7.5	10	40	56	5.1	6.2	2.2	184	0	10	8.6
JUNE 11...	315	8.7	10	0	63	5.6	9.4	2.0	205	0	12	14
JULY 10...	244	10	130	90	73	4.4	16	3.1	224	0	18	20
AUG. 06...	89	1.6	30	100	68	6.2	24	3.4	228	0	17	29
SEP. 04...	75	11	60	130	72	5.9	38	6.0	228	0	23	44

DATE	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	ALKA- LINITY AS CaCO ₃ (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	COLOR (PLAT- INUM- COBALT UNITS)	TEMPER- ATURE (DEG C)	CHEM- ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)
OCT. 05...	190	12	180	385	7.6	10	18.0	28	4.3	45	460	600
NOV. 14...	110	15	95	234	7.4	50	11.0	0	8.8	80	3500	20000
DEC. 11...	180	13	171	415	7.4	3	4.5	4	10.3	79	2800	930
JAN. 15...	160	14	151	424	8.0	5	8.0	4	10.2	86	380	90
FEB. 12...	160	9	146	395	7.7	5	7.0	0	8.3	69	2000	560
MAR. 13...	140	12	128	305	7.5	10	13.5	7	8.6	82	4200	1500
APR. 16...	140	12	133	330	7.9	3	13.5	3	8.3	79	3200	670
MAY 15...	160	10	151	340	7.7	5	16.0	0	7.8	79	750	250
JUNE 11...	180	12	168	392	7.6	2	23.0	0	5.4	62	130	70
JULY 10...	200	16	184	465	7.7	2	21.5	10	4.6	52	3200	1400
AUG. 06...	200	13	187	555	7.9	4	23.0	22	5.8	67	60	100
SEP. 04...	200	13	187	618	7.6	5	25.0	16	3.5	42	890	2800

07052250 JAMES RIVER NEAR BOAZ, MO.--Continued

PERIOD OF RECORD.--Chemical analyses: August 1967 to September 1973.

REMARKS.--Recorder inoperative on many days during the year.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	DIS- SOL- VED- PHOS- PHORUS (P) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	SODIUM AD- SORP- TION RATIO	PERCENT SODIUM
OCT. 05...	.0	2.7	.34	.42	.67	.70	.09	239	.33	147	.4	12
NOV. 14...	.1	1.9	.23	.47	.11	.34	.05	141	.19	1900	.2	7
DEC. 11...	.0	2.5	.51	.14	.45	.46	.03	231	.31	218	.4	11
JAN. 15...	.2	2.1	.95	.19	.77	.81	.08	238	.32	229	.4	14
FEB. 12...	.0	1.4	.29	.10	.27	.30	.08	190	.26	345	.3	9
MAR. 13...	.0	2.2	.07	.48	.11	.17	.11	170	.23	1030	.2	6
APR. 16...	.0	2.2	.01	.00	.24	.31	.06	180	.24	496	.2	8
MAY 15...	.0	2.7	.27	.00	.20	.30	.05	194	.26	315	.2	8
JUNE 11...	.1	2.5	.01	.17	.67	.67	.08	249	.34	212	.3	10
JULY 10...	.2	3.7	.01	.35	1.0	1.1	--	310	.42	204	.5	15
AUG. 06...	.2	2.8	.01	.38	1.1	1.7	--	281	.38	67.5	.7	21
SEP. 04...	.2	3.0	.72	.21	2.6	2.7	--	339	.46	68.6	1.2	28

07052250 JAMES RIVER NEAR BOAZ, MO.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C), OCTOBER 1972 TO SEPTEMBER 1973

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	---	---	374	340	380	372	395	368	407	399
2	---	---	---	---	383	373	380	374	374	363	---	---
3	---	---	---	---	384	375	438	376	366	355	---	---
4	---	---	---	---	393	381	428	371	363	351	---	---
5	---	---	---	---	398	391	371	366	357	349	---	---
6	---	---	---	---	404	392	374	366	358	352	---	---
7	---	---	---	---	405	397	368	364	366	353	---	---
8	---	---	---	---	412	404	373	365	399	359	---	---
9	---	---	---	---	417	408	382	374	375	368	---	---
10	---	---	---	---	420	413	386	377	388	377	---	---
11	---	---	---	---	418	409	390	383	396	388	---	---
12	429	411	---	---	412	406	398	387	395	390	---	---
13	460	429	---	---	466	412	403	391	405	389	---	---
14	497	459	---	---	429	401	399	392	408	398	---	---
15	527	406	---	---	400	387	424	392	418	408	---	---
16	457	445	348	339	394	383	417	401	419	410	---	---
17	468	457	357	332	391	383	414	398	423	413	---	---
18	544	461	362	355	390	384	424	322	415	408	---	---
19	490	462	384	135	409	385	327	243	411	402	---	---
20	481	467	385	131	411	353	298	264	405	388	---	---
21	478	465	379	369	361	350	350	296	397	372	---	---
22	527	400	381	368	353	338	301	276	397	374	---	---
23	422	412	369	344	349	337	306	281	403	382	---	---
24	425	423	471	352	346	339	324	308	401	386	---	---
25	431	426	---	---	346	341	339	325	395	386	---	---
26	445	410	---	---	348	343	348	340	398	390	---	---
27	427	414	---	---	358	348	353	349	404	396	292	277
28	436	423	---	---	371	352	365	353	403	397	307	293
29	437	427	---	---	380	372	368	361	---	---	329	305
30	435	427	395	342	402	373	372	364	---	---	316	311
31	---	---	---	---	395	378	372	366	---	---	330	232
MONTH	---	---	---	---	466	337	438	243	423	349	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	272	224	354	348	394	380	---	---	500	481	---	---
2	296	274	384	338	406	380	---	---	498	493	---	---
3	310	297	349	339	414	320	---	---	516	508	---	---
4	317	311	354	343	363	340	---	---	533	524	---	---
5	313	302	355	347	418	356	---	---	545	534	---	---
6	313	306	370	351	385	374	---	---	553	546	---	---
7	320	312	349	120	387	379	---	---	554	543	---	---
8	325	320	221	120	395	384	---	---	570	543	---	---
9	359	314	274	225	406	381	---	---	571	565	---	---
10	316	301	299	275	401	381	---	---	578	563	---	---
11	313	301	325	296	400	390	---	---	562	540	---	---
12	323	314	319	311	409	397	---	---	539	365	---	---
13	332	324	336	322	411	395	---	---	581	282	---	---
14	339	332	352	339	474	352	---	---	358	316	---	---
15	345	339	364	335	385	347	---	---	---	---	---	---
16	385	331	347	339	347	335	---	---	---	---	---	---
17	355	345	355	342	352	337	---	---	---	---	---	---
18	362	351	390	346	362	350	442	428	---	---	554	549
19	366	357	397	385	380	363	459	443	---	---	605	550
20	---	---	394	380	415	378	488	461	---	---	611	603
21	---	---	396	385	---	---	469	434	---	---	634	604
22	---	---	403	378	---	---	480	463	---	---	795	638
23	---	---	399	366	---	---	477	464	---	---	---	---
24	---	---	393	355	---	---	475	462	---	---	---	---
25	---	---	392	363	---	---	547	476	---	---	---	---
26	---	---	372	360	---	---	504	436	---	---	518	430
27	326	316	401	360	---	---	472	455	---	---	474	451
28	337	327	378	364	---	---	483	464	---	---	514	462
29	342	335	370	365	---	---	483	477	---	---	595	465
30	348	338	379	368	---	---	486	473	---	---	498	464
31	---	---	390	373	---	---	475	458	---	---	---	---
MONTH	---	---	403	120	---	---	---	---	---	---	---	---

07052250 JAMES RIVER NEAR BOAZ, MO.--Continued

PH, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	---	---	7.9	7.7	8.1	7.6	8.0	7.6	8.2	7.6
2	---	---	---	---	7.9	7.8	8.1	7.6	8.0	7.5	---	---
3	---	---	---	---	7.8	7.7	7.9	7.5	7.8	7.6	---	---
4	---	---	---	---	7.9	7.8	7.8	7.5	7.8	7.4	---	---
5	---	---	---	---	7.9	7.8	7.8	7.6	7.6	7.4	---	---
6	---	---	---	---	8.0	7.8	8.1	7.6	7.7	7.5	---	---
7	---	---	---	---	8.2	7.5	8.0	7.6	8.3	7.7	---	---
8	---	---	---	---	7.5	7.3	8.1	7.6	8.0	7.7	---	---
9	---	---	---	---	7.4	7.2	8.1	7.6	8.2	7.9	---	---
10	---	---	---	---	7.6	7.3	8.1	7.6	8.2	7.9	---	---
11	---	---	---	---	7.4	7.3	8.1	7.6	8.2	7.9	---	---
12	7.9	7.2	---	---	7.5	7.3	8.2	7.7	7.9	7.7	---	---
13	7.6	7.4	---	---	7.6	7.3	8.2	7.6	7.7	7.6	---	---
14	7.6	7.5	---	---	7.6	7.3	8.2	7.6	7.6	7.4	---	---
15	7.6	7.5	---	---	7.7	7.4	8.1	7.6	8.1	7.6	---	---
16	7.6	7.6	7.9	7.6	7.7	7.3	8.1	7.7	8.2	7.7	---	---
17	7.7	7.6	7.9	7.4	7.8	7.4	7.9	7.6	8.3	7.8	---	---
18	7.7	7.5	7.5	7.3	7.9	7.4	8.3	7.4	8.2	7.8	---	---
19	7.6	7.5	---	---	7.6	7.5	7.5	7.2	8.2	7.6	---	---
20	7.7	7.6	---	---	7.8	7.6	7.4	7.4	8.3	7.5	---	---
21	7.6	7.6	---	---	7.9	7.8	7.4	7.3	8.5	7.9	---	---
22	8.1	7.5	8.0	7.6	8.1	7.8	7.5	7.3	8.5	7.9	---	---
23	7.6	7.5	7.7	7.6	8.1	7.8	7.5	7.4	8.4	7.9	---	---
24	7.6	7.5	7.6	7.6	7.9	7.8	7.5	7.4	8.4	7.8	---	---
25	7.6	7.5	7.6	7.6	8.2	7.8	7.6	7.5	8.1	7.7	---	---
26	7.7	7.6	7.9	7.6	8.2	7.8	7.5	7.4	7.9	7.6	---	---
27	7.7	7.6	7.8	7.6	8.3	7.8	7.6	7.4	8.2	7.6	7.9	7.8
28	7.6	7.6	7.6	7.4	8.1	7.7	7.7	7.6	8.1	7.6	7.9	7.7
29	7.6	7.6	7.8	7.6	7.9	7.6	7.7	7.6	---	---	7.9	7.5
30	7.6	7.5	7.8	7.5	7.8	7.5	7.7	7.6	---	---	7.7	7.5
31	---	---	---	---	7.9	7.5	7.7	7.5	---	---	7.7	7.4
MONTH	---	---	---	---	8.3	7.2	8.3	7.2	8.5	7.4	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.6	7.6	---	---	---	---	---	---	7.9	7.7	---	---
2	7.7	7.6	---	---	---	---	---	---	7.9	7.7	---	---
3	7.7	7.7	8.1	7.7	---	---	---	---	7.9	7.7	---	---
4	7.8	7.7	8.1	7.9	---	---	---	---	7.9	7.7	---	---
5	7.9	7.7	8.3	7.9	---	---	---	---	7.9	7.6	---	---
6	7.9	7.8	8.1	7.7	7.5	7.3	---	---	8.2	7.7	---	---
7	8.0	7.8	7.8	7.4	7.6	7.4	---	---	8.2	7.8	---	---
8	7.9	7.8	8.2	7.3	7.6	7.4	---	---	8.0	7.7	---	---
9	7.9	7.7	7.9	7.2	7.5	7.3	---	---	7.9	7.6	---	---
10	7.9	7.7	7.7	7.0	7.6	7.4	---	---	8.0	7.6	---	---
11	8.1	7.9	7.7	7.0	7.7	7.4	---	---	---	---	---	---
12	8.2	7.8	7.7	6.8	7.5	7.4	---	---	---	---	---	---
13	8.2	7.8	7.6	7.0	7.5	7.3	---	---	---	---	---	---
14	8.3	7.8	8.0	7.2	8.0	7.2	---	---	---	---	---	---
15	8.1	7.9	7.8	7.4	7.6	7.3	---	---	---	---	---	---
16	8.0	7.7	8.0	7.4	7.4	7.3	---	---	---	---	---	---
17	8.1	7.7	8.0	7.5	7.4	7.1	---	---	---	---	---	---
18	8.0	7.7	8.3	7.5	7.5	7.2	8.1	7.8	---	---	7.6	7.5
19	7.9	7.7	8.1	7.6	7.5	7.3	8.1	7.7	---	---	7.6	7.5
20	---	---	8.4	7.6	7.6	7.2	8.0	7.7	---	---	7.7	7.5
21	---	---	8.3	7.6	7.6	7.3	7.9	7.6	---	---	7.6	7.4
22	---	---	7.9	7.6	7.6	7.3	7.7	7.5	---	---	---	---
23	---	---	7.9	7.6	7.6	7.3	7.7	7.5	---	---	---	---
24	---	---	7.8	7.4	7.6	7.3	7.7	7.5	---	---	---	---
25	---	---	---	---	7.7	7.5	7.7	7.5	---	---	7.5	7.3
26	---	---	---	---	7.7	7.6	8.0	7.5	---	---	7.5	7.4
27	---	---	---	---	7.7	7.5	7.8	7.6	---	---	7.6	7.4
28	---	---	---	---	7.7	7.4	7.9	7.6	---	---	7.7	7.5
29	---	---	---	---	7.6	7.4	7.8	7.6	---	---	7.7	7.5
30	---	---	---	---	7.7	7.4	7.8	7.6	---	---	7.7	7.6
31	---	---	---	---	---	---	8.0	7.6	---	---	---	---
MONTH	---	---	---	---	8.0	7.1	---	---	---	---	---	---

07052250 JAMES RIVER NEAR BOAZ, MO.--Continued

DISSOLVED OXYGEN (MG/L), WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	---	---	11.1	9.1	10.9	8.4	8.4	8.0	10.5	6.8
2	---	---	---	---	11.0	9.4	11.0	8.6	8.4	7.7	---	---
3	---	---	---	---	10.0	8.9	9.8	7.0	8.8	8.2	---	---
4	---	---	---	---	10.3	9.3	8.9	7.2	8.9	8.1	---	---
5	---	---	---	---	9.9	9.2	9.1	8.4	9.0	8.2	---	---
6	---	---	---	---	11.2	9.2	10.2	8.4	9.2	8.4	---	---
7	---	---	---	---	11.3	9.8	10.2	8.7	9.1	8.7	---	---
8	---	---	---	---	10.0	8.8	10.4	8.8	9.3	7.5	---	---
9	---	---	---	---	10.1	8.5	10.6	8.6	11.0	9.0	---	---
10	---	---	---	---	11.7	8.9	10.5	8.4	11.6	8.6	---	---
11	---	---	---	---	10.6	9.4	10.5	8.2	11.2	7.6	---	---
12	4.7	3.7	---	---	9.7	8.2	10.7	8.5	10.7	6.8	---	---
13	4.0	3.1	---	---	10.2	7.4	10.3	8.1	8.5	6.7	---	---
14	3.6	2.9	---	---	9.1	7.7	10.3	7.9	9.0	6.7	---	---
15	3.3	2.4	---	---	9.3	7.4	10.2	8.1	7.8	7.6	---	---
16	5.3	2.6	---	---	9.8	7.9	11.4	8.8	10.2	7.9	---	---
17	5.3	3.9	---	---	9.6	7.6	9.0	7.7	10.7	8.0	---	---
18	5.1	4.3	---	---	10.0	7.9	8.1	6.2	10.6	8.0	---	---
19	6.7	5.3	---	---	10.1	9.0	8.8	7.9	10.8	8.0	---	---
20	7.2	6.3	---	---	10.3	8.9	8.4	7.8	11.0	7.9	---	---
21	6.6	6.1	8.7	8.3	9.8	8.9	7.9	7.4	12.3	5.9	---	---
22	7.1	5.0	8.5	8.0	10.6	9.0	8.1	7.6	12.2	6.2	---	---
23	7.9	7.0	8.5	8.1	10.6	8.8	8.1	7.7	12.4	7.2	---	---
24	7.7	7.4	8.8	8.3	9.5	8.3	8.0	7.5	12.3	6.9	---	---
25	8.3	7.0	8.3	8.2	10.7	8.7	8.0	7.4	11.4	7.1	---	---
26	---	---	9.0	8.3	10.8	8.7	7.7	7.3	10.4	7.3	---	---
27	---	---	9.6	8.8	11.3	9.2	7.6	7.3	11.8	7.5	9.3	8.9
28	---	---	10.1	9.2	0.0	9.1	8.0	7.5	12.2	7.3	9.1	8.4
29	---	---	10.6	9.6	0.0	7.6	8.6	8.1	---	---	8.7	7.8
30	---	---	10.0	9.2	9.1	7.0	8.8	8.1	---	---	8.8	8.2
31	---	---	---	---	10.1	7.6	8.5	8.0	---	---	9.3	7.5
MONTH	---	---	---	---	11.7	7.0	11.4	6.2	12.4	5.9	---	---

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	9.3	9.2	7.3	6.6	7.2	3.7	---	---	---	---	---	---
2	9.4	8.8	8.1	5.3	5.1	3.7	---	---	---	---	---	---
3	9.1	8.7	9.2	7.2	5.2	3.5	---	---	---	---	---	---
4	9.3	8.7	9.2	6.7	5.9	4.5	---	---	---	---	---	---
5	9.5	8.6	9.2	6.3	5.2	4.0	---	---	---	---	---	---
6	8.9	7.9	7.4	6.1	6.2	4.5	---	---	---	---	---	---
7	8.2	7.8	8.3	4.9	6.4	4.6	---	---	---	---	---	---
8	8.0	7.6	8.5	7.7	7.4	4.3	---	---	---	---	---	---
9	8.6	6.9	7.7	7.1	6.4	5.1	---	---	---	---	---	---
10	10.1	8.5	8.0	7.1	6.1	3.9	---	---	---	---	---	---
11	10.3	9.0	7.7	6.7	6.4	3.8	---	---	---	---	---	---
12	10.0	8.4	7.5	6.7	5.5	3.6	---	---	---	---	---	---
13	10.1	8.1	7.7	6.4	5.9	3.6	---	---	---	---	---	---
14	9.3	7.7	9.4	6.4	4.6	3.6	---	---	---	---	---	---
15	8.6	7.5	9.3	7.4	5.0	3.7	---	---	---	---	---	---
16	8.9	7.7	9.7	6.8	4.7	3.3	---	---	---	---	---	---
17	10.7	7.7	10.6	6.5	5.1	3.4	---	---	---	---	---	---
18	10.1	6.8	10.4	6.2	4.7	3.1	---	---	---	---	5.1	4.1
19	9.3	6.6	10.8	5.5	3.6	2.7	---	---	---	---	4.9	3.8
20	---	---	11.5	5.4	4.8	3.0	---	---	---	---	4.1	2.8
21	---	---	10.6	4.4	---	---	---	---	---	---	3.7	2.6
22	---	---	9.8	4.2	---	---	---	---	---	---	5.6	3.1
23	6.1	---	6.1	3.5	---	---	---	---	---	---	---	---
24	---	---	7.7	3.6	---	---	---	---	---	---	---	---
25	---	---	7.3	3.6	---	---	---	---	---	---	---	---
26	---	---	6.4	3.8	---	---	---	---	---	---	4.6	3.7
27	8.3	7.8	6.1	3.8	---	---	---	---	---	---	4.1	3.6
28	8.4	7.3	6.0	3.9	---	---	---	---	---	---	4.4	3.4
29	8.3	7.2	7.4	4.3	---	---	---	---	---	---	3.9	3.2
30	7.8	6.9	6.7	3.8	---	---	---	---	---	---	3.5	3.1
31	---	---	6.1	3.6	---	---	---	---	---	---	---	---
MONTH	10.7	---	11.5	3.5	---	---	---	---	---	---	---	---

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	12.0	11.0	17.5	16.5	22.0	19.5	---	---	26.0	22.5	---	---
2	13.0	10.5	16.5	15.0	21.0	19.5	---	---	24.5	21.5	---	---
3	12.0	11.5	17.5	14.0	20.5	18.5	---	---	25.0	21.0	---	---
4	11.5	10.5	18.0	14.5	21.0	19.0	---	---	25.5	21.0	---	---
5	12.5	10.0	18.0	16.0	20.5	19.0	---	---	25.5	22.0	---	---
6	13.5	10.0	17.0	16.5	21.5	18.0	---	---	25.5	21.5	---	---
7	13.5	12.0	17.5	15.0	22.5	19.0	---	---	26.5	22.5	---	---
8	13.0	12.0	16.0	14.0	23.0	19.5	---	---	28.0	24.0	---	---
9	12.0	9.5	17.0	15.0	23.5	20.5	---	---	27.5	25.0	---	---
10	10.5	8.0	18.5	16.0	24.5	21.5	---	---	27.0	25.0	---	---
11	11.5	8.5	18.5	17.0	24.5	22.0	---	---	25.0	22.5	---	---
12	14.0	10.5	19.0	16.5	23.5	22.5	---	---	23.5	18.0	---	---
13	15.0	11.5	18.5	16.0	24.0	22.0	---	---	26.0	18.5	---	---
14	15.0	13.0	18.5	15.5	25.5	22.0	---	---	24.5	22.5	---	---
15	15.0	14.0	18.5	15.5	27.5	25.5	---	---	---	---	---	---
16	14.5	13.5	19.0	16.0	26.5	24.5	---	---	---	---	---	---
17	16.5	12.5	19.0	16.0	27.0	24.0	---	---	---	---	---	---
18	17.0	15.5	19.5	16.5	26.5	24.5	25.5	24.0	---	---	19.0	17.0
19	17.0	15.5	21.0	18.5	25.5	22.5	26.5	23.0	---	---	17.5	16.5
20	---	---	21.5	18.5	25.0	21.0	28.0	23.5	---	---	19.5	17.5
21	---	---	21.5	19.5	---	---	27.0	24.5	---	---	23.5	20.0
22	---	---	22.0	20.0	---	---	27.0	23.0	---	---	---	---
23	---	---	21.5	19.5	---	---	26.0	24.0	---	---	---	---
24	---	---	22.0	18.5	---	---	27.5	23.5	---	---	---	---
25	---	---	22.5	20.0	---	---	27.0	24.0	---	---	---	---
26	---	---	21.0	20.0	---	---	28.5	23.5	---	---	22.5	20.5
27	15.5	14.0	21.0	20.0	---	---	28.5	24.0	---	---	21.5	21.0
28	16.0	13.0	19.5	18.0	---	---	28.5	24.0	---	---	21.0	20.0
29	17.0	14.0	21.0	17.0	---	---	26.5	24.5	---	---	20.5	19.0
30	17.0	16.0	21.5	18.5	---	---	26.5	24.5	---	---	20.0	19.0
31	---	---	21.0	19.5	---	---	27.0	24.0	---	---	---	---
MONTH	---	---	22.5	14.0	---	---	---	---	---	---	---	---

WHITE RIVER BASIN

07052340 FINLEY CREEK AT RIVERDALE, MO.

LOCATION.--Lat 36°59'10", long 93°17'40", Christian County, at bridge on U.S. Highway 160, 1 mile (1.6 km) southwest of Riverdale, and 0.2 mi (0.3 km) downstream from Hog Creek.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT. 05...	40	9.7	30	0	58	7.9	4.6	2.0	208	0	9.3	7.3
NOV. 14...	1640	8.6	180	0	35	5.5	2.9	2.6	118	0	8.0	5.8
DEC. 11...	127	7.0	10	10	55	6.0	4.2	1.5	182	0	6.8	7.3
JAN. 17...	168	5.6	20	10	49	6.4	4.0	1.4	178	0	7.6	6.2
FEB. 12...	320	7.0	0	10	46	5.6	3.8	1.5	160	0	8.0	6.0
MAR. 13...	700	8.7	10	40	39	5.4	3.0	1.8	126	0	8.4	4.5
APR. 16...	190	6.7	20	20	41	5.8	3.4	1.6	144	0	7.6	5.2
MAY 14...	295	7.8	10	20	44	6.0	3.2	1.8	154	0	5.2	5.0
JUNE 11...	219	7.4	40	20	46	6.8	3.2	1.4	174	0	6.3	6.7
JULY 10...	120	10	130	50	57	6.8	3.8	2.2	194	0	6.7	6.9
AUG. 06...	55	10	20	60	54	7.6	3.8	1.7	192	0	5.7	6.9
SEP. 04...	30	11	30	30	60	7.0	4.4	1.9	204	0	5.8	9.0

DATE	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	ALKA- LINITY AS CACO ₃ (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	COLOR (PLAT- INUM- COBALT UNITS)	TEMPER- ATURE (DEG C)	CHEM- ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)
OCT. 05...	180	6	171	365	7.7	5	18.5	12	8.1	85	25	260
NOV. 14...	110	14	97	221	7.5	2	11.0	0	9.6	87	400	7500
DEC. 11...	160	12	149	328	7.8	2	4.0	0	10.6	81	270	180
JAN. 17...	150	2	146	321	7.8	5	8.0	0	10.4	87	280	56
FEB. 12...	140	7	131	295	7.7	3	7.0	0	10.8	89	120	54
MAR. 13...	120	16	103	250	7.6	5	12.5	0	9.6	90	460	1000
APR. 16...	130	8	118	270	8.0	2	13.0	0	10.5	99	180	54
MAY 14...	130	8	126	275	7.9	5	16.0	0	9.8	99	74	80
JUNE 11...	140	0	143	317	7.8	1	20.5	0	7.7	86	300	130
JULY 10...	170	11	159	350	7.8	1	21.5	2	6.0	67	350	840
AUG. 06...	170	12	157	355	8.1	3	22.5	4	9.2	105	100	130
SEP. 04...	180	13	167	405	7.9	2	24.0	10	7.0	82	120	140

07052340 FINLEY CREEK AT RIVERDALE, MO.--Continued

PERIOD OF RECORD.--Chemical analyses: August 1967 to September 1973.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	DIS- SOL- VED- PHOS- PHORUS (P) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	SODIUM AD- SORP- TION RATIO	PERCENT SODIUM
OCT.												
05...	.2	1.4	.00	.11	.13	.13	.05	197	.27	21.3	.2	5
NOV.												
14...	.1	1.6	.00	.06	.03	.04	.04	138	.19	611	.1	5
DEC.												
11...	.0	2.7	.00	.14	.04	.05	.04	177	.24	60.7	.1	5
JAN.												
17...	.0	.86	.00	.01	.00	.01	.03	170	.23	77.1	.1	5
FEB.												
12...	.1	1.1	.00	.20	.02	.03	.04	156	.21	135	.1	6
MAR.												
13...	.0	2.2	.03	.06	.05	.05	.07	140	.19	265	.1	5
APR.												
16...	.1	2.2	.00	.04	.00	.02	.04	142	.19	72.8	.1	5
MAY												
14...	.0	2.0	.04	.00	.00	.03	.04	150	.20	119	.1	5
JUNE												
11...	.3	1.3	.01	.11	.04	.04	.08	183	.25	108	.1	5
JULY												
10...	.0	1.7	.01	.39	.03	.08	--	228	.31	73.9	.1	5
AUG.												
06...	.0	1.1	.07	.08	.01	.04	--	193	.26	28.7	.1	5
SEP.												
04...	.0	1.0	.13	.10	.06	.06	--	221	.30	17.9	.1	5

WHITE RIVER BASIN

07063050 BLACK RIVER BELOW POPLAR BLUFF, MO.

LOCATION.--Lat 36°38'49", long 90°18'01", Butler County, at bridge on county road 1.5 mi (2.4 km) upstream from State Highway 53, and 10 mi (16.1 km) southeast of Poplar Bluff.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
NOV. 21...	2600	7.3	70	60	18	7.6	2.4	1.7	84	0	9.6	2.8
JAN. 04...	3240	6.1	90	40	14	8.5	2.1	1.4	74	0	12	2.6
MAR. 20...	3470	6.6	180	40	13	6.7	2.2	1.0	72	0	8.0	1.1
MAY 22...	3220	6.3	70	50	14	6.9	1.5	1.3	70	0	7.6	1.5
JULY 17...	2000	6.3	90	40	20	11	2.1	1.3	108	0	8.6	2.2
SEP. 11...	604	7.5	60	40	25	14	2.3	1.3	144	0	6.5	2.8

DATE	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	ALKA- LINITAS AS CaCO ₃ (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	COLOR (PLAT- INUM- COBALT UNITS)	TEMPER- ATURE (DEG C)	CHEM- ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)
NOV. 21...	76	7	69	167	7.8	20	9.0	1	9.2	79	90	160
JAN. 04...	70	10	61	145	7.6	30	6.0	1	8.8	71	530	2200
MAR. 20...	60	1	59	133	7.6	40	12.0	2	8.0	74	260	440
MAY 22...	64	6	57	136	7.7	5	18.0	2	5.0	52	180	96
JULY 17...	95	6	89	210	7.6	2	24.0	16	6.7	79	370	88
SEP. 11...	120	2	118	260	7.9	3	23.5	3	7.4	86	2200	1900

07063050 BLACK RIVER BELOW POPLAR BLUFF, MO.--Continued

PERIOD OF RECORD.--Chemical analyses: July 1969 to September 1973.

REMARKS.--Records of discharge are given for gaging station Black River at Poplar Bluff.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	DIS- SOL- VED- PHOS- PHORUS (P) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	SODIUM AD- SORP- TION RATIO	PERCENT SODIUM
NOV. 21...	.0	.18	.03	.13	.19	.34	.03	86	.12	604	.1	6
JAN. 04...	.4	.07	.04	.25	.02	.13	.02	80	.11	700	.1	6
MAR. 20...	.0	.22	.01	.20	.01	.11	.02	80	.11	750	.1	7
MAY 22...	.0	.20	.11	.03	.01	.07	.02	70	.10	609	.1	5
JULY 17...	.0	.16	.01	.22	.01	.06	--	123	.17	664	.1	5
SEP. 11...	.0	.21	.01	.03	.03	.06	--	132	.18	215	.1	4

07063300 MAIN DITCH NEAR NEELYVILLE, MO.

LOCATION.--Lat 36°33'18", long 90°26'53", Butler County, at bridge on State Highway 142, 4 mi (6.4 km) east of Neelyville.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
NOV. 21...	48	8.8	170	430	20	6.2	6.4	4.8	86	0	12	8.1
JAN. 03...	234	7.8	200	390	16	8.3	6.4	4.2	88	0	9.6	9.6
MAR. 20...	435	3.3	370	160	8.5	3.7	3.3	3.1	46	0	5.6	4.2
MAY 22...	--	20	60	1300	41	14	11	2.0	204	0	5.6	9.7
JULY 17...	3.2	18	40	1200	40	13	12	2.7	204	0	9.1	12
SEP. 11...	20	14	80	560	19	7.0	6.1	5.1	90	0	7.6	8.0

DATE	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	ALKA- LINITY AS CACO ₃ (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	COLOR (PLAT- INUM- COBALT UNITS)	TEMPER- ATURE (DEG C)	CHEM- ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)
NOV. 21...	76	5	70	184	7.4	30	6.5	19	6.8	55	850	1500
JAN. 03...	74	2	72	179	7.2	150	5.5	26	9.3	74	1200	18000
MAR. 20...	36	0	38	92	7.2	250	12.0	47	5.6	52	3800	33000
MAY 22...	160	0	167	358	8.1	2	23.0	12	8.3	95	100	190
JULY 17...	150	0	167	388	7.7	3	25.0	20	6.8	82	75	60
SEP. 11...	76	2	74	200	7.5	100	23.5	24	5.4	63	2500	6300

07063300 MAIN DITCH NEAR NEELYVILLE, MO.--Continued

PERIOD OF RECORD.--Chemical analyses: July 1969 to September 1973.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	DIS- SOL- VED- PHOS- PHORUS (P) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	SODIUM AD- SORP- TION RATIO	PERCENT SODIUM
NOV. 21...	.0	.99	.13	.63	.28	.47	.13	107	.15	13.9	.3	15
JAN. 03...	.3	.36	.38	1.1	.14	.63	.03	107	.15	67.6	.3	15
MAR. 20...	.2	1.0	.36	1.3	.12	.69	.01	70	.10	82.2	.2	15
MAY 22...	.2	.02	.01	.32	.02	.18	.08	209	.28	--	.4	13
JULY 17...	.2	.08	.11	.69	.05	.19	--	220	.30	1.90	.4	14
SEP. 11...	.1	.49	.07	.36	.10	.43	--	127	.17	6.86	.3	14

07068000 CURRENT RIVER AT DONIPHAN, MO.

LOCATION.--Lat 36°37'19", long 90°50'51", in NW¼NW¼ sec.27, T.23 N., R.2 E., Ripley County, temperature recorder at gaging station on right bank 0.5 mi (0.8 km) upstream from U.S. Highway 160, 1 mi (1.6 km) west of Doniphan, 2.5 mi (4.0 km) upstream from Brian Creek, and at mile 51.3 (82.5 km).

DRAINAGE AREA.--2,038 mi² (5,278 km²).

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CONTINUOUS ETHYL-ALCOHOL-ACTUATED THERMOGRAPH)

	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	17.0	16.0	14.0	13.5	8.5	8.5	9.0	8.5	9.0	8.0	9.5	9.0
2	18.0	16.5	14.0	13.5	8.5	8.5	8.5	8.0	9.0	9.0	10.0	9.5
3	18.0	16.5	13.5	13.0	9.0	8.5	8.0	8.0	9.0	8.5	10.5	10.0
4	19.0	16.5	13.0	12.0	9.0	9.0	8.5	8.0	8.5	8.0	10.5	10.5
5	18.5	18.0	12.0	11.5	9.0	9.0	8.5	8.5	9.0	8.0	11.5	10.5
6	19.0	18.5	11.5	11.0	9.0	7.0	8.5	8.0	9.0	9.0	11.5	11.0
7	19.0	18.5	11.0	11.0	7.0	6.5	8.0	7.0	9.0	9.0	11.0	10.5
8	18.5	16.5	11.0	11.0	6.5	6.5	7.0	7.0	9.0	8.0	11.5	11.0
9	18.0	16.5	11.0	10.5	6.5	6.5	7.0	7.0	8.0	6.5	11.5	11.5
10	18.0	16.0	10.5	10.5	6.5	6.5	7.0	6.5	6.5	6.5	11.5	11.5
11	18.0	16.0	10.5	10.5	6.5	6.5	8.0	6.5	6.5	6.5	12.0	11.5
12	18.0	17.0	11.0	10.5	6.5	6.5	6.5	6.5	6.5	6.5	12.0	11.5
13	18.0	18.0	11.0	11.0	6.5	6.5	6.5	6.5	7.0	6.5	12.0	12.0
14	18.0	17.0	11.0	10.0	6.5	6.5	7.0	6.5	7.0	7.0	13.0	12.0
15	17.0	16.0	10.0	9.5	6.5	6.5	8.0	7.0	7.0	7.0	13.0	13.0
16	17.0	16.0	9.5	9.5	6.5	6.5	8.5	8.0	7.0	7.0	13.0	11.5
17	17.0	16.5	9.5	9.5	6.5	6.0	9.0	8.5	7.0	6.5	12.0	11.0
18	16.5	14.5	9.5	9.5	6.0	6.0	9.5	9.0	6.5	6.5	11.0	10.5
19	14.5	13.5	9.5	9.0	7.0	6.0	9.5	9.5	7.0	6.5	11.5	10.5
20	13.5	13.0	9.0	9.0	8.0	7.0	9.5	9.5	8.5	7.0	12.0	11.5
21	13.5	13.0	9.0	9.0	8.0	8.0	9.5	9.0	9.0	8.0	11.5	11.0
22	13.5	13.5	9.0	9.0	8.0	8.0	9.0	8.5	9.0	8.0	11.0	10.5
23	14.0	13.5	9.0	8.5	8.0	8.0	8.5	8.0	9.0	8.5	11.0	10.5
24	14.0	13.5	8.5	8.5	8.0	8.0	8.0	7.0	9.0	9.0	11.0	11.0
25	13.5	13.0	8.5	8.5	8.0	8.0	7.0	7.0	9.5	9.0	11.0	11.0
26	13.0	12.0	8.5	8.5	8.0	8.0	8.0	7.0	9.5	9.5	11.0	11.0
27	12.0	12.0	8.5	8.5	8.0	7.0	9.0	8.0	10.0	9.5	11.0	11.0
28	13.0	12.0	9.0	8.5	8.0	7.0	9.0	8.5	9.5	9.0	11.0	11.0
29	13.0	13.0	9.0	8.5	9.0	8.0	8.5	8.0	---	---	12.0	11.0
30	13.0	13.0	8.5	8.5	9.5	9.0	8.0	7.0	---	---	12.0	12.0
31	14.5	13.0	---	---	9.5	8.5	8.0	7.0	---	---	13.0	12.0
MONTH	19.0	12.0	14.0	8.5	9.5	6.0	9.5	6.5	10.0	6.5	13.0	9.0

07068000 CURRENT RIVER AT DONIPHAN, MO.--Continued

PERIOD OF RECORD.--Water temperature: March 1965 to September 1973.

EXTREMES, 1972-73.--Water temperatures: Maximum, 24.0°C July 23, 24; minimum, 6.0°C Dec. 17, 18, 19.

EXTREMES, 1965-73.--Water temperatures: Maximum 27°C on several days during summer months in 1967, 1968, 1969; minimum, 2.5°C Jan. 9, 10, 1970.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973
(CONTINUOUS ETHYL-ALCOHOL-ACTUATED THERMOGRAPH)

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	13.0	11.5	13.0	13.0	18.0	16.5	23.5	22.0	22.0	21.0	22.0	21.5
2	11.5	10.5	13.5	13.0	18.0	18.0	22.0	21.5	21.5	20.0	22.0	21.5
3	11.0	11.0	13.5	13.0	18.5	18.0	23.5	23.0	20.5	20.0	21.5	20.5
4	11.0	10.0	13.5	13.0	18.5	18.5	23.5	23.0	20.5	20.0	20.5	20.5
5	10.0	9.5	13.5	13.5	18.5	18.5	23.0	22.0	20.5	20.0	20.5	20.0
6	11.0	10.0	13.5	13.5	18.5	18.0	23.0	22.0	20.5	20.0	20.0	19.5
7	11.0	11.0	13.5	13.0	18.5	18.0	23.0	22.0	21.0	20.0	19.5	19.0
8	11.0	10.5	13.5	13.5	18.5	18.0	22.0	21.5	22.0	21.0	19.0	19.0
9	10.5	9.0	13.5	13.0	19.0	18.5	21.5	21.0	22.0	21.0	19.5	19.0
10	9.0	8.5	13.5	13.0	20.0	19.0	21.5	21.0	21.5	21.0	19.5	19.5
11	9.0	8.0	13.5	13.5	20.0	19.5	21.5	21.0	21.5	20.5	19.5	19.5
12	10.0	9.0	14.0	13.5	20.0	19.5	22.0	21.5	21.5	20.5	21.0	20.0
13	10.5	10.0	14.0	13.5	19.5	19.0	22.0	21.5	21.5	21.0	21.0	20.0
14	10.0	10.0	14.0	13.5	19.5	19.0	23.0	22.0	21.0	20.0	20.0	20.0
15	10.5	10.0	13.5	12.0	19.5	19.0	23.0	20.5	21.0	20.0	20.0	19.0
16	11.0	10.5	14.0	13.5	20.0	19.5	21.0	20.5	21.0	20.5	19.5	19.0
17	11.0	11.0	14.0	13.5	21.0	20.0	21.0	19.5	21.0	20.5	19.5	18.5
18	11.0	11.0	14.0	13.5	21.5	20.5	21.5	21.0	21.5	20.5	18.5	16.5
19	11.0	11.0	14.0	14.0	21.5	20.5	21.5	21.5	23.0	21.5	16.5	15.5
20	11.0	11.0	15.5	14.5	20.5	20.0	23.0	22.0	23.5	22.0	16.0	16.0
21	11.0	11.0	16.0	15.5	20.5	19.5	23.5	23.0	23.5	22.0	18.0	16.0
22	13.0	11.0	16.0	16.0	20.0	19.5	23.5	23.0	23.0	21.5	18.5	18.0
23	13.5	13.0	16.0	15.5	20.0	19.5	24.0	23.5	22.0	20.5	19.0	18.5
24	13.5	13.0	16.5	15.5	21.0	20.0	24.0	23.5	21.5	21.0	19.5	19.0
25	13.0	12.0	17.0	16.5	21.5	20.5	23.5	22.0	23.0	21.0	19.5	18.5
26	12.0	11.0	17.0	17.0	21.5	21.0	22.0	21.0	23.0	22.0	19.5	19.0
27	11.0	11.0	17.0	17.0	22.0	21.5	22.0	21.0	23.0	22.0	19.0	19.0
28	11.0	11.0	18.0	17.0	22.0	21.5	22.0	21.5	23.0	22.0	19.0	19.0
29	12.0	11.0	17.0	16.5	21.5	21.0	22.0	21.5	23.0	21.5	19.0	19.0
30	13.0	12.0	18.0	17.0	21.0	20.5	22.0	22.0	21.5	20.5	19.0	18.5
31	---	---	18.0	17.0	---	---	22.0	21.5	22.0	21.0	---	---
MONTH	13.5	8.0	18.0	12.0	22.0	16.5	24.0	19.5	23.5	20.0	22.0	15.5

WHITE RIVER BASIN

07068050 CURRENT RIVER BELOW DONIPHAN, MO.

LOCATION.--Lat 36°34'24", long 90°51'30", Ripley County, from right bank off County Highway A, 2.6 mi (4.2 km) south of junction of County Highway A and State Highway 21, 3.8 mi (6.1 km) southeast of Doniphan, and 5.2 mi (8.4 km) downstream from gage.

DRAINAGE AREA.--2,038 mi² (5,278 km²), at gaging station.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
NOV. 20...	4140	7.6	40	30	30	12	1.9	1.1	148	0	7.2	2.1
JAN. 03...	6660	7.4	30	30	24	13	1.4	1.1	136	0	6.0	1.7
MAR. 19...	6180	7.5	20	50	24	13	1.9	1.0	136	0	7.2	.6
MAY 21...	4440	6.9	50	10	27	15	1.5	.9	156	0	4.2	2.0
JULY 16...	2270	8.5	260	10	34	20	1.9	.9	200	0	7.1	2.6
SEP. 10...	2060	8.6	40	10	36	21	2.0	.8	212	0	4.6	2.0

DATE	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	ALKA- LINITY AS CACO ₃ (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	COLOR (PLAT- INUM- COBALT UNITS)	TEMPER- ATURE (DEG C)	CHEM- ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)
NOV. 20...	120	4	121	242	8.0	3	9.5	0	8.9	77	10	110
JAN. 03...	110	2	112	236	8.1	5	7.5	1	9.7	81	25	70
MAR. 19...	110	2	112	223	8.0	15	13.0	0	9.6	91	22	28
MAY 21...	130	2	128	264	8.1	2	18.0	0	8.6	90	10	7
JULY 16...	170	6	164	345	8.0	1	21.0	7	7.9	88	11	31
SEP. 10...	180	2	174	358	8.2	2	21.0	1	8.8	98	49	140

07068050 CURRENT RIVER BELOW DONIPHAN, MO.--Continued

PERIOD OF RECORD.--Chemical analyses: July 1969 to September 1973. Prior to October 1972 published as "near Doniphan".

REMARKS.--Records of discharge are given for gaging station, Current River at Doniphan, 5.2 mi (8.4 km) upstream.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	DIS- SOL- VED- PHOS- PHORUS (P) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	SODIUM AD- SORP- TION RATIO	PERCENT SODIUM
NOV. 20...	.1	.25	.00	.03	.31	.62	.03	133	.18	1490	.1	3
JAN. 03...	.2	.09	.00	.12	.00	.00	.03	120	.16	2160	.1	3
MAR. 19...	.0	.38	.00	.20	.00	.01	.04	113	.15	1890	.1	3
MAY 21...	.1	.00	.01	.13	.01	.01	.06	139	.19	1670	.1	2
JULY 16...	.0	.27	.01	.10	.03	.03	--	189	.26	1160	.1	2
SEP. 10...	.0	.21	.00	.00	.01	.02	--	179	.24	996	.1	2

WHITE RIVER BASIN

07068550 LITTLE BLACK RIVER NEAR NAYLOR, MO.

LOCATION.--Lat 36°31'46", long 90°42'24", Ripley County, at bridge on County Highway KK, 6 mi (9.6 km) southwest of Naylor.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
NOV. 21...	240	8.5	150	80	14	6.6	2.6	1.1	74	0	6.0	2.8
JAN. 03...	334	7.3	130	60	9.1	4.7	2.4	1.4	44	0	6.4	3.2
MAR. 20...	400	7.2	680	100	11	5.4	2.6	1.3	56	0	9.2	1.4
MAY 22...	125	--	--	--	--	--	--	--	96	0	5.7	2.3
JULY 17...	62	8.6	50	80	29	16	2.4	1.0	168	0	5.7	2.9
SEP. 11...	76	9.3	40	70	31	17	2.3	1.1	184	0	4.9	2.2

DATE	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	ALKA- LINITY AS CACO ₃ (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	COLOR (PLAT- INUM- COBALT UNITS)	TEMPER- ATURE (DEG C)	CHEM- ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)
NOV. 21...	62	2	61	136	7.6	5	7.0	0	6.8	56	130	800
JAN. 03...	42	6	36	94	7.2	25	5.0	4	8.6	67	350	750
MAR. 20...	50	4	46	112	7.3	30	12.0	8	8.3	77	2600	4700
MAY 22...	--	--	79	180	7.4	--	19.0	3	5.2	55	120	170
JULY 17...	140	2	138	297	7.5	2	23.5	5	5.4	63	40	250
SEP. 11...	150	0	151	312	7.8	6	23.0	8	5.4	62	180	540

07068550 LITTLE BLACK RIVER NEAR NAYLOR, MO.--Continued

PERIOD OF RECORD.--Chemical analyses: July 1969 to September 1973.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	DIS- SOL- VED- PHOS- PHORUS (P) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	METHY- LENE- BLUE ACTIVE SUB- STANCE (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	SODIUM AD- SORP- TION RATIO	PERCENT SODIUM
NOV. 21...	.0	.07	.00	.09	.08	.28	.04	72	.10	46.7	.1	8
JAN. 03...	.2	.07	.32	.24	.03	.06	.03	53	.07	47.8	.2	11
MAR. 20...	.0	.20	.05	.26	.04	.06	.03	68	.09	73.4	.2	10
MAY 22...	.1	.06	.03	.06	.01	.05	--	106	.14	35.8	--	--
JULY 17...	.4	.00	.06	.33	.02	.10	--	155	.21	25.9	.1	4
SEP. 11...	.0	.05	.00	.08	.06	.07	--	164	.22	33.7	.1	3

07068867 FOURCHE RIVER NEAR MIDDLEBROOK, ARK.

LOCATION.--Lat 36°28'50", long 90°56'01", Randolph County, at end of private road 0.9 mi (1.4 km) west of State Highway 115, 0.7 mi (1.1 km) south of Missouri-Arkansas State line, and 1.5 mi (2.4 km) north of Middlebrook.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
NOV. 20...	175	8.7	20	100	48	21	2.0	1.3	244	0	11	2.8
JAN. 03...	165	7.4	30	30	36	22	1.8	1.1	224	0	6.0	2.6
MAR. 19...	263	8.0	10	40	41	21	2.0	1.0	224	0	13	1.4
MAY 21...	125	6.4	150	30	44	24	1.9	1.0	256	0	4.7	2.6
JULY 16...	26	9.7	50	60	48	27	2.2	1.3	292	0	5.7	3.0
SEP. 10...	64	9.2	20	30	45	26	1.8	1.3	276	0	5.2	3.1

DATE	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	ALKA- LINITY AS CaCO ₃ (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	COLOR (PLAT- INUM- COBALT UNITS)	TEMPER- ATURE (DEG C)	CHEM- ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)
NOV. 20...	210	6	200	382	8.0	5	8.5	0	9.4	80	96	500
JAN. 03...	180	0	184	358	7.9	10	5.5	1	10.1	80	80	430
MAR. 19...	190	5	184	353	8.1	5	13.5	0	9.2	88	20	55
MAY 21...	210	0	210	393	8.1	2	20.5	2	8.2	91	48	54
JULY 16...	230	0	239	480	7.8	1	24.5	13	5.1	61	74	170
SEP. 10...	220	0	226	428	8.1	2	24.0	1	7.2	85	190	600

07068867 FOURCHE RIVER NEAR MIDDLEBROOK, ARK.--Continued

PERIOD OF RECORD.--Chemical analyses: July 1969 to September 1973.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	DIS- SOL- VED- PHOS- PHORUS (P) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	SODIUM AD- SORP- TION RATIO	PERCENT SODIUM
NOV. 20...	.1	.11	.00	.00	.08	.33	.02	200	.27	94.5	.1	2
JAN. 03...	.2	.09	.02	.20	.01	.01	.03	175	.24	78.0	.1	2
MAR. 19...	.0	.27	.00	.18	.00	.01	.03	181	.25	129	.1	2
MAY 21...	.0	.01	.02	.06	.01	.01	.07	210	.29	70.9	.1	2
JULY 16...	.1	.08	.01	.18	.01	.05	--	242	.33	17.0	.1	2
SEP. 10...	.0	.14	.04	.00	.02	.03	--	236.	.32	40.8	.1	2

WHITE RIVER BASIN

07069170 SPRING RIVER NEAR THAYER, MO.

LOCATION.--Lat 36°30'10", long 91°31'31", Oregon County, at bridge on county road, 0.6 mi (1.0 km) east of U.S. Highway 63, 0.2 mi (0.3 km) north of Missouri-Arkansas State line, and 1.1 mi (1.8 km) southeast of Thayer.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
NOV. 20...	143	9.3	20	100	46	23	2.4	1.6	248	0	8.8	3.2
JAN. 02...	248	8.2	20	40	40	24	1.7	1.7	236	0	5.2	2.1
MAR. 19...	316	8.6	20	60	42	23	2.0	1.5	240	0	7.6	1.3
MAY 21...	337	7.3	70	80	43	23	1.7	1.4	233	0	9.1	2.9
JULY 16...	129	9.2	50	40	45	26	1.8	1.3	274	0	6.4	3.4
SEP. 10...	51	11	40	30	52	28	2.1	2.0	296	0	5.2	2.6

DATE	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	COLOR (PLAT- INUM- COBALT UNITS)	TEMPER- ATURE (DEG C)	CHEM- ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)
NOV. 20...	210	6	203	420	8.0	3	9.5	37	9.2	80	58	190
JAN. 02...	200	4	194	394	8.1	5	7.5	2	10.0	83	64	72
MAR. 19...	200	3	197	420	8.1	5	13.5	7	7.4	70	570	240
MAY 21...	200	11	191	368	8.2	2	17.0	0	10.0	103	16	38
JULY 16...	220	0	225	460	7.9	1	19.0	1	7.6	81	140	310
SEP. 10...	250	2	243	485	8.0	1	21.0	11	7.1	79	860	720

07069170 SPRING RIVER NEAR THAYER, MO.--Continued.

PERIOD OF RECORD.--Chemical analyses: July 1969 to September 1973.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	DIS- SOL- VED- PHOS- PHORUS (P) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	SODIUM AD- SORP- TION RATIO	PERCENT SODIUM
NOV. 20...	.0	.86	.00	.85	.02	.03	.02	209	.28	80.7	.1	2
JAN. 02...	.2	.27	.00	.10	.01	.01	.07	200	.27	134	.1	2
MAR. 19...	.0	.81	.19	.60	.02	.02	.04	203	.28	173	.1	2
MAY 21...	.1	.01	.03	.15	.02	.03	.08	190	.26	173	.1	2
JULY 16...	.0	.01	.03	.11	.05	.10	--	233	.32	81.2	.1	2
SEP. 10...	.1	.35	.06	.06	.05	.06	--	208	.28	28.6	.1	2

WHITE RIVER BASIN

07071900 ELEVEN POINT RIVER BELOW BARDLEY, MO.

LOCATION.--Lat 36°33'00", long 91°11'35", Oregon County, at bridge on State Highway 142, 6.3 mi (10.1 km) west of Gatewood and 8.7 mi (14.0 km) downstream from gaging station.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
NOV. 20...	1100	8.5	20	30	31	14	1.7	1.3	164	0	4.0	2.1
JAN. 02...	2100	8.1	30	30	28	18	1.6	1.3	176	0	3.6	3.4
MAR. 19...	2180	8.0	30	40	28	14	1.7	1.2	156	0	5.6	.8
MAY 21...	2500	7.5	110	40	29	16	1.4	1.1	167	0	4.3	2.2
JULY 16...	1550	8.5	40	30	38	21	1.8	1.2	224	0	6.0	3.0
SEP. 10...	1140	9.6	70	10	40	23	1.6	1.1	232	0	3.6	3.0

DATE	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	ALKA- LINITAS CACO ₃ (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	COLOR (PLAT- INUM- COBALT UNITS)	TEMPER- ATURE (DEG C)	CHEM- ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)
NOV. 20...	140	0	134	275	7.8	5	11.0	0	8.5	77	55	340
JAN. 02...	140	0	144	273	7.8	5	9.0	2	9.7	84	14	110
MAR. 19...	130	0	128	268	7.8	10	14.0	0	7.5	72	46	90
MAY 21...	140	1	139	272	7.9	1	16.5	0	7.3	75	62	32
JULY 16...	180	0	184	371	7.7	1	17.0	12	8.8	91	14	100
SEP. 10...	190	4	190	395	7.9	2	18.5	2	8.4	88	54	430

07071900 ELEVEN POINT RIVER BELOW BARDLEY, MO.--Continued

PERIOD OF RECORD.--Chemical analyses: July 1969 to September 1973.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973.

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	DIS- SOL- VED- PHOS- PHORUS (P) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	SODIUM AD- SORP- TION RATIO	PERCENT SODIUM
NOV. 20...	.0	.59	.07	.06	.13	.29	.04	139	.19	413	.1	3
JAN. 02...	.2	.20	.00	.04	.00	.01	.03	140	.19	794	.1	2
MAR. 19...	.0	.63	.01	.21	.00	.01	.04	130	.18	765	.1	3
MAY 21...	.1	.14	.02	.14	.02	.02	.06	140	.19	945	.1	2
JULY 16...	.0	.62	.00	.20	.01	.05	--	179	.24	749	.1	2
SEP. 10...	.0	.52	.00	.10	.03	.03	--	201	.27	619	.1	2

ARKANSAS RIVER BASIN

07186000 SPRING RIVER NEAR WACO, MO.

LOCATION.--Lat 37°14'45", long 94°33'55", on line between SE¼ sec.7, and NE¼ sec.18, T.29 N., R.33 W., Jasper County, at gaging station on left bank on downstream side of left pier of county highway bridge, 0.8 mi (1.3 km) downstream from Blackberry Creek, 1.5 mi (2.4 km) east of Waco, and 47.6 mi (76.6 km) upstream from mouth.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)
OCT. 02...	608	11	100	30	0	20	3	180	41	2.8
DEC. 15...	1300	8.2	60	120	<10	40	3	100	44	3.5
FEB. 15...	956	6.8	20	60	<10	10	1	130	49	3.2
APR. 10...	2540	8.0	60	110	<10	40	0	150	39	3.0
JUNE 14...	1160	9.8	60	50	0	10	1	80	54	3.2
AUG. 09...	151	9.4	10	50	0	17	1	40	60	3.6

DATE	DIS- SOL- VED- PHOS- PHORUS (P) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	SODIUM AD- SORP- TION RATIO	PERCENT SODIUM	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)
OCT. 02...	.13	.17	.16	144	.20	236	.2	7	110	15
DEC. 15...	.07	.13	.05	182	.25	639	.3	12	120	28
FEB. 15...	.03	.08	.09	187	.25	483	.3	10	140	24
APR. 10...	.02	.17	.04	150	.20	1030	.2	10	110	25
JUNE 14...	.08	.13	.09	212	.29	664	.2	8	150	27
AUG. 09...	.12	.19	--	202	.27	82.4	.2	8	160	7

07186000 SPRING RIVER NEAR WACO, MO.--Continued

DRAINAGE AREA.--1,164 mi² (3,015 km²).

PERIOD OF RECORD.--Chemical analyses: November 1965 to September 1973.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)
OCT. 02...	4.0	3.3	120	0	17	6.4	.2	1.2	.01	.49
DEC. 15...	8.0	3.4	118	0	31	11	.0	1.8	.07	.27
FEB. 15...	7.2	2.0	136	0	25	9.1	.3	1.6	.00	.26
APR. 10...	6.0	2.0	104	0	25	6.5	.2	2.0	.00	.14
JUNE 14...	5.9	1.7	150	0	22	7.6	.1	1.9	.02	.29
AUG. 09...	6.6	1.8	186	0	12	9.6	.0	2.0	.02	.47

DATE	ALKA- LINITY AS CaCO ₃ (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	COLOR (PLAT- INUM- COBALT UNITS)	TEMPER- ATURE (DEG C)	CHEM- ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)
OCT. 02...	98	259	7.8	50	18.0	16	7.3	76	740	890
DEC. 15...	97	302	7.6	5	2.0	3	12.0	87	425	450
FEB. 15...	112	330	7.8	5	5.0	5	8.5	66	35	30
APR. 10...	85	269	8.1	7	8.5	5	10.2	87	15000	1400
JUNE 14...	123	310	7.6	5	23.0	8	5.7	66	210	320
AUG. 09...	153	380	8.1	2	25.0	7	6.2	75	110	460

ARKANSAS RIVER BASIN

07186400 CENTER CREEK NEAR CARTERVILLE, MO.

LOCATION.--Lat 37°08'26", long 94°22'57", in NW¼NW¼NW¼ sec.24, T.28 N., R. 32 W., Jasper County, multi-parameter recorder on left bank at gaging station at bridge on County Road HH, 1.5 mi (2.4 km) downstream from Grove Creek, 3 mi (4.8 km) east of Carterville and 17 mi (27.4 km) upstream from mouth.

DRAINAGE AREA.--232 mi² (601 km²).

PERIOD OF RECORD.--Chemical analyses: August 1962 to September 1973.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)
OCT. 03...	90	12	100	120	<10	20	3	190	58	2.8
NOV. 15...	881	11	10	20	0	20	15	0	42	2.5
DEC. 15...	232	6.2	20	70	<10	230	2	280	50	2.6
JAN. 16...	180	5.7	90	70	<10	8	1	240	52	2.5
FEB. 14...	279	8.2	10	10	<10	10	2	120	47	2.3
MAR. 14...	1020	10	20	100	<10	30	10	90	40	2.1
APR. 10...	480	8.5	30	30	<10	10	8	300	42	2.3
MAY 15...	368	8.3	0	20	<10	12	0	130	49	2.5
JUNE 11...	272	10	30	30	0	10	1	80	48	2.6
JULY 11...	137	9.4	120	20	0	11	0	90	52	2.8
AUG. 09...	74	9.5	30	50	10	11	0	70	55	3.1
SEP. 05...	971	5.1	130	30	10	20	4	50	17	1.1

DATE	DIS- SOL- VED- PHOS- PHORUS (P) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	SODIUM AD- SORP- TION RATIO	PERCENT SODIUM	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)
OCT. 03...	1.0	1.0	.10	210	.29	51.0	.3	11	160	40
NOV. 15...	.08	.10	.05	156	.21	371	.2	8	120	20
DEC. 15...	.29	.74	.05	185	.25	116	.2	7	140	28
JAN. 16...	.11	.15	.12	189	.26	91.9	.3	10	140	26
FEB. 14...	.22	.26	.06	170	.23	128	.2	10	130	25
MAR. 14...	.08	.12	.04	157	.21	432	.2	8	110	16
APR. 10...	.11	.16	.06	135	.18	175	.2	7	110	22
MAY 15...	.08	.15	.06	169	.23	168	.2	8	130	27
JUNE 11...	.12	.13	.10	185	.25	136	.2	8	130	21
JULY 11...	.11	.15	--	223	.30	82.5	.3	11	140	20
AUG. 09...	.16	.19	--	215	.29	43.0	.4	13	150	20
SEP. 05...	.32	.49	--	70	.10	184	.2	12	47	4

07186400 CENTER CREEK NEAR CARTERVILLE, MO.--Continued

EXTREMES, 1963-72.--Specific conductance: Maximum, 1,510 micromhos Apr. 5, 1964; minimum, 74 micromhos Sept. 8, 1970.

PH (1968-72): Maximum, 8.3 Jan. 14, 1972; minimum, 6.3 Apr. 15, 1972.

Dissolved oxygen (1968-72): Maximum, 14.6 mg/l Feb. 20, 1972; minimum, 1.7 mg/l July 18, 19, 1970.

Water temperatures (1968-72): Maximum, 31.5°C Aug. 3, 5, 1970; minimum, freezing point on several days in January 1970, 1972.

REMARKS.--Recorder inoperative during the year.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)
OCT.										
03...	8.6	1.8	142	0	27	9.0	.5	6.6	1.2	.16
NOV.										
15...	5.0	2.5	116	0	14	6.0	.2	2.9	1.1	.20
DEC.										
15...	5.1	1.8	132	0	18	8.3	.3	4.3	.47	.24
JAN.										
16...	7.6	1.6	138	0	18	10	.3	4.1	1.3	.29
FEB.										
14...	6.3	1.6	124	0	14	8.0	.4	4.5	.03	.27
MAR.										
14...	4.3	2.2	112	0	17	5.9	.4	2.0	.31	.71
APR.										
10...	4.3	1.5	112	0	14	7.0	.4	3.6	.02	.00
MAY										
15...	5.3	1.7	128	0	14	6.9	.3	4.7	.41	.07
JUNE										
11...	5.4	1.4	133	0	12	6.5	.3	4.1	.01	.27
JULY										
11...	8.3	1.4	146	0	14	8.0	.4	5.4	.01	.53
AUG.										
09...	10	1.4	158	0	17	9.6	.3	9.0	.10	.04
SEP.										
05...	3.4	4.6	52	0	6.4	3.6	.2	2.0	.53	.36

DATE	ALKA- LITY AS CACO3 (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	COLOR (PLAT- INUM- COBALT UNITS)	TEMPER- ATURE (DEG C)	CHEM- ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)
OCT.										
03...	116	370	7.6	5	18.0	0	6.4	67	170	200
NOV.										
15...	95	250	7.5	5	10.0	0	8.9	79	380	700
DEC.										
15...	108	284	7.6	5	5.0	0	7.7	60	34	40
JAN.										
16...	113	355	8.0	5	9.5	2	11.8	103	8	54
FEB.										
14...	102	279	7.5	5	8.5	0	9.5	81	62	70
MAR.										
14...	92	255	7.6	15	15.0	2	8.4	83	370	320
APR.										
10...	92	267	7.7	3	8.5	0	10.1	86	1000	220
MAY										
15...	105	280	7.7	5	16.5	0	9.6	98	84	48
JUNE										
11...	109	279	7.7	1	21.5	3	5.1	57	160	220
JULY										
11...	120	325	7.7	1	25.0	2	7.4	89	36	120
AUG.										
09...	130	390	7.8	2	24.5	4	5.0	60	--	800
SEP.										
05...	43	131	7.4	90	21.0	39	4.4	49	22000	72000

07186480 CENTER CREEK NEAR SMITHFIELD, MO.

LOCATION.--Lat 37°09'20", long 94°36'10", Jasper County, at bridge on county road 1 mi (1.6 km) south of Smithfield.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED CUPPER (CU) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)
OCT. 02...	107	11	10	180	<10	30	4	1700	81	3.6
DEC. 15...	355	8.5	10	80	<10	70	3	840	63	2.8
FEB. 15...	415	8.3	0	60	<10	10	1	710	61	2.6
APR. 10...	940	8.5	30	80	<10	10	9	650	54	2.5
JUNE 13...	730	10	20	50	0	10	2	400	61	2.8
AUG. 09...	77	7.7	30	60	0	15	2	410	72	3.3

DATE	DIS- SOL- VED- PHOS- PHORUS (P) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	SODIUM AD- SORP- TION RATIO	PERCENT SODIUM	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)
OCT. 02...	.16	.18	.11	321	.44	92.7	.2	8	220	110
DEC. 15...	.33	.35	.06	224	.30	215	.2	7	170	62
FEB. 15...	.19	.21	.08	234	.32	262	.2	8	160	52
APR. 10...	.15	.16	.06	209	.28	530	.2	7	140	46
JUNE 13...	.22	.24	.18	233	.32	459	.2	7	160	52
AUG. 09...	.19	.20	--	282	.38	58.6	.3	10	190	74

07186480 CENTER CREEK NEAR SMITHFIELD, MO.--Continued

PERIOD OF RECORD.--Chemical analyses: October 1968 to September 1973.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)
OCT.										
02...	8.2	2.1	128	0	100	8.6	.5	7.0	.41	.07
DEC.										
15...	5.6	2.0	130	0	46	8.1	.3	5.9	.36	.23
FEB.										
15...	6.5	1.6	134	0	46	9.9	.6	2.9	.23	.12
APR.										
10...	4.8	1.6	120	0	41	6.1	.4	3.2	.12	.00
JUNE										
13...	6.0	1.5	136	0	41	6.9	.4	4.1	.01	.17
AUG.										
09...	10	1.6	142	0	60	11	.5	8.7	.01	1.6

DATE	ALKA- LINITY AS CACO3 (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	COLOR (PLAT- INUM- COBALT UNITS)	TEMPER- ATURE (DEG C)	CHEM- ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)
OCT.										
02...	105	515	7.7	5	18.0	0	7.6	79	320	160
DEC.										
15...	107	383	7.6	3	4.5	0	11.1	85	60	72
FEB.										
15...	110	377	7.7	5	6.0	0	10.8	87	8	18
APR.										
10...	98	347	8.1	2	9.5	6	9.8	85	840	230
JUNE										
13...	112	338	7.5	1	21.0	0	6.9	77	220	230
AUG.										
09...	116	490	7.9	2	25.0	3	7.0	84	28	150

07186600 TURKEY CREEK NEAR JOPLIN, MO.

LOCATION.--Lat 37°07'15", long 94°34'55", NE¼SE¼ sec.25, T.28 N., R.34 W., Jasper County, at bridge on Jasper County Highway P, 2.5 mi (4.0 km) upstream from mouth, and 3 mi (4.8 km) northwest of Joplin.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)
OCT.											
03...	39	13	50	220	<10	30	3	540	100	5.5	20
NOV.											
16...	93	10	10	100	0	30	10	1260	86	5.2	12
DEC.											
18...	36	8.7	30	110	<10	30	2	740	96	4.9	17
JAN.											
17...	33	7.4	110	140	<10	10	3	920	78	4.6	15
FEB.											
16...	21	9.7	280	190	<10	10	5	920	94	5.0	19
MAR.											
15...	74	10	300	390	<10	40	25	1200	80	5.1	12
APR.											
13...	43	8.4	80	270	<10	0	21	670	88	5.2	15
MAY											
17...	79	9.2	310	380	<10	22	0	640	93	5.2	13
JUNE											
14...	44	12	70	160	0	20	1	120	88	5.4	17
JULY											
12...	20	17	200	300	0	9	1	110	85	5.6	34
AUG.											
08...	15	18	80	530	10	50	2	110	92	5.9	38
SEP.											
06...	28	13	60	220	10	21	4	260	85	4.9	18

DATE	TOTAL PHOS- PHORUS (P) (MG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	SODIUM AD- SORP- TION RATIO	PERCENT SODIUM	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	ALKA- LITY AS CaCO ₃ (MG/L)
OCT.										
03...	1.2	.10	409	.56	43.1	.5	14	270	100	170
NOV.										
16...	.23	.04	339	.46	85.1	.3	10	240	110	128
DEC.										
18...	.96	.10	365	.50	35.5	.5	12	260	110	151
JAN.										
17...	1.2	.15	331	.45	29.5	.4	13	210	85	125
FEB.										
16...	1.2	.16	372	.51	21.1	.5	14	260	100	152
MAR.										
15...	.44	.11	329	.45	65.7	.4	10	220	90	131
APR.										
13...	.77	.06	326	.44	37.8	.4	12	240	100	141
MAY										
17...	.56	.07	347	.47	74.0	.4	10	250	100	151
JUNE										
14...	1.2	.22	359	.49	42.6	.5	13	240	93	149
JULY										
12...	3.1	--	418	.57	22.6	1.0	23	240	41	198
AUG.										
08...	4.1	--	427	.58	17.3	1.0	24	250	46	208
SEP.										
06...	.65	--	370	.50	28.0	.5	14	230	86	144

07186600 TURKEY CREEK NEAR JOPLIN, MO.--Continued

DRAINAGE AREA.--41.8 mi² (108 km²).

PERIOD OF RECORD.--Chemical analyses: August 1963 to September 1973.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	DIS- SOL- VED- PHOS- PHORUS (P) (MG/L)
OCT.										
03...	5.0	208	0	140	20	.2	.90	.89	.16	1.1
NOV.										
16...	3.5	156	0	120	12	.2	1.2	.14	.79	.22
DEC.										
18...	3.9	184	0	110	23	.2	2.5	1.6	.52	.82
JAN.										
17...	4.3	152	0	100	18	.3	.63	.56	.42	.77
FEB.										
16...	4.5	186	0	110	26	.4	1.2	2.5	.66	.96
MAR.										
15...	4.3	160	0	95	13	.4	2.7	.07	.24	.27
APR.										
13...	3.5	172	0	100	18	.3	1.6	.25	.00	.50
MAY										
17...	4.6	184	0	110	12	.2	1.9	.62	.20	.48
JUNE										
14...	3.4	182	0	100	17	.4	2.3	.01	.46	1.2
JULY										
12...	6.1	242	0	100	28	.4	4.7	.04	5.4	3.0
AUG.										
08...	8.1	254	0	100	35	.7	.30	.08	.85	3.4
SEP.										
06...	4.0	176	0	110	19	.0	.99	.75	--	.45

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	COLOR (PLAT- INUM- COBALT UNITS)	TEMPER- ATURE (DEG C)	CHEM- ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	BIO- CHEM- ICAL OXYGEN DEMAND (MG/L)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)
OCT.										
03...	640	7.5	10	17.0	13	4.8	3.8	39	220000	44000
NOV.										
16...	520	7.4	5	10.0	0	2.1	8.2	73	9300	6800
DEC.										
18...	595	7.5	5	5.5	12	4.8	8.8	70	66000	29000
JAN.										
17...	555	7.2	5	10.0	16	4.2	6.2	55	16000	5200
FEB.										
16...	595	7.4	5	4.5	22	5.5	7.3	56	26000	13000
MAR.										
15...	510	7.3	10	11.5	--	6.4	6.4	59	7000	12000
APR.										
13...	485	7.5	5	12.0	17	9.8	4.8	44	3500	6300
MAY										
17...	550	7.4	15	14.0	17	3.2	5.6	54	3600	3100
JUNE										
14...	561	7.3	3	22.0	11	3.7	3.8	43	7000	2000
JULY										
12...	660	7.4	5	22.5	15	7.8	1.8	20	10000	1800
AUG.										
08...	805	7.5	7	24.0	30	7.8	.9	11	72000	8800
SEP.										
06...	620	7.5	8	21.0	23	3.2	4.0	44	400	1200

07187560 SHOAL CREEK NEAR GALENA, KANS.

LOCATION.--Lat 37°02'31", long 94°38'34", Cherokee County, at bridge on State Highway 26, 2.5 mi (4.0 km) south of Galena.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT. 04...	105	10	30	10	55	3.0	7.6	1.9	170	0	15	8.3
DEC. 16...	675	8.3	20	10	47	2.5	4.8	1.5	140	0	11	7.1
FEB. 15...	852	8.0	0	20	41	2.2	4.5	1.5	126	0	9.6	4.8
APR. 11...	1360	8.6	10	10	39	2.2	3.5	1.5	116	0	10	5.1
JUNE 12...	1040	11	40	30	43	2.4	3.7	1.4	126	0	8.8	5.5
AUG. 07...	256	9.2	60	40	51	3.0	5.7	1.4	160	0	10	7.1

DATE	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	ALKA- LINITY AS CaCO ₃ (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	COLOR (PLAT- INUM- COBALT UNITS)	TEMPER- ATURE (DEG C)	CHEM- ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)
OCT. 04...	150	10	139	339	8.1	5	20.0	0	8.9	97	40	64
DEC. 16...	130	12	115	280	7.7	5	3.0	2	10.9	81	6	10
FEB. 15...	110	8	103	259	7.6	5	5.5	6	9.2	73	16	48
APR. 11...	110	12	95	240	8.1	5	12.0	0	9.8	91	60	16
JUNE 12...	120	17	103	246	7.9	1	24.0	0	7.9	93	320	60
AUG. 07...	140	9	131	310	8.3	2	26.0	5	8.8	107	80	100

07187560 SHOAL CREEK NEAR GALENA, KANS.--Continued

PERIOD OF RECORD.--Chemical analyses: October 1968 to September 1973.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	DIS- SOL- VED- PHOS- PHORUS (P) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	SODIUM AD- SORP- TION RATIO	PERCENT SODIUM
OCT. 04...	.1	1.5	.00	.09	.19	.19	.07	180	.24	51.0	.3	10
DEC. 16...	.0	2.0	.00	.18	.09	.41	.02	151	.21	275	.2	7
FEB. 15...	.0	1.5	.00	.08	.06	.07	.07	140	.19	322	.2	8
APR. 11...	.0	2.5	.00	.07	.04	.07	.03	119	.16	437	.1	7
JUNE 12...	.1	1.8	.03	.17	.07	.11	.12	171	.23	480	.1	6
AUG. 07...	.0	1.7	.02	.24	.12	.14	--	164	.22	113	.2	8

ARKANSAS RIVER BASIN

07188500 LOST CREEK AT SENECA, MO.

LOCATION.--Lat 36°50'25", long 94°36'40", Newton County, at bridge on State Highway 43 in Seneca, 0.4 mi (0.6 km) upstream from Little Lost Creek, and 9.5 mi (15.3 km) upstream from mouth.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO_2) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO_3) (MG/L)	CAR- BONATE (CO_3) (MG/L)	DIS- SOLVED SULFATE (SO_4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT.												
03...	4.3	11	30	0	53	1.3	4.4	1.3	160	0	11	5.8
DEC.												
16...	37	8.0	10	10	41	1.6	4.0	1.2	118	0	8.0	6.2
FEB.												
14...	56	8.8	0	10	36	1.4	3.9	1.4	106	0	8.0	4.6
APR.												
12...	92	9.2	10	0	37	1.2	2.9	1.2	104	0	10	3.6
JUNE												
13...	78	11	30	10	39	1.3	3.1	1.2	112	0	8.2	4.4
AUG.												
07...	5.5	6.2	20	20	46	1.5	4.0	1.3	140	0	7.2	5.3

DATE	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	ALKA- LINITY AS CaCO_3 (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	COLOR (PLAT- INUM- COBALT UNITS)	TEMPER- ATURE (DEG C)	CHEM- ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)
OCT.												
03...	140	6	131	283	8.3	5	19.0	0	6.8	72	200	230
DEC.												
16...	110	12	97	242	8.0	3	4.0	0	12.5	95	2	10
FEB.												
14...	96	9	87	218	7.7	5	8.0	0	6.7	56	150	130
APR.												
12...	98	12	85	218	8.2	3	14.5	0	11.0	107	4	18
JUNE												
13...	100	8	92	221	7.7	1	19.5	0	8.0	86	340	470
AUG.												
07...	120	5	115	275	8.3	2	24.5	4	9.2	110	360	520

07188500 LOST CREEK AT SENECA, MO.--Continued

DRAINAGE AREA.--42 mi² (109 km²).

PERIOD OF RECORD.--Chemical analyses: August 1967 to September 1973.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	DIS- SOL- VED- PHOS- PHORUS (P) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	SODIUM AD- SORP- TION RATIO	PERCENT SODIUM
OCT. 03...	.0	1.5	.00	.10	.01	.01	.05	163	.22	1.89	.2	6
DEC. 16...	.0	2.5	.03	.06	.01	.04	.02	129	.18	12.9	.2	7
FEB. 14...	.0	1.7	.04	.12	.02	.03	.08	130	.18	19.7	.2	8
APR. 12...	.1	1.9	.00	.05	.00	.01	.03	107	.15	26.7	.1	6
JUNE 13...	.1	1.6	.03	.15	.02	.04	.08	154	.21	32.4	.1	6
AUG. 07...	.1	1.5	.05	.24	.00	.01	--	150	.20	2.23	.2	7

07188820 LITTLE SUGAR CREEK AT CAVERNA, MO.

LOCATION.--Lat 36°30'10", long 94°16'30", McDonald County, at bridge on U.S. Highway 71, 0.5 mi (0.8 km) north of Caverna.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS-CHARGE (CFS)	DIS-SOLVED SILICA (SiO ₂) (MG/L)	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO ₃) (MG/L)	CARBONATE (CO ₃) (MG/L)	DIS-SOLVED SULFATE (SO ₄) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)
OCT. 03...	23	10	20	0	58	1.6	8.1	2.4	184	0	10	8.6
NOV. 15...	350	9.7	10	30	46	1.8	4.3	2.5	144	0	6.6	4.9
DEC. 16...	100	7.3	20	10	50	1.6	5.3	1.8	156	0	6.4	6.4
JAN. 16...	90	5.8	10	10	50	1.6	5.0	1.6	144	0	6.4	13
FEB. 14...	195	7.6	10	10	44	1.2	4.8	1.7	136	0	6.0	7.2
MAR. 14...	410	8.0	10	60	42	1.3	3.7	1.6	122	0	13	4.0
APR. 12...	322	7.5	0	20	42	1.1	3.7	1.6	124	0	8.0	4.6
MAY 16...	250	7.8	10	30	45	1.4	3.8	1.7	138	0	4.8	4.1
JUNE 13...	199	9.5	40	20	47	1.2	3.5	1.4	144	0	5.7	4.8
JULY 11...	100	10	110	20	53	1.4	4.6	1.6	160	0	6.0	5.7
AUG. 07...	110	4	20	40	58	1.5	5.6	1.8	176	0	5.8	7.5
SEP. 05...	102	9.3	40	20	47	1.5	5.3	2.3	148	0	5.5	7.1

DATE	HARDNESS (CA, MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	ALKALINITY AS CaCO ₃ (MG/L)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	COLOR (PLATINUM-COBALT UNITS)	TEMPERATURE (DEG C)	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	DIS-SOLVED OXYGEN (MG/L)	PERCENT SATURATION	FECAL COLIFORM (COL. PER 100 ML)	STREPTOCOCCI (COLONIES PER 100 ML)
OCT. 03...	150	0	151	324	7.8	5	18.5	0	7.6	80	140	240
NOV. 15...	120	4	118	263	7.5	3	11.0	2	9.0	82	380	330
DEC. 16...	130	4	128	282	7.9	3	6.0	0	12.3	99	<2	4
JAN. 16...	130	14	118	278	7.9	5	7.5	6	11.6	97	40	14
FEB. 14...	120	4	112	263	7.9	5	7.5	0	10.4	87	37	44
MAR. 14...	110	10	100	235	7.7	10	14.0	2	9.2	88	1000	230
APR. 12...	110	8	102	248	8.0	2	12.0	0	9.2	85	30	50
MAY 16...	120	5	113	257	8.2	5	17.0	7	11.0	113	20	36
JUNE 13...	120	2	118	253	7.8	1	20.0	2	6.4	70	440	350
JULY 11...	140	9	131	287	7.7	1	20.5	0	7.8	87	88	580
AUG. 07...	150	7	144	330	7.9	1	22.0	4	7.0	80	12	250
SEP. 05...	120	0	121	285	7.6	7	22.0	9	5.9	67	1300	15000

07188820 LITTLE SUGAR CREEK AT CAVERNA, MO.--Continued

PERIOD OF RECORD.--Chemical analyses: August 1967 to September 1973.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	DIS- SOL- VED- PHOS- PHORUS (P) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	SODIUM AD- SORP- TION RATIO	PERCENT SODIUM
OCT. 03...	.1	.50	.02	.00	.21	.21	.05	180	.24	11.2	.3	10
NOV. 15...	.0	1.7	.00	.09	.40	.53	.05	151	.21	143	.2	7
DEC. 16...	.0	2.0	.02	.01	.18	.20	.03	161	.22	43.5	.2	8
JAN. 16...	.1	.90	.10	.21	.09	.11	.03	164	.22	39.9	.2	8
FEB. 14...	.1	1.3	.00	.01	.12	.12	.07	140	.19	73.7	.2	8
MAR. 14...	.0	2.1	.00	.00	.05	.20	.05	134	.18	148	.2	7
APR. 12...	.0	1.7	.00	.00	.06	.08	.04	115	.16	100	.2	7
MAY 16...	.0	1.6	.00	.00	.07	.09	.04	141	.19	95.2	.2	6
JUNE 13...	.0	1.3	.03	.15	.10	.13	.05	174	.24	93.5	.1	6
JULY 11...	.0	.03	.00	.07	.14	.15	--	173	.24	46.7	.2	7
AUG. 07...	.0	.90	.02	.15	.04	.13	--	180	.24	53.5	.2	7
SEP. 05...	.0	.73	.12	.08	.19	.22	--	163	.22	44.9	.2	8

07189000 ELK RIVER NEAR TIFF CITY, MO.

LOCATION.--Lat 30°38', long 94°35', NE¼ sec.22, T.22 N., R.34 W., McDonald County, at gaging station on downstream side of right pier of bridge on State Highway 43, 0.8 mi (1.3 km) downstream from Blackfoot Branch, 2.8 mi (4.5 km) upstream from Buffalo Creek, 3 mi (4.8 km) southeast of Tiff City, and at mile 15.8 (25.4 km).

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NESIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
OCT.												
03...	212	10	30	0	57	2.8	5.0	1.9	184	0	8.1	6.4
NOV.												
15...	3600	10	0	0	43	2.6	3.2	2.1	136	0	8.4	3.8
DEC.												
16...	908	9.0	10	10	49	2.6	3.8	1.4	150	0	7.2	5.4
JAN.												
16...	708	4.2	20	10	46	2.4	3.7	1.3	140	0	6.8	5.0
FEB.												
14...	1420	7.1	10	10	41	2.1	3.7	1.4	132	0	5.6	4.0
MAR.												
14...	3480	8.9	10	40	38	2.0	2.8	1.6	112	0	7.6	3.1
APR.												
12...	2510	8.0	10	10	41	2.0	2.8	1.3	126	0	9.4	2.9
MAY												
16...	1700	6.5	0	10	44	2.2	3.0	1.6	138	0	6.8	3.7
JUNE												
13...	1460	9.9	20	0	45	2.0	2.7	1.3	140	0	5.9	3.8
JULY												
11...	468	10	100	20	47	2.2	3.5	1.5	152	0	5.5	4.8
AUG.												
07...	209	3.2	10	40	49	2.4	4.0	1.6	160	0	5.3	5.3
SEP.												
05...	232	12	40	10	46	2.3	4.6	1.9	148	0	6.0	5.9

DATE	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	ALKA- LINITY AS CaCO ₃ (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	COLOR (PLAT- INUM- COBALT UNITS)	TEMPER- ATURE (DEG C)	CHEM- ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)
OCT.												
03...	150	2	151	309	8.2	5	19.5	0	9.1	98	90	100
NOV.												
15...	120	6	112	253	7.6	5	11.0	0	9.4	85	320	590
DEC.												
16...	130	10	123	272	8.1	3	4.5	0	12.4	95	<2	8
JAN.												
16...	120	10	115	283	8.1	5	7.5	3	10.7	89	3	69
FEB.												
14...	110	2	108	242	7.8	5	8.0	0	10.7	90	54	44
MAR.												
14...	100	11	92	220	7.7	15	13.0	3	8.0	75	120	180
APR.												
12...	110	7	103	239	7.9	3	12.5	0	9.6	90	36	24
MAY												
16...	120	6	113	243	8.0	5	16.0	5	10.4	105	46	22
JUNE												
13...	120	5	115	250	7.7	1	20.5	0	7.0	78	160	220
JULY												
11...	130	5	125	268	8.0	1	25.0	0	8.1	98	42	110
AUG.												
07...	130	0	131	295	8.1	1	24.5	6	7.4	88	46	52
SEP.												
05...	120	0	121	290	7.8	2	23.5	6	5.4	63	290	920

07189000 ELK RIVER NEAR TIFF CITY, MO.--Continued

DRAINAGE AREA.--872 mi² (2,258 km²).

PERIOD OF RECORD.--Chemical analyses: August 1962 to June 1963; November 1965 to September 1973.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	DIS- SOL- VED- PHOS- PHORUS (P) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	SODIUM AD- SORP- TION RATIO	PERCENT SODIUM
OCT.												
03...	.1	.56	.01	.10	.03	.03	.04	173	.24	99.0	.2	7
NOV.												
15...	.2	1.5	.01	.06	.33	.66	.04	147	.20	1430	.1	5
DEC.												
16...	.1	1.6	.01	.06	.27	.28	.03	154	.21	378	.1	6
JAN.												
16...	.0	1.2	.00	.17	.00	.00	.05	149	.20	285	.1	6
FEB.												
14...	.2	1.2	.07	.10	.02	.02	.08	130	.18	498	.2	7
MAR.												
14...	.0	1.7	.01	.19	.02	.06	.05	120	.16	1130	.1	5
APR.												
12...	.0	1.7	.00	.00	.00	.02	.03	130	.18	881	.1	5
MAY												
16...	.0	1.4	.00	.00	.00	.02	.03	136	.18	624	.1	5
JUNE												
13...	.0	1.1	.03	.11	.05	.05	.06	158	.21	623	.1	5
JULY												
11...	.0	.89	.02	.34	.03	.05	--	186	.25	235	.1	6
AUG.												
07...	.2	.00	.08	.14	.03	.00	--	153	.21	86.3	.2	6
SEP.												
05...	.0	.70	.10	.07	.00	.04	--	168	.23	105	.2	7

ARKANSAS RIVER BASIN

07189100 BUFFALO CREEK AT TIFF CITY, MO.

LOCATION.--Lat 36°40'15", long 90°36'15", McDonald County, at bridge on State Highway 76, 0.5 mi (0.8 km) east of Tiff City.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
NOV. 15...	125	10	0	10	36	1.5	3.8	2.5	108	0	8.4	4.5
JAN. 16...	58	6.3	10	10	42	1.4	4.1	1.4	120	0	7.2	11
MAR. 14...	338	9.2	0	40	33	1.1	3.1	1.5	96	0	9.2	3.8
MAY 16...	187	8.8	0	10	41	1.3	3.7	1.8	122	0	7.6	4.3
JULY 11...	29	11	110	0	46	1.3	3.9	1.7	140	0	6.7	6.0
SEP. 05...	19	13	60	0	47	1.4	4.4	1.8	146	0	6.8	8.7

DATE	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	ALKA- LINITY AS CaCO ₃ (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	COLOR (PLAT- INUM- COBALT UNITS)	TEMPER- ATURE (DEG C)	CHEM- ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)
NOV. 15...	96	8	89	212	7.6	3	12.0	0	9.4	87	58	230
JAN. 16...	110	12	98	260	8.1	5	9.0	3	12.2	105	10	4
MAR. 14...	87	8	79	195	7.6	5	12.0	2	9.6	89	42	120
MAY 16...	110	8	100	238	7.8	5	14.5	0	9.6	93	11	28
JULY 11...	120	5	115	257	7.6	1	23.0	3	8.2	94	4	130
SEP. 05...	120	0	120	290	7.7	1	22.5	8	6.8	77	10	340

07189100 BUFFALO CREEK AT TIFF CITY, MO.--Continued

PERIOD OF RECORD.--Chemical analyses: August 1967 to September 1973.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	DIS- SOL- VED- PHOS- PHORUS (P) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	SODIUM AD- SORP- TION RATIO	PERCENT SODIUM
NOV. 15...	.1	1.5	.00	.00	.23	.40	.06	135	.18	45.6	.2	8
JAN. 16...	.0	1.2	.00	.15	.00	.00	.02	137	.19	21.5	.2	7
MAR. 14...	.0	1.6	.00	.31	.02	.04	.04	111	.15	101	.1	7
MAY 16...	.0	1.1	.00	.04	.00	.03	.03	133	.18	67.2	.2	7
JULY 11...	.0	.90	.00	.33	.03	.03	--	163	.22	13.1	.2	6
SEP. 05...	.0	.90	.08	.01	.00	.02	--	177	.24	9.08	.2	7

LOWER MISSISSIPPI RIVER BASIN

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO 1973

DATE	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	DIS- SOLVED SILVER (AG) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
MERAMEC RIVER BASIN										
07013050 - CROOKED CREEK NEAR DILLARD, MO. (LAT 37° 42' 40" LONG 091° 11' 50')										
1OCT., 1972										
16...	2.8	7.9	0	10	0	7	1	1	0	60
JAN., 1973										
29...	9.5	7.9	0	0	<10	0	0	4	0	60
MAY										
14...	7.8	7.9	0	10	<10	4	2	2	4	20
JULY										
30...	5.3	8.1	10	0	0	3	0	2	0	30
07013100 - HUZZAH CREEK AT DILLARD, MO. (LAT 37° 44' 20" LONG 091° 12' 10')										
1OCT., 1972										
16...	22	9.0	0	0	0	12	0	1	0	60
JAN., 1973										
29...	74	7.4	0	0	<10	0	1	5	0	50
MAY										
14...	96	7.1	0	0	<10	3	0	2	0	20
JULY										
30...	58	9.2	40	0	0	2	0	2	0	20
07013200 - HUZZAH CREEK NEAR DILLARD, MO. (LAT 37° 46' 40" LONG 091° 10' 00')										
1OCT., 1972										
16...	34	8.8	0	0	0	7	0	1	6	60
JAN., 1973										
29...	105	7.4	0	0	<10	0	0	6	3	30
MAY										
14...	122	7.1	0	0	<10	6	2	2	0	10
JULY										
30...	59	11	10	10	0	0	0	1	0	20
07014050 - COURTOIS CREEK AT COURTOIS, MO. (LAT 37° 45' 50" LONG 090° 04' 00')										
1OCT., 1972										
26...	5.6	9.6	0	0	0	6	0	1	0	60
JAN., 1973										
29...	17	8.3	0	20	<10	0	0	5	0	20
MAY										
14...	27	7.4	10	10	<10	5	0	0	0	20
JULY										
30...	6.9	6.7	20	0	0	0	0	3	2	50
07014060 - INDIAN CREEK AT COURTOIS, MO. (LAT 37° 46' 00" LONG 091° 04' 30')										
1OCT., 1972										
16...	14	9.0	0	60	0	24	0	1	7	220
JAN., 1973										
29...	21	8.1	0	50	<10	11	0	6	5	100
MAY										
14...	41	7.1	0	50	<10	7	0	2	0	30
JULY										
30...	12	11	30	10	0	8	0	6	5	20
07014550 - INDIAN CREEK NEAR ANTHONIES MILL, MO. (LAT 38° 07' 20" LONG 090° 58' 00')										
1OCT., 1972										
19...	8.9	8.3	0	0	0	9	1	6	2	80
FEB., 1973										
01...	48	7.9	10	0	<10	2	0	7	1	40
MAY										
17...	36	7.4	0	0	<10	5	1	4	0	30
AUG.										
02...	11	8.4	10	10	0	2	0	3	1	70

¹See footnote at end of table page 351.

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO 1973

DATE	DIS- SOLVED COBALT (CO) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED BARIUM (BA) (UG/L)	DIS- SOLVED CILIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)
MERAMEC RIVER BASIN--Continued										
07013050 - CROOKED CREEK NEAR DILLARD, MO. (LAT 37°42'40" LONG 091°11'50")										
1 OCT., 1972										
16...	0	1	0	59	32	9.2	2.2	232	0	102
JAN., 1973										
29...	2	3	0	32	17	4.4	1.6	136	0	39
MAY										
14...	4	3	100	33	16	3.0	1.6	168	0	25
JULY										
30...	0	3	100	21	48	6.4	1.7	210	0	68
07013100 - HUZZAH CREEK AT DILLARD, MO. (LAT 37°44'20" LONG 091°12'10")										
1 OCT., 1972										
16...	0	0	0	46	29	2.5	1.1	263	0	<10
JAN., 1973										
29...	1	1	0	32	17	1.9	1.0	163	0	<10
MAY										
14...	0	0	100	34	17	1.6	1.2	202	0	<10
JULY										
30...	0	1	0	15	32	1.9	1.1	210	0	<10
07013200 - HUZZAH CREEK NEAR DILLARD, MO. (LAT 37°46'40" LONG 091°10'00")										
1 OCT., 1972										
16...	0	0	0	48	30	2.7	1.2	254	0	11
JAN., 1973										
29...	1	0	0	33	18	2.0	1.0	166	0	<10
MAY										
14...	4	0	100	37	20	1.6	1.1	202	0	<10
JULY										
30...	0	0	0	20	35	2.1	1.1	244	0	12
07014050 - COURTOIS CREEK AT COURTOIS, MO. (LAT 37°45'50" LONG 090°04'00")										
1 OCT., 1972										
26...	0	0	0	41	22	1.5	.8	222	0	<10
JAN., 1973										
29...	2	0	0	26	12	1.2	.8	127	0	<10
MAY										
14...	1	0	100	25	15	1.1	.9	166	0	<10
JULY										
30...	0	0	0	15	34	1.5	.8	212	0	<10
07014060 - INDIAN CREEK AT COURTOIS, MO. (LAT 37°46'00" LONG 091°04'30")										
1 OCT., 1972										
16...	2	0	0	56	36	14	3.1	212	0	126
JAN., 1973										
29...	5	0	0	41	23	6.7	1.6	195	0	29
MAY										
14...	3	0	0	43	29	8.5	2.9	210	0	72
JULY										
30...	1	1	0	18	48	12	2.4	205	0	21
07014550 - INDIAN CREEK NEAR ANTHONIES MILL, MO. (LAT 38°07'20" LONG 090°58'00")										
1 OCT., 1972										
19...	1	0	0	51	37	9.1	2.2	295	0	27
FEB., 1973										
01...	6	0	0	35	20	3.6	1.4	178	0	15
MAY										
17...	4	0	0	37	22	2.6	1.4	212	0	11
AUG.										
02...	1	1	400	19	46	5.3	1.6	249	0	29

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS-SOLVED CHLO- RIDE (CL) (MG/L)	DIS-SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	DIS-SOLVED ORTHO PHOS- PHATE (PO ₄) (MG/L)	PHOS- PHATE (PO ₄) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA, MG) (MG/L)
MERAMEC RIVER BASIN--Continued										
07013050 - CROOKED CREEK NEAR DILLARD, MO. (LAT 37° 42' 40" LONG 091° 11' 50")										
1 OCT., 1972										
16...	13	.0	<.1	.10	<.02	<.02	340	.46	2.57	280
JAN., 1973										
29...	11	.1	.1	.10	<.02	.10	180	.24	4.62	150
MAY										
14...	6.4	.3	<.1	<.10	<.02	.04	176	.24	3.71	150
JULY										
30...	.6	.1	.1	.10	<.02	.06	257	.35	3.68	250
07013100 - HUZZAH CREEK AT DILLARD, MO. (LAT 37° 44' 20" LONG 091° 12' 10")										
1 OCT., 1972										
16...	7.7	2.3	.2	.10	.02	.02	237	.32	14.1	230
JAN., 1973										
29...	9.0	.1	.2	.10	<.02	<.02	159	.22	31.8	150
MAY										
14...	6.4	.2	<.1	<.10	<.02	.08	177	.24	45.9	156
JULY										
30...	.5	.2	.2	<.10	.02	.08	173	.24	27.1	170
07013200 - HUZZAH CREEK NEAR DILLARD, MO. (LAT 37° 46' 40" LONG 091° 10' 00")										
1 OCT., 1972										
16...	8.2	.1	.1	.30	<.02	<.02	235	.32	21.6	240
JAN., 1973										
29...	26	.1	.2	.10	<.02	<.02	180	.24	51.0	160
MAY										
14...	6.4	.3	.1	<.10	<.02	.04	183	.25	60.3	174
JULY										
30...	.5	.1	.2	.20	.02	.10	202	.27	32.2	196
07014050 - COURTOIS CREEK AT COURTOIS, MO. (LAT 37° 45' 50" LONG 090° 04' 00")										
1 OCT., 1972										
26...	9.0	.3	<.1	<.10	<.02	<.02	203	.28	3.07	190
JAN., 1973										
29...	26	.1	.1	.10	<.02	<.02	147	.20	6.75	110
MAY										
14...	5.5	.3	<.1	<.10	<.02	.05	148	.20	10.8	124
JULY										
30...	.4	.1	.1	.10	<.02	.06	174	.24	3.24	178
07014060 - INDIAN CREEK AT COURTOIS, MO. (LAT 37° 46' 00" LONG 091° 04' 30")										
1 OCT., 1972										
16...	15	.8	<.1	<.10	<.02	<.02	364	.50	13.8	290
JAN., 1973										
29...	52	.1	.1	.10	<.02	<.02	258	.35	14.6	200
MAY										
14...	9.3	.1	.2	<.10	.02	.06	275	.37	30.4	228
JULY										
30...	1.5	.2	<.1	<.10	<.02	.06	215	.29	6.97	242
07014550 - INDIAN CREEK NEAR ANTHONIES MILL, MO. (LAT 38° 07' 20" LONG 090° 58' 00")										
1 OCT., 1972										
16...	9.7	.2	<.1	<.10	<.02	.08	240	.39	6.97	280
FEB., 1973										
01...	32	.2	.1	.20	<.02	<.02	203	.28	26.3	170
MAY										
17...	6.9	.4	<.1	<.10	<.02	.05	193	.26	18.8	180
AUG.										
02...	1.1	.2	<.1	<.10	<.02	.05	233	.32	6.92	238

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	NON-CARBONATE HARDNESS (MG/L)	ALKALINITY AS CaCO ₃ (MG/L)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TURBIDITY (MG/L)	TEMPERATURE (DEG C)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)
MERAMEC RIVER BASIN--Continued									
07013050 - CROOKED CREEK NEAR DILLARD, MO. (LAT 37° 42' 40" LONG 091° 11' 50")									
1 OCT., 1972									
16...	90	190	550	8.2	<10	27.0	10.5	131	4
JAN., 1973									
29...	40	112	310	8.0	<10	6.0	12.9	104	4
MAY									
14...	10	138	290	8.1	<10	17.0	10.3	106	0
JULY									
30...	78	172	460	7.5	<10	25.0	8.5	102	0
07013100 - HUZZAH CREEK AT DILLARD, MO. (LAT 37° 44' 20" LONG 091° 12' 10")									
1 OCT., 1972									
16...	18	216	440	8.2	<10	20.0	10.6	115	1
JAN., 1973									
29...	18	134	300	8.1	<10	5.0	13.4	105	3
MAY									
14...	0	166	320	8.1	>10	17.0	10.3	106	0
JULY									
30...	0	172	335	7.5	<10	26.0	8.4	102	0
07013200 - HUZZAH CREEK NEAR DILLARD, MO. (LAT 37° 46' 40" LONG 091° 10' 00")									
1 OCT., 1972									
16...	34	208	440	7.9	<10	20.0	8.2	89	2
JAN., 1973									
29...	22	136	300	7.6	<10	3.0	13.1	97	1
MAY									
14...	8	166	320	8.0	>10	14.0	9.9	95	0
JULY									
30...	0	200	350	7.8	<10	25.0	7.8	94	1
07014050 - COURTOIS CREEK AT COURTOIS, MO. (LAT 37° 45' 50" LONG 090° 04' 00")									
1 OCT., 1972									
26...	12	182	380	8.2	<10	18.0	10.3	107	0
JAN., 1973									
29...	10	104	230	7.8	<10	6.0	13.1	106	3
MAY									
14...	0	136	250	8.1	>10	15.0	9.5	94	0
JULY									
30...	0	174	315	7.9	<10	25.0	8.8	106	0
07014060 - INDIAN CREEK AT COURTOIS, MO. (LAT 37° 46' 00" LONG 091° 04' 30")									
1 OCT., 1972									
16...	110	174	600	8.0	<10	17.0	9.0	93	4
JAN., 1973									
29...	38	160	400	7.9	<10	4.0	13.6	104	2
MAY									
14...	56	172	460	8.0	>10	16.0	10.0	101	0
JULY									
30...	74	168	495	8.0	<10	27.0	8.6	108	0
07014550 - INDIAN CREEK NEAR ANTHONIES MILL, MO. (LAT 38° 07' 20" LONG 090° 58' 00")									
1 OCT., 1972									
19...	38	242	580	8.2	10	13.0	9.6	91	0
FEB., 1973									
01...	26	146	340	8.2	<10	8.0	11.9	100	4
MAY									
17...	10	174	310	7.9	<10	13.0	10.0	94	0
AUG.									
02...	34	204	450	8.0	<10	21.0	8.0	89	0

LOWER MISSISSIPPI RIVER BASIN

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	DIS- SOLVED SILVER (AG) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
MERAMEC RIVER BASIN--Continued										
07014600 - LITTLE COURTOIS CREEK NR. ANTHONIES MILL, MO. (LAT 38° 08' 10" LONG 091° 00' 30")										
1 OCT., 1972										
19...	5.5	7.6	0	0	0	12	1	9	1	80
FEB., 1973										
01...	15	8.3	0	110	<10	4	0	7	0	40
MAY										
17...	4.4	8.2	0	0	<10	5	0	4	0	20
AUG.										
02...	5.1	8.9	20	0	0	3	0	4	0	10
07014650 - INDIAN CREEK NEAR SULLIVAN, MO. (LAT 38° 11' 40" LONG 090° 58' 50")										
1 OCT., 1972										
19...	15	8.6	0	0	0	3	1	6	0	60
FEB., 1973										
01...	97	7.4	10	0	<10	0	0	4	0	40
MAY										
17...	51	7.1	0	0	<10	6	1	4	0	20
AUG.										
02...	20	8.5	10	0	0	2	0	2	1	20
07017280 - FLAT RIVER AT ELVINS, MO. (LAT 37° 49' 36" LONG 090° 32' 21")										
1 OCT., 1972										
18...	.42	9.2	0	10	0	10	0	5	1	60
FEB., 1973										
01...	92	11	70	20	<10	0	0	10	1	40
MAY										
16...	5.6	6.5	0	0	<10	3	0	4	0	20
AUG.										
01...	.93	9.5	20	30	0	3	0	4	0	50
07017300 - FLAT RIVER AT FLAT RIVER, MO. (LAT 37° 52' 00" LONG 090° 40' 30")										
1 OCT., 1972										
18...	11	8.3	0	10	0	62	1	7	39	170
FEB., 1973										
01...	179	10	30	10	<10	7	0	8	0	70
MAY										
16...	6.2	5.7	0	10	<10	12	1	6	17	120
AUG.										
01...	.07	6.4	20	80	0	21	0	6	28	130
ST. FRANCIS RIVER BASIN										
07033850 - BREWERS CREEK NEAR ROSELLE, MO. (LAT 37° 37' 00" LONG 090° 30' 10")										
1 JAN., 1973										
31...	4.4	3.9	10	50	<10	0	0	8	1	30
MAY										
16...	3.5	4.0	0	0	<10	2	0	6	0	20
AUG.										
01...	.59	4.2	40	20	0	3	0	4	1	10
07034450 - STOUTS CREEK AT IRONTON, MO. (LAT 37° 36' 50" LONG 090° 37' 50")										
1 OCT., 1972										
18...	.45	7.6	0	40	0	6	0	7	3	80
JAN., 1973										
31...	12	7.7	10	30	<10	1	0	7	2	50
MAY										
16...	3.0	8.7	20	50	<10	4	0	4	0	20
AUG.										
01...	1.8	6.5	20	20	0	2	0	3	2	10
07036940 - BIG CREEK AT CHLORIDE, MO. (LAT 37° 27' 40" LONG 090° 41' 10")										
1 OCT., 1972										
18...	3.8	7.9	30	240	0	10	0	5	13	1000
JAN., 1973										
31...	24	8.3	20	10	<10	0	0	6	8	220
MAY										
16...	15	7.3	0	30	<10	4	1	4	25	480
AUG.										
01...	3.9	7.2	10	140	0	1	0	3	46	170

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS- SOLVED COBALT (CO) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED BARIUM (BA) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)
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MERAMEC RIVER BASIN--Continued

07014600 - LITTLE COURTOIS CREEK NR. ANTHONIES MILL, MO. (LAT 38°08'10" LONG 091°00'30")

1OCT., 1972										
19...	0	0	0	86	33	140	30	163	0	70
FEB., 1973										
01...	6	0	0	66	24	70	14	158	0	80
MAY										
17...	4	0	0	53	24	56	14	188	0	123
AUG.										
02...	0	0	300	29	54	90	16	166	0	112

07014650 - INDIAN CREEK NEAR SULLIVAN, MO. (LAT 38°11'40" LONG 090°58'50")

1OCT., 1972										
19...	0	0	0	58	34	40	8.1	236	2	14
FEB., 1973										
01...	1	0	0	40	20	14	3.6	173	0	2.3
MAY										
17...	2	0	100	36	20	7.4	2.7	207	0	16
AUG.										
02...	0	0	400	20	44	16	3.9	219	0	35

07017280 - FLAT RIVER AT ELVINS, MO. (LAT 37°49'36" LONG 090°32'21")

1OCT., 1972										
18...	2	0	0	42	27	12	2.6	241	0	16
FEB., 1973										
01...	3	0	0	26	13	3.6	2.6	110	0	20
MAY										
16...	3	0	0	24	15	3.3	1.4	163	76	11
AUG.										
01...	1	1	100	14	34	6.7	2.5	195	4	19

07017300 - FLAT RIVER AT FLAT RIVER, MO. (LAT 37°52'00" LONG 090°40'30")

1OCT., 1972										
18...	10	1	0	70	52	12	4.6	232	13	20
FEB., 1973										
01...	5	0	0	34	20	4.4	2.0	151	0	37
MAY										
16...	7	0	100	50	25	5.4	2.2	210	0	86
AUG.										
01...	10	2	100	29	73	15	4.3	207	0	18

ST. FRANCIS RIVER BASIN--Continued

07033850 - BREWERS CREEK NEAR ROSELLE, MO. (LAT 37°37'00" LONG 090°30'10")

1JAN., 1973										
31...	1	0	0	18	6.8	24	10	80	0	24
MAY										
16...	2	0	100	19	5.3	19	8.3	80	0	33
AUG.										
01...	0	1	100	5.2	11	21	7.3	68	2	31

07034450 - STOUTS CREEK AT IRONTON, MO. (LAT 37°36'50" LONG 090°37'50")

1OCT., 1972										
18...	0	1	0	46	21	32	12	188	0	52
JAN., 1973										
31...	3	1	0	21	7.3	8.1	3.6	78	0	14
MAY										
16...	3	1	100	28	7.8	5.5	2.7	112	50	39
AUG.										
01...	0	2	300	14	28	26	9.2	151	5	45

07036940 - BIG CREEK AT CHLORIDE, MO. (LAT 37°27'40" LONG 090°41'10")

1OCT., 1972										
18...	1	50	0	33	19	5.2	3.0	154	0	27
JAN., 1973										
31...	2	28	0	16	7.3	1.9	1.4	66	0	10
MAY										
16...	2	18	100	17	9.2	2.1	1.7	88	0	14
AUG.										
01...	2	80	0	11	26	4.0	2.2	134	0	21

LOWER MISSISSIPPI RIVER BASIN

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	DIS-SOLVED ORTHO PHOSPHATE (PO ₄) (MG/L)	PHOSPHATE (PO ₄) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA, MG) (MG/L)
MERAMEC RIVER BASIN--Continued										
07014600 - LITTLE COURTOIS CREEK NR. ANTHONIES MILL, MO. (LAT 38° 08' 10" LONG 091° 00' 30")										
1OCT., 1972										
19...	43	.2	6.8	.30	<.02	.08	497	.68	7.38	350
FEB., 1973										
01...	117	1.1	4.2	.70	.02	.03	463	.63	18.8	260
MAY										
17...	19	1.0	3.5	<.10	<.02	.07	395	.54	4.69	230
AUG.										
02...	16	2.4	6.0	.10	<.02	.07	417	.57	5.74	296
07014650 - INDIAN CREEK NEAR SULLIVAN, MO. (LAT 38° 11' 40" LONG 090° 58' 50")										
1OCT., 1972										
19...	19	.2	1.8	.08	<.02	.03	302	.41	12.2	280
FEB., 1973										
01...	60	.3	.6	.10	<.02	<.02	233	.32	61.0	180
MAY										
17...	7.6	.2	.3	<.01	<.02	.05	199	.27	27.4	170
AUG.										
02...	2.8	.4	.7	<.10	<.02	.04	239	.33	12.9	232
07017280 - FLAT RIVER AT ELVINS, MO. (LAT 37° 49' 36" LONG 090° 32' 21")										
1OCT., 1972										
18...	8.6	.4	<.1	.30	<.02	.03	236	.32	.27	220
FEB., 1973										
01...	26	.1	.2	.20	.06	.06	157	.21	39.0	120
MAY										
16...	6.0	.2	<.1	<.10	<.02	.05	224	.30	3.39	120
AUG.										
01...	.8	.2	<.1	<.10	<.02	.06	187	.25	.47	176
07017300 - FLAT RIVER AT FLAT RIVER, MO. (LAT 37° 52' 00" LONG 090° 40' 30")										
1OCT., 1972										
18...	25	.3	.3	<.10	.11	.11	320	.44	9.50	390
FEB., 1973										
01...	41	.1	.3	.10	<.02	<.02	223	.30	108	170
MAY										
16...	7.2	.3	.2	<.10	.04	.08	285	.39	4.77	230
AUG.										
01...	1.8	.2	.1	<.10	.02	.08	250	.34	.05	374
ST. FRANCIS RIVER BASIN--Continued										
07033850 - BREWERS CREEK NEAR ROSELLE, MO. (LAT 37° 37' 00" LONG 090° 30' 10")										
1JAN., 1973										
31...	35	.6	.70	.10	<.02	<.02	162	.22	1.92	72
MAY										
16...	5.6	.5	.90	<.10	<.02	.05	135	.18	1.28	70
AUG.										
01...	1.9	.7	.20	<.10	<.02	.04	118	.16	.19	58
07034450 - STOUTS CREEK AT IRONTON, MO. (LAT 37° 36' 50" LONG 090° 37' 50")										
1OCT., 1972										
18...	15	.2	1.0	.10	.04	.16	279	.38	.34	200
JAN., 1973										
31...	21	.2	.4	.10	<.02	<.02	121	.16	3.92	82
MAY										
16...	5.0	.2	.1	<.10	<.02	.07	201	.27	1.63	102
AUG.										
01...	2.9	.4	2.2	<.10	.02	.07	213	.29	1.04	150
07036940 - BIG CREEK AT CHLORIDE, MO. (LAT 37° 27' 40" LONG 090° 41' 10")										
1OCT., 1972										
18...	7.8	.0	<.1	<.10	<.02	.02	179	.24	1.84	160
JAN., 1973										
31...	18	.1	.01	.10	<.02	<.02	95	.13	6.16	70
MAY										
16...	4.1	.2	<.1	<.10	<.02	.04	99	.13	4.01	80
AUG.										
01...	.7	.3	<.1	<.10	<.02	.04	139	.19	1.46	136

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	NON-CARBONATE HARDNESS (MG/L)	ALKALINITY AS CaCO ₃ (MG/L)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TURBIDITY (MG/L)	TEMPERATURE (DEG C)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)
MERAMEC RIVER BASIN--Continued									
07014600 - LITTLE COURTOIS CREEK NR. ANTHONIES MILL, MO. (LAT 38° 08' 10" LONG 091° 00' 30")									
1 OCT., 1972									
19...	210	134	1300	8.2	<10	14.0	10.3	99	0
FEB., 1973									
01...	130	130	925	8.0	<10	8.0	11.5	97	7
MAY									
17...	76	154	875	8.0	<10	16.0	9.7	98	12
AUG.									
02...	160	136	1120	8.0	<10	24.0	7.5	88	1
07014650 - INDIAN CREEK NEAR SULLIVAN, MO. (LAT 38° 11' 40" LONG 090° 58' 50")									
1 OCT., 1972									
19...	86	198	800	8.4	<10	13.0	11.3	107	0
FEB., 1973									
01...	42	142	410	8.2	<10	8.0	12.0	101	3
MAY									
17...	2	170	340	8.1	<10	15.0	10.3	102	0
AUG.									
02...	52	180	505	7.5	--	23.0	8.5	98	0
07017280 - FLAT RIVER AT ELVINS, MO. (LAT 37° 49' 36" LONG 090° 32' 21")									
1 OCT., 1972									
18...	20	198	470	8.2	<10	14.0	11.3	109	3
FEB., 1973									
01...	28	90	240	7.9	66	8.0	11.8	99	27
MAY									
16...	0	260	255	8.6	<10	20.0	10.4	113	0
AUG.									
01...	10	166	330	8.5	<10	30.0	10.0	132	2
07017300 - FLAT RIVER AT FLAT RIVER, MO. (LAT 37° 52' 00" LONG 090° 40' 30")									
1 OCT., 1972									
18...	180	212	800	8.8	<10	13.0	12.3	116	0
FEB., 1973									
01...	42	124	340	7.9	46	8.0	11.8	99	13
MAY									
16...	58	172	420	8.3	<10	20.0	10.6	115	0
AUG.									
01...	204	170	680	7.8	--	29.0	10.8	138	3
ST. FRANCIS RIVER BASIN--Continued									
07033850 - BREWERS CREEK NEAR ROSELLE, MO. (LAT 37° 37' 00" LONG 090° 30' 10")									
1 JAN., 1973									
31...	6	66	280	7.6	<10	5.0	12.5	98	9
MAY									
16...	4	66	250	8.0	<10	20.0	9.8	107	5
AUG.									
01...	0	58	245	8.5	<10	28.0	7.5	95	1
07034450 - STOUTS CREEK AT IRONTON, MO. (LAT 37° 36' 50" LONG 090° 37' 50")									
1 OCT., 1972									
18...	50	154	560	8.3	<10	12.0	10.9	101	12
JAN., 1973									
31...	18	64	220	8.0	<10	7.0	13.4	111	3
MAY									
16...	0	176	200	8.8	<10	20.0	13.1	142	0
AUG.									
01...	18	132	440	8.5	--	25.0	13.6	164	5
07036940 - BIG CREEK AT CHLORIDE, MO. (LAT 37° 27' 40" LONG 090° 41' 10")									
1 OCT., 1972									
18...	36	126	350	8.2	<10	14.0	9.3	89	2
JAN., 1973									
31...	16	54	160	7.8	<10	6.0	12.7	102	2
MAY									
16...	8	72	180	7.6	<10	14.0	10.6	102	0
AUG.									
01...	26	110	280	7.9	<10	22.0	8.8	100	0

LOWER MISSISSIPPI RIVER BASIN

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	DIS- SOLVED SILVER (AG) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
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ST. FRANCIS RIVER BASIN--Continued

07036970 - BIG CREEK AT ANNAPOLIS, MD. (LAT 37°21'20" LONG 040°41'20")

1 OCT., 1972										
17...	17	8.6	0	10	0	10	0	5	4	70
JAN., 1973										
31...	93	7.4	10	0	<10	0	0	6	2	40
MAY										
16...	93	8.6	0	0	<10	4	0	4	0	30
AUG.										
01...	26	7.1	37	10	0	4	0	3	1	30

WHITE RIVER BASIN

07061125 - WEST FORK BLACK RIVER NR GREELEY MO (LAT 37°30'25" LONG 091°09'40")

1 OCT., 1972										
17...	9.4	8.3	0	0	0	6	0	1	0	50
JAN., 1973										
30...	37	7.0	0	0	<10	3	0	5	0	50
MAY										
15...	43	7.3	0	10	<10	4	2	4	0	20
JULY										
31...	30	9.0	20	0	0	4	0	2	0	30

07061130 - BILLS CREEK NR GREELEY MO (LAT 37°30'04" LONG 091°08'26")

1 OCT., 1972										
17...	1.3	9.0	0	0	0	11	0	1	0	60
JAN., 1973										
30...	11	7.3	0	20	<10	3	0	4	0	30
MAY										
15...	14	6.5	0	10	<10	5	0	4	0	20
JULY										
31...	8.3	7.9	20	0	0	4	0	4	1	20

07061135 - W. F. BLACK RIVER AT WEST FORK, MO. (LAT 37°29'32" LONG 091°06'29")

1 OCT., 1972										
17...	16	8.3	0	0	0	4	1	1	0	50
JAN., 1973										
30...	79	7.0	0	10	<10	0	0	5	0	30
MAY										
15...	87	6.7	0	10	<10	2	1	6	2	70
JULY										
31...	54	9.2	540	0	0	2	0	3	0	10

07061140 - BEE FORK AB HWY T NR. BUNKER, MO. (LAT 37°26'40" LONG 091°06'00")

1 OCT., 1972										
17...	1.5	7.6	0	10	0	9	0	2	0	50
JAN., 1973										
30...	14	6.2	0	0	<10	0	0	6	0	30
MAY										
15...	10	6.2	0	10	<10	1	0	0	0	20
JULY										
31...	8.0	7.1	20	0	0	2	0	4	0	30

07061145 - BEE FORK BL HWY T NR. BUNKER, MO. (LAT 37°26'30" LONG 091°05'30")

1 OCT., 1972										
17...	12	8.1	10	130	10	12	1	3	4	80
JAN., 1973										
31...	32	7.4	10	210	10	4	0	6	1	70
MAY										
15...	32	6.6	0	150	<10	9	0	4	0	30
JULY										
31...	17	6.7	28	70	0	5	0	6	2	20

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS-SOLVED COBALT (CO) (UG/L)	DIS-SOLVED CADMIUM (CD) (UG/L)	DIS-SOLVED BARIUM (BA) (UG/L)	DIS-SOLVED Cadmium (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED POSSPHORUS (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)
ST. FRANCIS RIVER BASIN--Continued										
07036970 - BIG CREEK AT ANNAPOLIS, MO. (LAT 37° 21' 20" LONG 090° 41' 20")										
1 OCT., 1972										
18...	3	0	0	34	18	4.1	1.7	188	0	<10
JAN., 1973										
31...	1	6	0	19	10	2.1	1.0	95	0	<10
MAY										
16...	2	3	100	20	11	1.7	1.2	115	0	18
AUG.										
01...	1	4	0	12	26	3.7	1.7	154	0	10
WHITE RIVER BASIN--Continued										
07061125 - WEST FORK BLACK RIVER NR GREELEY MO (LAT 37° 30' 25" LONG 091° 09' 40")										
1 OCT., 1972										
17...	0	0	0	42	21	1.4	.7	241	0	<10
JAN., 1973										
30...	2	0	0	23	12	1.2	.9	124	0	<10
MAY										
15...	3	0	100	28	12	1.1	1.0	149	0	<10
JULY										
31...	1	0	100	11	25	1.3	1.0	154	0	<10
07061130 - BILLS CREEK NR GREELEY MO (LAT 37° 30' 04" LONG 091° 08' 26")										
1 OCT., 1972										
17...	0	0	0	43	24	10	1.6	256	0	<10
JAN., 1973										
30...	1	0	0	30	16	5.0	1.2	168	0	<10
MAY										
15...	3	0	0	31	18	3.4	1.4	195	0	<10
JULY										
31...	1	0	20	14	28	7.6	1.6	180	0	<10
07061135 - W. F. BLACK RIVER AT WEST FORK, MO. (LAT 37° 29' 32" LONG 091° 06' 29")										
1 OCT., 1972										
17...	0	0	0	42	21	2.5	1.0	215	0	<10
JAN., 1973										
30...	2	0	0	26	12	1.6	.8	129	0	<10
MAY										
15...	4	0	100	27	16	1.7	1.2	156	0	10
JULY										
31...	1	0	0	11	26	2.5	1.0	156	0	<10
07061140 - BEE FORK AB HWY T NR. BUNKER, MO. (LAT 37° 26' 40" LONG 091° 06' 00")										
1 OCT., 1972										
17...	0	0	0	28	16	1.5	.8	151	0	<10
JAN., 1973										
30...	2	0	0	9.6	4.8	1.0	.8	41	0	<10
MAY										
15...	2	0	0	8.8	6.3	.9	.9	51	0	<10
JULY										
31...	1	0	0	4.8	12	1.4	.9	71	0	<10
07061145 - BEE FORK BL HWY T NR. BUNKER, MO. (LAT 37° 26' 30" LONG 091° 05' 30")										
1 OCT., 1972										
17...	1	0	0	49	22	41	4.2	176	0	108
JAN., 1973										
31...	4	0	0	24	13	16	1.8	98	0	33
MAY										
15...	5	0	0	24	11	14	1.9	112	0	48
JULY										
31...	1	0	0	12	27	22	2.4	122	0	43

LOWER MISSISSIPPI RIVER BASIN

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	DIS-SOLVED ORTHO PHOSPHATE (PO4) (MG/L)	PHOSPHATE (PO4) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARDNESS (CA, MG) (MG/L)
ST. FRANCIS RIVER BASIN--Continued										
07036970 - BIG CREEK AT ANNAPOLIS, MD. (LAT 37°21'20" LONG 090°41'20")										
1OCT., 1972										
18...	7.3	.2	<.1	.20	<.02	.12	176	.24	8.08	160
JAN., 1973										
31...	18	.1	.1	.10	<.02	<.02	115	.16	28.9	90
MAY										
16...	4.3	.2	<.1	<.10	<.02	.04	122	.17	30.6	94
AUG.										
01...	.6	.1	<.1	<.10	<.02	.07	138	.19	9.69	136
WHITE RIVER BASIN--Continued										
07061125 - WEST FORK BLACK RIVER NR GREELEY MD (LAT 37°30'25" LONG 091°09'40")										
1OCT., 1972										
17...	6.2	.1	<.1	.10	<.02	.02	208	.28	5.28	190
JAN., 1973										
30...	19	.1	.2	.10	<.02	<.02	134	.18	13.4	110
MAY										
15...	4.6	.3	<.1	<.10	<.02	.05	138	.19	16.0	118
JULY										
31...	.4	.1	<.1	<.10	<.02	.06	134	.18	10.9	128
07061130 - BILLS CREEK NR GREELEY MD (LAT 37°30'04" LONG 091°08'26")										
1OCT., 1972										
17...	7.7	.2	.1	.30	<.02	<.02	232	.32	.81	210
JAN., 1973										
30...	26	.1	.6	.10	<.02	<.02	179	.24	5.32	140
MAY										
15...	5.2	.3	<.1	<.10	<.02	.05	172	.23	6.50	154
JULY										
31...	1.3	.1	.2	.10	<.02	.05	160	.22	3.59	150
07061135 - W. F. BLACK RIVER AT WEST FORK, MD. (LAT 37°29'32" LONG 091°06'29")										
1OCT., 1972										
17...	6.8	.1	<.1	.20	<.02	.03	198	.27	8.55	190
JAN., 1973										
30...	20	.1	.2	.10	<.02	<.02	141	.19	30.1	110
MAY										
15...	5.0	.3	<.1	<.10	<.02	.05	145	.20	34.1	132
JULY										
31...	.5	.1	.1	<.10	<.02	.06	138	.19	20.1	132
07061140 - BEE FORK AB HWY T NR. BUNKER, MD. (LAT 37°26'40" LONG 091°06'00")										
1OCT., 1972										
17...	5.1	.0	<.1	<.10	<.02	<.02	143	.19	.58	130
JAN., 1973										
30...	11	.0	.2	.10	<.02	<.02	64	.09	2.42	44
MAY										
15...	3.2	.3	<.1	<.10	<.02	.05	62	.08	1.67	48
JULY										
31...	.4	.1	<.1	<.10	<.02	.05	72	.10	1.56	60
07061145 - BEE FORK BL HWY T NR. BUNKER, MD. (LAT 37°26'30" LONG 091°05'30")										
1OCT., 1972										
17...	16	.2	.1	<.10	<.02	.16	335	.46	10.9	212
JAN., 1973										
31...	26	.3	.1	.20	<.02	<.02	170	.23	14.7	110
MAY										
15...	2.6	.7	<.1	<.10	<.02	.05	164	.22	14.2	106
JULY										
31...	2.1	.4	<.1	.10	<.02	.10	176	.24	8.08	140

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	NON-CARBONATE HARDNESS (MG/L)	ALKALINITY AS CaCO ₃ (MG/L)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TURBIDITY (MG/L)	TEMPERATURE (DEG C)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)
ST. FRANCIS RIVER BASIN--Continued									
07036970 - BIG CREEK AT ANNAPOLIS, MO. (LAT 37° 21' 20" LONG 090° 41' 20")									
1OCT., 1972									
18...	6	154	340	8.1	<10	16.0	8.0	81	1
JAN., 1973									
31...	12	78	190	8.0	<10	6.0	12.6	102	2
MAY									
16...	0	94	160	7.5	<10	15.0	9.8	97	0
AUG.									
01...	10	126	168	7.7	<10	22.0	7.1	81	0
WHITE RIVER BASIN--Continued									
07061125 - WEST FORK BLACK RIVER NR GREELEY MO (LAT 37° 30' 25" LONG 091° 09' 40")									
1OCT., 1972									
17...	0	198	370	8.2	<10	19.0	9.7	103	0
JAN., 1973									
30...	4	102	215	8.1	<10	7.0	12.6	104	2
MAY									
15...	0	122	235	8.1	>10	17.0	10.7	110	5
JULY									
31...	2	126	235	8.1	<10	25.0	9.3	112	0
07061130 - BILLS CREEK NR GREELEY MO (LAT 37° 30' 04" LONG 091° 08' 26")									
1OCT., 1972									
17...	0	210	420	8.1	<10	18.0	8.4	88	0
JAN., 1973									
30...	4	138	300	8.0	<10	7.0	12.0	99	5
MAY									
15...	0	160	290	8.2	>10	17.0	9.5	98	1
JULY									
31...	2	148	255	8.1	<10	25.0	7.4	89	0
07061135 - W. F. BLACK RIVER AT WEST FORK, MO. (LAT 37° 29' 32" LONG 091° 06' 29")									
1OCT., 1972									
17...	18	176	380	8.2	<10	17.0	9.1	94	0
JAN., 1973									
30...	8	106	230	8.0	<10	7.0	12.7	105	5
MAY									
15...	4	128	235	8.0	>10	16.0	10.1	102	0
JULY									
31...	4	128	250	7.7	<10	26.0	8.0	98	0
07061140 - BEE FORK AB HWY T NR. BUNKER, MO. (LAT 37° 26' 40" LONG 091° 06' 00")									
1OCT., 1972									
17...	10	124	270	7.9	<10	17.0	9.6	99	2
JAN., 1973									
30...	10	34	105	7.2	<10	5.0	12.5	98	2
MAY									
15...	6	42	280	7.4	<10	19.0	9.3	99	0
JULY									
31...	2	58	130	8.1	<10	26.0	8.0	98	0
07061145 - BEE FORK BL HWY T NR. BUNKER, MO. (LAT 37° 26' 30" LONG 091° 05' 30")									
1OCT., 1972									
17...	68	144	600	8.0	<10	18.0	9.3	97	3
JAN., 1973									
31...	32	80	300	7.8	<10	5.0	12.5	98	3
MAY									
15...	14	92	280	7.9	<10	20.0	9.8	107	0
JULY									
31...	40	100	368	8.2	--	27.0	7.8	98	6

LOWER MISSISSIPPI RIVER BASIN

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	DIS- SOLVED SILVER (AG) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
WHITE RIVER BASIN--Continued										
07061155 - STROTHER CREEK NEAR DATES, MO. (LAT 37°35'20"LONG 091°03'20")										
¹ OCT., 1972										
17...	14	4.2	0	40	0	10	0	3	0	60
JAN., 1973										
30...	14	6.9	0	210	<10	3	0	8	0	140
MAY										
15...	16	8.0	0	180	<10	12	0	4	0	70
JULY										
31...	8.7	5.0	18	90	0	9	0	5	1	20
07061160 - NEALS CREEK NR. BUICK, MO. (LAT 37°38'30"LONG 091°02'30")										
¹ OCT., 1972										
17...	2.0	7.9	0	10	0	6	0	2	0	60
JAN., 1973										
30...	9.9	7.4	10	30	10	2	0	6	0	50
MAY										
15...	16	6.5	0	20	<10	6	1	3	0	30
JULY										
31...	4.2	8.0	30	0	0	3	0	3	2	20
07061165 - BRUSHY CREEK AT DATES, MO. (LAT 37°33'42"LONG 091°03'20")										
¹ OCT., 1972										
17...	.48	8.6	0	0	0	4	1	1	0	50
JAN., 1973										
30...	6.2	6.4	0	10	<10	4	0	4	0	30
MAY										
15...	8.0	7.0	0	10	<10	3	0	2	0	30
JULY										
31...	5.2	7.8	10	0	0	4	0	3	3	10
07061600 - BLACK RIVER BELOW ANAPOLIS, MO. (LAT 37°19'30"LONG 090°45'53")										
¹ OCT., 1972										
18...	171	7.9	0	0	0	8	0	4	0	50
JAN., 1973										
31...	603	7.3	10	0	<10	0	0	5	0	20
MAY										
16...	733	7.2	0	0	<10	8	0	3	0	20
AUG.										
01...	176	8.0	40	10	0	3	0	5	0	20
07061810 - LOGAN CR. AB. SWEETWATER CR. NR. CORRIDON, MO. (LAT 37°22'15"LONG 091°06'48")										
¹ OCT., 1972										
17...	.13	8.1	40	30	0	5	1	3	0	60
JAN., 1973										
31...	10	6.2	10	10	<10	0	0	6	0	10
MAY										
15...	6.0	5.8	0	10	<10	2	0	2	0	0
JULY										
31...	3.3	6.9	65	20	0	4	0	2	1	50
07061840 - LOGAN CR. BL. SWEETWATER CR. NR. CORRIDON, MO. (LAT 37°18'50"LONG 091°07'40")										
¹ OCT., 1972										
17...	6.9	6.4	0	40	0	6	1	9	2	60
JAN., 1973										
31...	46	6.0	20	120	<10	2	0	10	1	50
MAY										
15...	39	6.1	0	40	<10	2	0	8	0	10
JULY										
31...	25	5.6	50	40	0	2	0	7	1	20

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS- SOLVED COBALT (CO) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED BARIUM (BA) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)
WHITE RIVER BASIN--Continued										
07061155 - STROTHER CREEK NEAR DATES, MO. (LAT 37°35'20"LONG 091°03'20")										
1OCT., 1972										
17...	0	0	0	50	35	27	6.6	193	0	134
JAN., 1973										
30...	4	0	0	37	21	13	3.9	144	0	83
MAY										
15...	5	0	0	34	17	7.4	2.7	154	0	49
JULY										
31...	1	0	10	17	39	15	3.8	154	0	76
07061160 - NEALS CREEK NR. BUICK, MO. (LAT 37°38'30"LONG 091°02'30")										
1OCT., 1972										
17...	0	0	0	59	34	5.1	1.7	273	0	32
JAN., 1973										
30...	2	1	0	55	31	9.1	3.9	185	0	90
MAY										
15...	3	0	100	50	30	5.7	2.7	217	0	62
JULY										
31...	0	0	0	21	53	6.7	2.4	249	0	56
07061165 - BRUSHY CREEK AT DATES, MO. (LAT 37°33'42"LONG 091°03'20")										
1OCT., 1972										
17...	0	0	0	39	17	1.4	.7	215	0	<10
JAN., 1973										
30...	2	0	0	20	9.7	1.0	.9	98	0	<10
MAY										
15...	3	0	0	21	11	1.0	1.0	119	0	<10
JULY										
31...	2	0	20	8.8	21	1.3	.9	129	0	<10
07061600 - BLACK RIVER BELOW ANAPOLIS, MO. (LAT 37°19'30"LONG 090°45'53")										
1OCT., 1972										
18...	0	0	0	31	18	4.7	1.2	163	0	10
JAN., 1973										
31...	2	0	0	21	10	2.5	1.0	102	0	10
MAY										
16...	4	0	100	21	9.7	1.8	1.2	112	0	<10
AUG.										
01...	0	0	20	8.8	21	2.8	1.2	124	0	<10
07061810 - LOGAN CR. AB. SWEETWATER CR. NR. CORRIDON, MO. (LAT 37°22'15"LONG 091°06'48")										
1OCT., 1972										
17...	1	0	0	18	11	1.5	.8	105	0	<10
JAN., 1973										
31...	2	0	0	1.6	1.9	.7	.6	9	0	<10
MAY										
15...	2	0	200	3.2	1.0	.7	.8	12	0	11
JULY										
31...	1	0	0	1.3	4.1	1.0	.8	19	0	<10
07061840 - LOGAN CR. BL. SWEETWATER CR. NR. CORRIDON, MO. (LAT 37°18'50"LONG 091°07'40")										
1OCT., 1972										
17...	0	0	0	34	28	27	4.3	146	0	66
JAN., 1973										
31...	2	0	0	12	5.8	5.6	1.4	41	0	12
MAY										
15...	3	0	0	9.6	5.8	2.6	1.2	54	0	<10
JULY										
31...	0	0	0	7.6	13	9.1	2.1	76	0	28

LOWER MISSISSIPPI RIVER BASIN

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS-SOLVED CHLORIDE (CL) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	DIS-SOLVED ORTHO PHOSPHATE (PO4) (MG/L)	PHOSPHATE (PO4) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARDNESS (CA+MG) (MG/L)
WHITE RIVER BASIN--Continued										
07061155 - STROTHER CREEK NEAR OATES, MO. (LAT 37°35'20" LONG 091°03'20")										
1 OCT., 1972										
17...	22	.0	<.1	.30	.09	.10	374	.51	14.1	270
JAN., 1973										
30...	55	.1	.5	.40	.06	.06	291	.40	11.0	180
MAY										
15...	7.5	.4	.1	<.10	.03	.09	202	.27	8.73	156
JULY										
31...	2.1	.1	<.1	.10	.07	.14	234	.32	5.50	204
07061160 - NEALS CREEK NR. BUICK, MO. (LAT 37°38'30" LONG 091°02'30")										
1 OCT., 1972										
17...	11	.1	<.1	.20	<.02	<.02	285	.39	1.54	290
JAN., 1973										
30...	16	.1	.3	.50	<.02	<.02	304	.41	8.13	260
MAY										
15...	9.8	.3	.4	<.10	<.02	.05	275	.37	11.9	248
JULY										
31...	1.2	.1	.2	.10	<.02	.06	271	.37	3.07	270
07061165 - BRUSHY CREEK AT OATES, MO. (LAT 37°33'42" LONG 091°03'20")										
1 OCT., 1972										
17...	6.8	.2	<.1	.70	<.02	<.02	190	.26	.25	170
JAN., 1973										
30...	16	.1	<.1	.10	<.02	<.02	112	.15	1.87	90
MAY										
15...	4.7	.3	<.1	.10	.02	.06	115	.16	2.48	96
JULY										
31...	.4	.1	<.1	<.10	<.02	.06	114	.16	1.60	108
07061600 - BLACK RIVER BELOW ANAPOLIS, MO. (LAT 37°19'30" LONG 090°45'53")										
1 OCT., 1972										
18...	6.5	.3	<.1	<.10	<.02	.04	160	.22	73.9	150
JAN., 1973										
31...	26	.2	.1	.10	<.02	<.02	128	.17	208	94
MAY										
16...	4.6	.1	<.1	<.10	<.02	.05	111	.15	220	92
AUG.										
01...	.5	.1	.1	<.10	<.02	.05	114	.16	54.2	108
07061810 - LOGAN CR. AB. SWEETWATER CR. NR. CORRIDON, MO. (LAT 37°22'15" LONG 091°06'48")										
1 OCT., 1972										
17...	3.4	.1	<.1	.10	<.02	.09	105	.14	.04	92
JAN., 1973										
31...	4.0	.1	<.1	.10	<.02	<.02	30	.04	.81	12
MAY										
15...	1.7	.2	<.1	<.10	.02	.05	31	.04	.50	12
JULY										
31...	.4	.1	.1	<.10	<.02	.06	35	.05	.31	20
07061840 - LOGAN CR. BL. SWEETWATER CR. NR. CORRIDON, MO. (LAT 37°18'50" LONG 091°07'40")										
1 OCT., 1972										
17...	16	.0	.04	.10	<.02	.19	254	.35	4.73	200
JAN., 1973										
31...	15	.1	.2	.20	<.02	<.02	78	.11	9.69	54
MAY										
15...	2.9	.3	.1	<.10	<.02	.05	66	.09	6.95	48
JULY										
31...	1.7	.1	.4	<.10	<.02	.05	105	.14	7.09	74

LOWER MISSISSIPPI RIVER BASIN

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

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CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	NON-CARBONATE HARDNESS (MG/L)	ALKALINITY AS CaCO ₃ (MG/L)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TURBIDITY (MG/L)	TEMPERATURE (DEG C)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)
WHITE RIVER BASIN--Continued									
07061155 - STROTHER CREEK NEAR DATES, MO. (LAT 37°35'20" LONG 091°03'20")									
1OCT., 1972									
17...	110	158	650	8.1	<10	14.0	8.3	80	9
JAN., 1973									
30...	62	118	425	8.0	<10	6.0	12.2	98	7
MAY									
15...	30	126	375	8.2	>10	18.0	10.0	104	11
JULY									
31...	78	126	460	7.5	<10	26.0	7.0	85	6
07061160 - NEALS CREEK NR. BUICK, MO. (LAT 37°38'30" LONG 091°02'30")									
1OCT., 1972									
17...	62	224	460	8.2	<10	12.0	10.3	95	4
JAN., 1973									
30...	110	152	510	8.1	<10	2.0	14.0	101	7
MAY									
15...	70	178	440	7.9	>10	11.0	10.5	95	1
JULY									
31...	66	204	510	7.4	<10	21.0	8.6	96	1
07061165 - BRUSHY CREEK AT DATES, MO. (LAT 37°33'42" LONG 091°03'20")									
1OCT., 1972									
17...	0	176	340	8.1	<10	16.0	9.4	95	0
JAN., 1973									
30...	10	80	190	7.8	<10	6.0	12.8	103	4
MAY									
15...	0	98	200	7.8	>10	15.0	10.4	103	2
JULY									
31...	2	106	210	7.5	<10	22.0	7.2	82	0
07061600 - BLACK RIVER BELOW ANAPOLIS, MO. (LAT 37°19'30" LONG 090°45'53")									
1OCT., 1972									
18...	18	134	310	7.6	<10	8.0	8.5	71	2
JAN., 1973									
31...	10	84	200	8.0	<10	6.0	12.6	102	1
MAY									
16...	0	92	170	7.7	<10	15.0	9.5	94	0
AUG.									
01...	6	102	195	7.7	<10	23.0	7.7	89	0
07061810 - LOGAN CR. AB. SWEETWATER CR. NR. CORRIDON, MO. (LAT 37°22'15" LONG 091°06'48")									
1OCT., 1972									
17...	6	86	210	7.5	<10	16.0	8.2	83	2
JAN., 1973									
31...	5	7	45	6.3	<10	6.0	12.4	100	4
MAY									
15...	2	10	38	6.8	<10	17.0	9.4	97	0
JULY									
31...	4	16	46	7.4	<10	24.0	8.7	102	0
07061840 - LOGAN CR. BL. SWEETWATER CR. NR. CORRIDON, MO. (LAT 37°18'50" LONG 091°07'40")									
1OCT., 1972									
17...	80	120	550	7.7	<10	16.0	8.6	87	2
JAN., 1973									
31...	20	34	150	7.3	<10	5.0	12.4	97	5
MAY									
15...	4	44	102	7.5	<10	19.0	8.7	93	4
JULY									
31...	12	62	218	7.5	--	26.0	7.4	90	0

LOWER MISSISSIPPI RIVER BASIN

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
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WHITE RIVER BASIN--Continued

07064440 - CURRENT RIVER BELOW MONTAUK STATE PARK (LAT 37° 27' 01" LONG 091° 29' 41")

APR., 1973												
02...	253	8.0	50	20	19	9.0	1.4	1.0	98	0	4.8	2.0
JUNE												
18...	139	8.1	360	10	26	15	2.0	1.0	148	0	5.9	3.0
JULY												
23...	151	--	--	--	--	--	--	--	136	0	--	--
30...	107	8.4	80	10	30	17	2.4	.9	168	0	4.1	3.6

07066110 - JACKS FORK ABOVE TWO RIVERS (LAT 37° 10' 53" LONG 091° 17' 36")

APR., 1973											
05... 1600	6.8	0	0	29	15	1.7	1.0	160	0	4.6	1.4
JUNE											
20... 478	8.1	210	0	33	19	1.3	.9	194	0	4.3	2.2
AUG.											
01... 288	8.4	400	20	34	21	1.6	.9	212	0	3.0	2.4

07066510 - CURRENT RIVER ABOVE POWDER MILL (LAT 37° 10' 32" LONG 091° 12' 48")

APR., 1973											
05... 4500	7.0	10	10	25	13	1.8	1.0	144	0	4.6	1.4
JUNE											
20... 1560	7.6	120	10	33	18	2.1	.9	188	0	4.9	2.3
AUG.											
01... 1240	8.1	120	0	33	19	1.6	.9	196	0	3.6	2.3

07066550 - BLUE SPRING NEAR EMINENCE, MO. (LAT 37° 09' 58" LONG 091° 09' 47")

APR., 1973											
06... 290	6.1	30	10	11	6.1	3.0	1.1	56	0	7.6	1.4
JUNE											
21... 176	--	--	--	--	--	--	--	104	0	--	--
AUG.											
01... 155	7.1	160	10	26	12	2.9	.9	130	0	6.9	3.3

07067800 - CURRENT RIVER BELOW HAWES CAMPGROUND (LAT 36° 49' 08" LONG 090° 56' 48")

APR., 1973											
06... 6400	7.0	10	0	26	13	1.1	.9	140	0	5.0	1.4
JUNE											
22... 2790	7.5	120	20	32	18	2.7	.9	184	0	5.8	2.1
AUG.											
02... 2210	8.0	130	10	34	19	1.6	.8	196	0	3.4	2.3

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS-SOLVED FLUORIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	AMMONIA NITROGEN (N) (MG/L)	ORGANIC NITROGEN (N) (MG/L)	DIS-SOLVED PHOSPHORUS (P) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L)	DIS-SOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	HARDNESS (CA, MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)
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WHITE RIVER BASIN--Continued

07064440 - CURRENT RIVER BELOW MONTAUK STATE PARK (LAT 37°27'01"LONG 091°29'41")

APR., 1973												
02...	.0	.56	.01	.03	.00	.01	.0	102	.14	69.7	84	4
JUNE												
18...	.0	.72	.26	.23	.02	.04	.0	141	.19	52.9	130	9
JULY												
23...	--	--	--	--	--	--	--	--	--	--	--	--
30...	.0	.82	.04	.10	.00	.04	.0	166	.23	48.0	150	7

07066110 - JACKS FORK ABOVE TWO RIVERS (LAT 37°10'53"LONG 091°17'36")

APR., 1973												
05...	.0	.27	.00	.07	.00	.00	.0	141	.19	609	130	3
JUNE												
20...	.0	.33	.04	.00	.02	.03	.0	188	.26	243	160	2
AUG.												
01...	.0	.31	.01	.12	.00	.02	.0	180	.24	140	170	0

07066510 - CURRENT RIVER ABOVE POWDER MILL (LAT 37°10'32"LONG 091°12'48")

APR., 1973												
05...	.0	.32	.04	.00	.00	.00	.0	130	.18	1580	120	0
JUNE												
20...	.0	.31	.03	.04	.03	.03	.0	184	.25	775	160	6
AUG.												
01...	.0	.38	.01	.11	.00	.02	.0	172	.23	576	160	0

07066550 - BLUE SPRING NEAR EMINENCE, MO. (LAT 37°09'58"LONG 091°09'47")

APR., 1973												
06...	.0	.38	.00	.00	.00	.00	.0	70	.10	54.8	52	6
JUNE												
21...	--	.44	.00	.01	.02	.03	--	--	--	--	--	--
AUG.												
01...	.0	.52	.07	.09	.00	.02	.0	134	.18	56.1	110	8

07067800 - CURRENT RIVER BELOW HAWES CAMPGROUND (LAT 36°49'08"LONG 090°56'48")

APR., 1973												
06...	.0	.34	.00	.39	.00	.01	.0	130	.18	2250	120	4
JUNE												
22...	.0	.29	.03	.12	.03	.03	.0	169	.23	1270	150	0
AUG.												
02...	.0	.29	.01	.08	.00	.01	.0	176	.24	1050	160	2

LOWER MISSISSIPPI RIVER BASIN

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	ALKALINITY AS CACO ₃ (MG/L)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (JTU)	TEMPERATURE (DEG C)	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	IMMEDIATE COLIFORM (COL. PER 100 ML)	FECAL COLIFORM (COL. PER 100 ML)	STREPTOCOCCI (COLONIES PER 100 ML)
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WHITE RIVER BASIN--Continued

07064440 - CURRENT RIVER BELOW MONTAUK STATE PARK (LAT 37°27'01" LONG 091°29'41")

APR., 1973												
02...	80	183	7.6	5	10	13.0	0	9.8	92	520	4	29
JUNE												
18...	121	253	7.7	1	--	14.5	1	10.2	99	--	24	120
JULY												
23...	112	237	7.3	--	--	18.0	--	8.1	84	--	4200	27000
30...	138	288	7.7	1	2	14.5	12	9.4	91	--	170	230

07066110 - JACKS FORK ABOVE TWO RIVERS (LAT 37°10'53" LONG 091°17'36")

APR., 1973												
05...	131	260	7.9	5	10	10.0	3	10.4	92	540	16	28
JUNE												
20...	159	304	8.2	1	--	21.5	2	9.6	108	--	10	12
AUG.												
01...	174	323	8.0	2	2	20.5	4	9.0	100	--	48	76

07066510 - CURRENT RIVER ABOVE POWDER MILL (LAT 37°10'32" LONG 091°12'48")

APR., 1973												
05...	118	243	8.0	6	10	11.0	0	10.4	95	80	23	23
JUNE												
20...	154	300	8.2	1	--	21.5	0	9.2	103	--	27	14
AUG.												
01...	161	306	8.1	3	2	21.5	3	9.0	101	--	6	42

07066550 - BLUE SPRING NEAR EMINENCE, MO. (LAT 37°09'58" LONG 091°09'47")

APR., 1973												
06...	46	118	7.1	5	10	11.5	0	10.6	97	140	7	27
JUNE												
21...	85	188	7.3	--	--	13.5	2	8.6	82	--	20	140
AUG.												
01...	107	215	7.5	4	4	14.5	9	9.0	87	--	24	130

07067800 - CURRENT RIVER BELOW HAWES CAMPGROUND (LAT 36°49'08" LONG 090°56'48")

APR., 1973												
06...	115	227	7.9	5	10	11.0	0	9.8	89	1200	25	24
JUNE												
22...	151	295	8.0	1	--	19.0	0	8.4	89	--	14	54
AUG.												
02...	161	325	7.9	1	2	21.0	1	8.8	98	--	6	30

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	SUS- PENDE SEDIM MENT (MG/L)	SUS- PENDE SEDIM MENT DIS- CHARGE (T/DAY)	TOTAL ARSENIC (AS) (UG/L)	TOTAL BARIUM (BA) (UG/L)	TOTAL CAD- MIUM (CD) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	TOTAL LEAD (PB) (UG/L)
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WHITE RIVER BASIN--Continued

07064440 - CURRENT RIVER BELOW MONTAUK STATE PARK (LAT 37° 27' 01" LONG 091° 29' 41")

APR., 1973									
02...	3	2.0	<10	0	0	<10	3	0	1
JUNE									
18...	33	12	--	--	--	--	--	--	--
JULY									
23...	52	21	--	--	--	--	--	--	--
30...	7	2.0	0	0	<10	0	<25	<10	250

07066110 - JACKS FORK ABOVE TWO RIVERS (LAT 37° 10' 53" LONG 091° 17' 36")

APR., 1973									
05...	6	26	<10	0	0	<10	4	0	7
JUNE									
20...	34	44	--	--	--	--	--	--	--
AUG.									
01...	4	3.1	6	0	<10	0	<25	20	350

07066510 - CURRENT RIVER ABOVE POWDER MILL (LAT 37° 10' 32" LONG 091° 12' 48")

APR., 1973									
05...	7	85	<10	0	1	<10	4	0	7
JUNE									
20...	46	194	--	--	--	--	--	--	--
AUG.									
01...	4	13	6	0	<10	0	<25	20	550

07066550 - BLUE SPRING NEAR EMINENCE, MO. (LAT 37° 09' 58" LONG 091° 09' 47")

APR., 1973									
06...	--	--	<10	0	0	<10	6	0	2
AUG.									
01...	--	--	5	400	<10	20	<25	10	650

07067800 - CURRENT RIVER BELOW HAWES CAMPGROUND (LAT 36° 49' 08" LONG 090° 56' 48")

APR., 1973									
06...	8	138	<10	0	0	<10	6	0	0
JUNE									
22...	15	113	--	--	--	--	--	--	--
AUG.									
02...	10	60	0	0	<10	0	<25	<10	300

LOWER MISSISSIPPI RIVER BASIN

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	TOTAL MERCURY (HG) (UG/L)	TOTAL NICKEL (NI) (UG/L)	TOTAL SILVER (AG) (UG/L)	TOTAL ZINC (ZN) (UG/L)	ALDRIN (UG/L)	DDD (UG/L)	DDE (UG/L)	DDT (UG/L)	DI- ELDRIN (UG/L)
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WHITE RIVER BASIN--Continued

07064440 - CURRENT RIVER BELOW MONTAUK STATE PARK (LAT 37°27'01"LONG 091°29'41")

APR., 1973									
02...	<.5	0	0	30	.00	.00	.00	.00	.00
JUNE									
18...	--	--	--	--	.00	.00	.00	.00	.00
JULY									
23...	--	--	--	--	.00	.00	.00	.00	.00
30...	.0	<25	100	80	.00	.00	.00	.00	.00

07066110 - JACKS FORK ABOVE TWO RIVERS (LAT 37°10'53"LONG 091°17'36")

APR., 1973									
05...	<.5	0	1	50	.00	.00	.00	.00	.00
JUNE									
20...	--	--	--	--	.00	.00	.00	.00	.00
AUG.									
01...	.7	<25	<10	170	.00	.00	.00	.00	.00

07066510 - CURRENT RIVER ABOVE POWDER MILL (LAT 37°10'32"LONG 091°12'48")

APR., 1973									
05...	.5	7	0	160	.00	.00	.00	.00	.00
JUNE									
20...	--	--	--	--	.00	.00	.00	.00	.00
AUG.									
01...	.0	<25	<10	190	.00	.00	.00	.00	.00

07066550 - BLUE SPRING NEAR EMINENCE, MO. (LAT 37°09'58"LONG 091°09'47")

APR., 1973									
06...	<.5	6	1	30	--	--	--	--	--
AUG.									
01...	.0	<25	200	1400	--	--	--	--	--

07067800 - CURRENT RIVER BELOW HAWES CAMPGROUND (LAT 36°49'08"LONG 090°56'48")

APR., 1973									
06...	<.5	6	1	50	.00	.00	.00	.00	.00
JUNE									
22...	--	--	--	--	.00	.00	.00	.00	.00
AUG.									
02...	.0	<25	<10	40	.00	.00	.00	.00	.00

LOWER MISSISSIPPI RIVER BASIN

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

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CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	ENDRIN (UG/L)	HEPTA- CHLOR (UG/L)	HEPTA- CHLOR EPOXIDE (UG/L)	LINDANE (UG/L)	CHLOR- DANE (UG/L)	2,4-D (UG/L)	SILVEX (UG/L)	2,4,5-T (UG/L)	PCB (UG/L)
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WHITE RIVER BASIN--Continued

07064440 - CURRENT RIVER BELOW MONTAUK STATE PARK (LAT 37°27'01"LONG 091°29'41")

APR., 1973									
02...	.00	.00	.00	.00	.0	.00	.00	.00	.0
JUNE									
18...	.00	.00	.00	.00	.0	.00	.00	.00	.0
JULY									
23...	.00	.00	.00	.00	.0	.03	.00	.03	.0
30...	.00	.00	.00	.00	.0	.00	.00	.00	.0

07066110 - JACKS FORK ABOVE TWO RIVERS (LAT 37°10'53"LONG 091°17'36")

APR., 1973									
05...	.00	.00	.00	.00	.0	.00	.00	.00	.0
JUNE									
20...	.00	.00	.00	.00	.0	.00	.00	.00	.0
AUG.									
01...	.00	.00	.00	.00	.0	.00	.00	.00	.0

07066510 - CURRENT RIVER ABOVE POWDER MILL (LAT 37°10'32"LONG 091°12'48")

APR., 1973									
05...	.00	.00	.00	.00	.0	.00	.00	.00	.0
JUNE									
20...	.00	.00	.00	.00	.0	.00	.00	.00	.0
AUG.									
01...	.00	.00	.00	.00	.0	.00	.00	.00	.0

07066550 - BLUE SPRING NEAR EMINENCE, MO. (LAT 37°09'58"LONG 091°09'47")

APR., 1973									
06...	--	--	--	--	--	--	--	--	--
AUG.									
01...	--	--	--	--	--	--	--	--	--

07067800 - CURRENT RIVER BELOW HAWES CAMPGROUND (LAT 36°49'08"LONG 090°56'48")

APR., 1973									
06...	.00	.00	.00	.00	.0	.00	.00	.00	.0
JUNE									
22...	.00	.00	.00	.00	.0	.00	.00	.00	.0
AUG.									
02...	.00	.00	.00	.00	.0	.00	.00	.00	.0

¹Minor elements determinations by U.S. Geological Survey, remainder of analyses by Missouri Clean Water Commission.

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES IN MISSOURI

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SI02) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
WHITE RIVER BASIN												
07064420 - CURRENT RIVER BELOW MONTAUK SPRINGS (LAT 37°27'36"LONG 091°40'53")												
APR., 1973												
02... 212		8.0	0	20	18	9.3	1.4	1.1	94	0	5.4	1.6
JUNE												
18... 104		--	--	--	--	--	--	--	144	0	--	--
JULY												
30... 83		8.9	80	0	31	17	2.4	1.0	172	0	4.1	3.6
07064530 - WELCH SPRING NEAR AKERS, MO (LAT 37°23'38"LONG 091°34'25")												
APR., 1973												
02... 500		8.2	0	30	21	11	1.4	1.1	118	0	3.4	1.4
JUNE												
18... 232		--	--	--	--	--	--	--	172	0	--	--
JULY												
30... 272		8.0	90	0	30	17	1.5	1.1	176	0	3.7	1.6
07064533 - CURRENT RIVER ABOVE AKERS, MO. (LAT 37°22'30"LONG 091°33'13")												
JUNE, 1973												
18... 435		--	--	--	--	--	--	--	168	0	--	--
JULY												
30... 415		--	--	--	--	--	--	--	178	0	--	--
07064535 - CURRENT RIVER BELOW AKERS, MO (LAT 37°22'35"LONG 091°32'51")												
APR., 1973												
02... 1000		7.8	0	10	22	12	1.2	1.1	124	0	5.2	2.0
JUNE												
18... 440		--	--	--	--	--	--	--	166	0	--	--
JULY												
30... 420		7.9	90	0	32	18	1.8	1.0	180	0	4.1	2.6
07064550 - CURRENT RIVER ABOVE PULLTITE SPRING (LAT 37°30'02"LONG 091°28'29")												
JUNE, 1973												
18... 454		--	--	--	--	--	--	--	178	0	--	--
JULY												
30... 439		--	--	--	--	--	--	--	180	0	--	--
07064555 - PULLTITE SPRING NEAR ROUND SPRING, MO (LAT 37°20'03"LONG 091°29'24")												
APR., 1973												
03... 151		8.0	0	0	22	9.5	1.5	1.3	104	0	11	1.8
JUNE												
18... 164		--	--	--	--	--	--	--	148	0	--	--
JULY												
30... 93		8.4	90	0	30	17	1.8	.9	176	0	3.8	3.0
07064560 - CURRENT RIVER BELOW PULLTITE SPRING (LAT 37°19'58"LONG 091°29'20")												
JUNE, 1973												
18... 618		--	--	--	--	--	--	--	172	0	--	--
JULY												
30... 532		8.0	310	10	30	18	1.7	1.0	184	0	4.0	1.6
07064800 - SINKING CREEK NEAR ROUND SPRING, MO (LAT 37°18'12"LONG 091°24'50")												
APR., 1973												
03... 277		6.4	20	0	24	13	1.1	.8	138	0	5.0	.7
JUNE												
19... 100		--	--	--	--	--	--	--	210	0	--	--
JULY												
31... 133		8.2	190	10	32	18	1.3	.9	186	0	4.5	.9
07064940 - CURRENT RIVER ABOVE ROUND SPRING (LAT 37°17'17"LONG 091°24'43")												
JUNE, 1973												
19... 800		--	--	--	--	--	--	--	184	0	--	--
JULY												
31... 867		--	--	--	--	--	--	--	186	0	--	--

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES IN MISSOURI
CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

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DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	DIS- SOL- VED- PHOS- PHORUS (P) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)
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WHITE RIVER BASIN

07064420 - CURRENT RIVER BELOW MONTAUK SPRINGS (LAT 37°27'36" LONG 091°40'53")

APR., 1973												
02...	.0	.56	.01	.00	.00	.00	.0	100	.14	57.2	83	6
JUNE												
18...	--	.72	.03	.16	.04	.05	--	--	--	--	--	--
JULY												
30...	.0	.93	.03	.14	.01	.02	.0	160	.22	35.9	150	6

07064530 - WELCH SPRING NEAR AKERS, MO (LAT 37°23'38" LONG 091°34'25")

APR., 1973												
02...	.0	.97	.00	.00	.00	.00	.0	118	.16	159	98	1
JUNE												
18...	--	.60	.00	.21	.01	.02	--	--	--	--	--	--
JULY												
30...	.0	.72	.04	.11	.02	.03	.0	149	.20	109	150	1

07064533 - CURRENT RIVER ABOVE AKERS, MO. (LAT 37°22'30" LONG 091°33'13")

JUNE, 1973												
18...	--	.53	.00	.05	.02	.02	--	--	--	--	--	--
JULY												
30...	--	.65	.03	.09	.00	.02	--	--	--	--	--	--

07064535 - CURRENT RIVER BELOW AKERS, MO (LAT 37°22'35" LONG 091°32'51")

APR., 1973												
02...	.0	.59	.00	.00	.00	.00	.0	118	.16	319	100	3
JUNE												
18...	--	.52	.00	.00	.04	.04	--	--	--	--	--	--
JULY												
30...	.1	.63	.03	.13	.02	.01	.0	171	.23	194	150	6

07064550 - CURRENT RIVER ABOVE PULLTITE SPRING (LAT 37°30'02" LONG 091°28'29")

JUNE, 1973												
18...	--	.43	.04	.04	.02	.03	--	--	--	--	--	--
JULY												
30...	--	.59	.03	.15	.00	.01	--	--	--	--	--	--

07064555 - PULLTITE SPRING NEAR ROUND SPRING, MO (LAT 37°20'03" LONG 091°29'24")

APR., 1973												
03...	.0	.54	.00	.02	.00	.00	.0	105	.14	42.8	94	9
JUNE												
18...	--	.44	.01	.31	.02	.04	--	--	--	--	--	--
JULY												
30...	.0	.55	.01	.07	.01	.02	.0	167	.23	41.9	150	1

07064560 - CURRENT RIVER BELOW PULLTITE SPRING (LAT 37°19'58" LONG 091°29'20")

JUNE, 1973												
18...	--	.46	.00	.19	.03	.04	--	--	--	--	--	--
JULY												
30...	.0	.55	.03	.12	.00	.02	.0	155	.21	223	150	0

07064800 - SINKING CREEK NEAR ROUND SPRING, MO (LAT 37°18'12" LONG 091°24'50")

APR., 1973												
03...	.0	.07	.00	.00	.00	.00	.0	122	.17	91.2	110	0
JUNE												
19...	--	.05	.13	.31	.02	.03	--	--	--	--	--	--
JULY												
31...	.0	.09	.01	.09	.01	.02	.0	154	.21	55.3	150	1

07064940 - CURRENT RIVER ABOVE ROUND SPRING (LAT 37°17'17" LONG 091°24'43")

JUNE, 1973												
19...	--	.31	.00	.20	.03	.05	--	--	--	--	--	--
JULY												
31...	--	.48	.03	.15	.00	.01	--	--	--	--	--	--

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES IN MISSOURI

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	ALKALINITY AS CaCO ₃ (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	COLOR (PLATINUM- COBALT UNITS)	TURBIDITY (JTU)	TEMPERATURE (DEG C)	CHEMICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	IMMEDIATE COLIFORM (COL. PER 100 ML)	FECAL COLIFORM (COL. PER 100 ML)	STREPTOCOCCI (COLONIES PER 100 ML)
WHITE RIVER BASIN--Continued												
07064420 - CURRENT RIVER BELOW MONTAUK SPRINGS (LAT 37°27'36" LONG 091°40'53")												
APR., 1973												
02...	77	192	7.3	5	--	12.0	2	9.4	87	280	13	22
JUNE												
18...	118	256	7.2	--	--	14.0	1	8.7	84	--	19	52
JULY												
30...	141	287	7.7	1	2	14.0	8	8.0	77	--	11	110
07064530 - WELCH SPRING NEAR AKERS, MO (LAT 37°23'38" LONG 091°34'25")												
APR., 1973												
02...	97	201	7.2	5	--	13.0	0	8.8	83	150	19	33
JUNE												
18...	141	260	7.3	--	--	13.5	0	8.7	83	--	31	140
JULY												
30...	144	288	7.2	9	6	14.0	3	8.6	83	--	230	840
07064533 - CURRENT RIVER ABOVE AKERS, MO. (LAT 37°22'30" LONG 091°33'13")												
JUNE, 1973												
18...	138	273	7.6	--	--	18.0	0	10.8	112	--	18	40
JULY												
30...	146	304	7.2	--	--	18.0	--	10.0	104	--	58	310
07064535 - CURRENT RIVER BELOW AKERS, MO (LAT 37°22'35" LONG 091°32'51")												
APR., 1973												
02...	102	207	7.7	5	--	13.0	0	10.0	94	530	17	22
JUNE												
18...	136	270	7.6	--	--	18.0	5	10.8	112	--	30	35
JULY												
30...	148	298	7.7	4	4	18.0	6	10.3	107	--	38	280
07064550 - CURRENT RIVER ABOVE PULLTITE SPRING (LAT 37°30'02" LONG 091°28'29")												
JUNE, 1973												
18...	146	285	8.1	--	--	20.0	0	10.2	111	--	12	31
JULY												
30...	148	292	7.8	--	--	18.0	--	9.4	98	--	78	320
07064555 - PULLTITE SPRING NEAR ROUND SPRING, MO (LAT 37°20'03" LONG 091°29'24")												
APR., 1973												
03...	85	174	7.2	5	--	12.5	0	8.9	83	640	11	11
JUNE												
18...	121	252	7.4	--	--	13.5	0	7.6	72	--	4	22
JULY												
30...	144	292	7.4	3	2	13.5	2	8.2	78	--	5	84
07064560 - CURRENT RIVER BELOW PULLTITE SPRING (LAT 37°19'58" LONG 091°29'20")												
JUNE, 1973												
18...	141	285	8.2	--	--	20.0	0	10.0	109	--	14	38
JULY												
30...	151	294	7.9	4	5	18.5	10	9.2	97	--	64	180
07064800 - SINKING CREEK NEAR ROUND SPRING, MO (LAT 37°18'12" LONG 091°24'50")												
APR., 1973												
03...	113	222	8.0	5	--	10.0	0	10.5	93	250	10	22
JUNE												
19...	172	327	8.1	--	--	20.5	0	7.8	87	--	30	120
JULY												
31...	153	289	7.8	2	2	21.5	0	7.8	88	--	480	270
07064940 - CURRENT RIVER ABOVE ROUND SPRING (LAT 37°17'17" LONG 091°24'43")												
JUNE, 1973												
19...	151	296	7.9	--	--	18.0	0	8.5	88	--	18	84
JULY												
31...	153	289	7.9	--	--	17.5	--	8.4	88	--	130	480

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES IN MISSOURI

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
WHITE RIVER BASIN--Continued												
07065000 - ROUND SPRING AT ROUND SPRING MO (LAT 37°16'57"LONG 091°24'26")												
APR., 1973												
03... 158	7.5	30	0	21	11	1.1	1.0	116	0	1.8	2.5	
JUNE												
19... 60	--	--	--	--	--	--	--	172	0	--	--	
JULY												
31... 48	8.1	90	0	35	20	1.5	.7	208	0	3.0	2.2	
07065010 - CURRENT RIVER BELOW ROUND SPRING (LAT 37°16'44"LONG 091°24'13")												
APR., 1973												
03... 2300	7.4	20	20	23	12	1.2	1.0	128	0	5.0	1.8	
JUNE												
19... 860	--	--	--	--	--	--	--	176	0	--	--	
JULY												
31... 915	8.1	90	10	31	18	1.5	.9	190	0	4.0	1.6	
07065200 - JACKS FORK NEAR MOUNTAIN VIEW, MO (LAT 37°03'22"LONG 091°40'05")												
APR., 1973												
04... 664	6.8	20	0	30	17	1.3	1.1	176	0	5.2	2.0	
JUNE												
19... 107	--	--	--	--	--	--	--	208	0	--	--	
JULY												
31... 45	9.6	90	20	37	24	1.6	1.2	236	0	3.7	1.5	
07065490 - JACKS FORK ABOVE ALLEY SPRING (LAT 37°08'40"LONG 091°27'31")												
JUNE, 1973												
19... 195	--	--	--	--	--	--	--	188	0	--	--	
JULY												
31... 90	--	--	--	--	--	--	--	220	0	--	--	
07065500 - ALLEY SPRING AT ALLEY MO (LAT 37°09'14"LONG 091°26'29")												
APR., 1973												
04... 309	7.6	50	0	18	9.3	1.9	1.1	96	0	1.0	1.8	
JUNE												
19... 179	--	--	--	--	--	--	--	144	0	--	--	
JULY												
31... 141	8.0	340	0	29	16	1.5	1.0	158	0	3.7	1.7	
07065510 - JACKS FORK BELOW ALLEY SPRING (LAT 37°09'31"LONG 091°25'41")												
APR., 1973												
04... 1100	7.0	40	10	24	13	1.8	1.1	138	0	4.4	1.2	
JUNE												
19... 374	--	--	--	--	--	--	--	172	0	--	--	
JULY												
31... 231	8.5	90	0	30	18	1.6	1.0	184	0	3.3	1.6	
07065950 - MAHANS CREEK AT WEST EMINENCE, MO (LAT 37°08'50"LONG 091°22'42")												
APR., 1973												
04... 115	6.9	0	10	36	19	1.4	.7	200	0	4.6	1.0	
JUNE												
20... 39	--	--	--	--	--	--	--	234	0	--	--	
AUG.												
01... 16	8.5	100	20	44	25	1.7	1.2	260	0	4.2	2.2	
07065980 - JACKS FORK ABOVE EMINENCE, MO. (LAT 37°09'26"LONG 091°22'11")												
JUNE, 1973												
20... 435	--	--	--	--	--	--	--	178	0	--	--	
AUG.												
01... 260	--	--	--	--	--	--	--	192	0	--	--	

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	DIS- SOL- VED- PHOS- PHORUS (P) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)
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WHITE RIVER BASIN--Continued

07065000 - ROUND SPRING AT ROUND SPRING MO (LAT 37° 16' 57" LONG 091° 24' 26")

APR., 1973												
03...	.0	.41	.00	.00	.00	.01	.0	105	.14	44.8	98	2
JUNE												
19...	--	.26	.07	.14	.04	.04	--	--	--	--	--	--
JULY												
31...	.0	.38	.02	.13	.00	.02	.0	182	.25	23.6	170	0

07065010 - CURRENT RIVER BELOW ROUND SPRING (LAT 37° 16' 44" LONG 091° 24' 13")

APR., 1973												
03...	.0	.45	.00	.00	.00	.00	.0	120	.16	745	110	2
JUNE												
19...	--	.38	.02	.11	.03	.04	--	--	--	--	--	--
JULY												
31...	.0	.45	.01	.38	.00	.01	.0	154	.21	381	150	0

07065200 - JACKS FORK NEAR MOUNTAIN VIEW, MO (LAT 37° 03' 22" LONG 091° 40' 05")

APR., 1973												
04...	.0	.20	.01	.04	.00	.01	.0	145	.20	260	140	1
JUNE												
19...	--	.12	.04	.03	.03	.03	--	--	--	--	--	--
JULY												
31...	.0	.11	.01	.19	.01	.01	.0	191	.26	23.2	190	0

07065490 - JACKS FORK ABOVE ALLEY SPRING (LAT 37° 08' 40" LONG 091° 27' 31")

JUNE, 1973												
19...	--	.16	.10	.00	.03	.04	--	--	--	--	--	--
JULY												
31...	--	.09	.00	.12	.00	.01	--	--	--	--	--	--

07065500 - ALLEY SPRING AT ALLEY MO (LAT 37° 09' 14" LONG 091° 26' 29")

APR., 1973												
04...	.0	.68	.02	.00	.01	.02	.0	97	.13	80.9	83	4
JUNE												
19...	--	.59	.04	.01	.03	.03	--	--	--	--	--	--
JULY												
31...	.0	.63	.03	.08	.01	.03	.0	128	.17	48.7	140	9

07065510 - JACKS FORK BELOW ALLEY SPRING (LAT 37° 09' 31" LONG 091° 25' 41")

APR., 1973												
04...	.0	.32	.12	.03	.00	.00	.0	124	.17	368	110	0
JUNE												
19...	--	.31	.04	.06	.02	.03	--	--	--	--	--	--
JULY												
31...	.0	.40	.02	.06	.02	.02	.0	147	.20	91.7	150	0

07065950 - MAHANS CREEK AT WEST EMINENCE, MO (LAT 37° 08' 50" LONG 091° 22' 42")

APR., 1973												
04...	.0	.27	.00	.00	.00	.00	.0	169	.23	52.5	170	4
JUNE												
20...	--	.21	.00	.04	.02	.03	--	--	--	--	--	--
AUG.												
01...	.0	.20	.00	.11	.00	.03	.0	224	.30	9.68	210	0

07065980 - JACKS FORK ABOVE EMINENCE, MO. (LAT 37° 09' 26" LONG 091° 22' 11")

JUNE, 1973												
20...	--	.44	.00	.00	.03	.03	--	--	--	--	--	--
AUG.												
01...	--	.37	.01	.10	.00	.01	--	--	--	--	--	--

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES IN MISSOURI
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DATE	ALKALINITY AS CaCO ₃ (MG/L)	SPECIFIC CONDUCTANCE (MICRO- MHOS)	PH (UNITS)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)	TEMPER- ATURE (DEG C)	CHEM- ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	IMME- DIATE COLI- FORM (COL. PER 100 ML)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)
WHITE RIVER BASIN--Continued												
07065000 - ROUND SPRING AT ROUND SPRING MO (LAT 37°16'57" LONG 091°24'26")												
APR., 1973												
03...	95	190	7.2	5	--	12.5	0	9.4	88	94	7	23
JUNE												
19...	141	273	7.4	--	--	13.5	0	8.6	82	--	28	99
JULY												
31...	171	337	7.4	1	1	13.5	6	8.5	81	--	11	60
07065010 - CURRENT RIVER BELOW ROUND SPRING (LAT 37°16'44" LONG 091°24'13")												
APR., 1973												
03...	105	210	7.7	5	--	12.0	3	9.7	90	420	12	30
JUNE												
19...	144	293	7.9	--	--	18.0	0	9.1	95	--	9	45
JULY												
31...	156	302	7.9	3	3	18.0	30	9.0	94	--	62	230
07065200 - JACKS FORK NEAR MOUNTAIN VIEW, MO (LAT 37°03'22" LONG 091°40'05")												
APR., 1973												
04...	144	274	8.0	5	--	9.5	23	10.4	90	580	95	480
JUNE												
19...	170	342	8.2	--	--	24.0	0	8.0	94	--	29	34
JULY												
31...	194	397	8.2	2	1	25.5	28	8.3	101	--	10	10
07065490 - JACKS FORK ABOVE ALLEY SPRING (LAT 37°08'40" LONG 091°27'31")												
JUNE, 1973												
19...	154	278	8.2	--	--	24.5	0	7.8	93	--	15	56
JULY												
31...	180	362	8.3	--	--	27.5	--	8.8	110	--	10	96
07065500 - ALLEY SPRING AT ALLEY MO (LAT 37°09'14" LONG 091°26'29")												
APR., 1973												
04...	79	165	7.2	5	--	13.0	0	8.8	83	260	24	51
JUNE												
19...	118	239	7.4	--	--	13.5	2	8.6	82	--	16	58
JULY												
31...	130	258	7.3	8	5	13.5	5	8.4	80	--	260	990
07065510 - JACKS FORK BELOW ALLEY SPRING (LAT 37°09'31" LONG 091°25'41")												
APR., 1973												
04...	113	229	7.9	5	--	11.0	0	10.7	97	180	9	29
JUNE												
19...	141	267	7.8	--	--	20.0	0	8.4	91	--	240	450
JULY												
31...	151	289	7.9	3	2	20.0	0	9.4	102	--	160	560
07065950 - MAHANS CREEK AT WEST EMINENCE, MO (LAT 37°08'50" LONG 091°22'42")												
APR., 1973												
04...	164	322	8.1	5	--	10.5	0	10.4	93	620	38	56
JUNE												
20...	192	371	8.0	--	--	17.0	0	8.6	89	--	89	250
AUG.												
01...	213	388	7.9	2	1	19.0	3	8.0	85	--	92	350
07065980 - JACKS FORK ABOVE EMINENCE, MO. (LAT 37°09'26" LONG 091°22'11")												
JUNE, 1973												
20...	146	281	7.9	--	--	18.5	0	8.4	88	--	56	180
AUG.												
01...	158	297	7.9	--	--	18.0	--	8.8	92	--	160	420

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DATE	INSTAN- TANEOUS DIS- CHARGE (CFS)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
WHITE RIVER BASIN--Continued												
07066010 - JACKS FORK BELOW EMINENCE, MO (LAT 37°10'14" LONG 091°20'12")												
APR., 1973												
04... 1400		6.8	0	0	27	14	1.6	1.0	150	0	4.4	1.2
JUNE												
20... 440		--	--	--	--	--	--	--	186	0	--	--
AUG.												
01... 265		8.5	400	0	33	19	1.8	1.0	196	0	3.2	2.7
07066100 - SHAWNEE CREEK NEAR EMINENCE, MO (LAT 37°10'18" LONG 091°18'07")												
APR., 1973												
04... 55		6.5	0	0	38	20	1.7	.9	216	0	3.6	1.4
JUNE												
20... 20		--	--	--	--	--	--	--	300	0	--	--
AUG.												
01... 9.2		8.8	980	0	59	33	1.5	.8	340	0	3.6	2.8
07066540 - CURRENT RIVER BELOW POWDER MILL (LAT 37°10'48" LONG 091°10'22")												
JUNE, 1973												
21... 1570		--	--	--	--	--	--	--	192	0	--	--
AUG.												
01... 1250		--	--	--	--	--	--	--	196	0	--	--
07066700 - CURRENT RIVER ABOVE VAN BUREN, MO (LAT 37°02'03" LONG 091°03'16")												
APR., 1973												
05... 5480		7.0	280	0	25	14	1.4	.9	144	0	4.8	1.0
JUNE												
21... 2170		--	--	--	--	--	--	--	184	0	--	--
AUG.												
02... 1640		7.7	130	0	33	18	1.8	1.0	188	0	4.0	2.6
07066990 - PIKE CREEK AT VAN BUREN, MO (LAT 36°59'22" LONG 091°01'36")												
APR., 1973												
05... 40		6.6	10	10	40	21	1.6	.8	222	0	4.0	1.4
JUNE												
21... 15		--	--	--	--	--	--	--	260	0	--	--
AUG.												
02... 5.3		8.4	370	40	48	28	1.4	.8	282	0	4.0	2.4
07067300 - CURRENT RIVER BELOW VAN BUREN, MO (LAT 36°57'36" LONG 090°59'01")												
APR., 1973												
05... 5440		7.1	20	10	25	14	1.8	1.0	146	0	4.8	1.8
JUNE												
21... 2190		--	--	--	--	--	--	--	184	0	--	--
AUG.												
02... 1650		7.8	170	0	33	19	1.7	.8	192	0	4.2	2.2
07067500 - BIG SPRING NEAR VAN BUREN, MO. (LAT 36°57'05" LONG 090°59'31")												
APR., 1973												
06... 850		7.6	20	20	22	13	1.2	.9	129	0	.8	1.0
JUNE												
21... 581		--	--	--	--	--	--	--	172	0	--	--
AUG.												
02... 520		8.1	170	0	36	21	1.3	.7	220	0	2.7	2.1
07067600 - CURRENT RIVER BELOW BIG SPRING (LAT 36°56'45" LONG 090°58'48")												
APR., 1973												
06... 6300		7.0	0	0	26	13	1.1	.9	142	0	4.8	1.4
JUNE												
21... 2780		--	--	--	--	--	--	--	184	0	--	--
AUG.												
02... 2180		7.9	170	0	33	19	1.9	.9	202	0	3.7	2.2

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DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRATE (N) (MG/L)	AMMONIA NITRO- GEN (N) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	DIS- SOL- VED- PHOS- PHORUS (P) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA,MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)
------	--	-----------------------------------	---	---	--	---	--	--	--	--	------------------------------------	---

WHITE RIVER BASIN--Continued

07066010 - JACKS FORK BELOW EMINENCE, MO (LAT 37°10'14"LONG 091°20'12")

APR., 1973												
04...	.0	.27	.00	.00	.00	.00	.0	132	.18	499	120	2
JUNE												
20...	--	.34	.00	.10	.02	.03	--	--	--	--	--	--
AUG.												
01...	.0	.36	.01	.13	.01	.01	.0	181	.25	130	160	0

07066100 - SHAWNEE CREEK NEAR EMINENCE, MO (LAT 37°10'18"LONG 091°18'07")

APR., 1973												
04...	.0	.20	.00	.00	.00	.00	.0	180	.24	26.7	180	0
JUNE												
20...	--	.24	.00	.00	.02	--	--	--	--	--	--	--
AUG.												
01...	.0	.25	.00	.60	.00	.01	.0	267	.36	6.63	280	4

07066540 - CURRENT RIVER BELOW POWDER MILL (LAT 37°10'48"LONG 091°10'22")

JUNE, 1973												
21...	--	.35	.00	.05	.02	.04	--	--	--	--	--	--
AUG.												
01...	--	.38	.03	.17	.00	.01	--	--	--	--	--	--

07066700 - CURRENT RIVER ABOVE VAN BUREN, MO (LAT 37°02'03"LONG 091°03'16")

APR., 1973												
05...	.0	.22	.00	.00	.00	.00	.0	125	.17	1850	120	2
JUNE												
21...	--	.31	.06	.23	.04	.04	--	--	--	--	--	--
AUG.												
02...	.0	.34	.04	.14	.00	.01	.0	171	.23	757	160	2

07066990 - PIKE CREEK AT VAN BUREN, MO (LAT 36°59'22"LONG 091°01'36")

APR., 1973												
05...	.0	.38	.00	.00	.00	.00	.0	189	.26	20.4	190	4
JUNE												
21...	--	.19	.00	.31	.03	.04	--	--	--	--	--	--
AUG.												
02...	.0	.15	.01	.06	.00	.02	.0	239	.33	3.42	240	4

07067300 - CURRENT RIVER BELOW VAN BUREN, MO (LAT 36°57'36"LONG 090°59'01")

APR., 1973												
05...	.0	.32	.00	.00	.00	.00	.0	128	.17	1880	120	0
JUNE												
21...	--	.31	.00	.10	.02	.03	--	--	--	--	--	--
AUG.												
02...	.1	.30	.01	.15	.00	.00	.0	178	.24	793	160	3

07067500 - BIG SPRING NEAR VAN BUREN, MO. (LAT 36°57'05"LONG 090°59'31")

APR., 1973												
06...	.0	.45	.00	.03	.00	.00	.0	118	.16	271	110	3
JUNE												
21...	--	.38	.01	.10	.02	.03	--	--	--	--	--	--
AUG.												
02...	.0	.47	.04	.06	.01	.02	.0	183	.25	257	180	0

07067600 - CURRENT RIVER BELOW BIG SPRING (LAT 36°56'45"LONG 090°58'48")

APR., 1973												
06...	.0	.34	.00	.00	.00	.01	.0	131	.18	2230	120	2
JUNE												
21...	--	.31	.00	.11	.04	.04	--	--	--	--	--	--
AUG.												
02...	.0	.36	.01	.15	.00	.02	.0	167	.23	983	160	0

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DATE	ALKALINITY AS CaCO ₃ (MG/L)	SPECIFIC CONDUCTANCE (MICRO- MHOS)	PH (UNITS)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)	TEMPER- ATURE (DEG C)	CHEM- ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	IMME- DIATE COLI- FORM (COL. PER 100 ML)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)
WHITE RIVER BASIN--Continued												
07066010 - JACKS FORK BELOW EMINENCE, MO (LAT 37°10'14"LONG 091°20'12")												
APR., 1973												
04...	123	244	8.1	5	--	11.5	6	10.3	94	200	25	37
JUNE												
20...	152	297	8.0	--	--	19.5	1	9.0	97	--	53	84
AUG.												
01...	161	309	7.9	2	2	18.5	6	8.6	91	--	180	320
07066100 - SHAWNEE CREEK NEAR EMINENCE, MO (LAT 37°10'18"LONG 091°18'07")												
APR., 1973												
04...	177	333	8.2	5	--	11.0	0	10.6	96	740	160	200
JUNE												
20...	246	462	8.2	--	--	21.0	6	9.0	100	--	52	100
AUG.												
01...	279	452	8.1	1	1	21.0	11	8.6	96	--	16	160
07066540 - CURRENT RIVER BELOW POWDER MILL (LAT 37°10'48"LONG 091°10'22")												
JUNE, 1973												
21...	157	307	8.0	--	--	19.0	0	8.0	85	--	18	84
AUG.												
01...	161	307	8.1	--	--	21.5	--	9.0	101	--	4	52
07066700 - CURRENT RIVER ABOVE VAN BUREN, MO (LAT 37°02'03"LONG 091°03'16")												
APR., 1973												
05...	118	262	8.0	5	--	12.0	0	10.2	94	76	12	17
JUNE												
21...	151	304	8.1	--	--	20.5	2	8.4	93	--	6	14
AUG.												
02...	154	302	8.0	2	2	20.0	8	8.4	91	--	6	68
07066990 - PIKE CREEK AT VAN BUREN, MO (LAT 36°59'22"LONG 091°01'36")												
APR., 1973												
05...	182	358	8.0	5	--	14.5	0	10.4	101	110	9	13
JUNE												
21...	213	402	7.8	--	--	20.5	0	9.0	100	--	30	230
AUG.												
02...	231	430	7.5	1	1	18.5	10	8.2	86	--	28	170
07067300 - CURRENT RIVER BELOW VAN BUREN, MO (LAT 36°57'38"LONG 090°59'01")												
APR., 1973												
05...	120	240	8.0	5	--	12.0	0	10.4	96	72	8	13
JUNE												
21...	151	298	8.1	--	--	21.0	5	8.7	97	--	5	42
AUG.												
02...	157	302	8.0	2	2	20.5	17	8.8	90	--	2	50
07067500 - BIG SPRING NEAR VAN BUREN, MO. (LAT 36°57'09"LONG 090°59'31")												
APR., 1973												
06...	106	222	7.0	5	--	13.5	0	8.9	85	120	17	14
JUNE												
21...	141	275	7.3	--	--	13.5	4	8.6	82	--	9	45
AUG.												
02...	180	332	7.5	2	3	14.0	6	9.0	86	--	26	180
07067600 - CURRENT RIVER BELOW BIG SPRING (LAT 36°58'45"LONG 090°58'48")												
APR., 1973												
06...	117	230	7.8	5	--	12.0	0	9.8	91	460	7	18
JUNE												
21...	151	283	7.8	--	--	19.0	0	9.0	96	--	10	40
AUG.												
02...	166	323	7.8	2	2	18.0	2	9.0	94	--	10	82

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