

Water Resources Data for Iowa Water Year 1975



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

**Prepared in cooperation with the Iowa Geological Survey
and with other State and Federal agencies**

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Preface

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

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

UNITED STATES DEPARTMENT OF THE INTERIOR

THOMAS S. KLEPPE, Secretary

GEOLOGICAL SURVEY

V. E. McKelvey, Director

Prepared in cooperation with

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Iowa State Highway Commission
Iowa Natural Resources Council
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Iowa State University, Agricultural Experiment Station
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1976

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XI

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

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- Section 2. Water-Quality Records
- Section 3. Ground-Water Records

INTRODUCTION

Water resources data for the 1975 water year for Iowa consist of records of stage, discharge, and water quality of streams; stage, contents, and water quality of lakes and reservoirs; and water-levels of wells. This report contains discharge records for 112 gaging stations; stage or contents for 8 lakes and reservoirs; water quality for 41 gaging stations, of which 24 have periodic or miscellaneous sampling frequencies, 302 partial-record flow stations and water levels for 47 observation wells. Also included are data for 128 crest-stage partial-record stations and 321 low-flow partial-record stations. Additional water data were collected at various sites, not part of the systematic data collection program, and are published as miscellaneous measurements. These data represent that part of the National Water Data System operated by the U.S. Geological Survey and cooperating State and Federal agencies in Iowa.

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

Beginning with the 1961 water year and continuing through water year 1974, streamflow 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 in conjunction with streamflow records. These reports provided rapid release of preliminary water data shortly after the end of the water year. The final data were then released in the water-supply paper series mentioned above. Beginning with the 1975 water year, water data will be released on a State-boundary basis in final form and will not be republished in the water-supply paper series. The 1975 and subsequent water year reports will be in a series which will carry an identification number consisting of the two-letter State abbreviation, the last two digits of the water year, and the volume number. For example, this report is identified as "U.S. Geological Survey Water-Data Report IA-75-1." These reports are

for sale to the public for a nominal fee from the National Technical Information Service, U.S. Department of Commerce, Springfield, Virginia, 22151. For more information on publications available, see "PUBLICATIONS" on a subsequent page.

COOPERATION

The U.S. Geological Survey and organizations of the State of Iowa have had cooperative agreements for the systematic collection of streamflow records since 1914, and for water-quality records since 1943. Organizations that assisted in collecting data through cooperative agreement with the Survey are:

Iowa Geological Survey, Samuel J. Tuthill, director and State Geologist through March 31, 1975, Orville J. Van Eck, acting director and State Geologist April 1 to May 30, 1975, and Stanley B. Grant, director and State Geologist thereafter.

University of Iowa Institute of Hydraulic Research, Robert B. Hering, dean of College of Engineering and J. F. Kennedy, director

Iowa State Highway Commission, H. F. Gunnerson, Chief Engineer, and S. E. Roberts, director of research

Iowa Natural Resources Council, O. R. McMurry, director

Iowa State University, Richard E. Hasbrook, contracts and grants officer, and Agricultural Experiment Station, Thomas Hazen, assistant director

Linn County, W. G. Harrington, county engineer

City of Cedar Rapids, Donald Canney, mayor

City of Des Moines, Leo L. Johnson, director, department of public works

City of Fort Dodge, Vincent B. Gardner, general manager, department of municipal utilities

Assistance in the form of funds or services was given by the Corps of Engineers, U.S. Army, in collecting records for 64 gaging stations, and by the Environmental Protection Agency, in collecting records for seven water-quality stations published in this report. Assistance was also furnished by the Environmental Science Services Administration of the U.S. Department of Commerce.

The following organizations aided in collecting records:

Union Electric Co.; Des Moines Water Works; Ottumwa Water Works; Waterloo Sewage Treatment Plant; University of Iowa; and cities of Ames, Charles City, Council Bluffs, Iowa City, Marshalltown, Sioux City, and Waterloo.

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 (SI) Units on page 25.

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

Algae are mostly aquatic single-celled, colonial, or multi-celled plants, containing chlorophyll and lacking roots, stems, and leaves.

Bacteria are microscopic unicellular organisms, typically spherical, rod-like, or spiral and threadlike in shape, often clumped into colonies. Some bacteria cause disease, others perform an essential role in nature in the recycling of materials; for example, by decomposing organic matter into a form available for reuse by plants.

Total coliform bacteria are a particular group of bacteria that are used as indicators of possible sewage pollution. They are characterized as aerobic or facultative anaerobic, gram-negative, nonspore-forming, rod-shaped bacteria which ferment lactose with gas formation within 48 hours at 35°C. In the laboratory these bacteria are defined as all the organisms which produce colonies with a golden-green metallic sheen within 24 hours when incubated at 35°C \pm 1.0°C on M-Endo medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 ml of sample.

Fecal coliform bacteria are bacteria that are present in the intestine or feces of warmblooded animals. They are often used as indicators of the sanitary quality of the water. In the laboratory they are defined as all organisms which produce blue colonies within 24 hours when incubated at 44.5°C \pm 0.2°C on M-FC medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 ml of sample.

Fecal streptococcal bacteria are bacteria found also in the intestine of warmblooded animals. Their presence in water is considered to verify fecal pollution. They are characterized as gram-positive, cocci bacteria which are capable of growth in brain-heart infusion broth. In the laboratory they are defined as all the organisms which produce red or pink colonies within 48 hours at $35^{\circ}\text{C} \pm 1.0^{\circ}\text{C}$ on M-enterococcus medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 ml of sample.

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

Biochemical oxygen demand (BOD) is a measure of the quantity of dissolved oxygen, in milligrams per litre, used for the decomposition of organic matter by microorganisms, such as bacteria.

Biomass is the amount of living matter present at any given time, expressed as the weight per unit area or volume of habitat.

Ash weight is the weight or amount of residue present after the residue from the dry weight determination has been ashed in a muffle furnace at a temperature of 500°C for 1 hour. The ash weight values of zooplankton and phytoplankton are expressed in g/m^3 (grams per cubic metre), and periphyton and benthic organisms in g/m^2 (grams per square metre).

Dry weight refers to the weight of residue present after drying in an oven at 60°C for zooplankton and 105°C for periphyton, until the weight remains unchanged. This weight represents the total organic matter, ash and sediment, in the sample. Dry weight values are expressed in the same units as ash weight.

Organic weight or volatile weight of the living substance is the difference between the dry weight and the ash weight, and represents the actual weight of the living matter. The organic weight is expressed in the same units as for ash and dry weights.

Wet weight is the weight of living matter plus contained water.

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-ft, or about 646,000 gallons or 2,445 cubic metres. It represents a runoff of approximately 0.0372 inch from 1 square mile or 0.3468 millimetre from 1 square kilometre.

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

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

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

Cubic 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 (FT³/S, ft³/s) is the rate of discharge representing a volume of 1 cubic foot passing a given point during 1 second and is equivalent to approximately 7.48 gallons per second or 448.8 gallons per minute or 0.02832 cubic metres per second.

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

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

Instantaneous discharge is the discharge at a given time.

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

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

Gage height (G.H.) is the water-surface elevation referred to some arbitrary gage datum. Gage height is often used

interchangeably with the general term "stage," although gage height is more appropriate when used with a reading on a gage.

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

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

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 litre (UG/L, $\mu\text{g/l}$) is a unit expressing the concentration of chemical constituents in solution as the weight (micrograms) of solute per unit volume (litre) of water. One thousand micrograms per litre is equivalent to one milligram per litre.

Milligrams per litre (MG/L, mg/l) is a unit for expressing the concentration of chemical constituents in solution. Milligrams per litre represents the weight of solute per unit volume of water. Milligrams or micrograms per litre may be converted to milliequivalents (one thousandth of a gram-equivalent weight of a constituent) per litre by multiplying by the factors in table 1, page 7. Concentration of suspended sediment also is expressed in mg/l , and is based on the weight of sediment per litre of water-sediment mixture. Sediment concentrations may be converted to parts per million by using the factors in table 2, p. 10.

Organism is any living entity, such as an insect, phytoplankter, or zooplankter.

Cells/volume refers to the number of cells of any organism which is counted by using a microscope and grid or counting cell. Many planktonic organisms are multi-celled and are counted according to the number of contained cells per sample volume, usually millilitres (ml) or litres (l).

Organism count/area refers to the number of organisms collected and enumerated in a sample and adjusted to the number per area habitat, usually square metres (m^2), acres, or hectares. Periphyton, benthic organisms, and macrophytes are expressed in these terms.

Organism count/volume refers to the number of organisms collected and enumerated in a sample and adjusted to the number per sample volume, usually millilitres (ml) or litres (l). Numbers of planktonic organisms can be expressed in these terms.

Total organism count is the total number of organisms collected and enumerated in any particular sample.

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 litre to milliequivalents per litre

<u>Ion</u>	<u>Multi- ply by</u>	<u>Ion</u>	<u>Multi- ply by</u>
Aluminum (Al^{+3})*....	0.11119	Iodide (I^{-1}).....	0.00788
Ammonia as NH^{+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^{-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^{-2})...	.02082
Hydroxide (OH^{-1})....	.05880	Zinc (Zn^{+2})*.....	.03060

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

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

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.

Periphyton is the assemblage of microorganisms attached to and growing upon solid surfaces. While primarily consisting of algae, they also include bacteria, fungi, protozoa, rotifers, and other small organisms. Periphyton is a useful indicator of water quality.

Phytoplankton is the plant part of the plankton. They are usually microscopic and their movement is subject to the water currents. Phytoplankton growth is dependent upon solar radiation and nutrient substances. Because they are able to incorporate as well as release materials to the surrounding water, the phytoplankton have a profound effect upon the quality of the water. They are the primary food producers in the aquatic environment, and are commonly known as algae.

Blue-green algae are a group of phytoplankton organisms having a blue pigment, in addition to the green pigment called chlorophyll. Blue-green algae often cause nuisance conditions in water.

Diatoms are the unicellular or colonial algae having a siliceous shell. Their concentrations are expressed as number of cells per millilitre (cells/ml) of sample.

Green algae have chlorophyll pigments similar in color to those of higher green plants. Some forms produce algae mats or floating "moss" in lakes. Their concentrations are expressed as number of cells per millilitre (cells/ml) of sample.

Plankton is the community of suspended, floating, or weakly swimming organisms that live in the open water of lakes and rivers.

Zooplankton is the animal part of the plankton. Zooplankton are capable of extensive movements within the water column, and are often large enough to be seen with the unaided eye. Zooplankton are secondary consumers feeding upon bacteria, phytoplankton, and detritus. Because they are the grazers in the aquatic environment, the zooplankton are a vital part of the aquatic food web. The zooplankton community is dominated by small crustaceans and rotifers.

Runoff in inches (IN, 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.

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 litre 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.

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

Range of concentration in 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.

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

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

Specific conductance is a measure of the ability of a water to conduct an electrical current and is expressed in micromhos per centimeter at 25 °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 litre) is about 65 percent of the specific conductance (in micromhos per cm at 25°C). This relation is not constant from stream to stream or from well to well, and it may even vary in the same source with changes in the composition of the water.

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

Substrate is the physical surface upon which an organism lives.

Natural substrates refers to any naturally occurring emerged or submersed solid surface, such as a rock or tree, upon which an organism lives.

Artificial substrate is a device which is purposely placed in a stream or lake for colonization of organisms. The use of artificial substrates simplifies the community structure by standardizing the substrate from which each sample is taken. Examples of artificial substrates are basket samplers (made of wire cages filled with clean streamside rocks) and multi-plate samplers (made of hardboard) for benthic organism collection, and plexiglass strips for periphyton collection.

Taxonomy is the division of biology concerned with the classification and naming of organisms. The classification of organisms is based upon a hierarchial scheme beginning with Kingdom and ending with Species at the base. The higher the classification level, the fewer features the organisms have in common. For example, the taxonomy of a particular mayfly, Hexagenia limbata, is the following:

Kingdom.....	Animal
Phylum.....	Arthropoda
Class.....	Insecta
Order.....	Ephemeroptera
Family.....	Ephemeridae
<u>Genus.....</u>	<u>Hexagenia</u>
<u>Species.....</u>	<u>Hexagenia limbata</u>

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

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

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

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

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

Weighted average is used in this report to indicate discharge-weighted average. It is computed by multiplying the discharge for a sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the sum of the discharges. A discharge-weighted average approximates the composition of water that would be found in a reservoir containing all the water passing a given location during the water year after thorough mixing in the reservoir. See also table for converting English Units to International Units on p.25.

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

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

SPECIAL NETWORKS AND PROGRAMS

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

National stream-quality accounting network is an accounting network designed by the U.S. Geological Survey to meet many of the information demands of agencies or groups involved in national or regional water-quality planning and management. Both accounting and broad-scale monitoring objectives have been incorporated in the network design.

Areal configuration of the network is based on river-basin accounting units designated by the Office of Water Data Coordination in consultation with the Water Resources Council. Primary objectives of the network are (1) to depict areal variability of water-quality conditions nationwide on a year-to-year basis and (2) to detect and assess long-term changes in stream quality.

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 main-stream stations are listed before the first main-stream 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 indentation, each indentation 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 05387500, which appears just to the left of the station name includes the 2-digit part number "05" plus the 6-digit downstream order number "387500." 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) and Part 6 (Missouri 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.

EXPLANATION OF SURFACE WATER RECORDS

Collection and computation of data

The base data collected at gaging stations consist of records of stage and measurements of discharge of streams or canals, and stage, surface area, and contents of lakes or reservoirs. In addition, observations of factors affecting the stage-discharge relation or the stage-capacity relation, weather records, and other information are used to supplement base data in determining the daily flow or volume of water in storage. Records of stage are obtained from direct readings on a nonrecording gage or from a water-stage recorder that gives either a continuous graph of the fluctuations or a tape punched at 5-, 15-, or 60-minute intervals. Measurements of discharge are made with a current

meter, using the general methods adopted by the Geological Survey on the basis of experience in stream gaging since 1888. These methods are described in standard textbooks, in Water-Supply Paper 888, and in U.S. Geological Survey Techniques of Water Resources Investigations, book 3, chapter A6.

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 daily discharge (or minimum contents) and the minimum gage height if it is significant are given under "EXTREMES." In the first paragraph headed "Current year," the data given are for the complete current water year unless otherwise specified. In the second paragraph under "EXTREMES" headed "Period of record:" the data given are for the period of record given in 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 for all stations for which cubic feet per second per square mile and runoff in inches are published, a revision of the drainage area necessitates corresponding revision of all figures based on the drainage area. Revised figures of cubic feet per second per square mile and runoff in inches resulting from a revision of the drainage area only are usually not published in the annual series of reports.

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

The daily 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 noncontributing 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 site are indicated only if they are a month or more in length and the accuracy of the records is affected. Days on which the stage-discharge relation is affected by ice are not indicated. The methods used in computing discharge for various unusual conditions have been explained in preceding paragraphs.

Peak discharges and their times of occurrence and corresponding gage heights for many stations are listed below the yearly summary. All independent peaks above the selected base are given. The base discharge, which is given in parentheses, is selected so that an average of about three peaks a year can be presented. Peak discharges are 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 gaging stations on lakes and reservoirs the data presented comprise a description of the station and a daily

summary table of stage or contents. A skeleton table of capacity at given stages is published for most reservoirs.

Data collected at partial-record stations and miscellaneous sites are given in four 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, the third is a table of discharge measurements at miscellaneous sites, and the fourth is a table of supplemental low-flow measurements made during periods of low flow.

Accuracy of data

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

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

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

Discharge at 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.

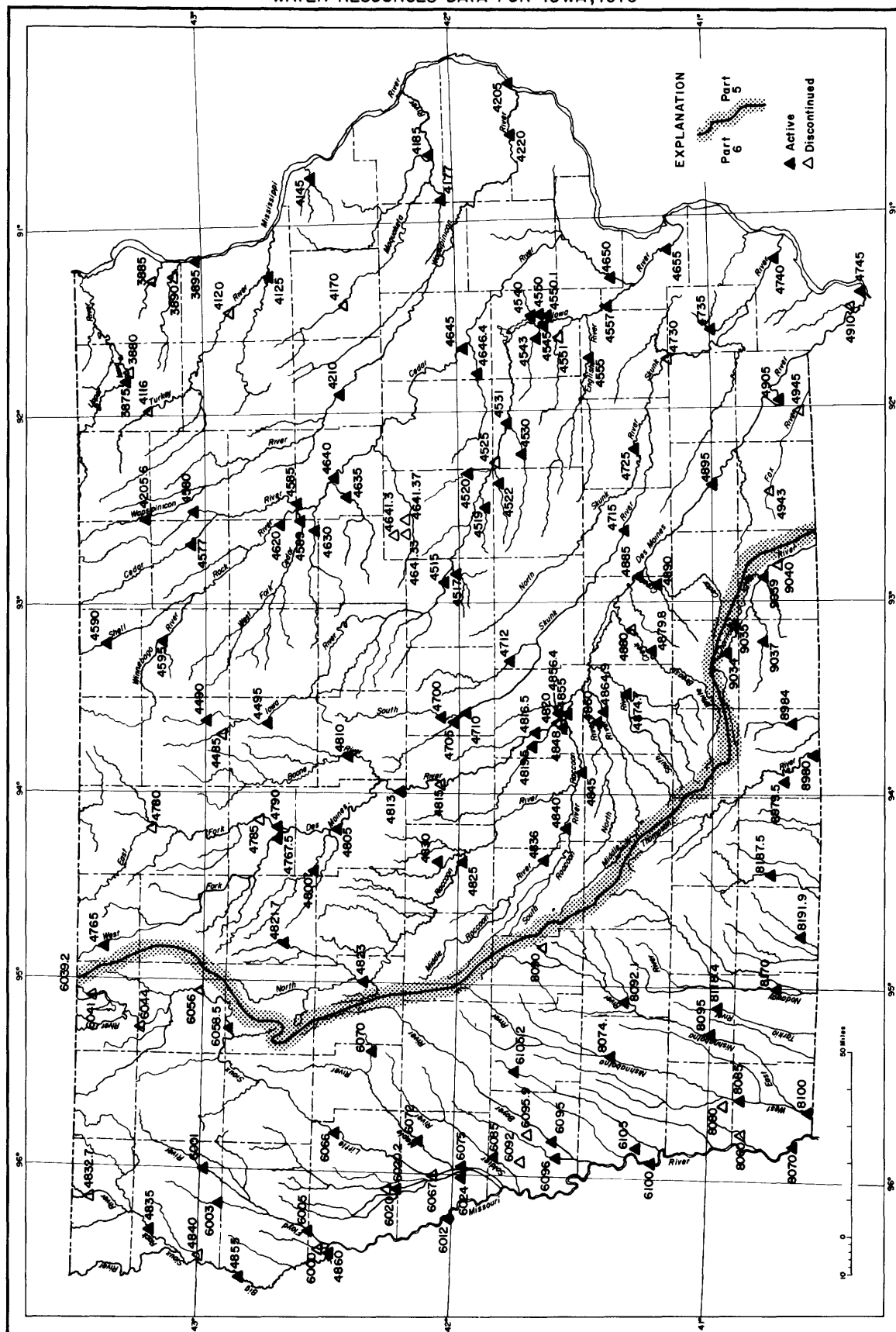


Figure 1.--Map of Iowa showing location of continuous-record gaging stations.

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 Iowa for the period October 1960 to September 1965 are in Water-Supply Papers 1914, 1915, 1917, 1918, and 1919. Records for stations in Iowa for the period October 1965 to September 1970 are in Water-Supply Papers 2114, 2115, 2117, 2118, and 2119.

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 month-end 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 Iowa are compiled in Water-Supply Papers 1308, 1309, and 1310 through September 1950, and in 1728, 1729, and 1730 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.

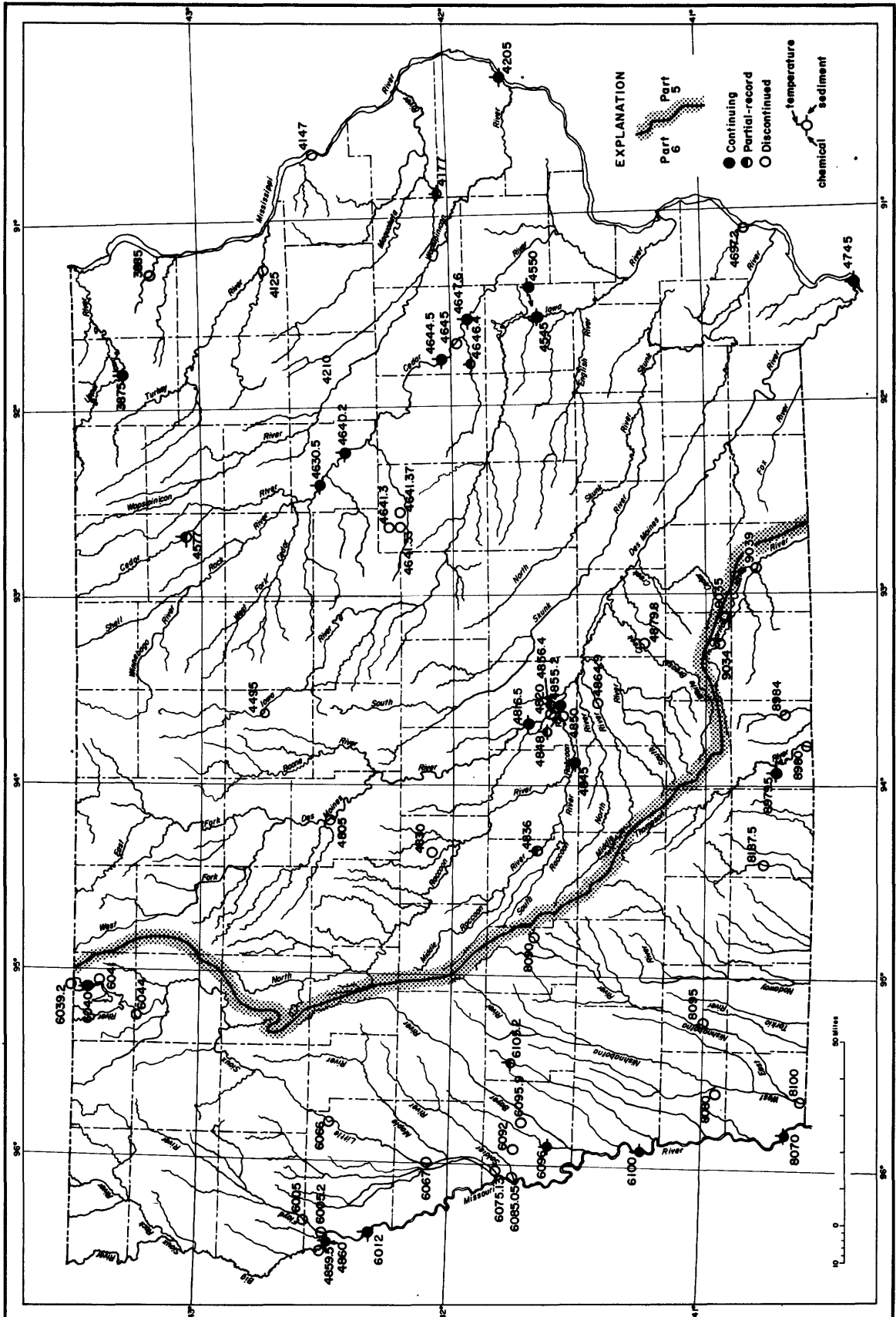


Figure 2.--Map of Iowa showing location of water-quality stations.

EXPLANATION OF WATER QUALITY RECORDS

Collection and examination of data

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

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

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

<u>°C</u>	<u>F</u>	<u>°C</u>	<u>°F</u>	<u>°C</u>	<u>°F</u>	<u>°C</u>	<u>°F</u>	<u>°C</u>	<u>°F</u>
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

Water-quality information is presented for chemical quality, biological, microbiological quality, 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 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 litre (mg/l) and water temperatures in degrees Celsius ($^{\circ}\text{C}$). In waters with a density of 1.000 g/ml (grams per millilitre), parts per million and milligrams per litre can be considered equal. In waters 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 litre. Temperatures reported in degrees Celsius may be converted to degrees Fahrenheit by using table 3, p. 22.

In October 1968, the Geological Survey began reporting many of the chemical constituents as well as the minor elements in micrograms per litre instead of milligrams per litre. (See "Definition of Terms," p. 6 and table for converting English Units to SI Units, p.32).

Solutes

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

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

Chemical-quality data published in this report are considered to be the most representative values available for the conditions at the time of sampling as much as possible, consistent with available sampling techniques and methods of analysis.

Temperature

Water temperatures are measured at most of the water-quality stations. For daily stations, the water temperatures are taken about the same time each day when the 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.

In addition, water temperatures are taken at time of discharge measurements for surface water stations. Although these temperatures are measured on different days of the month, an analysis of these data for each month for a long period of record will indicate significant thermal characteristics of the stream. Data have been analyzed for the period of record through 1974 for gaging stations with 10 or more years of record. A summary is published in the 1974 report in the table entitled "Extremes and Mean Periodic Water Temperature" for each month.

Sediment

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

During periods of rapidly changing flow or rapidly changing concentration, samples may have been collected more frequently (twice daily or, in some instances, hourly). The published sediment discharges for days of rapidly changing flow or concentration were computed by the subdivided 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 subdivided day method. For periods when no samples are collected, daily loads of suspended sediment are estimated on the basis of water discharge, sediment concentrations observed immediately before and after the periods,

and suspended-sediment loads for other periods of similar discharge.

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

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

Publications

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

<u>Water</u> <u>year</u>	<u>WSP</u> <u>No.</u>	<u>Water</u> <u>year</u>	<u>WSP</u> <u>No.</u>	<u>Water</u> <u>year</u>	<u>WSP</u> <u>No.</u>	<u>Water</u> <u>year</u>	<u>WSP</u> <u>No.</u>
1941	942	1948	1132	1955	1401	1962	1943
1942	950	1949	1162	1956	1451	1963	1949
1943	970	1950	1187	1957	1521	1964	1956
1944	1022	1951	1198	1958	1572	1965	1963
1945	1030	1952	1251	1959	1643	1966	1993
1946	1050	1953	1291	1960	1743	1967	2013
1947	1102	1954	1351	1961	1883	1968	2094, 2095
						1969	2144, 2145
						1970	2154, 2155

EXPLANATION OF GROUND-WATER LEVEL RECORDS

Collection of the data

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

Each well is identified by means of (1) a 15-digit number that is based on the grid system of latitude and longitude, and (2) a local number that is provided for continuity with older reports and for other use as dictated by local needs. The former number serves not only to identify the well but also to locate it as a point on a map. For maximum utility, latitude and longitude

code numbers are determined to seconds in order that each well may have a unique number. The first six digits represent degrees, minutes, and seconds of latitude; "N" refers to north latitude and is used to break the string of numbers; the next seven digits are degrees, minutes, and seconds of west longitude; and the number after the decimal point is a sequential number assigned in the order in which the wells are located in a 1-second quadrangle.

The local well numbers are in accordance with the Bureau of Land Management's system of land subdivision. Each well number is made up of three segments. The first segment indicates the township, the second the range, and the third the section in which the well is situated. The letters after the section number which are assigned in a counter-clockwise direction (beginning with "a" in the northeast quarter), represent subdivisions of the section. The first letter denotes the 160-acre tract, the second the 40-acre tract, and the third the 10-acre tract. Numbers are added as suffixes to distinguish wells in the same tract. Thus, the number 75-30-17bcb designates the well in the NW1/4 SW1/4 NW1/4 sec.17, T.75 N., R.30 W.

Measurements are made in many types of wells under varying conditions, but the methods of measurement are standardized to the extent possible. The equipment and measuring techniques used at each observation well insure that measurements at each well are of consistent accuracy and reliability.

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

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

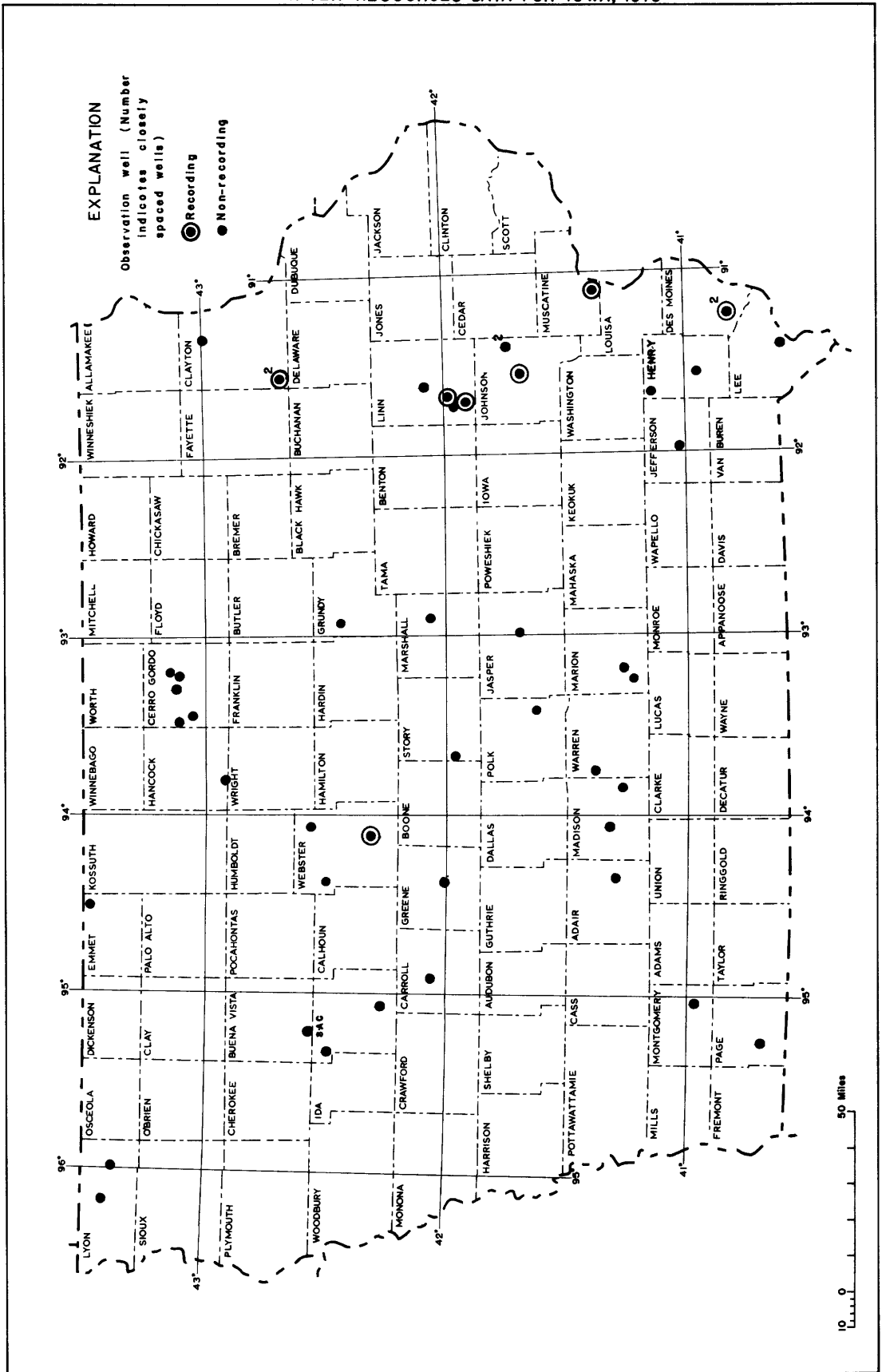


Figure 3.-- Location of observation wells in Iowa.

Publications

Publications of ground-water level data for the United States in Water-Supply Papers was begun by the Geological Survey in 1935. From 1935 through 1939, a single Water-Supply Paper for each year covering the entire nation was issued (Water-Supply Papers 777, 817, 840, 845, and 886). From 1940 through 1974, separate Water-Supply Papers were issued for 6 sections of the United States. Water-level data for Iowa are in the Water-Supply Papers listed below, each report containing one or more calendar years (January-December) of data. Data in this report are for 1972-75 water years.

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

Information about reports and other data on ground water in Iowa may be obtained from the district office, at the address given on the back of the title page.

HYDROLOGIC CONDITIONS

Annual runoff for the 1975 water year generally varied from 3 inches in the northwestern part of the state to 10 inches in the eastern part. Normal runoff is 2 to 8 inches respectively. Much higher runoff was experienced from small watersheds in the Marshalltown, Ames and Des Moines areas.

Runoff each month was near normal except for the period March through June. Snowmelt in March, particularly that from the January blizzard in northwestern, north-central and western Iowa produced high runoff but little serious flooding. Rains in April, May, and June maintained runoff above normal over most of the state. Very intense thunderstorms in late June on the Squaw Creek basin produced a flood exceeding the 100-year recurrence interval in Ames. Runoff from this basin for the year was over 14 inches compared to the normal of 6 inches.

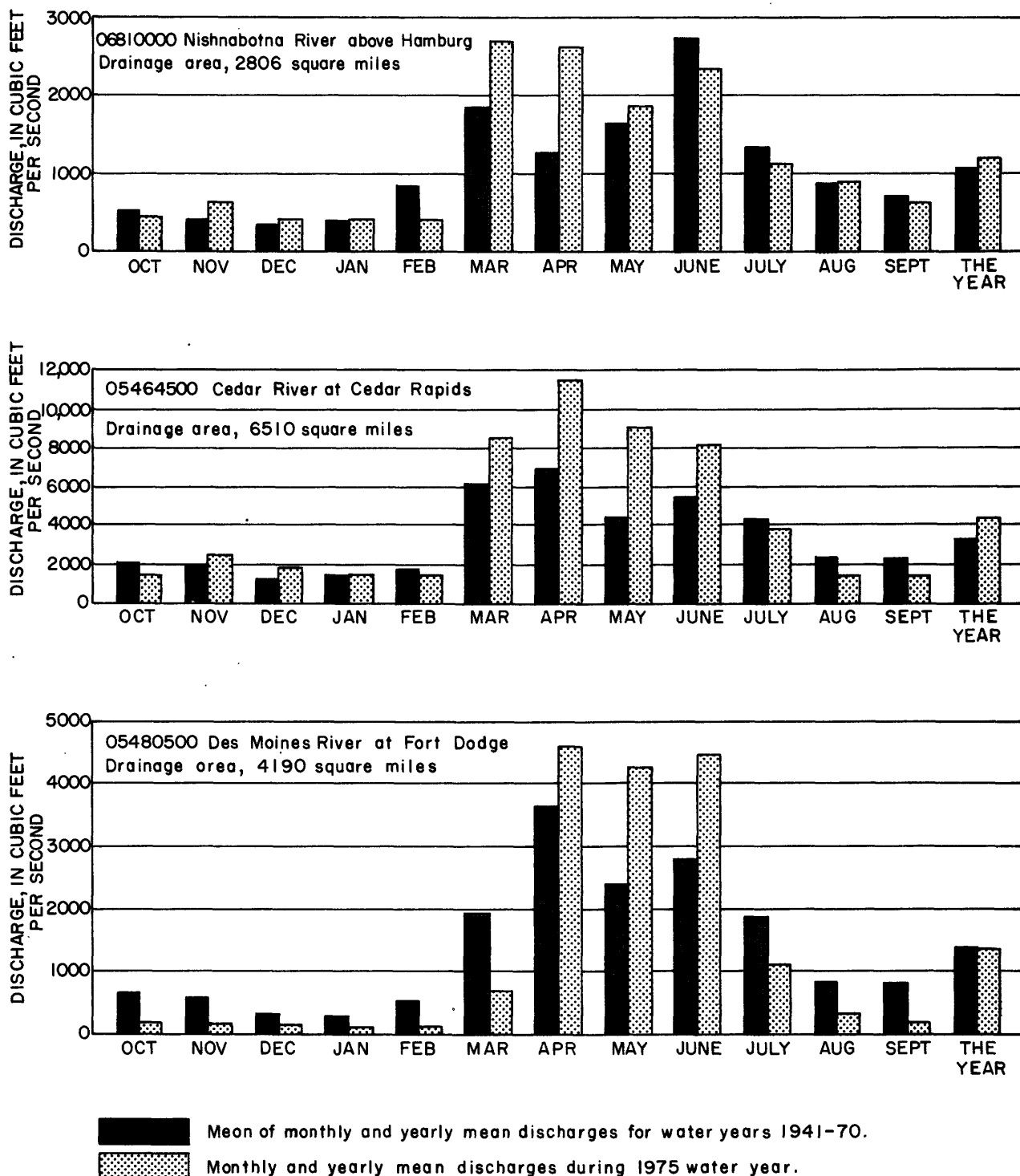


FIGURE 4.-- RUNOFF DURING 1975 WATER YEAR COMPARED WITH MEAN RUNOFF FOR PERIOD 1941-70 FOR THREE REPRESENTATIVE GAGING STATIONS

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____1957, Some fundamentals of particle size analysis: Rept. 12.

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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). This report contains and 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)
feet (ft)	.3048	metres (m)
miles (mi)	1.609	kilometres (km)
Area		
acres	4,047	square metres (m ²)
square miles (mi ²)	2.590	square kilometres (km ²)
Volume		
gallons (gal)	.003785	cubic metres (m ³)
cubic feet (ft ³)	.02832	cubic metres (m ³)
cfs-day (ft ³ /s-day)	2,447	cubic metres (m ³)
acre-feet (acre-ft)	1,233	cubic metres (m ³)
Flow		
cubic feet per second (ft ³ /s)	.02832	cubic metres per second (m ³ /s)
	28.32	cubic decimeters per second (dm ³ /s)
gallons per minute (gpm)	.06309	cubic decimetres per second (dm ³ /s)
million gallons per day (mgd)	.04381	cubic meters per second (m ³ /s)
Mass		
tons (short)	.9072	tonnes (t)

SECTION 1. SURFACE WATER RECORDS

05387500 UPPER IOWA RIVER AT DECORAH, IOWA

LOCATION.--Lat 43°18'19", long 91°47'48". in NE1/4 SW1/4 sec.16, T.98 N., R.8 W., Winneshiek County, on right bank 1,200 ft (366 m) upstream from bridge on U.S. Highway 52 (city route) in Decorah, 1,500 ft (457 m) downstream from Dry Run cutoff, and 3.0 mi (4.8 km) upstream from Trout Run.

DRAINAGE AREA.--511 mi² (1,323 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 850.00 ft (259.08 m) above mean sea level.

AVERAGE DISCHARGE.--24 years, 306 ft³/s (8.67 m³/s), 8.13 in/yr (207 mm/yr), 221,700 acre-ft/yr (273 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 6,090 ft³/s (172 m³/s) Apr. 29, gage height, 9.21 ft (2.807 m); minimum daily, 57 ft³/s (1.61 m³/s) Jan. 12, 13.
 Period of record: Maximum discharge, 20,200 ft³/s (572 m³/s) Mar. 27, 1961, gage height, 13.08 ft (3.987 m); minimum daily, 22 ft³/s (0.62 m³/s) Feb. 2-7, 1959.
 Maximum flood known, probably since at least 1913, occurred May 29, 1941, at site of former gaging station near Decorah, 4 mi (6.4 km) downstream, discharge, 28,500 ft³/s (807 m³/s).

REMARKS.--Records good except those for winter period, which are fair. Records of daily temperature and periodic chemical analyses for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1438: Drainage area.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	128	198	116	90	84	90	567	1,280	325	285	133	141
2	125	179	92	83	85	96	515	973	318	266	133	136
3	125	169	90	77	86	100	497	846	303	248	130	130
4	123	156	100	94	87	90	464	755	342	236	128	124
5	126	146	86	90	89	87	478	691	394	230	126	126
6	135	140	110	84	92	89	659	620	422	1,070	120	121
7	135	135	120	87	100	85	1,300	571	348	333	119	118
8	132	132	95	90	105	118	1,970	537	311	274	116	113
9	127	129	98	95	110	105	1,420	530	291	248	115	113
10	124	135	90	110	110	83	932	543	280	238	114	113
11	123	142	110	80	75	87	774	522	275	223	115	111
12	124	139	113	57	75	88	1,220	563	277	212	116	108
13	125	135	122	57	90	125	1,580	709	277	205	140	108
14	132	132	116	92	76	96	1,480	559	278	196	116	107
15	133	125	122	100	77	99	1,250	481	305	191	113	107
16	130	121	119	84	78	88	1,230	441	319	185	113	108
17	126	124	105	92	80	98	1,240	409	314	179	123	107
18	122	123	89	100	84	110	1,160	390	333	173	113	105
19	119	123	96	95	88	136	1,060	374	320	168	110	103
20	119	121	90	90	86	218	1,130	364	523	166	113	102
21	116	117	89	95	87	549	864	369	489	161	110	102
22	116	116	107	90	88	1,350	718	355	423	159	116	101
23	116	120	105	94	90	2,220	749	353	363	158	119	100
24	116	124	102	98	86	3,410	827	343	410	158	348	100
25	119	116	107	102	78	2,550	906	340	355	154	622	99
26	116	100	101	105	82	1,530	705	339	314	150	305	97
27	117	105	107	100	90	964	794	320	415	147	231	96
28	119	89	110	93	82	695	3,430	314	352	144	191	97
29	131	113	105	86	-----	598	5,250	317	412	143	172	104
30	137	125	107	92	-----	544	1,980	325	325	140	157	101
31	159	-----	87	88	-----	546	-----	325	-----	137	148	-----
TOTAL	3,895	3,929	3,206	2,790	2,441	17,044	37,149	15,858	10,413	6,977	4,925	3,298
MEAN	126	131	103	90.0	87.2	550	1,238	512	347	225	159	110
MAX	159	198	122	110	110	1,410	5,250	1,280	523	1,070	622	141
MIN	116	89	86	57	75	83	464	314	275	137	110	96
CFSM	.25	.26	.20	.18	.17	1.08	2.42	1.00	.68	.44	.31	.22
IN.	.28	.29	.23	.20	.18	1.24	2.70	1.15	.76	.51	.36	.24
AC-FT	7,730	7,790	6,360	5,530	4,840	31,810	73,690	31,450	20,650	13,840	9,770	6,540

CAL YR 1974 TOTAL 175,267 MEAN 480 MAX 5,750 MIH 86 CFSM .94 IN 12.76 AC-FT 347,600
 WTR YR 1975 TOTAL 111,925 MEAN 307 MAX 5,250 MIH 57 CFSM .60 IN 8.15 AC-FT 222,000

PEAK DISCHARGE (BASE, 4,000 FT³/S).--Apr. 29 (1645) 6,090 ft³/s (9.21 ft).

MISSISSIPPI RIVER MAIN STEM

05389500 MISSISSIPPI RIVER AT MCGREGOR, IOWA

LOCATION.--Lat 43°01'29", long 91°10'21", in SE1/4 SE1/4 sec.22, T.95 N., R.3 W., Clayton County, on right bank in city park at east end of Main Street in McGregor, 2.6 mi (4.2 km) upstream from Wisconsin River, 4.3 mi (6.9 km) downstream from Yellow River, and at mile 633.4 (1,019.1 km) upstream from Ohio River.

DRAINAGE AREA.--67,500 mi² (174,800 km²), approximately.

PERIOD OF RECORD.--August 1936 to current year.

GAGE.--Water-stage recorder. Datum of gage is 605.30 ft (184.50 m) above mean sea level, adjustment of 1912. Prior to June 1, 1937, and since June 2, 1939, auxiliary water-stage recorder; June 1, 1937 to June 1, 1939, auxiliary nonrecording gage 14.1 mi (22.7 km) upstream in tailwater of dam 9, at datum 5.30 ft (1.615 m) lower.

AVERAGE DISCHARGE.--39 years, 33,830 ft³/s (958 m³/s), 6.81 in/yr (173 mm/yr), 24,510,000 acre-ft/yr (30,200 hm³/yr).

EXTREMES.--Current year: Maximum daily discharge, 183,000 ft³/s (5,180 m³/s) May 4; maximum gage height, 21.15 ft (6.447 m) May 5; minimum daily discharge, 11,500 ft³/s (326 m³/s) Oct. 5; minimum gage height, 6.12 ft (1.865 m) Aug. 20.

Period of record: Maximum daily discharge, 276,000 ft³/s (7,820 m³/s) Apr. 24, 1965; maximum gage height, 25.38 ft (7.735 m) Apr. 24, 1965; minimum daily discharge, 6,200 ft³/s (176 m³/s) Dec. 9, 1936; minimum gage height, -0.86 ft (-0.262 m) Aug. 18, 1936.

Maximum stage since at least 1828, that of Apr. 24, 1965.

REMARKS.--Records good except those for winter period, which are fair. Stage-discharge relation affected by backwater from Wisconsin River and Dam 10. Flow regulated by navigation dams.

COOPERATION.--Gage height record at Dam 9 collected in cooperation with Corps of Engineers.

REVISIONS.--Revised figures of discharge in cubic feet per second, for August and September 1974, superseding figures published in Water Resources Data for Iowa, 1974, are given herewith:

Date	Discharge	Date	Discharge	Date	Discharge
Aug. 21	22,100	Aug. 30	14,800	Sept. 7	14,300
22	27,700	31	18,700	8	15,300
23	29,600	Sept. 1	20,100	9	20,000
24	27,600	2	19,300	10	22,800
25	21,600	3	17,200	11	23,500
26	17,100	4	15,400	12	23,300
27	15,800	5	14,900	13	23,900
28	14,800	6	14,100	14	21,900
29	14,100				

Month	Cfs-days	Mean	Max	Min	Cfsm	inches	Runoff acre-ft
August	711,000	22,940	31,800	14,100	0.34	.39	1,410,000
September	546,600	18,220	23,900	14,100	.27	.30	1,084,000
Water year 1973-74	14,501,020	39,730	104,000	9,920	.59	7.99	28,760,000

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15900	24400	19700	16000	19200	20500	31700	164000	60000	78100	20300	30600
2	13900	24100	18100	16200	19000	20400	32600	173000	59400	78400	21500	31100
3	11600	25300	17000	16500	18800	20200	33500	180000	58300	78900	23900	32400
4	12800	25100	16000	16500	18800	20100	32800	183000	56100	79000	24700	31700
5	11500	24700	15900	16500	18600	20000	32500	182000	55000	78800	26000	29000
6	14200	25000	16000	16400	18600	21000	29700	179000	53500	79100	25300	23900
7	17800	25000	17000	16400	18400	21500	29800	174000	52900	79800	21500	19700
8	17800	25000	18000	17000	18400	21400	31000	169000	51600	81600	17900	16300
9	17700	26400	17500	17000	18200	21200	32300	163000	48200	82200	16700	13900
10	18200	28700	14000	17500	18200	21000	34900	158000	42400	83600	16700	12400
11	18300	32500	13500	17500	18000	21200	35400	152000	40500	82700	18100	13800
12	17800	32900	13000	17000	18000	21000	36300	146000	40100	81900	19200	21300
13	17800	31400	14000	16500	18000	20000	38100	138000	40400	79600	19000	24100
14	17800	27900	16000	17000	18000	19000	41000	132000	42000	77100	19200	30000
15	17700	24900	19000	17000	18000	18000	44700	125000	44600	73800	19100	31400
16	17600	22600	23000	16800	18000	18500	48500	117000	47700	70100	18500	32000
17	17400	22200	25000	16600	18000	19000	53200	110000	50100	65300	17100	30300
18	18200	22200	24000	16500	20000	20000	62000	103000	52900	59500	16100	27800
19	17900	23500	20000	16500	20200	21500	66900	95700	56000	56300	16000	25300
20	17700	24500	19900	16500	20200	22000	68600	90600	59500	51000	16400	22900
21	17900	25000	19000	16500	20000	25000	72200	85900	63700	47700	16100	23000
22	16400	25000	18500	16400	21500	29000	76000	80600	68300	42000	19000	22300
23	15500	24300	18500	16400	22000	33000	81400	76300	69800	38700	26900	22100
24	15700	24800	18500	17000	21000	40000	89300	74500	70900	36400	37000	22200
25	15300	24300	18500	18500	20900	45000	95900	72200	71900	34600	46400	22800
26	15700	22000	18600	18800	20900	41000	102000	66100	73000	31800	48200	22800
27	15600	24200	18600	19000	20800	38000	111000	62200	74200	30700	46600	23000
28	15500	24400	17600	19000	20700	37000	125000	61300	75400	29800	40400	22800
29	16600	23900	16500	19100	---	33000	139000	61000	77100	27400	36600	24500
30	19200	20900	16400	19200	---	30000	152000	61100	77600	25000	33500	24200
31	22300	---	16000	19200	---	31100	---	60200	---	21200	31300	---
TOTAL	515300	757100	553300	533000	540400	789600	1859300	3695700	1733100	1862100	775200	729600
MEAN	16620	25240	17850	17190	19300	25470	61980	119200	57770	60070	25010	24320
MAX	22300	32900	25000	19200	22000	45000	152000	183000	77600	83600	48200	32400
MIN	11500	20900	13000	16000	18000	18000	29700	60200	40100	21200	16000	12400
CFSM	.25	.37	.26	.25	.29	.38	.92	1.77	.66	.89	.37	.36
IN.	.28	.42	.30	.29	.30	.44	1.02	2.04	.96	1.03	.43	.40
AC-FT	1022000	1502000	1097000	1057000	1072000	1566000	3688000	7330000	3438000	3693000	1538000	1447000

CAL YR 1974 TOTAL 12966320 MEAN 35520 MAX 104000 MIN 9920 CFSM .53 IN 7.15 AC-FT 25720000
WTR YR 1975 TOTAL 14343700 MEAN 39300 MAX 183000 MIN 11500 CFSM .58 IN 7.90 AC-FT 28450000

05412500 TURKEY RIVER AT GARBER, IOWA

LOCATION.--Lat 42°44'24", long 91°15'42", in SE1/4 NW1/4 sec.36, T.92 N., R.4 W., Clayton County, on left bank 10 ft (3 m) downstream from bridge on county highway C43, 800 ft (244 m) upstream from Wayman Creek, 1,000 ft (305 m) southeast of Garber, 2,000 ft (610 m) downstream from Elk Creek, 1 mi (1.6 km) downstream from Volga River, and 19.8 mi (31.9 km) upstream from mouth.

DRAINAGE AREA.--1,545 mi² (4,002 km²).

PERIOD OF RECORD.--August 1913 to November 1916, May 1919 to September 1927, April 1929 to September 1930, October 1932 to current year. Monthly discharge only for some periods, published in WSP 1308.

GAGE.--Water-stage recorder. Datum of gage is 634.46 ft (193.38 m) above mean sea level. Prior to Feb. 7, 1935, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--55 years (1913-16, 1919-27, 1929-30, 1932-75), 908 ft³/s (25.7 m³/s), 7.98 in/yr (203 mm/yr), 657,800 acre-ft/yr (811 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 16,700 ft³/s (473 m³/s) Mar. 24, gage height, 20.93 ft (6.379 m); maximum gage height, 21.72 ft (6.620 m) Mar. 22; minimum daily discharge, 180 ft³/s (5.10 m³/s) Mar. 4, 5. Period of record: Maximum discharge, 32,300 ft³/s (915 m³/s) Feb. 23, 1922, gage height, 28.06 ft (8.553 m), from floodmark; minimum daily, 49 ft³/s (1.39 m³/s) Jan. 28, 29, 1940. Maximum stage since at least 1890, that of Feb. 23, 1922.

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

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

REVISIONS (WATER YEARS).--WSP 1308: 1922-25 (M), 1927 (M). WSP 1438: Drainage area.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	384	499	370	400	310	200	4090	4070	1110	990	359	399
2	362	554	340	350	300	190	2640	3150	1000	970	359	379
3	354	535	280	380	290	190	1940	2760	960	870	365	363
4	356	509	300	400	290	180	1720	2490	1220	770	357	348
5	376	483	320	410	280	180	1690	2330	1420	980	350	339
6	568	460	340	450	270	190	2330	2140	1230	1110	344	346
7	481	444	380	440	350	200	3010	1940	1160	990	331	339
8	427	435	400	430	400	220	3850	1880	1010	850	324	326
9	407	424	320	420	300	250	3580	1750	930	732	325	315
10	393	434	550	450	290	270	2620	1670	880	682	325	316
11	392	477	1100	500	380	300	2240	1640	870	647	322	317
12	409	476	1600	330	450	310	2580	1790	880	627	325	311
13	403	465	1700	400	500	320	4730	1740	850	604	326	304
14	405	451	700	450	400	320	4000	1750	1290	586	317	296
15	396	435	450	500	330	330	3300	1570	1440	569	309	290
16	390	421	440	470	300	330	3120	1440	1090	555	304	290
17	385	428	420	450	280	350	3230	1330	1190	534	304	290
18	380	425	410	430	270	600	3170	1250	1470	518	302	290
19	374	423	420	400	260	2000	2870	1200	1170	516	307	293
20	371	419	450	370	250	4260	2580	1150	1110	509	329	290
21	366	412	500	370	240	8950	2320	1090	1080	479	330	286
22	365	408	850	360	230	13300	2010	1070	1450	453	1250	285
23	367	409	900	360	230	9590	2010	1070	1500	464	846	281
24	365	417	800	360	220	15000	2380	1050	1670	471	542	272
25	367	412	650	350	220	8680	2270	1020	1290	441	581	265
26	361	400	700	350	210	5130	2010	1020	1100	424	654	256
27	360	388	770	340	210	3300	2190	974	2040	411	496	258
28	368	382	720	340	200	2530	7090	906	1510	402	443	260
29	407	374	600	330	---	2180	9340	903	1230	388	626	289
30	428	380	500	330	---	1990	7700	1690	1100	374	544	308
31	432	---	450	320	---	2430	---	1230	---	367	440	---
TOTAL	12199	13179	18730	12240	8260	84270	98610	51063	36250	19283	13336	9200
MEAN	394	439	604	395	295	2718	3287	1647	1208	622	430	307
MAX	568	554	1700	500	500	15000	9340	4070	2040	1110	1250	399
MIN	354	374	280	320	200	180	1690	903	850	367	302	256
CFSM	.26	.28	.39	.26	.19	1.76	2.13	1.07	.78	.40	.28	.20
IN.	.29	.32	.45	.29	.20	2.03	2.37	1.23	.87	.46	.32	.22
AC-FT	24200	26140	37150	24280	16380	167100	195600	101300	71900	38250	26450	18250

CAL YR 1974 TOTAL 474606 MEAN 1300 MAX 12400 MIN 280 CFSM .84 IN 11.43 AC-FT 941400
WTR YR 1975 TOTAL 376620 MEAN 1032 MAX 15000 MIN 180 CFSM .67 IN 9.07 AC-FT 747000

PEAK DISCHARGE (BASE, 8,000 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-22	0415	21.72	16,500	4-29	0515	16.45	9,740
3-24	1015	20.93	16,700				

LITTLE MAQUOKETA RIVER BASIN

05414500 LITTLE MAQUOKETA RIVER NEAR DURANGO, IOWA

LOCATION.--Lat 42°33'18", long 90°44'46", in NW1/4 NE1/4 sec.5, T.89 N., R.2 E., Dubuque County, on left bank 10 ft (3 m) upstream from bridge on county highway, 300 ft (91 m) upstream from Cloie Branch, 1.7 mi (2.7 km) east of Durango, 5.6 mi (9.0 km) northwest of court house at Dubuque, and 6.4 mi (10.3 km) upstream from mouth.

DRAINAGE AREA.--130 mi² (337 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 612.03 ft (186.55 m) above mean sea level. Prior to Jan. 5, 1939, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--41 years, 87.7 ft³/s (2.48 m³/s), 9.16 in/yr (233 mm/yr), 63,540 acre-ft/yr (78.3 hm³/yr); median of yearly mean discharges, 74 ft³/s (2.10 m³/s), 7.7 in/yr (196 mm/yr), 53,600 acre-ft/yr (66.1 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 5,770 ft³/s (163 m³/s) Mar. 24, gage height, 13.97 ft (4.258 m); minimum daily, 24 ft³/s (0.680 m³/s) Sept. 26-30.

Period of record: Maximum discharge, 40,000 ft³/s (1,130 m³/s) Aug. 2, 1972, gage height, 23.13 ft (7.050 m) in gage well, 23.8 ft (7.25 m), from floodmarks, on basis of slope-area measurement of peak flow; minimum daily, 5 ft³/s (142 dm³/s) July 12, 13, 1936.

Flood of June 15, 1925, reached a stage of about 22.1 ft (6.74 m), discharge, about 29,000 ft³/s (821 m³/s), computed by Corps of Engineers.

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

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

REVISIONS (WATER YEARS).--WSP 1508: 1935-38, 1939 (M), 1940, 1943 (M), 1946, 1948.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40	65	45	35	40	35	323	260	58	52	32	40
2	38	51	41	32	38	34	169	216	55	49	32	35
3	39	47	37	40	40	34	138	201	56	48	32	34
4	40	45	48	38	42	33	119	183	85	47	31	33
5	44	44	42	37	43	35	154	175	64	108	31	30
6	114	43	50	38	39	37	299	148	54	140	31	30
7	59	41	68	40	36	38	335	136	49	60	31	29
8	47	41	64	41	33	34	282	130	47	51	30	29
9	45	40	42	43	31	33	210	118	46	46	50	29
10	43	54	52	60	30	36	167	108	50	45	42	28
11	43	108	50	130	31	35	270	108	50	44	33	28
12	43	62	47	70	35	37	315	114	50	46	31	28
13	43	53	48	60	34	33	275	97	50	44	30	28
14	54	49	48	53	31	33	266	94	127	43	30	26
15	46	45	71	48	33	34	234	92	302	41	30	26
16	43	46	66	45	34	38	243	83	83	39	28	26
17	42	46	7.0	44	35	44	237	79	188	39	28	26
18	41	45	38	43	36	178	230	77	255	38	28	26
19	41	46	45	42	36	915	214	76	132	37	26	26
20	40	46	45	41	35	1350	161	73	85	37	28	26
21	39	43	45	40	35	2020	141	72	70	36	28	26
22	38	43	39	40	36	1870	131	74	80	35	243	26
23	39	47	41	39	37	980	157	70	77	34	309	26
24	39	51	43	42	45	1460	179	75	443	34	55	26
25	40	44	39	66	39	318	121	64	104	33	55	25
26	38	40	41	55	40	206	110	66	83	33	51	24
27	38	46	47	47	36	172	812	59	71	32	40	24
28	39	41	47	43	39	163	1340	56	70	33	38	24
29	148	42	47	46	---	150	481	58	69	32	37	24
30	141	43	42	43	---	124	346	87	57	32	40	24
31	58	---	46	39	---	429	---	72	---	32	40	---
TOTAL	1602	1457	1431.0	1480	1019	10968	8419	3321	3010	1420	1572	832
MEAN	51.7	48.6	46.2	47.7	36.4	354	281	107	100	45.8	50.7	27.7
MAX	148	108	71	130	45	2020	1340	260	443	140	309	40
MIN	38	40	7.0	32	30	33	110	56	46	32	28	24
CFSM	.40	.37	.36	.37	.28	2.72	2.16	.82	.77	.35	.39	.21
IN.	.46	.42	.41	.42	.29	3.14	2.41	.95	.86	.41	.45	.24
AC-FT	3180	2890	2840	2940	2020	21760	16700	6590	5970	2820	3120	1650

CAL YR 1974 TOTAL 55951.0 MEAN 153 MAX 3510 MIN 7.0 CFSM 1.18 IN 16.01 AC-FT 111000
WTR YR 1975 TOTAL 36531.0 MEAN 100 MAX 2020 MIN 7.0 CFSM .77 IN 10.45 AC-FT 72460

PEAK DISCHARGE (BASE, 3,000 FT³/S).--Mar. 20 (2045) 3,240 ft³/s (11.13 ft); Mar. 24 (0300) 5,770 ft³/s (13.97 ft).

05417700 BEAR CREEK NEAR MONMOUTH, IOWA

LOCATION.--Lat 42°02'18", long 90°52'59", in NE1/4 SE1/4 sec.31, T.84 N., R.1 E., Jackson County, on right bank 15 ft (5 m) downstream from bridge on county highway, 1.6 mi (2.6 km) upstream from Rat Run, 2.8 mi (4.5 km) south of Monmouth, and 8.2 mi (13.2 km) upstream from mouth.

DRAINAGE AREA.--61.3 mi² (159 km²).

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 728.80 ft (222.14 m) above mean sea level.

AVERAGE DISCHARGE.--18 years, 46.5 ft³/s (1.32 m³/s), 10.30 in/yr (262 mm/yr), 33,690 acre-ft/yr (41.5 hm³/yr); median of yearly mean discharges, 40 ft³/s (1.13 m³/s), 8.9 in/yr (226 mm/yr), 29,000 acre-ft/yr (35.8 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,650 ft³/s (46.7 m³/s) Mar. 22, gage height, 9.60 ft (2.926 m); minimum daily, 6.5 ft³/s (0.18 m³/s) Sept. 16.
Period of record: Maximum discharge, 7,340 ft³/s (208 m³/s) Sept. 21, 1965, gage height, 13.76 ft (4.194 m); minimum daily, 1.8 ft³/s (51 dm³/s) Dec. 8-12, 1958.
Flood in June 1944 reached a stage of about 21.5 ft (6.55 m), from floodmark, from information by local residents, discharge not determined.

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

REVISIONS (WATER YEARS).--WSP 1708: 1959.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	29	18	18	29	18	269	46	23	22	9.7	10
2	16	20	16	17	28	19	84	42	21	19	11	8.7
3	16	18	15	21	27	20	59	40	21	18	10	9.0
4	16	17	16	19	26	21	55	39	27	17	9.8	10
5	18	17	15	20	24	22	64	37	31	19	10	15
6	24	17	17	20	23	22	128	34	21	19	9.9	16
7	22	16	18	20	30	21	120	33	19	16	9.1	12
8	18	17	16	21	26	20	99	32	18	16	8.9	10
9	18	16	14	23	23	19	85	30	18	16	11	9.4
10	17	21	22	60	20	21	127	29	20	16	11	9.5
11	17	36	21	80	29	21	125	30	23	16	10	9.3
12	17	28	20	55	25	21	106	43	23	15	10	9.3
13	18	22	21	140	23	21	93	33	19	15	12	9.3
14	22	20	24	150	25	25	84	33	19	15	12	9.2
15	20	18	45	100	24	25	77	32	77	14	10	9.9
16	18	19	30	85	23	27	70	29	32	13	9.7	6.5
17	17	18	22	70	25	31	64	28	38	13	10	7.6
18	17	18	17	55	26	112	61	26	36	12	10	8.1
19	17	19	19	40	24	599	60	24	31	13	9.5	8.9
20	16	18	21	35	25	877	55	23	26	12	9.7	8.8
21	16	18	24	40	26	997	49	22	23	11	10	8.8
22	16	20	22	35	27	997	45	23	21	11	9.9	8.7
23	16	25	20	30	24	307	43	21	32	48	8.5	8.8
24	16	27	18	36	21	402	43	21	308	59	7.9	7.8
25	16	23	17	45	25	107	38	20	69	13	12	7.0
26	16	22	19	40	22	65	34	21	68	10	17	7.2
27	16	18	20	35	20	52	62	19	37	9.4	9.9	7.7
28	16	15	20	33	22	74	70	19	30	8.6	8.8	7.7
29	18	16	19	32	---	103	62	21	25	8.0	13	10
30	18	17	18	31	---	68	55	40	35	7.7	21	11
31	20	---	21	30	---	207	---	28	---	8.3	13	---
TOTAL	543	605	625	1436	692	5341	2386	918	1191	510.0	334.3	281.2
MEAN	17.5	20.2	20.2	46.3	24.7	172	79.5	29.6	39.7	16.5	10.8	9.37
MAX	24	36	45	150	30	997	269	46	308	59	21	16
MIN	15	15	14	17	20	18	34	19	18	7.7	7.9	6.5
CFSM	.29	.33	.33	.76	.40	2.81	1.30	.48	.65	.27	.18	.15
IN.	.33	.37	.38	.87	.42	3.24	1.45	.56	.72	.31	.20	.17
AC-FT	1080	1200	1240	2850	1370	10590	4730	1820	2360	1010	663	558

CAL YR 1974 TOTAL 30573.0 MEAN 83.8 MAX 1990 MIN 14 CFSM 1.37 IN 18.55 AC-FT 60640
WTR YR 1975 TOTAL 14862.5 MEAN 40.7 MAX 997 MIN 6.5 CFSM .66 IN 9.02 AC-FT 29480

PEAK DISCHARGE (BASE, 1,000 FT³/S).--Mar. 22 (0100) 1,650 ft³/s (9.60 ft).

MAQUOKETA RIVER BASIN

0541B500 MAQUOKETA RIVER NEAR MAQUOKETA, IOWA

LOCATION.--Lat 42°05'05", long 90°38'04", in SW1/4 NE1/4 sec.17, T.84 N., R.3 E., Jackson County, on right bank 500 ft (152 m) upstream from bridge on State Highway 62, 1,200 ft (366 m) upstream from Prairie Creek, 2.0 mi (3.2 km) northeast of Maquoketa, 2.2 mi (3.5 km) downstream from North Fork, and 26.7 mi (43.0 km) upstream from mouth.

DRAINAGE AREA.--1,553 mi² (4,022 km²).

PERIOD OF RECORD.--September 1913 to current year. Prior to October 1939, published as "below North Fork near Maquoketa". Monthly discharge only for some periods, published in WSP 1308.

GAGE.--Water-stage recorder. Datum of gage is 626.52 ft (190.96 m) above mean sea level, adjustment of 1912. Prior to July 14, 1924, nonrecording gage, and July 15, 1924 to Sept. 30, 1972, recording gage at same site at datum 10.00 ft (3.048 m) higher.

AVERAGE DISCHARGE.--62 years, 1,023 ft³/s (29.0 m³/s), 8.95 in/yr (227 mm/yr), 741,200 acre-ft/yr (914 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 30,000 ft³/s (850 m³/s) Mar. 22, gage height, 30.63 ft (9.336 m); minimum daily, 334 ft³/s (9.46 m³/s) Sept. 27.
Period of record: Maximum discharge, 48,000 ft³/s (1,360 m³/s) June 27, 1944, gage height, 24.70 ft (7.529 m) at datum then in use; minimum daily, 105 ft³/s (2.97 m³/s) Feb. 11-20, 1936.
A flood, probably in 1903, reached a stage of 23.5 ft (7.16 m), discharge, 43,000 ft³/s (1,220 m³/s), at datum in use prior to Oct. 1, 1972.

REMARKS.--Records good except those for winter period, which are poor. Diurnal fluctuation caused by powerplant 4 mi (6.4 km) above station.

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

REVISIONS (WATER YEARS).--WSP 405: 1914. WSP 1438: Drainage area. WSP 1508: 1914-17, 1919-25, 1926 (M), 1929, 1933-34 (M), 1943.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	680	798	711	675	520	664	5,730	2,520	986	1,090	579	613
2	667	900	708	620	520	640	3,660	2,120	1,020	983	591	589
3	664	858	619	535	530	563	2,380	1,880	994	924	539	568
4	668	1,030	668	696	540	607	1,940	1,710	1,040	903	545	537
5	741	1,220	676	566	540	591	1,820	1,630	1,110	982	522	569
6	852	898	704	651	520	653	2,320	1,520	1,030	1,300	528	581
7	962	673	746	756	500	613	2,670	1,420	990	1,020	507	564
8	925	658	803	758	1,100	629	2,680	1,510	949	938	519	551
9	882	655	680	797	1,100	597	2,400	1,150	853	830	516	544
10	795	678	660	880	1,050	588	2,200	1,220	817	795	653	537
11	756	859	747	1,400	1,000	623	2,020	1,270	822	765	664	527
12	757	854	846	900	930	680	2,120	1,390	819	771	649	540
13	742	780	837	600	860	637	2,790	1,120	841	757	646	522
14	800	723	835	1,300	780	606	2,440	1,140	872	709	600	488
15	794	674	990	1,500	740	652	2,350	1,130	1,640	683	563	466
16	761	669	1,020	1,350	740	653	2,180	1,100	1,880	585	552	502
17	750	659	963	1,200	850	669	2,030	1,040	1,650	603	544	530
18	727	734	847	1,100	900	1,380	2,090	1,010	1,790	655	538	516
19	716	721	831	1,050	880	5,350	2,070	997	1,820	759	496	544
20	689	766	821	1,000	860	11,900	1,910	984	2,110	636	505	517
21	690	663	740	920	815	18,100	1,730	974	1,650	594	550	493
22	680	715	803	850	709	27,000	1,630	958	1,290	589	543	542
23	697	741	803	800	721	19,300	1,580	1,020	1,290	691	1,690	662
24	680	784	782	750	621	15,000	1,630	1,040	1,560	759	1,260	497
25	703	698	708	700	621	7,180	1,650	1,040	1,580	675	970	496
26	647	667	640	650	731	4,080	1,500	1,090	2,160	552	769	447
27	687	680	664	610	663	2,910	1,990	1,000	1,720	562	726	334
28	684	684	791	580	692	2,540	2,810	913	1,390	555	684	434
29	782	660	800	540	-----	2,750	3,300	915	1,380	547	735	349
30	973	695	796	530	-----	2,180	3,290	1,080	1,170	558	836	339
31	802	-----	712	520	-----	2,620	-----	1,070	-----	571	698	-----
TOTAL	23,353	22,794	23,551	25,784	21,033	132,955	70,910	38,961	39,323	23,341	20,717	15,398
MEAN	753	760	773	832	751	4,289	2,364	1,257	1,311	753	668	513
MAX	973	1,220	1,020	1,500	1,100	27,000	5,730	2,520	2,160	1,300	1,690	662
MIN	647	655	619	520	500	563	1,500	913	817	547	496	334
CFSM	.48	.49	.50	.54	.48	2.76	1.52	.81	.84	.48	.43	.33
IN.	.56	.55	.57	.62	.50	3.18	1.70	.93	.94	.56	.50	.37
AC-FT	46,320	45,210	47,510	51,140	41,720	263,700	140,600	77,280	78,000	46,300	41,090	30,540

CAL YR 1974 TOTAL 691,097 MEAN 1,893 MAX 17,700 MIN 619 CFSM 1.22 IN 16.55 AC-FT 1,371,000
WTR YR 1975 TOTAL 458,520 MEAN 1,256 MAX 27,000 MIN 334 CFSM .81 IN 10.98 AC-FT 909,500

PEAK DISCHARGE (BASE, 7,500 FT³/S).--Mar. 22 (1345) 30,000 ft³/s (30.63 ft).

05420500 MISSISSIPPI RIVER AT CLINTON, IOWA
(National stream-quality accounting network station)

LOCATION.--Lat 41°46'53", long 90°15'04", in NW1/4 sec.34, T.81 N., R.6 E., Clinton County, on right bank at foot of Seventh Avenue in Camanche, 5.0 mi (8.0 km) upstream from Wapsipinicon River, 6.4 mi (10.3 km) downstream from Clinton, 10.6 mi (17.1 km) downstream from dam 13, and at mile 511.8 (823.5 km) upstream from Ohio River. Prior to June 6, 1969, at site 400 ft (122 m) downstream.

DRAINAGE AREA.--85,600 mi² (221,700 km²), approximately, at Fulton-Lyons Bridge where discharge measurements are made.

PERIOD OF RECORD.--June to August 1873 (fragmentary), October 1873 to current year (October 1932 to September 1939, published as "at Le Claire").

GAGE.--Water-stage recorder. Datum of gage is 562.68 ft (171.50 m) above mean sea level. Oct. 1, 1955, to June 5, 1969, water-stage recorder at site 400 ft (121 m) downstream at same datum. Auxiliary water-stage recorder at dam 13 since Oct. 1, 1958. See WSP 1728 for history of changes prior to Oct. 1, 1955.

AVERAGE DISCHARGE.--102 years, 47,360 ft³/s (1,340 m³/s), 7.51 in/yr (191 mm/yr), 34,310,000 acre-ft/yr (42,300 hm³/yr).

EXTREMES.--Current year: Maximum daily discharge, 214,000 ft³/s (6,060 m³/s) May 7, 8; maximum gage height, 20.78 ft (6.334 m) May 7, 8; minimum daily discharge, 18,300 ft³/s (518 m³/s) Dec. 13; minimum gage height, 8.73 ft (2.661 m) Mar. 5.

Period of record: Maximum daily discharge, 307,000 ft³/s (8,690 m³/s) Apr. 28, 1955; maximum gage height, 24.65 ft (7.513 m) Apr. 28, 1955; minimum daily discharge, 6,500 ft³/s (184 m³/s) Dec. 25-27, 1933. Maximum stage known since at least 1828 that of Apr. 28, 1955.

REMARKS.--Records good except those for winter period, which are poor. Minor flow regulation caused by navigation dams. Records of chemical and biological analyses, water temperatures and suspended-sediment discharge for the current year are published in Part 2, of this report.

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

REVISIONS.--Revised figures of discharge in cubic feet per second, for August and September 1974, superseding figures published in Water Resources Data for Iowa, 1974, are given herewith:

Date	Discharge	Date	Discharge
Aug. 28	25,700	Sept. 3	26,900
29	24,800	4	26,300
30	25,700	5	23,200
31	27,100	6	21,400
Sept. 1	27,200	7	21,300
2	27,200		

Month	Cfs-days	Mean	Max	Min	Cfsm	Runoff inches	acre-ft
August	1,014,100	32,710	41,800	24,800	0.38	0.44	2,011,000
September	769,100	25,640	35,100	19,900	.30	.33	1,526,000
Water year 1973-74	19,308,400	52,900	158,000	18,200	.62	8.39	38,300,000

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26800	30600	31500	21200	23000	23800	57400	152000	71800	83300	28700	43800
2	26600	32900	29600	20000	23000	23400	60700	164000	71500	83000	26600	41500
3	23200	33900	26600	18800	23000	23400	58900	177000	70600	82900	27800	42400
4	20800	33300	19800	18400	23000	23500	49500	190000	69300	82900	28800	44500
5	19600	34400	18800	18400	22800	23800	50100	201000	69100	85600	29700	45700
6	22800	34800	20000	18600	22200	23800	51400	209000	68800	88500	31000	41200
7	24900	33700	21900	18800	21800	24000	50500	214000	66400	86300	30300	34700
8	26300	32700	24100	19000	21400	25000	50300	214000	63800	85000	27600	32700
9	25700	32300	22000	19600	21200	25100	49100	213000	60900	83600	25100	28100
10	26300	32400	19800	19800	21000	25200	49500	210000	61200	83400	23900	24700
11	26700	36900	18600	21000	21000	25200	51600	205000	60600	83100	23000	23800
12	26400	41200	18500	19400	21000	25200	52700	199000	56000	83500	24100	26300
13	26700	43000	18300	20800	21200	25200	53900	192000	52800	83600	24900	30700
14	27600	43300	18800	22000	21300	25100	57400	184000	52100	83900	24500	32600
15	27200	40500	21500	22000	21400	24800	60900	177000	53300	83700	25000	33800
16	26700	34900	26000	21200	21600	24200	62500	168000	57900	82300	25400	40800
17	26000	31100	30000	20600	22000	24800	63300	159000	62100	80600	25300	42000
18	24200	29500	27000	20300	22600	26000	67000	150000	62800	74500	24600	42000
19	24300	30200	24600	20200	23200	32000	73700	141000	63700	72200	25200	40000
20	24300	32600	23000	20200	24000	53900	78500	132000	68000	77800	25200	37500
21	23900	34100	22600	20300	24800	76000	79400	120000	71100	62300	24600	36200
22	23500	34000	22200	20400	25000	101000	80100	108000	70600	56700	23200	34500
23	23300	33900	22000	20600	25600	114000	83300	100000	71400	53200	30300	31100
24	23700	34100	22200	21200	26000	112000	89000	96200	77600	52100	34700	29200
25	23900	34200	21300	22000	26000	110000	90800	89000	83500	47600	42000	29000
26	24500	32000	20800	22600	25000	104000	94800	86800	84800	39000	53600	27100
27	25000	30800	20600	23000	25000	88500	104000	84000	83800	35000	53800	28900
28	24300	32500	20400	23200	24600	75500	119000	75400	84100	37500	54500	29900
29	23700	32300	20000	23000	---	76300	131000	71200	83500	36800	54900	31400
30	24600	32000	20200	23000	---	71000	140000	70800	83500	33800	55900	33500
31	27800	---	21000	23000	---	55600	---	71800	---	31700	50400	---
TOTAL	771300	1024100	693700	642600	643700	1511400	2160300	4624200	2056600	2125400	1004600	1039700
MEAN	24880	34140	22380	20730	22990	48750	72010	149200	68550	68560	32410	34560
MAX	27800	43300	31500	23200	26000	114000	140000	214000	84800	88500	55900	45700
MIN	19600	29500	18300	18400	21000	23400	49100	70800	52100	31700	23000	23800
CFSM	.29	.40	.26	.24	.27	.57	.84	1.74	.80	.80	.38	.40
IN	.34	.45	.30	.28	.28	.66	.94	2.01	.89	.92	.44	.45
AC-FT	1530000	2031000	1376000	1275000	1277000	2998000	4285000	9172000	4079000	4216000	1993000	2062000

CAL YR 1974	TOTAL	17588300	MEAN	48190	MAX	158000	MIN	18200	CFSM	.56	IN	7.64	AC-FT	34890000
WTR YR 1975	TOTAL	18297600	MEAN	50130	MAX	214000	MIN	18300	CFSM	.59	IN	7.95	AC-FT	36290000

WAPSIPINICON RIVER BASIN

05420560 WAPSIPINICON RIVER NEAR ELMA, IOWA

LOCATION.--Lat 43°14'34", long 92°31'48", in NW1/4 NW1/4 sec.8, T.97 N., R.14 W., Howard County, on right bank 10 ft (3 m) downstream from bridge on county highway B17, 0.2 mi (0.3 km) downstream from small left-bank tributary, 4.8 mi (7.7 km) west of Elma, and at mile 217.9 (350.6 km).

DRAINAGE AREA.--95.2 mi² (247 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 1,130.05 ft (344.44 m) above mean sea level (revised).

AVERAGE DISCHARGE.--17 years, 61.9 ft³/s (1.75 m³/s), 8.83 in/yr (224 mm/yr), 44,850 acre-ft/yr (55.3 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,940 ft³/s (112 m³/s) Apr. 28, gage height, 13.84 ft (4.218 m); minimum daily, 8.0 ft³/s (0.23 m³/s) Aug. 15, Sept. 28.
Period of record: Maximum discharge, 10,100 ft³/s (286 m³/s) June 4, 1974, gage height, 14.94 ft (4.554 m), from high-water mark in well; minimum daily, 1.9 ft³/s (0.054 m³/s) Feb. 4-8, 1959.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	34	12	12	11	13	122	192	39	66	9.7	13
2	11	30	12	13	11	12	112	134	35	45	10	12
3	11	21	12	13	11	12	104	137	36	36	11	12
4	11	17	12	13	11	12	96	113	176	31	9.5	11
5	13	16	12	13	11	12	94	110	70	30	9.1	11
6	15	15	12	13	11	12	156	106	66	29	8.8	11
7	16	14	11	13	11	12	310	102	61	26	8.8	11
8	14	14	11	13	11	12	264	98	57	23	8.6	11
9	13	14	11	13	11	12	162	93	54	22	8.6	9.9
10	13	16	11	12	11	12	111	91	50	21	8.6	10
11	13	16	11	12	11	12	136	134	61	19	9.0	10
12	16	16	10	12	11	12	239	150	86	19	8.8	9.3
13	19	15	10	12	11	12	173	115	100	18	8.5	9.0
14	18	13	10	12	11	12	154	89	92	18	8.2	8.9
15	17	13	10	12	11	13	142	75	85	17	8.0	9.1
16	15	14	10	11	11	13	148	66	82	16	8.5	9.8
17	14	14	10	11	12	15	163	58	84	15	13	9.3
18	14	14	10	11	12	18	138	51	98	14	9.6	9.6
19	15	14	10	11	12	22	162	48	120	13	9.9	9.0
20	12	14	10	11	12	76	166	46	110	13	9.6	9.5
21	12	12	10	11	13	174	110	42	102	12	9.6	9.5
22	13	12	10	11	13	188	92	41	94	12	27	9.2
23	13	12	10	11	13	200	91	40	86	12	26	9.1
24	13	11	10	11	13	222	154	40	73	12	44	8.9
25	13	9.5	10	11	13	210	153	41	62	12	104	8.7
26	13	9.6	10	11	13	196	134	38	54	11	49	8.6
27	13	10	11	11	13	190	130	34	79	11	26	8.1
28	14	10	11	11	13	176	2040	32	103	10	18	8.0
29	15	11	11	11	---	162	1640	36	62	10	16	8.3
30	18	11	12	11	---	148	286	41	47	9.9	15	9.3
31	23	---	12	11	---	134	---	45	---	9.7	14	---
TOTAL	441	442.1	334	364	328	2326	7982	2438	2324	612.6	534.4	293.1
MEAN	14.2	14.7	10.8	11.7	11.7	75.0	266	78.6	77.5	19.8	17.2	9.77
MAX	23	34	12	13	13	222	2040	192	176	66	104	13
MIN	11	9.5	10	11	11	12	91	32	35	9.7	8.0	8.0
CFSM	.15	.15	.11	.12	.12	.79	2.79	.83	.81	.21	.18	.10
IN.	.17	.17	.13	.14	.13	.91	3.12	.95	.91	.24	.21	.11
AC-FT	875	877	662	722	651	4610	15830	4840	4610	1220	1060	581

CAL YR 1974 TOTAL 30781.9 MEAN 84.3 MAX 4830 MIN 9.5 CFSM .89 IN 12.03 AC-FT 61060
WTR YR 1975 TOTAL 18419.2 MEAN 50.5 MAX 2040 MIN 8.0 CFSM .53 IN 7.20 AC-FT 36530

PEAK DISCHARGE (BASE, 600 FT³/S).--Apr. 28 (1730) 3,940 ft³/s (13.84 ft).

05421000 WAPSIPINICON RIVER AT INDEPENDENCE, IOWA

LOCATION.--Lat 42°27'49", long 91°53'42", in SE1/4 sec.4, T.88 N., R.9 W., Buchanan County, on right bank at Sixth Street in Independence, 1,800 ft (549 m) downstream from dam at abandoned hydroelectric plant, 4.9 mi (7.9 km) downstream from Otter Creek, 9.7 mi (15.6 km) upstream from Pine Creek, and at mile 142.5 (229.3 km).

DRAINAGE AREA.--1,048 mi² (2,714 km²).

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 882.85 ft (269.09 m) above mean sea level. Prior to May 24, 1941, nonrecording gage in tailrace of powerplant 1,800 ft (549 m) upstream at datum 80.00 ft (24.38 m) lower.

AVERAGE DISCHARGE.--42 years, 574 ft³/s (16.3 m³/s), 7.44 in/yr (189 mm/yr), 415,900 acre-ft/yr (513 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 7,580 ft³/s (215 m³/s) Mar. 22, gage height, 11.06 ft (3.371 m); minimum daily, 56 ft³/s (1.59 m³/s) Sept. 28.
Period of record: Maximum discharge, 26,800 ft³/s (759 m³/s) July 18, 1968, gage height, 21.11 ft (6.434 m); minimum daily, about 7.0 ft³/s (198 dm³/s) many times in period 1933-34.
Maximum stage since at least 1901, that of July 18, 1968.

REMARKS.--Records excellent.

REVISIONS (WATER YEARS).--WSP 1438: Drainage area. WSP 1508: 1938-39, 1940 (M), 1947.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	78	354	164	136	115	97	2,320	2,820	730	551	93	125
2	74	511	135	131	112	101	2,030	3,270	647	511	97	109
3	71	423	128	135	112	107	1,770	3,970	574	447	96	103
4	74	349	151	138	113	104	1,490	3,200	544	386	89	92
5	83	305	136	134	114	106	1,320	2,410	543	370	83	94
6	157	268	168	150	95	107	1,540	1,640	594	388	79	87
7	135	239	236	145	104	102	1,750	1,180	568	366	75	84
8	135	220	263	147	115	92	1,810	970	555	366	74	77
9	137	201	213	145	104	93	1,900	836	537	353	75	75
10	102	207	270	166	124	106	2,060	731	464	303	77	76
11	110	238	289	243	108	100	2,390	689	428	268	81	80
12	114	249	262	223	101	102	3,020	825	410	242	80	72
13	110	244	251	246	95	94	2,770	844	378	227	77	65
14	113	228	240	218	98	100	2,510	797	430	134	70	65
15	101	211	256	194	101	101	2,320	767	782	138	69	65
16	102	204	283	181	98	101	2,360	717	699	184	68	67
17	99	202	250	169	99	107	2,340	640	749	178	69	65
18	96	195	225	164	97	129	2,170	566	763	165	70	66
19	94	198	225	157	95	309	2,070	505	969	151	69	67
20	90	199	199	138	98	1,290	1,970	459	790	141	86	65
21	87	173	200	149	103	3,730	1,790	733	711	130	93	62
22	92	170	196	138	105	7,070	1,680	1,310	1,450	127	87	60
23	90	184	197	135	106	6,720	1,680	1,020	1,330	139	85	61
24	90	174	176	132	110	5,540	1,890	1,020	1,890	146	84	58
25	90	161	150	137	101	4,060	2,010	1,030	1,430	129	136	58
26	86	151	150	130	100	3,560	1,860	898	1,330	123	167	57
27	86	161	163	127	99	3,780	1,760	764	1,170	118	142	57
28	92	140	164	126	103	3,740	3,200	656	892	110	148	56
29	107	145	165	127	-----	3,130	3,450	636	737	105	207	59
30	119	154	146	123	-----	2,510	3,220	850	617	102	199	59
31	171	-----	160	118	-----	2,240	-----	772	-----	98	153	-----
TOTAL	3,185	6,858	6,211	4,802	2,925	49,528	64,450	37,525	23,711	7,196	3,078	2,186
MEAN	103	229	200	155	104	1,598	2,148	1,210	790	232	99.3	72.9
MAX	171	511	289	246	124	7,070	3,450	3,970	1,890	551	207	125
MIN	71	140	128	118	95	92	1,320	459	378	98	68	56
CFSM	.10	.22	.19	.15	.10	1.52	2.05	1.15	.75	.22	.09	.07
IN.	.11	.24	.22	.17	.10	1.76	2.29	1.33	.84	.26	.11	.08
AC-FT	6,320	13,600	12,320	9,520	5,800	98,240	127,800	74,430	47,030	14,270	6,110	4,340

CAL YR 1974 TOTAL 257,915 MEAN 707 MAX 5,550 MIN 57 CFSM .67 IN 9.15 AC-FT 511,600
WTR YR 1975 TOTAL 211,655 MEAN 580 MAX 7,070 MIN 56 CFSM .55 IN 7.51 AC-FT 419,800

PEAK DISCHARGE (BASE, 4,000 FT³/S).--Mar. 22 (1745) 7,580 ft³/s (11.06 ft); May 3 (0845) 4,100 ft³/s (8.35 ft).

WAPSIPINICON RIVER BASIN

05422000 WAPSIPINICON RIVER NEAR DE WITT, IOWA

LOCATION.--Lat 41°46'01", long 90°32'05", in SW1/4 NE1/4 sec.6, T.80 N., R.4 E., Clinton County, on left bank 5 ft (2 m) upstream from bridge on U.S. Highway 61, 0.9 mi (1.4 km) downstream from Silver Creek, 4.0 mi (6.4 km) south of water tower in De Witt, 6.2 mi (10.0 km) upstream from Brophy Creek, and 18.2 mi (29.3 km) upstream from mouth.

DRAINAGE AREA.--2,330 mi² (6,034 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 598.81 ft (182.52 m) above mean sea level.

AVERAGE DISCHARGE.--41 years, 1,477 ft³/s (41.8 m³/s), 8.61 in/yr (219 mm/yr), 1,070,000 acre-ft/yr (1,320 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 11,200 ft³/s (317 m³/s) Mar. 23, gage height, 11.65 ft (3.551 m); minimum daily, 229 ft³/s (6.49 m³/s) Sept. 27, 28.
Period of record: Maximum discharge, 29,900 ft³/s (847 m³/s) May 17, 1974, gage height, 13.07 ft (3.984 m); minimum daily, 70 ft³/s (1.98 m³/s) Jan. 17-24, 1940.

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

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

REVISIONS (WATER YEARS).--WSP 1308: 1937 (M). WSP 1438: Drainage area. WSP 1708: 1951.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	371	526	580	600	530	560	7,150	4,030	1,830	1,880	405	379
2	380	562	585	540	520	560	7,150	4,620	1,990	1,680	412	379
3	380	534	533	500	520	600	6,740	4,970	1,880	1,500	395	385
4	376	546	535	500	510	570	5,280	4,840	1,790	1,350	378	370
5	378	632	482	500	500	540	4,180	4,360	1,790	1,330	369	392
6	391	722	543	480	500	510	3,920	4,370	1,590	1,270	364	406
7	401	714	609	540	550	490	4,040	4,670	1,440	1,160	353	378
8	434	686	681	600	540	480	3,670	4,490	1,360	1,060	346	337
9	469	660	666	680	530	460	3,530	3,350	1,300	1,010	331	313
10	498	660	602	380	520	440	3,790	2,640	1,270	980	328	295
11	506	727	550	1,100	510	420	4,040	2,300	1,230	936	340	287
12	486	772	620	600	500	410	3,790	2,190	1,200	882	335	287
13	498	762	738	900	490	410	3,720	2,020	1,150	846	340	275
14	518	721	854	920	490	410	4,070	1,920	1,140	810	352	270
15	498	705	985	930	480	420	4,470	1,900	1,120	766	352	262
16	494	691	1,110	940	470	440	4,750	1,870	1,140	715	326	262
17	480	676	1,110	920	520	700	4,660	1,790	1,550	668	310	260
18	472	658	870	900	560	2,330	4,310	1,730	2,030	616	307	256
19	462	644	820	850	600	6,310	4,080	1,650	1,930	585	306	255
20	452	632	760	770	540	7,940	3,940	1,570	2,130	580	301	254
21	438	619	760	700	540	7,770	3,740	1,500	2,320	551	297	250
22	434	607	740	670	900	8,090	3,540	1,440	2,090	531	292	247
23	430	614	670	640	900	10,200	3,400	1,390	1,900	560	287	242
24	427	617	650	700	800	10,600	3,280	1,430	2,150	642	290	240
25	430	600	610	770	700	10,400	3,120	1,790	2,620	651	310	237
26	427	581	560	700	650	10,800	3,030	1,900	2,790	550	316	232
27	424	579	540	630	610	11,100	3,620	1,870	2,840	495	337	229
28	420	565	580	580	580	10,600	4,280	1,780	2,890	470	304	229
29	430	548	660	560	-----	10,100	4,170	1,690	2,370	413	325	250
30	438	559	750	550	-----	8,990	3,820	1,980	2,170	430	373	255
31	458	-----	660	540	-----	7,480	-----	1,910	-----	415	385	-----
TOTAL	13,700	19,119	21,413	21,690	16,060	131,130	127,280	79,960	55,000	26,332	10,466	8,713
MEAN	442	637	691	700	574	4,230	4,243	2,579	1,833	849	338	290
MAX	518	772	1,110	1,100	900	11,100	7,150	4,970	2,890	1,880	412	406
MIN	371	526	482	480	470	410	3,030	1,390	1,120	413	287	229
CFSM	.19	.27	.30	.30	.25	1.82	1.82	1.11	.79	.36	.15	.12
IN.	.22	.31	.34	.35	.26	2.09	2.03	1.28	.88	.42	.17	.14
AC-FT	27,170	37,920	42,470	43,020	31,860	260,100	252,500	158,600	109,100	52,230	20,760	17,280

CAL YR 1974 TOTAL 891,530 MEAN 2,443 MAX 23,000 MIN 371 CFSM 1.05 IN 14.23 AC-FT 1,768,000
WTR YR 1975 TOTAL 530,863 MEAN 1,454 MAX 11,100 MIN 229 CFSM .62 IN 8.48 AC-FT 1,053,000

PEAK DISCHARGE (BASE, 6,000 FT³/S).--Mar. 23 (1615) 11,200 ft³/s (11.65 ft).

05449000 EAST BRANCH IOWA RIVER NEAR KLEMME, IOWA

LOCATION.--Lat 43°00'31", long 93°37'42", in NE1/4 NW1/4 sec.36, T.95 N., R.24 W., Hancock County, on left bank 15 ft (5 m) downstream from bridge on county highway 855, 1.2 mi (1.9 km) west of Chicago, Rock Island and Pacific Railroad crossing in Klemme, 1.5 mi (2.4 km) upstream from Drainage ditch 9, 18.2 mi (29.3 km) upstream from confluence with West Branch Iowa River, and at mile 341.0 (548.7 km).

DRAINAGE AREA.--133 mi² (344 km²).

PERIOD OF RECORD.--April 1948 to current year. Prior to October 1958, published as East Fork Iowa River near Klemme.

GAGE.--Water-stage recorder. Datum of gage is 1,179.33 ft (359.46 m) above mean sea level. Apr. 1, 1948, to Sept. 30, 1955, nonrecording gage at site 0.6 mi (1.0 km) upstream at datum 0.80 ft (0.24 m) higher. Oct. 1, 1955, to Sept. 30, 1969, at present site and datum 0.31 ft (0.09 m) lower.

AVERAGE DISCHARGE.--27 years, 57.5 ft³/s (1.63 m³/s), 5.87 in/yr (149 mm/yr), 41,660 acre-ft/yr (51.4 hm³/yr); median of yearly mean discharges, 44 ft³/s (1.25 m³/s), 4.5 in/yr (114 mm/yr), 31,900 acre-ft/yr (39.3 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,530 ft³/s (43.3 m³/s) Apr. 28, gage height, 8.57 ft (2.612 m); minimum daily, 2.6 ft³/s (0.074 m³/s) Feb. 25 to Mar. 13.

Period of record: Maximum discharge, 5,960 ft³/s (169 m³/s) June 19, 1954, gage height, 11.2 ft (3.41 m), from floodmark, site and datum then in use; maximum gage height, 10.67 ft (3.252 m) Sept. 6, 1965, backwater from ice; minimum daily discharge, 0.2 ft³/s (5.7 dm³/s) Feb. 22-26, 1959.

Flood in June 1944 reached a stage of about 10 ft (3 m), from information by local residents, former site and datum.

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

REVISIONS.--WSP 1438: Drainage area.

DAY	OCT	DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR	OCTOBER 1974	TO SEPTEMBER 1975								
		NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.5	16	8.3	3.0	2.8	2.6	5.3	485	114	90	12	9.4
2	7.4	12	8.0	3.0	2.7	2.6	6.0	352	104	80	14	8.9
3	6.9	10	7.7	3.0	2.7	2.6	7.4	321	106	71	12	9.3
4	7.6	11	7.5	2.9	2.7	2.6	20	304	217	64	12	8.5
5	8.8	14	7.1	2.9	2.7	2.6	109	234	232	61	11	9.8
6	8.7	10	6.7	2.9	2.7	2.6	153	188	153	57	11	10
7	8.5	9.2	6.3	2.9	2.7	2.6	186	155	120	51	10	10
8	8.9	11	6.0	2.9	2.7	2.6	168	134	100	46	10	10
9	7.9	10	5.7	2.9	2.7	2.6	118	118	124	40	11	11
10	7.5	11	5.5	2.9	2.7	2.6	100	107	185	37	12	11
11	8.6	10	5.3	2.9	2.7	2.6	125	170	232	34	11	11
12	8.7	9.3	5.1	2.9	2.7	2.6	127	260	441	31	10	9.5
13	8.1	9.3	4.9	2.9	2.7	2.6	114	202	385	29	9.5	9.9
14	10	9.4	4.7	2.9	2.7	2.7	120	162	259	28	9.0	9.6
15	7.8	9.6	4.5	2.9	2.7	3.2	134	135	328	26	8.9	10
16	7.8	10	4.2	2.9	2.7	4.3	151	120	319	23	9.0	10
17	8.0	11	4.1	2.9	2.7	5.3	157	116	247	22	8.6	8.3
18	7.8	9.7	3.9	2.9	2.7	6.6	142	106	251	21	9.7	8.9
19	7.2	9.3	3.8	2.9	2.7	7.0	186	94	396	20	11	10
20	8.6	8.5	3.6	2.9	2.7	7.2	145	88	337	19	10	10
21	6.7	7.7	3.6	2.9	2.7	7.0	116	82	269	18	9.9	10
22	8.4	7.5	3.4	2.9	2.7	6.4	105	78	484	17	27	10
23	8.0	7.5	3.3	2.9	2.7	6.0	176	74	512	17	19	10
24	7.4	7.7	3.3	2.9	2.7	5.8	178	71	418	16	14	10
25	8.0	7.9	3.2	2.8	2.6	5.5	139	68	311	15	28	9.9
26	9.4	8.1	3.1	2.8	2.6	5.4	123	72	225	15	19	9.8
27	7.9	8.5	3.1	2.8	2.6	5.3	140	67	176	15	13	8.3
28	8.3	8.8	3.1	2.8	2.6	5.2	1,130	74	144	13	11	10
29	9.5	9.0	3.0	2.8	-----	5.0	1,040	126	120	13	10	9.8
30	9.2	8.9	3.0	2.8	-----	5.0	677	156	103	12	10	11
31	14	-----	3.0	2.8	-----	5.1	-----	136	-----	12	9.3	-----
TOTAL	259.1	291.9	147.9	89.5	75.3	131.8	6,097.7	4,856	7,412	1,013	381.9	293.9
MEAN	8.36	9.73	4.77	2.89	2.69	4.25	203	157	247	32.7	12.3	9.80
MAX	14	16	8.3	3.0	2.8	7.2	1,130	485	512	90	28	11
MIN	6.7	7.5	3.0	2.8	2.6	2.6	5.3	67	100	12	8.6	8.3
CFSM	.06	.07	.04	.02	.02	.03	1.53	1.18	1.86	.25	.09	.07
IN.	.07	.08	.04	.03	.02	.04	1.71	1.36	2.07	.28	.11	.08
AC-FT	514	579	293	178	149	261	12,090	9,630	14,700	2,010	767	583

CAL YR 1974 TOTAL 18,942.1 MEAN 51.9 MAX 427 MIN 3.0 CFSM .39 IN 5.30 AC-FT 37,570
WTR YR 1975 TOTAL 21,050.0 MEAN 57.7 MAX 1,130 MIN 2.6 CFSM .43 IN 5.89 AC-FT 41,750

PEAK DISCHARGE (BASE, 700 FT³/S).--Apr. 28 (1630) 1,530 ft³/s (8.57 ft).

IOWA RIVER BASIN

05449500 IOWA RIVER NEAR ROWAN, IOWA

LOCATION.--Lat 42°45'36", long 93°37'23", in NW1/4 NE1/4 sec.25, T.92 N., R.24 W., Wright County, on left bank 10 ft (3 m) downstream from bridge on county highway C38, 0.9 mi (1.4 km) downstream from Drainage ditch 123, 3.8 mi (6.1 km) northwest of Rowan, 10.7 mi (17.2 km) downstream from confluence of East and West Branches, and at mile 316.4 (509.1 km).

DRAINAGE AREA.--429 mi² (1,111 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 1,143.35 ft (348.49 m) above mean sea level. Prior to Oct. 14, 1948, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--35 years, 192 ft³/s (5.44 m³/s), 6.08 in/yr (154 mm/yr), 139,100 acre-ft/yr (172 hm³/yr); median of yearly mean discharges, 190 ft³/s (5.38 m³/s), 6.0 in/yr (152 mm/yr), 138,000 acre-ft/yr (170 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,270 ft³/s (92.6 m³/s) Apr. 30, gage height, 11.10 ft (3.383 m); minimum daily, 22 ft³/s (0.62 m³/s) Feb. 1-24, Mar. 6-12.

Period of record: Maximum discharge, 8,460 ft³/s (240 m³/s) June 21, 1954, gage height, 14.88 ft (4.535 m); minimum daily, 2.9 ft³/s (82 dm³/s) Jan. 21-23, 1959.

REMARKS.--Records good except those for winter period and periods of no gage height record, which are poor.

REVISIONS (WATER YEARS).--WSP 130B: 1942-43 (M). WSP 143B: Drainage area.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	54	37	23	22	23	46	2,780	441	271	46	31
2	27	49	37	23	22	23	63	2,270	371	238	51	33
3	28	46	36	23	22	23	76	1,780	340	216	49	31
4	30	40	35	23	22	23	150	1,380	368	198	46	32
5	29	37	34	23	22	23	243	1,120	528	190	43	37
6	35	39	32	23	22	22	396	860	549	182	41	35
7	35	36	31	23	22	22	516	645	420	164	40	33
8	32	35	30	23	22	22	536	530	345	149	39	32
9	31	35	30	23	22	22	458	455	342	138	38	30
10	30	40	29	23	22	22	403	398	488	128	45	34
11	34	38	28	23	22	22	385	393	691	119	45	32
12	35	37	28	23	22	22	405	513	1,090	111	46	31
13	34	35	27	23	22	23	398	613	1,380	103	42	30
14	34	30	27	23	22	25	392	534	1,300	99	36	29
15	33	34	27	23	22	29	441	439	1,010	94	35	29
16	34	33	27	23	22	38	460	374	904	88	35	29
17	31	34	26	23	22	49	494	334	847	83	35	30
18	31	34	26	23	22	57	525	312	760	78	41	30
19	31	36	26	23	22	61	584	291	898	74	40	28
20	32	34	26	23	22	62	622	266	949	72	40	28
21	30	33	26	23	22	57	511	246	886	68	37	29
22	30	31	25	23	22	53	427	236	808	64	45	29
23	30	30	25	23	22	50	449	221	952	62	60	28
24	32	28	25	23	22	49	552	210	955	60	56	27
25	31	26	25	23	23	47	526	202	885	58	48	28
26	30	27	25	23	23	45	453	291	732	56	52	28
27	33	29	25	23	23	44	459	312	576	52	48	28
28	33	31	25	23	23	43	1,190	274	438	51	40	29
29	33	33	24	23	-----	43	2,400	442	364	49	36	29
30	34	35	24	23	-----	43	3,180	530	310	47	34	28
31	49	-----	24	23	-----	44	-----	522	-----	45	32	-----
TOTAL	997	1,059	872	713	620	1,131	17,730	19,773	20,927	3,407	1,320	907
MEAN	32.2	35.3	28.1	23.0	22.1	36.5	591	638	698	110	42.6	30.2
MAX	49	54	37	23	23	62	3,180	2,780	1,380	271	60	37
MIN	26	26	24	23	22	22	46	202	310	45	32	27
CFSM	.08	.08	.07	.05	.05	.09	1.38	1.49	1.63	.26	.10	.07
IN.	.09	.09	.08	.06	.05	.10	1.54	1.71	1.81	.30	.11	.08
AC-FT	1,980	2,100	1,730	1,410	1,230	2,240	35,170	39,220	41,510	6,760	2,620	1,800

CAL YR 1974 TOTAL 70,090 MEAN 192 MAX 1,350 MIN 24 CFSM .45 IN 6.08 AC-FT 139,000
WTR YR 1975 TOTAL 69,456 MEAN 190 MAX 3,180 MIN 22 CFSM .44 IN 6.02 AC-FT 137,800

PEAK DISCHARGE (BASE, 1,200 FT³/S).--Apr. 30 (0900) 3,270 ft³/s (11.10 ft); June 13 (1600) 1,410 ft³/s (9.05 ft).

NOTE.--No gage height record Jan. 7 to Feb. 17, Mar. 14-30.

05451500 IOWA RIVER AT MARSHALLTOWN, IOWA

LOCATION.--Lat 42°03'57", long 92°54'27", in SE1/4 SE1/4 sec.23, T.84N., R.18 W., Marshall County, on right bank 10 ft (3 m) downstream from State Highway 14 bridge, 1,500 ft (457 m) upstream from Burnett Creek, 2.2 mi (3.5 km) upstream from Linn Creek, and at mile 222.8 (358.5 km).

DRAINAGE AREA.--1,564 mi² (4,050 km²), including that of Burnett Creek.

PERIOD OF RECORD.--October 1902 to September 1903, October 1914 to September 1927, October 1932 to current year. Monthly discharge only for some periods, published in WSP 1308.

GAGE.--Water-stage recorder. Datum of gage is 853.10 ft (260.02 m) above mean sea level. See WSP 1728 for history of changes prior to Sept. 21, 1934.

AVERAGE DISCHARGE.--57 years (1902-3, 1914-27, 1932-75), 778 ft³/s (22.0 m³/s), 6.76 in/yr (172 mm/yr), 563,700 acre-ft/yr (695 hm³/yr); median of yearly mean discharges, 690 ft³/s (19.5 m³/s), 6.0 in/yr (152 mm/yr), 500,000 acre-ft/yr (616 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 11,500 ft³/s (326 m³/s) Mar. 21, gage height, 18.42 ft (5.614 m); minimum daily, 139 ft³/s (3.94 m³/s) Sept. 25-28. Period of record: Maximum discharge, 42,000 ft³/s (1,190 m³/s) June 4, 1918, gage height, 17.74 ft (5.407 m), from floodmark, from rating curve extended above 19,000 ft³/s (538 m³/s) on basis of velocity-area study; maximum gage height, 19.38 ft (5.907 m) June 23, 1974; minimum daily discharge, 9 ft³/s (0.255 m³/s) Jan. 9, 10, 1940.

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

REVISIONS (WATER YEARS).--WSP 1438: Drainage area. WSP 1558: 1915-18, 1919 (M), 1920, 1921-23 (M), 1924-27, 1933, 1934 (M), 1936, 1938, 1947 (M).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	214	3,210	444	380	330	230	4,150	3,240	1,240	1,760	278	322
2	211	2,420	416	360	320	240	2,220	3,510	1,280	1,500	270	268
3	209	1,730	400	350	310	240	1,420	3,970	1,630	1,320	268	238
4	210	1,350	380	350	305	240	1,290	3,900	1,650	1,190	258	218
5	218	1,130	410	380	300	240	1,670	3,390	1,530	1,130	255	223
6	289	998	460	450	290	240	3,220	3,030	1,310	1,250	245	230
7	316	901	530	500	285	250	3,420	2,750	1,260	1,140	238	215
8	302	840	580	600	280	250	2,870	2,530	1,260	1,030	233	198
9	282	798	620	550	270	250	3,580	2,220	1,240	925	230	192
10	266	808	1,000	500	265	250	3,330	1,910	1,330	830	228	187
11	280	826	800	450	260	260	2,750	1,750	1,430	950	225	182
12	451	783	760	400	255	270	2,390	1,700	1,860	890	228	174
13	385	757	720	850	250	270	2,150	1,620	2,280	825	238	170
14	355	716	680	800	250	280	2,180	1,570	2,520	765	235	167
15	334	738	660	740	245	280	2,550	1,580	4,350	715	228	165
16	339	681	670	680	240	300	2,630	1,550	3,010	670	218	164
17	305	663	680	620	235	350	2,580	1,440	3,100	615	206	163
18	299	645	690	580	230	1,400	2,450	1,330	3,890	590	206	162
19	280	645	700	550	225	3,000	2,400	1,250	5,370	562	215	158
20	285	618	720	510	220	7,460	2,310	1,190	3,650	558	235	156
21	256	583	700	480	220	10,300	2,200	1,180	3,130	577	228	154
22	258	569	680	460	225	7,040	2,280	1,170	4,140	582	218	154
23	260	568	640	440	225	5,380	2,390	1,080	5,230	546	206	144
24	258	552	600	420	230	4,540	2,560	1,030	4,700	466	198	141
25	243	511	580	400	230	3,320	2,410	960	3,630	419	223	139
26	233	504	550	390	230	2,480	2,230	914	2,990	381	258	139
27	231	510	520	380	230	1,980	2,420	882	3,920	360	238	139
28	239	468	462	370	230	2,010	4,250	872	3,650	334	230	139
29	275	456	434	360	-----	2,150	3,590	1,020	2,730	310	650	144
30	307	462	409	350	-----	1,500	3,270	1,070	2,110	295	658	149
31	2,520	-----	410	340	-----	2,040	-----	1,140	-----	285	420	-----
TOTAL	10,920	26,440	18,305	15,000	7,185	59,040	79,200	56,748	81,420	23,770	8,264	5,394
MEAN	362	881	590	484	257	1,905	2,640	1,831	2,714	767	267	180
MAX	2,520	3,210	1,000	850	330	10,300	4,250	3,970	5,370	1,760	658	322
MIN	209	456	380	340	220	230	1,290	872	1,240	285	198	139
CFSM	.23	.56	.38	.31	.16	1.22	1.69	1.17	1.74	.49	.17	.12
IN.	.26	.63	.44	.36	.17	1.40	1.88	1.35	1.94	.57	.20	.13
AC-FT	21,660	52,440	36,310	29,750	14,250	117,100	157,100	112,600	161,600	47,150	16,390	10,700

CAL YR 1974 TOTAL 504,084 MEAN 1,381 MAX 13,300 MIN 209 CFSM .88 IN 11.99 AC-FT 999,900
WTR YR 1975 TOTAL 391,686 MEAN 1,073 MAX 10,300 MIN 139 CFSM .69 IN 9.32 AC-FT 776,900

PEAK DISCHARGE (BASE, 5,000 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-21	0200	18.42	11,500	6-23	1215	15.30	5,360
6-19	0315	15.78	5,940				

IOWA RIVER BASIN

05451700 TIMBER CREEK NEAR MARSHALLTOWN, IOWA

LOCATION.--Lat 42°00'25", long 92°51'15", in SE1/4 SW1/4 sec.8, T.83 N., R.17 W., Marshall County, on left bank 20 ft (6 m) downstream from bridge on U.S. Highway 30, 3.5 mi (5.6 km) upstream from mouth, and 4.1 mi (6.6 km) southeast of court house in Marshalltown.

DRAINAGE AREA.--118 mi² (306 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 849.44 ft (258.91 m) above mean sea level.

AVERAGE DISCHARGE.--26 years, 67.2 ft³/s (1.90 m³/s), 7.73 in/yr (196 mm/yr), 48,690 acre-ft/yr (60.0 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,610 ft³/s (102 m³/s) Mar. 20, gage height, 14.83 ft (4.520 m); minimum daily, 10 ft³/s (0.283 m³/s) Sept. 24, 27.
Period of record: Maximum discharge, 8,090 ft³/s (229 m³/s) June 9, 1974, gage height, 17.57 ft (5.355 m), from rating curve extended above 5,200 ft³/s on basis of contracted-opening measurement of peak flow; no flow July 24-26, Oct. 4-12, 1956.
Flood in June 1947 reached a stage of 16.8 ft (5.12 m), discharge, 5,700 ft³/s (161 m³/s).

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

COOPERATION.--One discharge measurement furnished by Corps of Engineers.

REVISIONS (WATER YEARS).--WSP 1708: 1950-55, 1957-59.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	221	45	51	52	38	226	152	85	163	38	23
2	24	116	44	44	50	37	138	140	114	151	37	21
3	25	91	43	45	47	36	122	135	183	140	36	20
4	25	80	41	45	44	37	123	126	146	133	34	21
5	25	72	43	44	41	39	130	118	127	128	31	32
6	51	66	48	43	38	38	172	110	110	134	29	29
7	34	61	80	41	42	37	160	108	103	118	28	22
8	26	59	70	43	41	40	145	110	98	112	27	19
9	25	56	74	40	40	39	374	103	97	106	26	18
10	23	62	70	95	39	38	236	102	114	102	27	17
11	25	78	64	170	39	37	177	107	108	97	28	18
12	29	69	61	120	38	37	160	98	110	94	27	18
13	27	67	60	100	38	37	148	95	100	90	25	15
14	28	62	64	90	38	37	153	92	108	87	23	15
15	26	60	80	82	38	42	154	86	201	83	23	15
16	25	60	78	78	37	47	147	84	157	79	22	15
17	25	60	74	72	37	120	142	85	170	75	22	15
18	24	58	68	66	37	750	136	83	758	71	24	15
19	25	56	62	58	37	1340	134	78	476	69	27	14
20	24	53	60	50	36	2140	120	74	238	65	43	12
21	21	52	58	49	39	1030	119	82	202	62	50	13
22	24	51	56	48	40	561	120	86	230	60	25	12
23	24	52	54	54	35	328	129	78	218	64	22	11
24	24	50	52	60	33	355	127	74	503	64	21	10
25	24	48	50	80	37	171	118	74	208	55	27	11
26	23	49	58	68	41	142	166	70	190	53	23	11
27	23	49	57	64	40	209	281	66	1040	50	19	10
28	25	45	60	60	39	515	286	68	252	46	20	12
29	33	46	60	56	---	411	246	86	199	45	42	13
30	39	47	55	52	---	175	168	101	178	42	44	12
31	260	---	57	50	---	175	---	90	---	40	28	---
TOTAL	1060	1996	1846	2018	1113	9038	5057	2961	6823	2676	898	489
MEAN	34.2	66.5	59.5	65.1	39.8	292	169	95.5	227	86.4	29.0	16.3
MAX	260	221	80	170	52	2140	374	152	1040	163	50	32
MIN	21	45	41	40	33	36	118	66	85	40	19	10
CFSM	.29	.56	.50	.55	.34	2.47	1.43	.81	1.92	.73	.25	.14
IN.	.33	.63	.58	.64	.35	2.85	1.59	.93	2.15	.84	.28	.15
AC-FT	2100	3960	3660	4000	2210	17930	10030	5870	13530	5310	1780	970

CAL YR 1974 TOTAL 53857 MEAN 148 MAX 4010 MIN 21 CFSM 1.25 IN 16.98 AC-FT 106900
WTR YR 1975 TOTAL 35977 MEAN 98.6 MAX 2140 MIN 10 CFSM .84 IN 11.34 AC-FT 71360

PEAK DISCHARGE (BASE, 1,000 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-20	0315	14.83	3,610	6-27	1730	12.02	1,760
6-18	2000	10.75	1,620				

05451900 RICHLAND CREEK NEAR HAVEN, IOWA

LOCATION.--Lat 41°53'58", long 92°28'27", in SE1/4 NE1/4 sec.21, T.82 N., R.14 W., Tama County, on right bank 5 ft (1 m) upstream from bridge on county highway, 0.6 mi (1.0 km) northeast of Haven, and 2.8 mi (4.5 km) upstream from mouth.

DRAINAGE AREA.--56.1 mi² (145 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 788.69 ft (240.39 m) above mean sea level. Prior to Oct. 1, 1971, at datum 10 ft (3.05 m) higher.

AVERAGE DISCHARGE.--26 years, 33.6 ft³/s (0.952 m³/s), 8.13 in/yr (207 mm/yr), 24,340 acre-ft/yr (30.0 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,250 ft³/s (63.7 m³/s) June 24, gage height, 19.67 ft (5.995 m); minimum daily, 4.4 ft³/s (0.125 m³/s) Sept. 25-28.
Period of record: Maximum discharge, 7,000 ft³/s (198 m³/s) May 28, 1974, gage height, 24.00 ft (7.315 m); minimum daily, 0.1 ft³/s (2.8 dm³/s) on several days in 1949, 1953-54, 1956.
Flood in June 1918 reached a stage of 24.3 ft (7.41 m), discharge not determined.

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

COOPERATION.--Two discharge measurement furnished by Corps of Engineers.

REVISIONS (WATER YEARS).--WSP 1708: 1950-55, 1956 (M), 1957, 1958 (M), 1959.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	187	25	31	28	20	75	39	47	43	12	9.5
2	14	77	25	30	25	22	47	36	51	39	11	8.5
3	14	58	24	32	23	17	53	36	144	35	11	10
4	13	48	23	34	21	15	48	34	106	33	11	9.2
5	13	43	24	35	20	13	75	32	63	31	11	14
6	17	37	29	32	18	11	119	34	48	31	11	12
7	14	37	50	30	31	14	86	30	40	27	9.8	9.5
8	13	35	45	28	28	18	71	43	35	25	9.2	9.6
9	12	33	42	27	28	16	361	40	45	23	9.2	7.9
10	12	40	38	80	31	15	133	45	42	22	9.2	7.6
11	17	52	34	97	33	16	94	52	41	21	8.8	7.3
12	18	45	33	100	32	12	82	42	37	20	8.5	6.7
13	16	44	33	70	29	13	75	32	32	19	8.2	6.3
14	16	38	38	60	30	15	75	25	60	18	7.8	6.2
15	15	36	90	56	31	15	72	22	81	17	7.2	6.2
16	15	35	68	54	29	12	67	21	64	17	7.2	6.2
17	14	36	50	52	26	50	64	21	51	16	7.0	6.4
18	13	33	46	49	22	450	64	20	243	15	7.2	6.5
19	13	32	42	47	21	800	59	19	104	15	7.0	6.6
20	13	30	40	44	21	889	56	17	69	14	35	6.0
21	13	29	38	47	20	397	57	23	56	14	17	5.5
22	13	28	36	45	22	448	54	19	95	14	10	5.2
23	13	28	35	50	19	246	62	17	225	15	9.2	4.9
24	13	26	34	60	24	158	54	16	1,310	15	8.2	4.6
25	13	25	37	75	15	67	49	16	142	14	14	4.4
26	13	26	47	45	22	57	48	19	92	14	11	4.4
27	13	26	37	46	20	75	57	16	90	14	8.0	4.4
28	13	25	35	42	18	176	59	18	62	14	8.8	4.4
29	15	24	35	38	-----	129	50	37	54	13	27	4.7
30	14	26	33	35	-----	68	42	117	48	12	14	5.0
31	286	-----	33	32	-----	73	-----	59	-----	12	11	-----
TOTAL	706	1,239	1,199	1,503	687	4,327	2,308	997	3,577	632	346.5	209.7
MEAN	22.8	41.3	38.7	48.5	24.5	140	76.9	32.2	119	20.4	11.2	6.99
MAX	286	187	90	100	33	889	361	117	1,310	43	35	14
MIN	12	24	23	27	15	11	42	16	32	12	7.0	4.4
CFSM	.41	.74	.69	.86	.44	2.50	1.37	.57	2.12	.36	.20	.12
IN.	.47	.82	.80	1.00	.46	2.87	1.53	.66	2.37	.42	.23	.14
AC-FT	1,400	2,460	2,380	2,980	1,360	8,580	4,580	1,980	7,090	1,250	687	416

CAL YR 1974 TOTAL 30,509.0 MEAN 83.6 MAX 2,140 MIN 12 CFSM 1.49 IN 20.23 AC-FT 60,510
WTR YR 1975 TOTAL 17,731.2 MEAN 48.6 MAX 1,310 MIN 4.4 CFSM .87 IN 11.76 AC-FT 35,170

PEAK DISCHARGE (BASE, 1,000 FT³/S).--Mar. 20 (0330) 2,000 ft³/s (19.21 ft); June 24 (1230) 2,250 ft³/s (19.67 ft).

IOWA RIVER BASIN

05452000 SALT CREEK NEAR ELBERON, IOWA

LOCATION.--Lat 41°57'51", long 92°18'47", in NW1/4 NW1/4 sec.36, T.83 N., R.13 W., Tama County, near center of span on downstream side of bridge on U.S. Highway 30, 2.0 mi (3.2 km) upstream from Hog Run, 3.0 mi (4.8 km) south of Elberon, and 9.0 mi (14.5 km) upstream from mouth.

DRAINAGE AREA.--201 mi² (521 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 781.58 ft (238.23 m) above mean sea level (Iowa Highway Commission bench mark). Prior to Oct. 15, 1945, and June 14, 1947, to Feb. 10, 1949, nonrecording gage on upstream side of bridge at present datum.

AVERAGE DISCHARGE.--30 years, 126 ft³/s (3.57 m³/s), 8.51 in/yr (216 mm/yr), 91,290 acre-ft/yr (113 hm³/yr); median of yearly mean discharges, 110 ft³/s (3.12 m³/s), 7.4 in/yr (188 mm/yr), 79,700 acre-ft/yr (98.3 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 5,400 ft³/s (153 m³/s) Mar. 21, gage height, 15.96 ft (4.865 m); minimum daily, 15 ft³/s (0.42 m³/s) Sept. 24-28.

Period of record: Maximum discharge observed, 35,000 ft³/s (991 m³/s) June 13, 1947, gage height, 17.6 ft (5.36 m) from rating curve extended above 17,000 ft³/s (481 m³/s); maximum gage height, 17.78 ft (5.419 m) July 18, 1969; minimum daily discharge, 2.4 ft³/s (68 dm³/s) Jan. 16-29, 1954.

Flood of June 16, 1944, reached a stage of 19.9 ft (6.07 m), from floodmark at downstream side of bridge, discharge, about 30,000 ft³/s (850 m³/s).

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

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

REVISIONS (WATER YEARS).--WSP 1438: Drainage area. WSP 1558: 1946.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	47	1,010	110	96	105	70	466	154	192	135	32	22
2	44	386	160	160	100	70	192	148	163	134	31	21
3	45	297	200	210	90	68	173	145	165	131	31	21
4	47	255	180	160	80	62	172	139	163	124	29	21
5	46	226	140	180	75	55	231	137	140	119	28	20
6	189	201	170	170	72	50	430	127	120	118	27	20
7	128	188	220	130	80	53	287	121	106	115	26	20
8	86	179	200	120	77	54	240	125	97	98	25	20
9	73	170	180	100	74	52	1,450	115	104	86	27	19
10	65	179	160	150	74	48	1,230	109	106	75	28	20
11	91	246	150	300	76	54	349	119	104	77	28	19
12	175	216	140	250	73	46	307	121	105	72	29	18
13	124	201	130	200	71	55	275	106	91	70	28	18
14	116	185	140	160	69	56	270	102	86	67	25	17
15	99	175	180	140	68	53	263	96	597	65	23	18
16	92	171	190	140	68	44	252	91	205	61	23	18
17	84	168	160	135	66	70	246	88	205	58	23	18
18	77	162	145	130	64	500	237	85	809	55	23	18
19	73	156	135	120	62	1,800	229	82	681	52	24	17
20	71	148	130	110	60	3,500	200	79	282	49	97	17
21	68	140	125	120	56	4,430	195	96	228	47	57	16
22	68	138	120	110	60	3,990	193	94	228	47	27	16
23	65	137	115	100	56	1,370	210	83	185	52	24	16
24	63	132	110	140	54	1,980	203	78	917	51	23	15
25	61	123	160	170	52	371	184	76	259	45	35	15
26	57	123	200	120	54	241	171	83	206	43	29	15
27	58	125	180	130	64	233	189	72	184	41	23	15
28	63	116	130	120	67	398	200	77	165	38	22	15
29	81	114	110	110	-----	452	187	116	153	37	23	17
30	73	112	100	105	-----	221	167	363	142	35	22	17
31	652	-----	98	100	-----	279	-----	246	-----	34	22	-----
TOTAL	3,081	6,179	4,668	4,486	1,967	20,725	9,398	3,673	7,188	2,231	914	539
MEAN	99.4	206	151	145	70.3	669	313	118	240	72.0	29.5	18.0
MAX	652	1,010	220	300	105	4,430	1,450	363	917	135	97	22
MIN	44	112	98	96	52	44	167	72	86	34	22	15
CFSM	.49	1.02	.75	.72	.35	3.33	1.56	.59	1.19	.36	.15	.09
IN.	.57	1.14	.86	.83	.36	3.84	1.74	.68	1.33	.41	.17	.10
AC-FT	6,110	12,260	9,260	8,900	3,900	41,110	18,640	7,290	14,260	4,430	1,810	1,070

CAL YR 1974 TOTAL 86,001 MEAN 235 MAX 2,620 MIN 40 CFSM 1.17 IN 15.92 AC-FT 170,600
WTR YR 1975 TOTAL 65,049 MEAN 178 MAX 4,430 MIN 15 CFSM .89 IN 12.04 AC-FT 129,000

PEAK DISCHARGE (BASE, 1,500 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-21	0630	15.96	5,400	6-18	2230	13.63	1,870
4-10	0315	14.50	2,570	6-24	1000	13.33	1,700

05452200 WALNUT CREEK NEAR HARTWICK, IOWA

LOCATION.--Lat 41°50'06", long 92°23'10", in SE1/4 SW1/4 sec.8, T.81 N., R.13 W., Poweshiek County, on left bank 5 ft (2 m) upstream from bridge on county highway V21, 1.2 mi (1.9 km) downstream from North Walnut Creek, 4.0 mi (6.4 km) northwest of Hartwick, and 6.5 mi (10.5 km) upstream from mouth.

DRAINAGE AREA.--70.9 mi² (184 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 786.59 ft (239.75 m) above mean sea level.

AVERAGE DISCHARGE.--26 years, 42.2 ft³/s (1.20 m³/s), 8.08 in/yr (205 mm/yr), 30,570 acre-ft/yr (37.7 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,010 ft³/s (114 m³/s) Mar. 19, gage height, 15.29 ft (4.660 m); minimum daily, 4.2 ft³/s (0.119 m³/s) Sept. 28.

Period of record: Maximum discharge, 5,650 ft³/s (160 m³/s) May 28, 1974, gage height, 15.90 ft (4.846 m), from rating curve extended above 2,600 ft³/s (73.6 m³/s) on basis of contracted-opening and flow-over-embankment measurement of peak flow; no flow at times for most years.

Flood in June 1947 reached a stage of 17.7 ft (5.39 m), from information by local residents, discharge not determined.

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

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

REVISIONS (WATER YEARS).--WSP 1558: 1950 (P), 1951-57.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	113	24	31	29	23	79	50	51	67	12	7.6
2	14	52	19	29	27	21	57	46	62	57	11	6.9
3	13	41	21	28	26	20	65	43	130	46	11	7.9
4	13	36	20	34	25	19	74	44	124	40	9.9	7.1
5	12	32	22	32	24	19	95	42	65	39	9.6	22
6	14	31	25	30	23	20	129	41	57	37	9.4	12
7	13	32	48	28	22	21	61	38	48	32	9.4	9.0
8	13	30	40	26	21	19	82	41	42	29	9.4	7.8
9	12	30	43	23	21	18	344	36	44	27	16	7.6
10	12	34	41	43	20	17	145	34	55	26	11	7.1
11	13	46	40	40	19	16	106	38	55	24	10	6.6
12	14	40	39	130	20	15	90	34	53	24	9.6	6.6
13	13	39	38	120	22	17	81	33	47	23	9.9	6.1
14	13	37	45	90	19	19	80	34	49	22	9.4	6.0
15	13	35	60	75	18	18	78	32	61	21	9.4	6.1
16	12	35	55	60	19	22	78	31	67	20	9.3	5.9
17	12	34	50	50	20	50	76	30	67	18	9.2	5.9
18	11	30	42	45	21	400	70	30	156	17	11	6.1
19	11	26	36	40	20	1,100	66	29	99	16	9.7	5.7
20	11	26	35	39	19	594	64	28	80	16	248	5.2
21	11	26	34	42	22	741	65	35	67	15	35	5.0
22	11	25	33	50	28	733	66	31	60	15	15	4.9
23	11	24	33	60	26	388	73	28	247	17	12	4.8
24	11	24	32	80	24	253	63	27	881	17	11	4.4
25	11	23	32	100	23	88	68	28	164	15	17	4.5
26	11	26	50	70	25	71	63	29	119	14	10	4.5
27	11	24	40	50	26	92	61	25	98	13	7.8	4.3
28	11	22	34	43	25	184	58	29	82	13	7.6	4.2
29	12	22	36	38	-----	100	54	39	72	13	19	4.8
30	12	22	35	33	-----	64	49	92	70	13	13	4.6
31	143	-----	34	31	-----	68	-----	60	-----	12	8.9	-----
TOTAL	508	1,017	1,136	1,590	634	5,230	2,540	1,157	3,272	758	600.5	201.2
MEAN	16.4	33.9	36.6	51.3	22.6	169	84.7	37.3	109	24.5	19.4	6.71
MAX	143	113	60	130	29	1,100	344	92	881	67	248	22
MIN	11	22	19	23	18	15	49	25	42	12	7.6	4.2
CFSM	.23	.48	.52	.72	.32	2.38	1.19	.53	1.54	.35	.27	.09
IN.	.27	.53	.60	.83	.33	2.74	1.33	.61	1.72	.40	.32	.11
AC-FT	1,010	2,020	2,250	3,150	1,260	10,370	5,040	2,290	6,490	1,500	1,190	399

CAL YR 1974 TOTAL 38,510.0 MEAN 106 MAX 2,290 MIN 11 CFSM 1.50 IN 20.21 AC-FT 76,380
WTR YR 1975 TOTAL 18,643.7 MEAN 51.1 MAX 1,100 MIN 4.2 CFSM .72 IN 9.78 AC-FT 36,980

PEAK DISCHARGE (BASE, 1,000 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-19	1945	15.29	4,010	6-24	0500	14.64	2,850
3-22	0030	15.02	3,440	8-20	1430	12.93	1,610
3-23	2230	13.10	1,670				

IOWA RIVER BASIN

05453000 BIG BEAR CREEK AT LADORA, IOWA

LOCATION.--Lat 41°44'58", long 92°10'55", in SW1/4 SW1/4 sec.7, T.80 N., R.11 W., Iowa County, on left bank 10 ft (3 m) downstream from bridge on county highway V52, 0.4 mi (0.6 km) south of Ladora, 1.2 mi (1.9 km) downstream from Coats Creek, 2.8 mi (4.5 km) upstream from Little Bear Creek, and 8.1 mi (13.0 km) upstream from mouth.

DRAINAGE AREA.--189 mi² (490 km²).

PERIOD OF RECORD.--October 1945 to current year. Prior to October 1966, published as Bear Creek at Ladora.

GAGE.--Water-stage recorder. Datum of gage is 754.94 ft (230.11 m) above mean sea level. Prior to June 26, 1945, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--30 years, 118 ft³/s (3.34 m³/s), 8.48 in/yr (215 mm/yr), 85,490 acre-ft/yr (105 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,010 ft³/s (114 m³/s) Mar. 22, gage height, 11.64 ft (3.548 m); minimum daily, 11 ft³/s (0.312 m³/s) Sept. 24-28.
Period of record: Maximum discharge, 10,500 ft³/s (297 m³/s) Mar. 30, 1960, gage height, 14.60 ft (4.450 m); no flow Jan. 22 to Feb. 8, 1956.

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

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

REVISIONS (WATER YEARS).--WSP 1308: 1947 (M). WSP 1438: Drainage area.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	244	74	75	60	54	235	120	110	154	23	25
2	26	110	70	68	59	52	175	117	96	139	23	21
3	26	81	76	74	58	49	163	116	317	138	22	19
4	27	73	66	62	57	47	164	110	258	127	21	19
5	28	62	60	68	56	46	176	106	197	124	20	38
6	29	55	66	64	50	45	282	99	151	123	20	38
7	29	51	130	62	52	44	251	98	132	110	18	24
8	28	48	140	60	49	43	215	104	119	102	17	21
9	27	46	100	57	49	43	678	97	127	94	20	20
10	26	52	130	180	49	42	428	89	153	90	19	19
11	27	85	110	240	49	42	302	93	145	85	18	18
12	30	78	96	180	49	43	280	93	144	80	17	18
13	31	72	86	210	49	42	248	83	127	77	20	16
14	32	67	84	160	48	41	231	80	271	73	19	15
15	29	62	130	135	49	41	222	76	571	69	17	15
16	28	61	120	120	51	43	212	73	264	63	15	15
17	27	61	100	110	52	250	204	67	292	58	15	15
18	27	59	110	100	52	1,300	202	67	559	54	19	15
19	26	58	95	92	52	1,600	192	65	487	49	24	15
20	28	53	85	84	52	1,400	168	62	340	46	58	14
21	27	50	75	80	59	1,420	167	66	292	42	146	13
22	27	51	60	77	65	2,650	165	68	339	40	30	13
23	28	52	50	74	70	594	194	60	264	45	23	13
24	27	49	45	100	62	817	197	56	1,060	42	19	11
25	26	43	40	250	58	286	173	55	354	36	33	11
26	25	58	70	100	60	152	161	59	262	33	32	11
27	25	58	100	80	62	166	158	60	232	31	21	11
28	26	65	110	72	60	498	157	56	207	28	21	11
29	26	65	110	68	-----	396	143	70	185	27	35	12
30	28	72	79	64	-----	222	130	182	172	25	98	14
31	62	-----	81	60	-----	216	-----	132	-----	24	32	-----
TOTAL	884	2,041	2,748	3,226	1,538	12,684	6,673	2,679	8,227	2,228	915	520
MEAN	28.5	68.0	88.6	104	54.9	409	222	86.4	274	71.9	29.5	17.3
MAX	62	244	140	250	70	2,650	678	182	1,060	154	146	38
MIN	25	43	40	57	48	41	130	55	96	24	15	11
CFSM	.15	.36	.47	.55	.29	2.16	1.17	.46	1.45	.38	.16	.09
IN.	.17	.40	.54	.63	.30	2.50	1.31	.53	1.62	.44	.18	.10
AC-FT	1,750	4,050	5,450	6,400	3,050	25,160	13,240	5,310	16,320	4,420	1,810	1,030

CAL YR 1974 TOTAL 99,256 MEAN 272 MAX 4,720 MIN 25 CFSM 1.44 IN 19.54 AC-FT 196,900
WTR YR 1975 TOTAL 44,363 MEAN 122 MAX 2,650 MIN 11 CFSM .65 IN 8.73 AC-FT 87,990

PEAK DISCHARGE (BASE, 2,000 FT³/S).--Mar. 22 (0700) 4,010 ft³/s (11.64 ft).

IOWA RIVER BASIN

55

05453100 IOWA RIVER AT MARENGO, IOWA

LOCATION.--Lat 41°48'41", long 92°03'42", in SW1/4 NE1/4 sec.24, T.81 N., R.11 W., Iowa County, on right bank 10 ft (3 m) downstream from abandoned highway bridge, 0.7 mi (1.1 km) downstream from Big Bear Creek, 0.8 mi (1.3 km) north of Marengo, 4.9 mi (7.9 km) upstream from Hilton Creek, and at mile 139.4 (224.3 km).

DRAINAGE AREA.--2,794 mi² (7,236 km²).

PERIOD OF RECORD.--October 1956 to current year. Monthly discharge only for some periods, published in WSP 1728.

GAGE.--Water-stage recorder. Datum of gage is 720.52 ft (219.61 m) above mean sea level.

AVERAGE DISCHARGE.--19 years, 1,753 ft³/s (49.6 m³/s), 8.52 in/yr (216 mm/yr), 1,270,000 acre-ft/yr (1,570 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 22,200 ft³/s (629 m³/s) Mar. 24, gage height, 18.82 ft (5.736 m); minimum daily, 297 ft³/s (8.41 m³/s) Sept. 28.

Period of record: Maximum discharge, 30,800 ft³/s (872 m³/s) Mar. 31, 1960, gage height, 19.21 ft (5.855 m); maximum gage height, 19.79 ft (6.032 m) July 12, 1969; minimum daily discharge, 54 ft³/s (1.53 m³/s), estimated, Oct. 11, 12, 1956.

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

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

REVISIONS (WATER YEARS).--WSP 1558: 1957.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	694	3100	1130	1200	1050	740	4510	4580	2200	5300	667	874
2	636	4060	1110	1100	1000	730	4590	4650	2100	4200	639	741
3	615	4010	1040	1050	980	720	4690	4370	2330	3310	611	646
4	608	3410	1110	1000	960	730	4340	4250	2960	2790	592	590
5	601	2780	1160	1200	940	740	3380	4350	2980	2520	572	604
6	622	2400	1180	1500	910	750	3660	4480	2670	2340	553	636
7	814	2150	1390	1550	880	750	4200	4400	2320	2230	534	572
8	846	1970	1790	1500	850	750	4510	3960	2110	2190	516	537
9	798	1840	1810	1100	810	760	5240	3500	2070	2040	509	503
10	750	1780	1700	1200	780	740	6140	3130	2190	1900	532	475
11	714	1890	1690	2000	760	740	6370	2790	2210	1770	493	459
12	762	1980	1760	1800	740	750	6230	2610	2250	1630	486	441
13	882	1890	1660	2000	720	760	5740	2460	2310	1530	488	424
14	946	1770	1570	1800	700	760	4750	2310	2720	1460	475	409
15	918	1670	1830	2000	680	750	4070	2200	3890	1400	466	399
16	862	1590	2090	2100	660	800	3910	2120	4220	1320	455	390
17	826	1530	2030	2000	650	1200	3930	2080	4570	1260	443	383
18	798	1490	1920	1900	640	4000	3910	2010	5190	1200	447	382
19	770	1430	1790	1700	630	10000	3870	1900	5980	1130	449	375
20	734	1410	1740	1500	620	12500	3680	1800	6030	1080	843	364
21	714	1370	1720	1400	640	11700	3460	1770	5760	1030	1440	352
22	694	1330	1720	1300	660	17000	3320	1770	5750	974	727	347
23	690	1310	1730	1280	700	19100	3350	1720	5980	950	609	338
24	670	1280	1570	1250	660	19700	3470	1610	8580	934	543	325
25	658	1250	1460	1400	640	14800	3470	1530	12000	938	525	320
26	647	1200	1310	1350	650	10900	3390	1530	8780	914	552	309
27	636	1200	1360	1300	670	9010	3260	1490	7250	866	514	302
28	629	1170	1360	1250	700	7870	3530	1410	6830	814	515	297
29	650	1150	1370	1200	---	6730	3760	1460	6150	762	518	303
30	690	1110	1310	1150	---	5840	4200	1860	5530	724	597	300
31	882	---	1270	1100	---	5180	---	2420	---	697	758	---
TOTAL	22756	56520	47680	45180	21280	167500	126930	82520	135910	52203	18068	13398
MEAN	734	1884	1538	1457	760	5403	4231	2662	4530	1684	583	447
MAX	946	4060	2090	2100	1050	19700	6370	4650	12000	5300	1440	874
MIN	601	1110	1040	1000	620	720	3260	1410	2070	697	443	297
CFSM	.26	.67	.55	.52	.27	1.93	1.51	.95	1.62	.60	.21	.16
IN	.30	.75	.63	.60	.28	2.23	1.69	1.10	1.81	.70	.24	.18
AC-FT	45140	112100	94570	89610	42210	332200	251800	163700	269600	103500	35840	26570
CAL YR 1974 TOTAL	1155860			3167	MAX 19000	MIN 588	CFSM 1.13	IN 15.39	AC-FT 2293000			
WTR YR 1975 TOTAL	789945			2164	MAX 19700	MIN 297	CFSM .77	IN 10.52	AC-FT 1567000			

PEAK DISCHARGE (BASE, 6,000 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-20	--	--	* 16,000	6-25	0615	16.72	13,100
3-24	0400	18.82	22,200				

* About.

IOWA RIVER BASIN

05453510 CORALVILLE LAKE NEAR CORALVILLE, IOWA

LOCATION.--Lat 41°43'29", long 91°31'40", in SW1/4 NE1/4 sec.22, T.80 N., R.6 W., Johnson County, at outlet works at left end of Coralville Dam on Iowa River, 2.3 mi (3.7 km) upstream from Rapid Creek, 4.3 mi (6.9 km) northeast of Coralville Post Office and at mile 83.3 (134.0 km).

DRAINAGE AREA.--3,115 mi² (8,067 km²).

PERIOD OF RECORD.--October 1958 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, 247,000 acre-ft (304 hm³) Mar. 29, elevation, 700.83 ft (213.613 m); minimum daily contents, 456 acre-ft (0.562 hm³) Jan. 15; minimum observed elevation, 660.80 ft (201.412 m) Jan. 15.

Period of record: Maximum contents, 472,000 acre-ft (582 hm³) July 21, 1969, elevation, 711.85 ft (216.972 m); minimum daily contents, 456 acre-ft (0.562 hm³) Jan. 15, 1975; minimum observed elevation, 658.77 ft (200.793 m) Mar. 10, 1959.

REMARKS.--Reservoir is formed by earthfill dam completed in 1957. Storage began in September 1958. Releases controlled by three gates, 8.33 ft (2.539 m) wide and 20 ft (6 m) high, into forechamber of 23-ft (7 m) diameter concrete conduit through dam. Inlet invert elevation at 650 ft (198 m). No dead storage. Maximum design discharge through gates is 20,000 ft³/s (566 m³/s). Ungated spillway is concrete overflow section 500 ft (152 m) in length at elevation 712 ft (217 m) above mean sea level, contents, 476,000 acre-ft (587 hm³). Reservoir is used for flood control, low-flow augmentation, conservation and recreation. Normal operation will maintain an elevation of 670 ft (204 m) Feb. 15 to June 15, 680 ft (207 m) June 15 to Sept. 25, 683 ft (208 m) Sept. 25 to Dec. 15, and 680 ft (207 m) December 15 to Feb. 1 with a minimum release of 150 ft³/s (4.25 m³/s) and maximum release of 10,000 ft³/s (283 m³/s) Dec. 15 to May 1 and 6,000 ft³/s (170 m³/s) May 1 to Dec. 15. Minimum observed elevation on Jan. 15, 1975 is approximate due to freezing of gages.

COOPERATION.--Records furnished by Corps of Engineers.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	58,700	57,200	56,700	11,000	7,470	8,500	224,000	11,200	41,900	116,000	48,100	46,500
2	58,600	59,400	56,500	10,100	7,310	8,620	215,000	14,800	41,900	118,000	48,300	46,400
3	58,500	60,500	56,300	9,660	7,510	8,690	205,000	21,900	41,500	118,000	48,900	46,300
4	58,400	60,800	56,000	9,380	8,080	8,570	195,000	29,200	41,500	116,000	48,100	45,800
5	58,400	59,900	55,800	9,720	8,220	8,410	184,000	37,200	41,400	113,000	47,800	45,700
6	58,500	58,100	55,700	8,310	8,000	8,420	172,000	45,900	43,200	110,000	47,300	45,300
7	58,800	57,600	55,800	8,110	7,670	8,420	160,000	54,600	41,600	106,000	46,800	45,300
8	59,200	57,800	55,900	8,250	7,610	8,200	148,000	62,500	41,300	105,000	46,600	45,100
9	59,500	57,900	55,900	8,290	7,600	8,410	138,000	68,800	41,800	102,000	46,700	45,000
10	59,700	58,200	56,300	8,570	7,550	8,790	129,000	73,900	41,700	97,800	46,800	45,200
11	59,500	58,000	57,000	6,580	7,720	8,790	123,000	78,300	41,900	93,400	46,600	44,600
12	59,200	57,500	56,900	4,360	8,040	8,550	116,000	81,300	41,700	88,600	46,700	45,800
13	59,300	57,500	55,200	2,980	8,060	8,370	108,000	81,600	41,600	83,700	46,500	46,000
14	59,600	57,900	52,800	1,390	7,940	8,390	99,500	79,600	41,900	78,700	46,300	46,300
15	59,800	57,900	50,000	456	7,840	8,450	89,600	75,800	42,800	73,600	46,200	46,600
16	59,800	57,700	46,900	2,220	7,800	8,610	80,200	71,500	44,000	68,500	46,200	47,000
17	59,600	57,400	43,300	4,540	7,840	8,730	70,100	71,300	45,100	63,400	46,100	47,300
18	59,300	57,000	39,900	6,920	7,960	11,100	59,400	66,500	48,200	59,200	46,200	47,700
19	59,000	56,900	38,300	8,050	7,800	17,600	48,700	61,600	52,800	55,900	46,000	48,200
20	58,600	56,900	34,600	8,650	7,760	30,500	38,400	57,400	56,700	51,700	46,200	48,600
21	58,200	57,000	30,800	8,570	7,680	42,000	30,700	52,700	61,200	49,300	47,100	48,800
22	58,000	57,400	27,600	8,270	7,800	65,800	24,600	47,700	66,200	48,700	46,200	49,200
23	58,100	57,900	25,000	8,070	8,190	100,000	19,600	44,400	70,500	48,900	45,600	49,600
24	58,200	58,300	22,700	8,250	8,330	141,000	16,000	43,000	73,700	48,800	45,000	49,800
25	58,200	58,300	20,300	8,170	8,470	180,000	13,700	42,300	76,900	48,700	44,900	50,100
26	58,100	58,000	18,400	8,530	8,510	209,000	12,400	42,100	84,800	48,500	44,700	50,400
27	58,100	57,500	17,400	8,870	8,490	231,000	11,200	42,000	96,500	48,400	44,900	50,700
28	58,000	57,100	15,900	8,170	8,430	244,000	10,200	41,800	104,000	48,100	45,300	51,100
29	58,000	56,900	16,800	7,810	-----	245,000	9,770	41,800	109,000	47,700	45,900	51,500
30	58,000	56,800	15,300	7,930	-----	238,000	9,810	41,300	113,000	47,600	46,100	51,900
31	57,300	-----	13,200	7,740	-----	233,000	-----	41,600	-----	47,800	46,400	-----
MAX	59,800	60,800	57,000	11,000	8,510	245,000	224,000	81,600	113,000	118,000	48,900	51,900
MIN	57,300	56,800	13,200	456	7,310	8,200	9,770	11,200	41,300	47,600	44,700	44,600

CAL YR 1974 MAX 407,000 MIN 8,310
WTR YR 1975 MAX 245,000 MIN 456

+ 683.28 683.28 672.43 670.25 670.25 700.15 670.30 680.14 690.68 680.19 680.44 681.87
* -1,400 -500 -43,600 -5,460 +690 +224,570 -223,190 +31,790 +71,400 -65,200 -1,400 +5,500

CAL YR 1974.....*-27,000
WTR YR 1975.....*-6,800

+ Elevation, in feet, at end of month.

* Change in contents, in acre-feet.

05454000 RAPID CREEK NEAR IOWA CITY, IOWA

LOCATION.--Lat 41°41'19", long 91°29'15", in NE1/4 NE1/4 sec.36, T.80 N., R.6 W., Johnson County, on left bank 80 ft (24 m) upstream from bridge on State Highway 1, 3.5 mi (5.6 km) northeast of Iowa City, and 4.7 mi (7.6 km) upstream from mouth.

DRAINAGE AREA.--25.3 mi² (65.5 km²).

PERIOD OF RECORD.--October 1937 to current year. Monthly discharge only for some periods, published in WSP 1308.

GAGE.--Water-stage recorder and concrete control with sharp-crested weir. Datum of gage is 673.72 ft (205.35 m) above mean sea level.

AVERAGE DISCHARGE.--38 years, 15.7 ft³/s (0.445 m³/s), 8.43 in/yr (214 mm/yr), 11,370 acre-ft/yr (14.0 hm³/yr).

EXTREMES.--Current year: Maximum discharge, about 900 ft³/s (25.5 m³/s) Mar. 19, gage height, 12.19 ft (3.716 m), backwater from ice; minimum daily, 0.01 ft³/s (0.0003 m³/s) Aug. 7, 8.

Period of record: Maximum discharge, 6,100 ft³/s (173 m³/s) May 23, 1965, gage height, 14.10 ft (4.298 m); from rating curve extended above 3,600 ft³/s (102 m³/s) on basis of contracted-opening measurement of peak flow; maximum gage height, 14.93 ft (4.551 m) July 17, 1972; no flow at times most years.

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

REVISIONS (WATER YEARS).--WSP 1558: 1941 (M), 1943 (P), 1944 (M); 1946. WSP 1708: 1951 (P), 1952, WRD IOWA 1967: Drainage area.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.9	5.4	3.5	22	7.2	5.3	19	11	6.8	2.5	.04	.41
2	2.7	3.9	3.4	21	7.3	5.4	18	11	7.2	2.3	.04	.20
3	2.6	3.5	3.3	20	7.5	5.4	19	11	8.1	2.1	.03	.14
4	2.9	3.4	3.3	20	7.7	5.4	20	10	9.6	1.9	.03	.11
5	3.1	3.3	3.2	19	7.6	5.4	20	10	7.5	2.7	.02	3.3
6	4.5	3.2	3.2	18	7.0	5.6	21	9.5	6.2	2.2	.02	2.3
7	3.5	3.2	3.4	17	6.0	5.6	22	9.0	5.6	1.7	.01	.64
8	3.1	3.2	4.2	16	5.4	5.8	25	9.2	5.3	1.4	.01	.32
9	3.1	3.1	6.0	20	4.8	6.2	60	8.8	5.5	1.3	.07	.24
10	2.7	5.8	7.0	40	4.6	6.8	35	8.5	6.1	1.4	.05	.16
11	2.7	10	8.0	60	4.5	7.6	28	17	6.0	1.1	.04	.10
12	3.0	6.4	9.0	45	4.6	8.4	24	13	6.0	.92	.03	.07
13	3.7	5.8	10	30	4.7	9.6	21	10	5.6	.96	.10	.06
14	5.3	5.0	12	20	4.8	11	20	10	5.8	.93	.10	.06
15	3.4	4.6	15	15	5.0	14	19	9.8	5.8	.78	.11	.06
16	3.2	4.6	30	13	5.4	35	18	9.0	6.1	.62	.08	.06
17	3.1	5.0	37	12	6.2	100	20	8.5	6.2	.49	.06	.07
18	3.0	5.0	41	11	7.0	300	40	8.0	6.4	.37	.19	.11
19	2.9	5.1	40	10	9.0	500	23	7.6	5.8	.31	.19	.14
20	2.7	5.1	37	9.5	12	321	19	7.4	4.7	.22	5.2	.11
21	2.7	4.8	34	9.4	15	141	18	9.8	4.4	.18	2.4	.09
22	2.7	4.6	31	9.2	10	214	17	8.2	4.2	.16	.46	.08
23	2.7	4.7	29	12	7.0	50	25	7.6	4.4	.54	.16	.07
24	2.8	5.0	27	15	6.2	80	18	7.2	3.7	.76	.08	.05
25	2.8	4.8	25	20	5.8	25	15	7.0	4.1	.30	.74	.05
26	2.6	4.2	24	13	5.6	35	15	7.4	4.1	.17	.47	.04
27	2.6	4.3	24	10	5.5	55	15	6.6	3.8	.12	.25	.05
28	2.8	3.7	24	9.0	5.4	80	15	6.6	3.3	.09	.17	.10
29	3.7	3.7	23	8.0	-----	30	14	6.8	3.0	.07	1.4	.21
30	3.2	3.6	23	7.5	-----	24	13	6.8	2.7	.07	3.3	.20
31	7.1	-----	22	7.3	-----	21	-----	6.8	-----	.05	.84	-----
TOTAL	99.8	138.0	565.5	558.9	188.8	2,118.5	656	279.1	164.0	28.71	16.69	9.60
MEAN	3.22	4.60	18.2	18.0	6.74	68.3	21.9	9.00	5.47	.93	.54	.32
MAX	7.1	10	41	60	15	500	60	17	9.6	2.7	5.2	3.3
MIN	2.6	3.1	3.2	7.3	4.5	5.3	13	6.6	2.7	.05	.01	.04
CFSM	.13	.18	.72	.71	.27	2.70	.87	.36	.22	.04	.02	.01
IN.	.15	.20	.83	.82	.28	3.11	.96	.41	.24	.04	.02	.01
AC-FT	198	274	1,120	1,110	374	4,200	1,300	554	325	57	33	19

CAL YR 1974 TOTAL 13,508.60 MEAN 37.0 MAX 895 MIN 2.6 CFSM 1.46 IN 19.86 AC-FT 26,790
WTR YR 1975 TOTAL 4,823.60 MEAN 13.2 MAX 500 MIN .01 CFSM .52 IN 7.09 AC-FT 9,570

PEAK DISCHARGE (BASE, 600 FT³/S).--Mar. 19 (time unknown) about 900 ft³/s; Mar. 22 (0300) 658 ft³/s (8.95 ft).

IOWA RIVER BASIN

05454300 CLEAR CREEK NEAR CORALVILLE, IOWA

LOCATION.--Lat 41°40'36", Long 91°35'55", in NE1/4 SE1/4 sec.1, T.79 N., R.7 W., Johnson County, on left bank about 50 ft (15 m) upstream from bridge on county highway, 1.1 mi (1.8 km) west of post office in Coralville, 1.5 mi (2.4 km) downstream from Deer Creek and 2.7 mi (4.3 km) upstream from mouth.

DRAINAGE AREA.--98.1 mi² (254 km²).

PERIOD OF RECORD.--October 1952 to current year. Monthly discharge only for some periods, published in WSP 1728.

GAGE.--Water-stage recorder. Datum of gage is 647.48 ft (197.35 m) above mean sea level (levels by Corps of Engineers). Prior to Jan. 7, 1957, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--23 years, 64.7 ft³/s (1.83 m³/s), 8.96 in/yr (228 mm/yr), 46,880 acre-ft/yr (57.8 hm³/yr); median of yearly mean discharges, 50 ft³/s (1.42 m³/s), 6.9 in/yr (175 mm/yr), 36,200 acre-ft/yr (44.6 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,940 ft³/s (54.9 m³/s) Mar. 19, gage height, 10.71 ft (3.264 m); minimum daily, 4.0 ft³/s (0.113 m³/s) Aug. 7, 8.
Period of record: Maximum discharge, 6,630 ft³/s (188 m³/s) May 17, 1974, gage height, 13.93 ft (4.246 m); minimum daily, 0.1 ft³/s (2.8 dm³/s) July 1, 1956.

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

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	24	45	30	24	13	119	46	17	16	4.6	6.6
2	24	24	35	45	22	13	97	43	17	16	4.6	6.0
3	24	24	28	80	21	12	82	42	32	15	4.5	5.8
4	24	24	24	70	20	12	95	39	25	14	4.4	5.6
5	24	23	22	58	20	12	105	37	22	14	4.2	19
6	26	22	25	52	19	12	155	34	16	15	4.1	16
7	28	20	50	48	19	12	143	33	14	14	4.0	8.2
8	26	21	75	45	18	12	126	34	13	13	4.0	6.4
9	25	21	100	42	18	12	265	31	14	12	5.4	6.1
10	24	30	120	100	18	12	259	29	16	12	6.9	5.9
11	23	55	87	210	18	12	186	32	15	11	5.2	5.7
12	24	38	60	180	17	12	177	42	15	11	4.4	5.4
13	25	33	50	130	17	12	161	29	13	11	6.2	4.9
14	36	31	45	90	17	12	146	27	13	10	5.6	4.6
15	31	29	180	70	17	12	138	27	24	9.7	4.5	5.0
16	26	29	115	52	17	13	129	24	19	9.0	4.4	5.4
17	24	30	93	46	16	200	119	23	20	8.3	4.3	5.3
18	24	29	80	41	16	900	108	22	54	7.5	5.2	5.5
19	23	28	68	40	15	1,500	97	20	116	7.3	5.8	6.1
20	23	27	65	36	15	1,280	87	19	43	6.9	6.4	5.7
21	23	25	60	34	14	601	83	30	33	6.5	12.4	5.0
22	23	25	54	33	14	1,050	73	25	29	6.6	15	4.8
23	23	27	48	32	14	384	76	21	26	7.5	9.9	4.8
24	23	28	45	38	14	331	72	18	24	7.3	8.4	4.6
25	22	24	40	48	14	190	65	18	23	6.7	8.5	4.7
26	22	22	54	43	13	110	58	23	22	6.1	7.7	5.0
27	22	19	50	39	13	110	59	18	21	5.7	6.6	4.5
28	22	17	45	35	13	165	64	17	20	5.4	6.6	4.5
29	22	18	43	31	-----	201	58	22	19	5.2	13	5.9
30	22	40	39	29	-----	115	52	24	17	5.1	14	6.8
31	23	-----	35	27	-----	119	-----	20	-----	4.9	8.1	-----
TOTAL	756	807	1,880	1,854	473	7,451	3,454	869	752	299.7	378.1	189.8
MEAN	24.4	26.9	60.6	59.8	16.9	240	115	28.0	25.1	9.67	12.2	6.33
MAX	36	55	180	210	24	1,500	265	46	116	16	124	19
MIN	22	17	22	27	13	12	52	17	13	4.9	4.0	4.5
CFSM	.25	.27	.62	.61	.17	2.45	1.17	.29	.26	.10	.12	.06
IN.	.29	.31	.71	.70	.18	2.83	1.31	.33	.29	.11	.14	.07
AC-FT	1,600	1,600	3,730	3,680	938	14,780	6,850	1,720	1,490	594	750	376

CAL YR 1974 TOTAL 56,388.0 MEAN 154 MAX 3,450 MIN 17 CFSM 1.57 IN 21.38 AC-FT 111,800
WTR YR 1975 TOTAL 19,163.6 MEAN 52.5 MAX 1,500 MIN 4.0 CFSM .54 IN 7.27 AC-FT 38,010

PEAK DISCHARGE (BASE, 1,000 FT³/S).--Mar. 19 (2300) 1,940 ft³/s (10.71 ft); Mar. 22 (0100) 1,620 ft³/s (9.97 ft).

05454500 IOWA RIVER AT IOWA CITY, IOWA

LOCATION.--Lat 41°39'24", long 91°32'27", in SE1/4 SE1/4 sec.9, T.79 N., R.6 W., Johnson County, on right bank 25 ft (8 m) downstream from Hydraulics Laboratory of University of Iowa in Iowa City, 175 ft (53 m) downstream from University Dam, 0.8 mi (1.3 km) upstream from Ralston Creek, 3.6 mi (5.8 km) downstream from Clear Creek, and at mile 74.2 (119.4 km).

DRAINAGE AREA.--3,271 mi² (8,472 km²).

PERIOD OF RECORD.--June 1903 to current year. Monthly discharge only for some periods, published in WSP 1308.

GAGE.--Water-stage recorder. Datum of gage is 29.00 ft (8.84 m) above Iowa City datum, and 617.27 ft (188.14 m) above mean sea level. Oct. 1, 1934, to Sept. 30, 1972, at datum 10.00 ft (3.05 m) higher. See WSP 1708 for history of changes prior to Oct. 1, 1934.

AVERAGE DISCHARGE.--72 years, 1,648 ft³/s (46.7 m³/s), 6.84 in/yr (174 mm/yr), 1,194,000 acre-ft/yr (1,470 hm³/yr); median of yearly mean discharges, 1,460 ft³/s (41.3 m³/s), 6.1 in/yr (155 mm/yr), 1,060,000 acre-ft/yr (1,310 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 10,500 ft³/s (297 m³/s) Apr. 9, gage height, 21.50 ft (6.553 m); minimum daily, 158 ft³/s (4.47 m³/s) Sept. 23, 24. Period of record: Maximum discharge, 42,500 ft³/s (1,204 m³/s) June 8, 1918, gage height, 19.6 ft (5.974 m), from graph based on gage readings, site and datum then in use; minimum daily, 29 ft³/s (0.82 m³/s) Oct. 21, 22, 1916, regulated.

Flood of July 17, 1881, reached a stage of 21.1 ft (6.43 m), from floodmarks at site and datum in use 1913-21, from information by local resident, discharge, 51,000 ft³/s (1,440 m³/s). Maximum stage known since at least 1850, about 3 ft (1 m) higher than that of July 17, 1881, occurred in June 1851, discharge 70,000 ft³/s (1,980 m³/s), estimated.

REMARKS.--Records excellent. Diurnal fluctuation at low stages caused by powerplant above station. Flow regulated by Coralville Lake since Sept. 17, 1958 (see sta. 05453510). Records of chemical analyses, water temperature, and suspended-sediment discharge for the current year are published in Part 2 of this report.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	653	1,630	1,230	2,200	1,260	757	9,680	4,260	2,460	4,280	470	491
2	648	2,280	1,220	1,740	1,210	795	9,630	3,560	2,470	4,300	468	757
3	648	3,210	1,210	1,370	1,060	819	9,670	1,770	2,630	4,310	466	861
4	650	3,670	1,210	1,220	913	835	9,650	1,400	3,040	4,300	563	861
5	656	3,680	1,210	1,200	993	847	9,800	1,450	3,370	4,290	704	864
6	668	3,670	1,230	1,310	1,080	791	9,950	1,200	3,010	4,270	700	889
7	655	3,310	1,470	1,280	1,110	770	9,890	1,220	2,830	4,240	696	693
8	652	1,980	1,790	1,190	1,010	809	9,960	1,240	2,640	4,210	584	587
9	701	1,950	1,890	1,260	903	712	10,200	1,230	2,190	4,180	478	536
10	783	1,990	1,660	1,920	994	621	10,200	1,170	2,300	4,150	494	426
11	820	2,160	1,540	2,850	759	717	10,000	1,200	2,420	4,120	539	323
12	989	2,450	1,870	2,830	680	806	9,980	1,430	2,480	4,080	537	303
13	914	2,250	2,530	1,970	763	808	9,830	2,400	2,560	4,050	549	269
14	806	1,860	3,060	1,170	820	746	9,870	3,450	2,560	4,010	537	270
15	849	1,850	3,570	1,090	820	703	9,990	4,060	2,790	3,960	510	246
16	928	1,850	3,560	745	784	728	9,830	4,110	3,500	3,920	444	188
17	926	1,850	3,460	487	752	1,150	9,540	4,180	3,740	3,860	443	180
18	928	1,520	3,410	572	797	2,950	9,310	4,180	3,800	3,490	455	167
19	926	1,470	3,360	1,080	779	4,570	9,000	4,160	3,900	3,120	537	166
20	925	1,550	3,430	1,310	754	5,530	8,620	4,180	3,860	2,920	563	164
21	924	1,460	3,440	1,370	734	5,760	7,500	4,230	3,890	2,310	635	162
22	847	1,280	3,140	1,460	757	8,870	6,360	4,150	3,930	1,450	1,590	162
23	724	1,170	2,690	1,320	759	7,920	6,040	3,750	4,060	947	1,260	158
24	722	1,160	2,500	1,250	829	5,040	5,390	2,850	4,270	919	1,090	158
25	721	1,280	2,470	1,310	884	1,400	5,090	2,260	4,300	911	738	159
26	722	1,390	2,210	1,360	764	1,220	4,560	2,000	4,340	912	630	159
27	723	1,390	1,790	1,370	767	1,250	4,460	1,710	4,390	907	621	162
28	725	1,380	1,660	1,530	760	2,540	4,390	1,700	4,320	904	438	172
29	736	1,300	1,650	1,520	-----	6,160	4,300	1,790	4,330	900	417	165
30	737	1,220	2,010	1,270	-----	8,290	4,260	1,890	4,260	759	462	160
31	919	-----	2,250	1,260	-----	9,810	-----	2,220	-----	598	425	-----
TOTAL	24,225	59,210	69,720	43,814	24,495	84,724	246,950	80,400	100,640	91,577	19,043	10,858
MEAN	781	1,974	2,249	1,413	875	2,733	8,232	2,594	3,355	2,954	614	362
MAX	989	3,680	3,570	2,850	1,260	9,810	10,200	4,260	4,390	4,310	1,590	889
MIN	648	1,160	1,210	487	680	621	4,260	1,170	2,190	598	417	158
AC-FT	48,050	117,400	138,300	86,910	48,590	168,100	489,800	159,500	199,600	181,600	37,770	21,540
CAL YR 1974	TOTAL	1,362,842	MEAN	3,734	MAX	11,200	MIN	648	AC-FT	2,703,000		
WTR YR 1975	TOTAL	855,656	MEAN	2,344	MAX	10,200	MIN	158	AC-FT	1,697,000		

IOWA RIVER BASIN

05455000 RALSTON CREEK AT IOWA CITY, IOWA

LOCATION.--Lat 41°39'50", long 91°30'48", in SE1/4 NW1/4 sec.11, T.79 N., R.6 W., Johnson County, on left bank 10 ft (3 m) upstream from bridge on Rochester Avenue, 1.0 mi (1.6 km) northeast of post office in Iowa City and 2.2 mi (3.5 km) upstream from mouth.

DRAINAGE AREA.--3.01 mi² (7.80 km²).

PERIOD OF RECORD.--September 1924 to current year.

GAGE.--Water stage recorder and V-notch sharp-crested weir. Datum of gage is 663.27 ft, revised (201.94 m) above mean sea level (University of Iowa bench mark).

AVERAGE DISCHARGE.--51 years, 1.70 ft³/s (0.048 m³/s), 7.67 in/yr (195 mm/yr), 1,230 acre-ft/yr (1.52 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 160 ft³/s (4.53 m³/s) Mar. 19, gage height, 3.67 ft (1.119 m); no flow July 28 to Aug. 8, Aug. 10-12, 14-17, and 24.

Period of record: Maximum discharge, 1,940 ft³/s (54.9 m³/s) Sept. 21, 1965, gage height, 6.90 ft (2.103 m); maximum gage height, 9.06 ft (2.761 m) July 18, 1956; no flow at times during most years.

REMARKS.--Records good except those for winter period, which are poor. Records of chemical analyses, water temperatures, and suspended-sediment discharge for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1508: 1933, 1935-37, 1940-41 (M); 1942, 1943 (M), 1948-51, 1952 (P), 1953, 1954 (M), 1955. WRD Iowa. 1967: 1965-66.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.0	1.2	.73	1.1	.77	.93	3.2	1.7	.42	.15	0	.09
2	1.1	1.0	.74	1.1	.79	.91	2.5	1.6	.96	.14	0	.07
3	1.1	1.1	.76	1.2	.80	.87	2.8	1.6	1.6	.13	0	.04
4	1.2	.77	.78	1.1	.79	.84	2.9	1.7	1.6	.14	0	.03
5	1.3	.73	.80	1.0	.77	.80	4.2	1.5	.70	.14	0	3.2
6	1.6	.71	1.0	1.1	.71	.75	4.8	1.5	.49	.14	0	.26
7	1.2	.70	2.2	1.1	.67	.80	4.3	1.5	.36	.10	0	.10
8	1.0	.70	1.5	1.1	.63	.75	4.0	1.7	.34	.10	0	.07
9	.82	.70	1.1	1.2	.60	.80	7.5	1.6	.52	.08	.03	.05
10	.70	1.7	1.0	8.8	.60	.81	5.4	1.4	.40	.08	0	.05
11	.72	1.8	.96	3.4	.60	.82	4.6	2.0	.34	.07	0	.06
12	.96	.98	.97	2.2	.61	.95	4.2	1.5	.32	.06	0	.04
13	1.3	.97	1.1	1.9	.62	.85	3.7	1.4	.34	.04	.04	.07
14	.98	.85	2.3	1.7	.63	.90	3.7	1.3	.40	.04	0	.03
15	.73	.83	6.8	1.5	.64	1.2	3.5	1.2	.31	.04	0	.02
16	.71	.88	3.3	1.4	.66	3.0	3.3	1.2	.40	.05	0	.02
17	.71	.86	2.5	1.2	.76	36	2.9	.92	.40	.04	0	.04
18	.74	.85	1.7	1.1	.68	76	3.6	.79	.38	.04	.15	.09
19	.66	.88	1.5	1.0	.66	73	3.0	.79	.29	.04	.01	.11
20	.73	.88	1.4	1.0	.68	15	2.8	.79	.23	.03	2.6	.04
21	.82	.96	1.3	.90	1.1	13	2.8	1.9	.18	.02	.17	.02
22	.95	1.0	1.3	.90	1.6	15	2.7	.73	.14	.01	.03	.02
23	1.0	1.2	1.2	1.1	1.2	5.6	3.1	.67	.15	.29	.01	.02
24	.97	1.2	1.1	1.4	1.1	4.9	2.2	.64	.16	.15	0	.01
25	1.0	1.0	1.1	1.9	1.1	2.9	2.0	.79	.38	.03	.76	.01
26	.98	.89	1.1	1.4	1.0	2.4	1.9	.64	.27	.01	.07	.01
27	1.0	.70	1.2	1.0	.98	3.0	1.9	.42	.20	.01	.02	.01
28	1.1	.60	1.3	.85	.97	8.4	2.1	.44	.17	0	.01	.09
29	1.6	.62	1.3	.83	---	4.8	2.0	.47	.15	0	2.4	.19
30	1.5	.72	1.2	.80	---	3.5	1.9	.52	.16	0	.62	.07
31	2.1	---	1.3	.78	---	3.7	---	.47	---	0	.11	---
TOTAL	32	27	46	47	22	283	99	35	12	2.1	7.0	4.9
MEAN	1.04	.93	1.50	1.52	.81	9.13	3.32	1.14	.43	.070	.23	.16
MAX	2.1	1.8	6.8	8.8	1.6	76	7.5	2.0	1.6	.29	2.6	3.2
MIN	.66	.60	.73	.78	.60	.75	1.9	.42	.14	0	0	.01
CFSM	.35	.31	.50	.51	.27	3.03	1.10	.38	.14	.02	.08	.05
IN.	.40	.35	.58	.58	.28	3.50	1.23	.44	.16	.03	.09	.06
AC-FT	64	55	92	93	45	562	197	70	25	4.3	14	9.8

CAL YR 1974 TOTAL 1569.82 MEAN 4.30 MAX 85 MIN .60 CFSM 1.43 IN 19.40 AC-FT 3110
WTR YR 1975 TOTAL 621.43 MEAN 1.70 MAX 76 MIN 0 CFSM .56 IN 7.68 AC-FT 1230

PEAK DISCHARGE (BASE, 200 FT³/S).--No peak above base.

05455010 SOUTH BRANCH RALSTON CREEK AT IOWA CITY, IOWA

LOCATION.--Lat 41°39'05", long 91°30'27", in SW1/4 NE1/4 sec.14, T.79 N., R.6 W., Johnson County, on right bank 60 ft (18 m) downstream from bridge on Muscatine Avenue in Iowa City, and 1.2 mi (1.9 km) upstream from mouth.

DRAINAGE AREA.--2.94 mi² (7.61 km²).

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

GAGE.--Water-stage recorder and V-notch sharp-crested weir. Datum of gage is 678.03 ft (206.66 m) above mean sea level.

AVERAGE DISCHARGE.--12 years, 2.72 ft³/s (0.077 m³/s), 12.56 in/yr (319 mm/yr), 1,970 acre-ft/yr (2.43 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 136 ft³/s (3.85 m³/s) Mar. 19, gage height, 4.07 ft (1.241 m); no flow Aug. 4-8, Sept. 26, 27.

Period of record: Maximum discharge, 1,070 ft³/s (30.3 m³/s) July 17, 1972, gage height, 9.47 ft (2.886 m); no flow at times most years.

Flood of July 14, 1962 reached a stage of 10.5 ft (3.20 m), from flood profile, discharge not determined.

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

REVISIONS.--WRD Iowa 1966: Drainage area.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.55	1.6	2.6	1.3	.84	.84	4.5	.97	.64	.23	.02	.13
2	.58	1.1	3.8	1.2	.82	.80	3.4	.93	.84	.22	.01	.14
3	.64	1.2	1.9	1.1	.82	.72	5.3	.93	2.1	.21	.01	.06
4	.52	1.0	1.5	1.0	1.4	.68	4.6	.94	3.3	.19	0	.05
5	.58	1.2	1.6	.97	.93	.65	5.4	.88	.80	.32	0	6.1
6	.64	1.0	3.5	.92	1.4	.62	5.5	.91	.58	.21	0	.24
7	.42	.88	5.4	.96	2.0	1.0	5.0	.84	.55	.18	0	.15
8	.42	.79	6.4	1.0	1.2	.78	5.5	1.4	.50	.16	0	.10
9	.40	.87	4.5	1.3	2.9	.60	12	.89	.94	.15	1.0	.09
10	.42	8.1	3.5	12	6.5	.73	6.7	.84	.58	.19	.06	.10
11	.68	4.4	3.5	7.0	1.4	.90	5.6	2.4	.75	.13	.12	.07
12	.46	2.4	3.1	3.0	.77	1.1	4.8	.87	.47	.15	.05	.05
13	2.7	3.5	3.4	1.8	.73	1.2	4.1	.79	.57	.13	.88	.04
14	.69	1.9	9.2	1.6	.95	1.0	4.1	.79	.58	.11	.05	.03
15	.55	1.9	14	1.5	2.8	3.0	3.2	.73	.51	.10	.03	.12
16	.55	1.9	7.9	1.4	1.1	4.5	2.9	.68	1.9	.08	.02	.04
17	.52	1.6	4.3	1.3	8.5	29	2.7	.64	.85	.07	.02	.15
18	.54	1.9	3.5	1.2	3.1	41	6.2	.64	1.3	.06	1.5	.36
19	.52	1.9	3.0	1.1	.94	40	3.1	.68	.42	.11	.17	.06
20	.50	1.9	2.5	1.0	1.5	9.9	2.2	.61	.36	.03	9.2	.03
21	.49	2.1	2.2	.96	5.0	16	2.1	1.2	.34	.04	.21	.03
22	.53	2.4	4.8	.92	3.2	12	1.9	.68	.30	.04	.13	.03
23	.55	4.5	2.5	1.2	1.6	9.0	5.1	.68	.34	1.4	.09	.03
24	.55	1.8	2.3	2.5	2.1	8.4	2.2	.61	.45	.07	.05	.02
25	.58	1.5	2.1	2.3	2.9	4.9	1.6	.61	.32	.06	1.9	.02
26	.55	1.6	1.8	1.3	.91	4.3	1.4	.64	.29	.05	.04	0
27	.61	1.6	1.8	.93	1.0	6.9	1.7	.55	.28	.03	.01	0
28	.67	1.6	1.8	.88	.89	13	2.6	.68	.27	.03	.02	1.3
29	2.1	1.8	1.8	.84	-----	7.7	1.2	.61	.25	.03	6.1	.90
30	2.4	2.8	1.4	.75	-----	6.7	1.0	.68	.24	.02	.30	.12
31	6.4	-----	1.4	.73	-----	5.1	-----	.58	-----	.02	.13	-----
TOTAL	28.32	62.74	113.0	55.96	58.20	233.02	117.6	25.88	21.62	4.82	22.12	10.56
MEAN	.91	2.09	3.65	1.81	2.08	7.52	3.92	.83	.72	.16	.71	.35
MAX	6.4	8.1	14	12	8.5	41	12	2.4	3.3	1.4	9.2	6.1
MIN	.40	.79	1.4	.73	.73	.60	1.0	.55	.24	.02	0	0
CFSM	.31	.71	1.24	.62	.71	2.56	1.33	.28	.24	.05	.24	.12
IN.	.36	.79	1.43	.71	.74	2.95	1.49	.33	.27	.06	.28	.13
AC-FT	56	124	224	111	115	462	233	51	43	9.6	44	21

CAL YR 1974 TOTAL 2,042.71 MEAN 5.60 MAX 81 MIN .30 CFSM 1.90 IN 25.85 AC-FT 4,050
WTR YR 1975 TOTAL 753.84 MEAN 2.07 MAX 41 MIN 0 CFSM .70 IN 9.54 AC-FT 1,500

PEAK DISCHARGE (BASE, 200 FT³/S).--No peak above base.

05455500 ENGLISH RIVER AT KALONA, IOWA

LOCATION.--Lat 41°27'59", Long 91°42'56", in SE1/4 SE1/4 sec.13, T.77 N., R.8 W., Washington County, on right bank 30 ft (9 m) upstream from bridge on State Highway 1, 0.8 mi (1.3 km) south of Kalona, 1.1 mi (1.8 km) upstream from Camp Creek, 4.5 mi (7.2 km) downstream from Smith Creek, and 14.5 mi (23.3 km) upstream from mouth.

DRAINAGE AREA.--573 mi² (1,484 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 633.45 ft (193.08 m) above mean sea level (levels by Corps of Engineers). Prior to Dec. 27, 1939, nonrecording gage 30 ft (9 m) downstream at same datum.

AVERAGE DISCHARGE.--36 years, 370 ft³/s (10.5 m³/s), 8.77 in/yr (223 mm/yr), 268,100 acre-ft/yr (330 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 6,850 ft³/s (194 m³/s) Mar. 20, gage height, 16.04 ft (4.889 m); minimum daily, 13 ft³/s (0.37 m³/s) Aug. 8.
Period of record: Maximum discharge, 20,000 ft³/s (566 m³/s) Sept. 21, 1965, gage height, 21.45 ft (6.538 m); minimum daily, 1.1 ft³/s (31 dm³/s) Jan. 20-27, 1956.
Flood in June 1930 reached a stage of 19.9 ft (6.07 m) from floodmark, from information by local residents, discharge, 18,500 ft³/s (524 m³/s).

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

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

REVISIONS (WATER YEARS).--WSP 1438: Drainage area. WSP 1558: 1940 (M), 1941, WSP 1708: 1956, 1957 (P), 1958 (P).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	60	109	67	120	130	125	642	346	214	144	19	90
2	53	192	76	220	120	120	554	311	175	132	18	63
3	52	131	100	250	110	100	422	297	317	125	18	51
4	53	95	94	200	115	92	437	287	780	123	17	44
5	58	82	86	220	120	87	479	271	1,170	124	16	89
6	66	74	80	190	110	84	687	255	547	120	15	195
7	74	69	140	150	110	92	757	236	321	104	14	183
8	67	65	380	110	90	100	657	243	252	88	13	91
9	61	63	360	100	80	90	890	244	226	78	18	66
10	53	71	320	300	70	78	1,780	225	266	72	21	57
11	51	137	300	1,500	66	76	1,120	213	265	68	23	52
12	54	168	270	350	70	80	827	222	285	63	20	47
13	60	139	252	370	76	92	698	208	273	60	23	44
14	80	116	229	400	78	86	621	192	238	58	25	39
15	87	104	733	350	80	84	603	192	305	56	32	35
16	69	98	906	300	80	200	557	181	441	53	26	34
17	63	98	538	250	80	1,300	513	166	257	49	22	34
18	56	94	369	230	85	3,220	549	158	321	45	31	34
19	52	96	300	210	93	5,880	623	151	848	41	56	34
20	48	93	250	190	96	6,310	541	144	471	37	88	38
21	47	86	230	170	100	3,340	455	149	293	35	134	34
22	47	81	220	150	220	2,850	437	169	247	32	135	30
23	47	82	210	140	400	1,880	600	153	243	34	482	28
24	48	86	190	130	370	2,010	933	137	190	34	244	26
25	48	80	180	200	210	1,360	655	129	354	34	86	25
26	46	69	200	250	160	689	519	129	225	29	55	23
27	43	66	200	210	140	590	457	128	185	27	58	23
28	45	69	190	190	130	1,030	475	124	175	25	48	22
29	48	61	150	170	-----	1,510	470	143	158	23	47	23
30	54	70	130	150	-----	843	400	188	151	22	183	20
31	79	-----	110	140	-----	643	-----	239	-----	20	222	-----
TOTAL	1,769	2,844	7,860	7,920	3,589	35,041	19,358	6,230	10,193	1,955	2,209	1,574
MEAN	57.1	94.8	254	255	128	1,130	645	201	340	63.1	71.3	52.5
MAX	87	192	906	1,500	400	6,310	1,780	346	1,170	144	482	195
MIN	43	61	67	100	66	76	400	124	151	20	13	20
CFSM	.10	.17	.44	.45	.22	1.97	1.13	.35	.59	.11	.12	.09
IN.	.11	.18	.51	.51	.23	2.27	1.26	.40	.66	.13	.14	.10
AC-FT	3,510	5,640	15,590	15,710	7,120	69,500	38,400	12,360	20,220	3,880	4,380	3,120

CAL YR 1974 TOTAL 314,469 MEAN 862 MAX 14,100 MIN 43 CFSM 1.50 IN 20.42 AC-FT 623,700
WTR YR 1975 TOTAL 100,542 MEAN 275 MAX 6,310 MIN 13 CFSM .48 IN 6.53 AC-FT 199,400

PEAK DISCHARGE (BASE, 4,000 FT³/S).--Mar. 20 (0130) 6,850 ft³/s (16.04 ft).

05455700 IOWA RIVER NEAR LONE TREE, IOWA

LOCATION.--Lat 41°25'15", long 91°28'25", in NW1/4 NE1/4 sec.6, T.76 N., R.5 W., Louisa County, on left bank 10 ft (3 m) downstream from bridge on county highway W66, 5 mi (8.0 km) southwest of Lone Tree, 6.2 mi (10.0 km) downstream from English River, and at mile 47.2 (75.9 km).

DRAINAGE AREA.--4,293 mi² (11,118 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 588.16 ft (179.27 m) above mean sea level. Prior to Dec. 28, 1956, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--19 years, 2,846 ft³/s (80.6 m³/s), 9.00 in/yr (229 mm/yr), 2,062,000 acre-ft/yr (2,540 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 15,700 ft³/s (445 m³/s) Mar. 21, gage height, 15.37 ft (4.685 m); minimum daily, 237 ft³/s (6.71 m³/s) Sept. 28.

Period of record: Maximum discharge, 35,700 ft³/s (110 m³/s) May 19, 1974, gage height, 18.97 ft (5.782 m); maximum gage height, 20.27 ft (6.178 m) Sept. 22, 1965; minimum daily discharge, 75 ft³/s (2.12 m³/s) Dec. 8, 1956.

Flood of May 25, 1944, reached a stage of 19.94 ft (6.078 m), discharge not determined, from information by Corps of Engineers.

REMARKS.--Records good except those for winter period, which are poor. Flow regulated by Coralville Lake beginning Sept. 17, 1958 (see Sta. 05453510).

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	810	1,550	1,460	2,620	1,800	1,120	10,500	4,990	2,870	4,480	742	743
2	794	2,180	1,430	2,570	1,800	1,140	10,800	4,880	2,850	4,490	655	949
3	781	3,160	1,390	2,000	1,500	1,170	10,600	3,410	2,970	4,480	639	1,030
4	782	3,810	1,450	1,820	1,300	1,200	10,500	2,220	3,530	4,460	628	1,020
5	796	3,880	1,420	1,640	1,400	1,200	10,600	2,390	4,710	4,440	767	1,450
6	826	3,870	1,470	1,700	1,500	1,150	10,900	2,030	4,210	4,440	828	1,360
7	821	3,800	1,660	1,660	1,500	1,100	11,300	1,930	3,470	4,400	816	1,180
8	814	2,640	2,250	1,660	1,300	1,110	11,400	1,940	3,290	4,360	803	1,000
9	795	2,260	2,630	1,510	1,200	1,160	11,400	1,930	2,800	4,320	656	800
10	875	2,280	2,610	2,000	1,300	1,060	12,300	1,850	2,710	4,270	626	722
11	905	2,480	2,160	4,430	1,000	801	12,900	1,810	2,920	4,230	645	565
12	1,030	2,850	2,100	4,340	900	954	12,000	1,850	2,920	4,190	664	480
13	1,140	2,830	2,530	3,180	1,000	962	11,600	2,350	3,040	4,150	687	440
14	1,040	2,330	3,220	2,250	1,100	993	11,300	3,360	3,060	4,110	669	403
15	982	2,220	4,430	2,000	1,200	904	11,100	4,270	2,990	4,070	655	385
16	1,070	2,200	5,370	1,600	1,100	1,070	11,100	4,390	3,810	4,020	592	345
17	1,080	2,190	4,750	1,100	1,000	2,780	11,000	4,480	4,130	3,960	558	306
18	1,060	2,190	4,260	900	1,100	8,300	10,800	4,480	4,160	3,880	590	289
19	1,040	2,090	4,090	1,100	1,180	11,300	10,600	4,440	4,760	3,350	657	270
20	1,030	1,920	3,990	1,500	1,150	14,100	10,200	4,430	4,770	3,250	817	261
21	1,030	1,840	4,030	1,900	1,130	15,100	9,610	4,490	4,390	2,880	999	261
22	1,020	1,680	3,980	2,100	1,150	12,400	7,930	4,500	4,500	2,330	1,690	258
23	867	1,470	3,500	2,000	1,200	13,300	7,220	4,360	4,400	1,510	1,660	251
24	820	1,450	3,100	1,800	1,300	11,100	7,310	3,630	4,580	1,330	1,800	248
25	828	1,420	2,980	1,850	1,400	5,800	6,530	2,750	4,710	1,310	1,150	242
26	815	1,590	2,970	1,900	1,250	2,750	5,770	2,610	4,720	1,280	822	239
27	809	1,620	2,580	2,000	1,150	2,360	5,440	2,200	4,670	1,250	761	239
28	809	1,610	2,240	2,200	1,100	2,800	5,400	2,110	4,600	1,220	619	237
29	831	1,610	2,190	2,200	-----	6,890	5,300	2,110	4,590	1,160	595	247
30	841	1,480	2,150	1,900	-----	8,590	5,130	2,270	4,490	1,110	685	247
31	941	-----	2,630	1,850	-----	9,420	-----	2,490	-----	882	777	-----
TOTAL	28,082	68,500	87,020	63,280	35,010	144,084	288,540	96,950	115,620	99,612	25,252	16,467
MEAN	906	2,283	2,807	2,041	1,250	4,648	9,618	3,127	3,854	3,213	815	549
MAX	1,140	3,880	5,370	4,430	1,800	15,100	12,900	4,990	4,770	4,490	1,800	1,450
MIN	781	1,420	1,390	900	900	801	5,130	1,810	2,710	882	558	237
AC-FT	55,700	135,900	172,600	125,500	69,440	285,800	572,300	192,300	229,300	197,600	50,090	32,660

CAL YR 1974 TOTAL 1,951,445 MEAN 5,346 MAX 30,600 MIN 781 AC-FT 3,871,000
WTR YR 1975 TOTAL 1,068,417 MEAN 2,927 MAX 15,100 MIN 237 AC-FT 2,119,000

IOWA RIVER BASIN

05457700 CEDAR RIVER AT CHARLES CITY, IOWA

LOCATION.--Lat 43°03'45", long 92°40'23", in SE1/4 NE1/4, sec.12, T.95 N., R.16 W., Floyd County, on right bank 800 ft (244 m) downstream from bridge on U.S. Highway 18 (Brantingham Street) in Charles City, 10.6 mi (17.1 km) upstream from Gizzard Creek, and at mile 252.9 (406.9 km) upstream from mouth of Iowa River.

DRAINAGE AREA.--1,054 mi² (2,730 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 973.02 ft (296.58 m) above mean sea level.

AVERAGE DISCHARGE.--11 years, 715 ft³/s (20.2 m³/s), 9.21 in/yr (234 mm/yr), 518,000 acre-ft/yr (639 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 9,260 ft³/s (262 m³/s) Apr. 29, gage height, 12.04 ft (3.670 m); minimum daily, 150 ft³/s (4.25 m³/s) Nov. 28, Jan. 3.

Period of record: Maximum discharge, 21,000 ft³/s (595 m³/s) Apr. 7, 1965, gage height, 19.14 ft (5.834 m); maximum gage height, 21.64 ft (6.596 m) Mar. 2, 1965, backwater from ice; minimum daily discharge, 86 ft³/s (2.44 m³/s) Dec. 1, 1966.

Flood of Mar. 27, 1961, reached a stage of 21.6 ft (6.58 m), from floodmarks, discharge, 29,200 ft³/s (827 m³/s).

REMARKS.--Records good except those for winter period, which are poor. Occasional minor regulation by dam 0.2 mi (0.3 km) above gage. Daily wire-weight gage readings available in district office for period Sept. 13, 1945, to June 30, 1954, at same site and datum. Discharge not published for this period because of extreme regulation of streamflow by power dam 0.2 mi (0.3 km) upstream.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	206	291	190	248	330	198	820	2,910	1,120	4,100	248	370
2	200	304	198	174	324	200	685	2,050	946	1,900	253	344
3	199	298	200	150	330	202	1,040	1,770	837	1,250	255	323
4	202	279	192	204	330	210	874	2,170	899	1,020	251	305
5	212	262	170	233	330	222	801	2,360	1,390	950	241	300
6	243	252	230	193	335	239	955	1,800	1,410	1,050	231	287
7	228	248	226	185	335	236	1,440	1,430	1,060	931	224	278
8	218	241	220	193	343	226	2,510	1,400	875	777	219	266
9	217	238	178	195	350	212	3,190	1,390	782	664	216	258
10	216	249	160	200	356	200	2,690	1,330	740	595	218	256
11	223	254	186	500	356	220	1,920	1,310	737	542	237	256
12	286	254	208	590	362	240	2,250	1,390	835	505	268	248
13	287	245	222	590	362	260	2,720	1,650	1,400	471	240	247
14	270	239	212	580	362	254	3,020	1,380	1,610	446	226	239
15	258	230	212	520	362	250	3,080	1,140	1,310	426	220	236
16	255	224	202	470	370	246	2,730	997	1,140	409	221	233
17	248	224	182	435	375	242	2,420	888	1,250	388	233	233
18	238	228	174	405	370	240	2,290	827	1,290	370	214	235
19	229	230	174	395	360	240	2,410	781	2,170	355	287	232
20	225	233	176	380	340	500	2,810	912	3,600	340	264	234
21	217	229	180	380	320	1,120	2,170	840	2,800	324	240	231
22	215	223	186	395	300	1,300	1,620	720	1,880	310	763	228
23	217	222	192	408	274	1,500	1,520	672	1,610	307	1,070	226
24	217	223	200	395	250	2,200	2,590	682	1,530	312	617	223
25	217	215	196	395	232	2,480	2,700	758	1,280	316	1,210	222
26	217	190	192	382	216	1,660	2,040	778	1,110	302	2,170	222
27	217	188	186	345	200	1,400	1,880	1,070	1,530	293	1,140	225
28	216	150	203	335	196	1,290	5,490	1,510	2,710	279	728	222
29	235	164	209	330	-----	1,120	8,780	1,080	1,770	266	527	222
30	246	174	198	330	-----	990	5,710	1,070	1,960	260	445	222
31	292	-----	184	330	-----	871	-----	1,220	-----	254	402	-----
TOTAL	7,166	6,981	6,038	10,865	8,970	20,768	75,155	40,285	43,581	20,712	14,078	7,622
MEAN	231	233	195	350	320	670	2,505	1,300	1,453	668	454	254
MAX	292	304	230	590	375	2,480	8,780	2,910	3,600	4,100	2,170	370
MIN	199	150	160	150	196	198	685	672	737	254	214	222
CFSM	.22	.22	.19	.33	.30	.64	2.38	1.23	1.38	.63	.43	.24
IN.	.25	.25	.21	.38	.32	.73	2.65	1.42	1.54	.73	.50	.27
AC-FT	14,210	13,850	11,980	21,550	17,790	41,190	149,100	79,910	86,440	41,080	27,920	15,120
CAL YR 1974	TOTAL 275,429	MEAN 755	MAX 7,780	MIN 150	CFSM .72	IN 9.72	AC-FT 546,300					
WTR YR 1975	TOTAL 262,221	MEAN 718	MAX 8,780	MIN 150	CFSM .68	IN 9.25	AC-FT 520,100					

PEAK DISCHARGE (BASE, 2,500 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. HT.	DISCHARGE
3-25	--	--	* 2,600	4-24	2315	5.98	2,970	6-28	0315	6.12	3,090
4-9	1415	6.37	3,290	4-29	0500	12.04	9,260	7-1	0545	8.18	4,950
4-15	1045	6.15	3,110	6-20	1445	6.88	3,740	8-26	0300	5.65	2,690
4-20	0715	5.87	2,890								

* About.

05458000 LITTLE CEDAR RIVER NEAR IONIA, IOWA

LOCATION.--Lat 43°02'05", long 92°30'05", in SW1/4 NE1/4 sec.21, T.9S N., R.14 W., Chickasaw County, on left bank 12 ft (4 m) downstream from bridge on county highway B57, 2.4 mi (3.9 km) west of Ionia, 6.4 mi (10.3 km) upstream from mouth, and 7.6 mi (12.2 km) downstream from Beaver Creek.

DRAINAGE AREA.--306 mi² (793 km²).

PERIOD OF RECORD.--October 1954 to current year.

GAGE.--Water-stage recorder. Datum of gage is 973.35 ft (296.68 m) above mean sea level.

AVERAGE DISCHARGE.--21 years, 159 ft³/s (4.50 m³/s), 7.06 in/yr (179 mm/yr), 115,200 acre-ft/yr (142 hm³/yr); median of yearly mean discharges, 140 ft³/s (3.96 m³/s), 6.2 in/yr (157 mm/yr), 101,000 acre-ft/yr (125 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,180 ft³/s (118 m³/s) Apr. 29, gage height, 10.63 ft (3.240 m); minimum daily, 23 ft³/s (0.65 m³/s) Mar. 12-15.

Period of record: Maximum discharge, 10,800 ft³/s (306 m³/s) Mar. 27, 1961, gage height, 15.58 ft (4.749 m); minimum daily, 3.0 ft³/s (85 dm³/s) Feb. 4-9, 1959.

Flood of June 22, 1954, reached a stage of 11.37 ft (3.466 m), discharge, 4,600 ft³/s (130 m³/s).

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

REVISIONS (WATER YEARS).--WSP 1438: Drainage area. WSP 1708: 1959.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	67	36	29	28	28	309	629	125	342	36	59
2	35	71	35	28	27	28	294	413	116	325	36	56
3	35	66	35	27	27	28	216	352	111	192	36	52
4	35	60	34	27	27	27	193	332	133	151	35	48
5	36	56	34	26	26	26	229	302	339	136	34	49
6	43	53	33	28	25	25	359	262	237	122	33	45
7	43	46	33	26	25	24	529	231	176	108	32	44
8	42	47	32	25	25	24	563	212	145	97	31	41
9	39	47	32	25	25	24	519	219	128	87	31	41
10	38	49	32	25	25	24	374	219	126	83	31	40
11	39	51	33	25	26	24	373	218	124	78	31	39
12	40	51	34	25	26	23	763	265	137	73	31	37
13	62	50	37	25	27	23	559	343	176	71	31	36
14	63	39	38	24	26	23	478	278	176	68	29	35
15	55	31	38	26	25	23	449	226	163	66	29	35
16	54	36	39	27	25	24	425	195	147	62	28	35
17	49	44	36	29	25	25	442	174	137	60	32	36
18	46	48	34	29	25	26	405	160	133	56	32	36
19	43	47	33	29	25	30	445	148	248	54	51	35
20	41	45	32	29	25	110	507	142	496	51	51	34
21	40	43	32	29	25	800	362	135	361	50	38	34
22	40	42	31	29	25	1,180	261	126	361	48	251	34
23	40	39	30	28	25	1,310	290	116	350	48	164	34
24	40	34	30	27	25	1,500	457	110	274	48	114	33
25	40	29	30	28	25	1,250	481	108	212	46	138	32
26	39	26	29	28	26	1,000	350	108	190	42	195	32
27	39	26	29	28	28	700	368	102	209	39	147	31
28	39	26	31	28	28	206	2,340	100	321	40	99	31
29	44	27	32	28	-----	180	3,600	105	279	39	81	32
30	48	37	31	28	-----	170	1,780	115	195	38	69	32
31	61	-----	30	29	-----	221	-----	124	-----	36	63	-----
TOTAL	1,344	1,333	1,025	844	722	9,106	18,720	6,569	6,325	2,756	2,039	1,158
MEAN	43.4	44.4	33.1	27.2	25.8	294	624	212	211	88.9	65.8	38.6
MAX	63	71	39	29	28	1,500	3,600	629	496	342	251	59
MIN	35	26	29	24	25	23	193	100	111	36	28	31
CFSM	.14	.15	.11	.09	.08	.96	2.04	.69	.69	.29	.22	.13
IN.	.16	.16	.12	.10	.09	1.11	2.28	.80	.77	.34	.25	.14
AC-FT	2,670	2,640	2,030	1,670	1,430	18,060	37,130	13,030	12,550	5,470	4,040	2,300

CAL YR 1974 TOTAL 96,475 MEAN 264 MAX 5,800 MIN 26 CFSM .86 IN 11.73 AC-FT 191,400
WTR YR 1975 TOTAL 51,941 MEAN 142 MAX 3,600 MIN 23 CFSM .46 IN 6.31 AC-FT 103,000

PEAK DISCHARGE (BASE, 1,200 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-22	--	--	* 2,500	4-29	1045	10.63	4,180
3-24	--	--	* 1,600				

* About.

05458500 CEDAR RIVER AT JANESVILLE, IOWA

LOCATION.--Lat 42°38'54", long 92°27'54", in NE1/4 SW1/4 sec.35, T.91 N., R.14 W., Bremer County, on left bank 300 ft (91 m) downstream from bridge on county highway at Janesville, 3.6 mi (5.8 km) upstream from West Fork Cedar River, and at mile 207.7 (334.2 km) upstream from mouth of Iowa River.

DRAINAGE AREA.--1,661 mi² (4,301 km²).

PERIOD OF RECORD.--October 1904 to Sept. 1906, October 1914 to September 1927, October 1932 to September 1942, October 1945 to current year. Monthly discharge only for some periods, published in WSP 1308. Published as Red Cedar River at Janesville, 1905-6.

GAGE.--Water-stage recorder. Datum of gage is 868.26 ft (264.65 m) above mean sea level. Prior to July 26, 1919, nonrecording gage at site 1,000 ft (305 m) downstream at datum 4.0 ft (1.2 m) lower. July 26, 1919, to Sept. 30, 1927, Nov. 14, 1932, to Sept. 30, 1942, and Apr. 26, 1946, to Nov. 10, 1949, nonrecording gage at county bridge 300 ft (91 m) upstream at same datum.

AVERAGE DISCHARGE.--55 years (1904-6, 1914-27, 1932-42, 1945-75), 784 ft³/s (22.2 m³/s), 6.41 in/yr (163 mm/yr), 568,000 acre-ft/yr (700 hm³/yr); median of yearly mean discharges, 700 ft³/s (19.8 m³/s), 5.7 in/yr (145 mm/yr) 507,000 acre-ft/yr (625 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 12,000 ft³/s (340 m³/s) Apr. 30, gage height, 9.90 ft (3.018 m); minimum daily, 197 ft³/s (5.58 m³/s) Aug. 3.

Period of record: Maximum discharge, 37,000 ft³/s (1,050 m³/s) Mar. 28, 1961, gage height, 16.33 ft (4.977 m); minimum daily, 28 ft³/s (0.79 m³/s) Oct. 21, 1922.

Flood of Mar. 17, 1945, reached a stage of 16.2 ft (4.94 m), from floodmark at site 300 ft (91 m) upstream, discharge, 34,300 ft³/s (971 m³/s). Flood of Mar. 16, 1929, reached a stage of about 16 ft (5 m), from information by City of Waterloo, discharge not determined.

REMARKS.--Records good except those for winter period, which are poor. Diurnal fluctuation during low water caused by powerplant at Waverly, 10 mi (16.1 km) upstream.

REVISIONS (WATER YEARS).--WSP 1438: Drainage area. WSP 1558: 1906 (M), 1915-16 (M), 1917, 1918-19 (M), 1920-27, 1933-37 (M), 1940-42 (M).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	335	512	230	500	300	300	2,230	9,640	1,450	2,000	341	612
2	321	477	240	500	300	320	1,690	5,190	1,470	3,660	315	568
3	310	455	300	460	310	280	1,420	3,510	1,300	3,330	197	517
4	306	450	350	380	300	290	1,410	2,910	1,220	1,920	371	555
5	314	430	500	370	300	290	1,520	2,870	1,170	1,500	371	505
6	348	408	331	420	280	280	1,830	3,150	1,560	1,340	365	416
7	428	389	250	400	270	270	2,050	2,780	1,900	1,320	355	441
8	441	393	280	370	280	260	2,000	2,320	1,490	1,260	322	468
9	297	344	300	330	270	260	3,130	2,020	1,300	1,080	325	407
10	331	366	400	290	280	280	3,940	1,790	1,120	980	350	376
11	338	397	370	240	290	280	3,840	1,800	1,070	930	383	392
12	339	358	350	220	280	270	3,340	1,880	1,020	721	344	392
13	350	399	314	280	270	260	3,290	1,910	1,030	756	326	348
14	370	360	291	320	270	260	3,510	2,320	1,340	716	368	357
15	402	313	320	350	270	270	3,920	2,190	1,810	674	353	397
16	384	331	330	360	280	280	4,040	1,840	1,780	629	344	337
17	379	339	280	370	280	300	3,840	1,570	1,500	650	337	373
18	371	371	300	380	280	350	3,440	1,460	1,480	606	339	324
19	361	309	320	370	280	707	3,220	1,360	1,580	517	402	336
20	350	334	340	360	280	1,590	3,150	1,280	1,980	549	383	331
21	337	373	360	350	300	2,260	3,540	1,440	3,260	611	442	336
22	331	323	380	330	310	2,880	3,300	967	3,840	497	383	365
23	333	302	390	350	290	3,490	2,760	744	3,170	441	656	337
24	335	338	400	340	290	4,300	2,480	966	2,370	465	1,160	330
25	334	359	300	340	300	4,390	2,900	1,010	2,150	489	993	282
26	329	307	450	330	300	4,810	3,590	1,050	1,880	442	972	349
27	326	305	320	330	290	4,240	3,370	1,100	1,610	459	2,080	277
28	335	271	245	320	300	2,640	3,540	1,180	1,610	466	1,660	309
29	352	260	290	320	-----	2,090	6,530	1,770	2,670	432	1,160	354
30	358	250	400	310	-----	2,000	11,000	1,580	2,590	543	780	329
31	482	-----	250	300	-----	1,920	-----	1,380	-----	441	691	-----
TOTAL	10,927	10,823	10,181	10,890	8,050	42,417	100,120	66,977	53,720	30,424	17,868	11,720
MEAN	352	361	328	351	288	1,368	3,337	2,161	1,791	981	576	391
MAX	482	512	500	500	310	4,810	11,000	9,640	3,840	3,660	2,080	612
MIN	297	250	230	220	270	260	1,410	744	1,020	432	197	277
CFSM	.21	.22	.20	.21	.17	.82	2.01	1.30	1.08	.59	.35	.24
IN.	.24	.24	.23	.24	.18	.95	2.24	1.50	1.20	.68	.40	.26
AC-FT	21,670	21,470	20,190	21,600	15,970	84,130	198,600	132,800	106,600	60,350	35,440	23,250
CAL YR 1974	TOTAL 458,130	MEAN 1,255	MAX 10,400	MIN 230	CFSM .76	IN 10.26	AC-FT 908,700					
WTR YR 1975	TOTAL 374,117	MEAN 1,025	MAX 11,000	MIN 197	CFSM .62	IN 8.38	AC-FT 742,100					

PEAK DISCHARGE (BASE, 4,000 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-26	1900	5.43	4,960	6-22	0630	4.64	4,010
4-16	0515	4.69	4,070	7-2	2000	4.80	4,210
4-30	1845	9.90	12,000				

05458900 WEST FORK CEDAR RIVER AT FINCHFORD, IOWA

LOCATION.--Lat 42°37'50", long 92°32'24", in SW1/4 SE1/4 sec.6, T.90 N., R.14 W., Black Hawk County, on left bank 100 ft (30 m) downstream from bridge on county highway C55 at Finchford, 3.2 mi (5.1 km) upstream from Shell Rock River, and 5.0 mi (8.0 km) upstream from mouth.

DRAINAGE AREA.--846 mi² (2,191 km²).

PERIOD OF RECORD.--October 1945 to current year. Prior to October 1955, published as West Fork Shell Rock River at Finchford.

GAGE.--Water-stage recorder. Datum of gage is 867.54 ft (264.43 m) above mean sea level (revised). Prior to June 10, 1955, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--30 years, 456 ft³/s (12.9 m³/s), 7.32 in/yr (186 mm/yr), 330,400 acre-ft/yr (407 hm³/yr); median of yearly mean discharges, 360 ft³/s (10.2 m³/s), 5.8 in/yr (147 mm/yr), 261,000 acre-ft/yr (322 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 6,990 ft³/s (198 m³/s) Mar. 22, gage height, 13.03 ft (3.972 m); minimum daily, 55 ft³/s (1.56 m³/s) Sept. 28.

Period of record: Maximum discharge, 31,900 ft³/s (903 m³/s) June 27, 1951, gage height, 17.28 ft (5.267 m), from floodmarks; minimum daily, 5.9 ft³/s (167 dm³/s) Feb. 26, 27, 1959.

Flood in March 1929 reached a stage of about 14 ft (4 m), from information by local resident, discharge, about 12,800 ft³/s (362 m³/s).

REMARKS.--Records good except those for winter period, which are poor. An authorized diversion is made into Big Marsh, 16 mi (25.7 km) upstream from gage, of 2,100 acre-ft each year between September 1 and November 15. Net effect on daily flows at gage is unknown.

REVISIONS (WATER YEARS).--WSP 1438: Drainage area. WSP 1558: 1946 (M), 1947.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	92	338	140	130	110	100	1,410	3,610	992	698	165	113
2	91	413	130	125	110	100	1,320	3,180	886	629	157	101
3	87	395	160	120	110	100	1,100	2,370	793	580	155	89
4	91	344	250	160	105	105	937	1,830	748	543	161	86
5	92	308	220	170	100	105	940	1,660	784	511	159	85
6	105	287	230	180	98	105	1,320	1,590	929	493	152	82
7	109	266	240	175	97	105	1,810	1,470	999	474	147	83
8	115	251	200	170	96	105	2,300	1,270	842	447	144	80
9	117	239	170	160	94	110	2,630	1,090	707	416	140	75
10	113	233	240	160	96	110	2,420	970	671	393	141	73
11	117	233	250	150	98	110	2,270	916	716	375	142	71
12	121	230	220	145	100	110	1,870	942	817	362	145	72
13	135	227	210	140	100	110	1,650	1,050	1,050	340	149	71
14	151	221	210	140	100	110	1,550	1,110	1,300	326	149	68
15	149	203	210	135	100	110	1,520	993	1,310	309	149	66
16	145	195	200	135	100	110	1,570	881	1,140	296	139	64
17	139	208	190	135	105	110	1,610	793	1,060	279	135	63
18	135	205	180	135	105	150	1,570	735	999	265	134	63
19	135	200	170	130	105	300	1,520	696	971	250	152	63
20	133	193	180	130	105	950	1,450	660	1,090	241	149	63
21	129	185	190	130	105	2,530	1,480	631	1,280	230	156	64
22	125	175	200	130	110	5,510	1,400	611	1,420	223	150	63
23	123	173	180	125	110	6,310	1,410	593	1,580	219	139	62
24	121	178	160	125	110	4,840	1,450	571	1,730	219	134	59
25	123	173	130	125	110	3,780	1,530	543	1,710	215	143	58
26	125	163	150	120	110	3,100	1,490	537	1,430	203	134	57
27	125	155	170	120	105	2,120	1,420	707	1,180	195	130	56
28	125	163	160	120	105	1,350	1,690	962	999	188	129	55
29	129	157	150	120	-----	1,170	1,960	876	866	183	156	55
30	137	150	135	115	-----	1,150	2,910	883	772	175	135	55
31	245	-----	150	110	-----	1,090	-----	1,010	-----	171	117	-----
TOTAL	3,879	6,861	5,775	4,265	2,899	36,165	49,507	35,740	31,771	10,448	4,487	2,117
MEAN	125	229	186	138	104	1,167	1,650	1,153	1,059	337	145	70.6
MAX	245	413	250	180	110	6,310	2,910	3,610	1,730	698	165	113
MIN	87	150	130	110	94	100	937	537	671	171	117	55
CFSM	.15	.27	.22	.16	.12	1.38	1.95	1.36	1.25	.40	.17	.08
IN.	.17	.30	.25	.19	.13	1.59	2.18	1.57	1.40	.46	.20	.09
AC-FT	7,690	13,610	11,450	8,460	5,760	71,730	98,200	70,890	63,020	20,720	8,900	4,200

CAL YR 1974 TOTAL 278,105 MEAN 762 MAX 9,840 MIN 87 CFSM .90 IN 12.23 AC-FT 551,600
WTR YR 1975 TOTAL 193,914 MEAN 531 MAX 6,310 MIN 55 CFSM .63 IN 8.53 AC-FT 384,600

PEAK DISCHARGE (BASE, 2,500 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-22	2015	13.03	6,990	5-1	1315	11.34	3,770
4-9	0745	10.13	2,670				

05459000 SHELL ROCK RIVER NEAR NORTHWOOD, IOWA

LOCATION.--Lat 43°24'51", long 93°13'14", in NW1/4 NW1/4 sec.9, T.99 N., R.20 W., Worth County, on right bank 50 ft (15 m) downstream from bridge on county highway A27, 1.3 mi (2.1 km) downstream from Drainage ditch 2, 2.0 mi (3.2 km) south of Northwood, 3.7 mi (6.0 km) upstream from Elk Creek, and 84.5 mi (136.0 km) upstream from mouth.

DRAINAGE AREA.--300 mi² (777 km²).

PERIOD OF RECORD.--October 1945 to current year. Prior to April 1948 monthly discharge only, published in WSP 1308.

GAGE.--Water-stage recorder. Datum of gage is 1,175.48 ft (358.59 m) above mean sea level. Prior to May 17, 1956, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--30 years, 146 ft³/s (4.13 m³/s), 6.61 in/yr (168 mm/yr), 105,800 acre-ft/yr (130 hm³/yr); median of yearly mean discharges, 137 ft³/s (3.68 m³/s), 5.9 in/yr (150 mm/yr), 94,200 acre-ft/yr (116 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,440 ft³/s (40.8 m³/s) Apr. 28, gage height, 8.17 ft (2.490 m); minimum daily, 27 ft³/s (0.76 m³/s) Jan. 17-31.
Period of record: Maximum discharge, 3,400 ft³/s (96.3 m³/s) Apr. 8, 1965, gage height, 12.07 ft (3.679 m), backwater from ice; minimum daily, 0.3 ft³/s (8.5 dm³/s) Feb. 17-26, 1959.

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

REVISION (WATER YEARS).--WSP 1308: 1948 (M). WSP 1438: Drainage area.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32	60	44	34	28	32	370	1,180	475	821	61	82
2	30	55	43	35	28	32	365	1,060	460	861	64	77
3	30	51	43	35	29	32	360	1,040	445	793	66	70
4	29	49	42	36	29	32	355	977	558	710	58	65
5	28	48	42	36	29	32	350	884	641	650	52	60
6	31	46	41	36	30	32	350	794	584	619	50	57
7	31	44	41	36	30	32	350	710	523	594	47	53
8	32	43	40	35	31	32	480	639	472	514	42	52
9	30	43	39	33	32	32	530	577	422	442	40	53
10	30	48	37	32	32	32	590	523	394	396	44	52
11	34	49	35	31	32	32	690	515	416	346	42	49
12	34	53	34	30	33	32	726	535	640	296	41	51
13	35	53	33	29	33	32	795	500	678	268	38	48
14	37	50	32	29	34	32	843	455	626	240	39	45
15	37	56	32	28	34	32	879	422	605	218	58	44
16	36	48	32	28	34	32	905	377	602	197	58	44
17	34	41	32	27	34	32	903	329	616	178	55	44
18	33	41	32	27	34	32	905	303	675	162	52	42
19	33	40	32	27	34	32	947	297	873	151	58	41
20	32	39	32	27	34	47	900	281	869	147	59	41
21	33	37	33	27	34	72	832	260	797	136	62	42
22	31	36	33	27	34	112	781	267	809	121	168	43
23	31	35	33	27	34	150	867	269	805	113	120	40
24	32	33	33	27	34	210	949	258	731	109	111	38
25	32	38	33	27	34	284	921	248	644	107	324	38
26	32	42	33	27	34	350	883	284	566	93	248	37
27	32	54	33	27	33	400	893	340	566	82	169	36
28	33	51	33	27	33	395	1,350	367	560	78	130	36
29	35	48	33	27	-----	390	1,390	408	505	72	111	37
30	35	46	34	27	-----	380	1,300	475	678	66	100	36
31	41	-----	34	27	-----	375	-----	485	-----	61	91	-----
TOTAL	1,015	1,377	1,103	928	904	3,773	22,759	16,049	18,235	9,641	2,658	1,453
MEAN	32.7	45.9	35.6	29.9	32.3	122	759	518	608	311	85.7	48.4
MAX	41	60	44	36	34	400	1,390	1,180	873	861	324	82
MIN	28	33	32	27	28	32	350	248	394	61	38	36
CFSM	.11	.15	.12	.10	.11	.41	2.53	1.73	2.03	1.04	.29	.16
IN.	.13	.17	.14	.12	.11	.47	2.82	1.99	2.26	1.20	.33	.18
AC-FT	2,010	2,730	2,190	1,840	1,790	7,480	45,140	31,830	36,170	19,120	5,270	2,880

CAL YR 1974 TOTAL 71,475 MEAN 196 MAX 965 MIN 28 CFSM .65 IN 8.86 AC-FT 141,800
WTR YR 1975 TOTAL 75,895 MEAN 219 MAX 1,390 MIN 27 CFSM .73 IN 9.91 AC-FT 158,500

PEAK DISCHARGE (BASE, 700 FT²/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
4-11	--	--	* 780	4-28	1145	8.17	1,440
4-16	2245	7.02	913	6-19	1615	6.97	893
4-19	0600	7.11	950	6-22	2215	6.82	833
4-24	0415	7.11	950	7-1	2400	6.94	881

* About.

05459500 WINNEBAGO RIVER AT MASON CITY, IOWA

LOCATION.--Lat 43°09'54", long 93°11'33", in NE1/4 NW1/4 sec.3, T.96 N., R.20 W., Cerro Gordo County, on right bank 650 ft (198 m) upstream from Thirteenth Street Bridge in Mason City, 0.1 mi (0.2 km) downstream from Calmus Creek, and 1.0 mi (1.6 km) upstream from Willow Creek.

DRAINAGE AREA.--523 mi² (1,362 km²).

PERIOD OF RECORD.--October 1932 to current year. Prior to December 1932, monthly discharge only, published in WSP 1308. Prior to October 1959, published as Lime Creek at Mason City.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,069.59 ft (326.01 m) above mean sea level. Prior to Oct. 15, 1934, nonrecording gage at datum 6.47 ft (1.97 m) lower. Oct. 15 to Nov. 6, 1934, nonrecording gage at different datum, and Nov. 7, 1934, to Mar. 22, 1935, nonrecording gage at present datum.

AVERAGE DISCHARGE.--43 years, 241 ft³/s (6.83 m³/s), 6.22 in/yr (158 mm/yr), 174,600 acre-ft/yr (215 hm³/yr); median of yearly mean discharges, 210 ft³/s (5.95 m³/s), 5.4 in/yr (137 mm/yr), 152,000 acre-ft/yr (187 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 5,130 ft³/s (145 m³/s) Apr. 28, gage height, 10.48 ft (3.194 m), from floodmark; minimum daily, 22 ft³/s (0.62 m³/s) Jan. 14.

Period of record: Maximum discharge, 10,800 ft³/s (306 m³/s) Mar. 30, 1933, gage height, 15.7 ft (4.79 m), present datum; minimum daily, 2.5 ft³/s (71 dm³/s) Dec. 29-31, 1933, Aug. 5, 1934.

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

REVISIONS (WATER YEARS).--WSP 825: 1935-36, WSP 1438: Drainage area. WSP 1558: 1933-37, 1943 (M), 1945, 1948.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	56	130	28	43	24	28	430	1,840	490	613	88	115
2	57	125	28	41	24	27	390	1,550	470	559	100	120
3	62	95	28	42	24	27	350	1,520	475	537	91	103
4	71	86	27	44	23	26	350	1,360	632	530	81	92
5	76	79	27	44	23	27	365	1,160	790	544	78	93
6	79	75	27	47	23	27	500	998	706	568	76	86
7	77	70	27	40	23	27	650	874	659	540	72	77
8	77	68	27	37	23	27	740	796	615	503	70	70
9	76	67	28	34	23	27	749	730	610	464	68	75
10	70	75	28	31	23	27	711	664	676	427	65	77
11	98	81	28	27	23	27	809	760	816	396	65	61
12	63	79	28	25	24	27	1,060	933	1,350	371	64	67
13	61	72	28	23	23	27	996	796	1,190	348	64	66
14	69	53	28	22	23	27	1,040	706	1,050	329	60	63
15	65	44	28	23	23	28	1,080	626	1,190	306	61	65
16	63	52	28	25	23	30	1,050	566	1,150	281	61	64
17	63	64	28	25	23	40	1,030	516	1,110	256	62	63
18	63	70	29	25	23	58	1,060	475	1,190	231	64	65
19	56	74	30	25	23	170	1,370	445	1,500	207	102	66
20	55	70	31	25	24	690	1,250	420	1,240	183	79	63
21	53	68	32	26	25	1,200	1,150	395	1,050	168	72	57
22	54	66	34	26	26	1,160	1,080	375	1,260	160	319	57
23	55	67	35	26	26	1,130	1,270	360	1,160	154	254	59
24	57	61	36	26	26	940	1,230	337	938	152	203	58
25	60	43	38	27	28	720	1,110	319	829	133	622	55
26	56	37	40	27	28	520	1,050	332	738	127	463	53
27	55	32	43	27	26	450	1,120	337	730	117	298	53
28	55	31	44	27	27	400	4,200	370	657	106	224	56
29	64	30	45	27	-----	470	2,930	445	585	98	181	64
30	66	29	44	26	-----	430	2,230	510	803	94	147	68
31	95	-----	44	25	-----	450	-----	510	-----	90	126	-----
TOTAL	2,027	1,993	996	938	677	9,264	33,350	22,025	26,659	9,592	4,380	2,131
MEAN	65.4	66.4	32.1	30.3	24.2	299	1,112	710	889	309	141	71.0
MAX	98	130	45	47	28	1,200	4,200	1,840	1,500	613	622	120
MIN	53	29	27	22	23	26	350	319	470	90	60	53
CFSM	.12	.13	.06	.06	.05	.57	2.11	1.35	1.69	.59	.27	.14
IN.	.14	.14	.07	.07	.05	.66	2.36	1.56	1.89	.68	.31	.15
AC-FT	4,020	3,950	1,980	1,860	1,340	18,380	66,150	43,690	52,880	19,030	8,690	4,230

CAL YR 1974 TOTAL 106,637 MEAN 292 MAX 1,650 MIN 27 CFSM .56 IN 7.54 AC-FT 211,500
WTR YR 1975 TOTAL 114,032 MEAN 312 MAX 4,200 MIN 22 CFSM .59 IN 8.06 AC-FT 226,200

PEAK DISCHARGE (BASE, 2,000 FT³/S).--Apr. 28 (0800) 5,130 ft³/s (10.48 ft).

IOWA RIVER BASIN

05460000 CLEAR LAKE AT CLEAR LAKE, IOWA

LOCATION.--Lat 43°08'01", long 93°22'57", in SE1/4 NE1/4 sec.13, T.96 N., R.22 W., Cerro Gordo County, at the public bathing beach in the town of Clear Lake near dam across Clear Creek.

DRAINAGE AREA.--22.6 mi² (58.5 km²).

PERIOD OF RECORD.--May 1933 to current year. No winter records 1933-52. Record fragmentary Nov. 1952 to June 1959.

GAGE.--Water-stage recorder. Datum of gage is 1,222.24 ft (372.54 m) above mean sea level, and 4.60 ft (1.40 m) below crest of spillway of dam at outlet. See WSP 1708 for history of changes prior to June 25, 1959.

EXTREMES.--Current year: Maximum gage height, 5.17 ft (1.576 m) June 30; minimum, 3.68 ft (1.122 m) Nov. 26.
Period of record: Maximum gage height observed, 5.94 ft (1.811 m) July 3, 1951; minimum observed, 1.16 ft (0.354 m) Dec. 20, 22-24, 1958.

REMARKS.--Lake is formed by concrete dam on Clear Creek with ungated overflow spillway 50 ft (15 m) long at elevation 1,226.84 ft (373.941 m) above mean sea level. Dam constructed in 1903. A previous outlet works had been constructed in 1887. Lake is used for conservation and recreation. Area of lake is approximately 3,600 acres (1,460 km²).

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.89	3.87	3.79			3.96	4.25	5.02	4.85	5.08	4.35	4.24
2	3.88	3.85	3.78			3.96	4.26	5.05	4.85	5.05	4.35	4.22
3	3.87	3.85	3.78			3.96	4.26	5.08	4.86	5.04	4.35	4.23
4	3.87	3.84	3.77			3.96	4.26	5.08	4.91	4.98	4.34	4.20
5	3.87	3.82	3.77			3.95	4.29	5.09	4.93	4.99	4.31	4.19
6	3.91	3.83	3.77	3.86		3.95	4.33	5.07	4.88	4.95	4.28	4.19
7	3.87	3.83	3.79	3.86		3.96	4.28	5.05	4.83	4.92	4.26	4.19
8	3.87	3.82	3.78	3.86		3.95	4.28	5.05	4.80	4.89	4.25	4.14
9	3.83	3.81	3.77	3.86		3.95	4.32	5.04	4.80	4.85	4.21	4.12
10	3.86	3.83	3.77	3.88		3.95	4.33	5.03	4.84	4.81	4.24	4.13
11	3.87	3.85	3.77			3.95	4.34	5.10	4.90	4.78	4.20	4.14
12	3.84	3.84	3.76			3.95	4.35	5.12	4.99	4.74	4.18	4.11
13	3.85	3.81	3.77			3.95	4.35	5.12	4.95	4.71	4.17	4.08
14	3.87	3.82	3.77			3.95	4.37	5.12	4.93	4.70	4.14	4.05
15	3.85	3.80	3.82			3.95	4.38	5.08	4.97	4.70	4.13	4.05
16	3.85	3.78	3.83			3.97	4.40	5.05	4.96	4.68	4.13	4.03
17	3.82	3.78	3.83			4.10	4.42	5.05	4.98	4.67	4.12	4.01
18	3.82	3.78	3.82			4.06	4.46	5.01	4.97	4.66	4.09	4.04
19	3.81	3.79	3.83			4.20	4.51	5.03	5.04	4.64	4.10	4.05
20	3.77	3.80	3.82			4.03	4.52	5.02	5.05	4.60	4.11	4.01
21	3.79	3.77	3.82			4.04	4.52	4.97	5.07	4.56	4.14	3.99
22	3.77	3.76	3.81			4.05	4.53	4.93	5.14	4.55	4.33	3.95
23	3.75	3.77	3.82			4.07	4.61	4.95	5.13	4.52	4.35	3.94
24	3.75	3.76	3.81			4.11	4.63	4.92	5.12	4.52	4.33	3.91
25	3.75	3.75	3.82		3.97	4.12	4.64	4.90	5.12	4.48	4.36	3.91
26	3.74	3.75	3.80		3.96	4.12	4.63	4.91	5.12	4.49	4.34	3.90
27	3.75	3.77	3.82		3.96	4.17	4.67	4.87	5.12	4.45	4.27	3.90
28	3.74	3.75	3.81		3.96	4.20	5.05	4.86	5.10	4.43	4.28	3.90
29	3.75	3.74	3.81		-----	-----	5.03	4.89	5.08	4.40	4.27	3.92
30	3.76	3.78	3.82		-----	-----	5.01	4.89	5.07	4.38	4.25	3.95
31	3.83	-----	3.82		-----	4.26	-----	4.89	-----	4.36	4.24	-----
MEAN	3.82	3.80	3.80				4.48	5.01	4.98	4.70	4.24	4.06
MAX	3.91	3.87	3.83				5.05	5.12	5.14	5.08	4.36	4.24
MIN	3.74	3.74	3.76				4.25	4.86	4.80	4.36	4.09	3.90

05462000 SHELL ROCK RIVER AT SHELL ROCK, IOWA

LOCATION.--Lat 42°39'10", long 92°35'46", in NE1/4 NW1/4 sec.11, T.91 N., R.15 W., Butler County, on right bank 400 ft (122 m) upstream from bridge on county highway C45 in Shell Rock, 2.2 mi (3.5 km) downstream from Curry Creek, and 10.4 mi (16.7 km) upstream from mouth.

DRAINAGE AREA.--1,746 mi² (4,522 km²).

PERIOD OF RECORD.--June 1953 to current year. Prior to July 1953, monthly discharge only, published in WSP 1728.

GAGE.--Water-stage recorder. Rockfill dam since Oct. 19, 1957. Datum of gage is 885.34 ft (269.85 m) above mean sea level.

AVERAGE DISCHARGE.--22 years, 883 ft³/s (25.0 m³/s), 6.87 in/yr (174 mm/yr), 639,700 acre-ft/yr (789 hm³/yr); median of yearly mean discharges, 750 ft³/s (21.2 m³/s), 5.8 in/yr (147 mm/yr), 543,000 acre-ft/yr (670 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 12,100 ft³/s (343 m³/s) Apr. 29, gage height, 12.36 ft (3.767 m); minimum daily, 90 ft³/s (2.55 m³/s) Jan. 11.

Period of record: Maximum discharge, 33,500 ft³/s (949 m³/s) Mar. 28, 1961, gage height, 15.26 ft (4.956 m); minimum daily, 39 ft³/s (1.10 m³/s) Feb. 4-9, 1959.

Flood in 1856 reached a stage of 17.7 ft (5.39 m) at bridge 400 ft (122 m) downstream, from information furnished by Corps of Engineers, discharge, about 45,000 ft³/s (1,270 m³/s).

REMARKS.--Records good except those for winter period, which are poor. Diurnal fluctuation at low stages caused by powerplant at Greene.

REVISIONS.--WSP 1438: Drainage area.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	310	450	340	170	220	190	1,820	6,160	1,750	2,560	406	615
2	305	500	222	150	220	160	1,680	4,910	1,710	2,250	393	561
3	305	500	270	200	220	170	1,570	4,170	1,680	2,160	407	532
4	315	460	290	210	220	180	1,520	4,030	1,700	2,070	410	491
5	340	420	242	230	210	200	1,540	3,620	1,890	2,000	371	479
6	390	400	340	260	150	190	1,920	3,130	2,130	1,990	350	443
7	400	380	365	240	160	170	2,290	2,770	2,020	1,920	326	412
8	375	365	162	250	160	150	2,440	2,500	1,920	1,840	306	375
9	370	355	230	250	140	180	2,410	2,340	1,850	1,730	296	351
10	360	370	290	270	130	200	2,370	2,200	1,800	1,620	291	343
11	335	380	295	90	130	210	2,440	2,130	1,820	1,520	288	343
12	345	385	285	98	150	200	2,820	2,320	2,000	1,430	272	326
13	385	375	305	300	140	170	2,860	2,440	2,610	1,350	277	288
14	330	375	330	310	130	160	2,670	2,290	2,550	1,280	252	284
15	310	350	375	270	140	190	2,800	2,130	2,430	1,220	244	283
16	310	290	370	240	170	217	2,890	1,990	2,490	1,150	238	275
17	305	295	270	240	200	244	2,870	1,880	2,440	1,070	241	270
18	295	360	260	260	200	220	2,810	1,780	2,420	985	265	273
19	280	365	220	280	190	507	2,910	1,690	2,810	916	342	265
20	262	360	250	250	190	1,490	3,260	1,630	3,350	846	437	254
21	242	335	260	230	200	3,040	2,970	1,580	2,990	775	414	249
22	242	315	270	230	210	3,060	2,710	1,520	3,180	739	374	246
23	242	315	270	220	210	2,770	2,650	1,470	3,400	707	1,110	241
24	242	340	230	240	200	2,810	3,140	1,450	3,150	689	1,090	239
25	254	325	190	260	210	2,720	3,060	1,420	2,690	664	903	233
26	238	270	200	250	200	2,020	2,820	1,400	2,410	610	1,750	232
27	242	230	260	250	190	1,590	2,710	1,390	2,240	578	1,510	215
28	242	210	250	240	200	1,440	4,410	1,410	2,300	531	1,140	205
29	266	250	240	240	-----	1,500	10,500	1,510	2,140	488	956	212
30	290	254	210	230	-----	1,630	9,540	1,630	2,040	466	810	219
31	430	-----	240	230	-----	1,650	-----	1,730	-----	433	699	-----
TOTAL	9,557	10,579	8,341	7,188	5,090	29,628	92,400	72,620	69,910	38,587	17,168	9,754
MEAN	308	353	269	232	182	956	3,080	2,343	2,330	1,245	554	325
MAX	430	500	375	310	220	3,060	10,500	6,160	3,400	2,560	1,750	615
MIN	238	210	162	90	130	150	1,520	1,390	1,680	433	238	205
CFSM	.18	.20	.15	.13	.10	.55	1.76	1.34	1.33	.71	.32	.19
IN.	.20	.23	.18	.15	.11	.63	1.97	1.55	1.49	.82	.37	.21
AC-FT	18,960	20,980	16,540	14,260	10,100	58,770	183,300	144,000	138,700	76,540	34,050	19,350

CAL YR 1974 TOTAL 460,429 MEAN 1,261 MAX 11,500 MIN 162 CFSM .72 IN 9.81 AC-FT 913,300
WTR YR 1975 TOTAL 370,822 MEAN 1,016 MAX 10,500 MIN 90 CFSM .58 IN 7.90 AC-FT 735,500

PEAK DISCHARGE (BASE, 4,000 FT³/S).--Apr. 29 (1900) 12,100 ft³/s (12.36 ft).

IOWA RIVER BASIN

05463000 BEAVER CREEK AT NEW HARTFORD, IOWA

LOCATION.--Lat 42°30'50", long 92°37'55", in SE1/4 SE1/4 sec.28, T.90 N., R.15 W., Butler County, on downstream side of center bridge pier of bridge on county highway T56, 0.2 mi (0.3 km) north of New Hartford, and 8 mi (12.9 km) upstream from mouth.

DRAINAGE AREA.--347 mi² (899 km²).

PERIOD OF RECORD.--October 1945 to current year. Prior to April 1948, monthly discharge only, published in WSP 1308.

GAGE.--Water-stage recorder. Datum of gage is 882.44 ft (268.97 m) above mean sea level. Prior to July 14, 1959, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--30 years, 190 ft³/s (5.38 m³/s), 7.44 in/yr (189 mm/yr), 137,700 acre-ft/yr (170 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,970 ft³/s (141 m³/s) Mar. 21, gage height, 10.61 ft (3.234 m); minimum daily, 26 ft³/s (0.74 m³/s) Sept. 24-29.

Period of record: Maximum discharge, 18,000 ft³/s (510 m³/s) June 13, 1947, gage height, 13.5 ft (4.11 m), from graph based on gage readings, from rating curve extended above 14,000 ft³/s (396 m³/s); minimum daily, 2.3 ft³/s (65 dm³/s) Jan. 20-24, 1956.

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

REVISIONS (WATER YEARS).--WSP 1438: Drainage area. WSP 1558: 1948-49. WSP 1708: 1947 (M).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	44	709	187	130	66	51	1,020	564	169	174	53	38
2	45	454	169	145	65	52	667	475	162	162	53	37
3	45	295	144	150	64	53	345	453	162	150	52	36
4	46	234	126	130	63	54	397	430	172	140	51	35
5	47	203	124	120	62	55	449	390	192	136	50	36
6	56	181	120	115	61	56	959	351	169	137	48	37
7	63	166	121	110	60	56	1,170	323	154	127	47	35
8	57	157	129	105	58	58	832	305	146	119	46	33
9	53	150	148	100	58	59	864	290	147	113	46	32
10	52	151	150	100	57	60	1,420	273	165	109	46	32
11	54	154	129	160	56	61	777	284	177	103	46	31
12	60	152	114	170	56	62	607	320	218	97	46	30
13	60	147	94	180	56	62	557	308	224	94	49	30
14	60	141	92	180	56	63	566	286	202	90	48	29
15	58	136	101	150	56	64	694	266	200	87	44	29
16	57	140	99	120	57	66	675	248	193	84	43	29
17	59	134	86	105	58	70	658	237	223	80	42	29
18	56	131	76	100	60	140	607	228	239	76	41	29
19	56	129	82	94	59	550	590	221	347	72	43	28
20	53	127	90	88	58	1,500	527	212	299	71	47	28
21	55	121	97	84	57	4,380	476	204	252	68	45	28
22	56	120	110	80	56	3,230	532	202	421	66	42	28
23	56	120	120	78	56	1,910	609	193	736	68	40	27
24	56	119	130	76	56	1,220	662	186	481	71	39	26
25	56	112	150	74	54	853	559	178	359	70	43	26
26	57	104	140	72	52	540	500	179	297	64	41	26
27	57	114	115	71	51	405	674	170	262	62	38	26
28	59	153	100	70	50	373	994	166	231	60	37	26
29	64	147	95	69	-----	443	1,180	177	208	58	50	26
30	69	203	100	68	-----	332	761	184	190	57	47	27
31	339	-----	100	67	-----	420	-----	178	-----	55	41	-----
TOTAL	2,005	5,404	3,638	3,361	1,618	17,298	21,328	8,481	7,397	2,920	1,404	909
MEAN	64.7	180	117	108	57.8	558	711	274	247	94.2	45.3	30.3
MAX	339	709	187	180	66	4,380	1,420	564	736	174	53	38
MIN	44	104	76	67	50	51	345	166	146	55	37	26
CFSM	.19	.52	.34	.31	.17	1.61	2.05	.79	.71	.27	.13	.09
IN.	.21	.58	.39	.36	.17	1.85	2.29	.91	.79	.31	.15	.10
AC-FT	3,980	10,720	7,220	6,670	3,210	34,310	42,300	16,820	14,670	5,790	2,780	1,800

CAL YR 1974 TOTAL 110,055 MEAN 302 MAX 7,540 MIN 44 CFSM .87 IN 11.80 AC-FT 218,300

WTR YR 1975 TOTAL 75,763 MEAN 208 MAX 4,380 MIN 26 CFSM .60 IN 8.12 AC-FT 150,300

PEAK DISCHARGE (BASE, 1,400 FT³/S).--Mar. 21 (0930) 4,970 ft³/s (10.61 ft); Apr. 10 (0745) 1,610 ft³/s (8.24 ft).

05483500 BLACK HAWK CREEK AT HUDSON, IOWA

LOCATION.--Lat 42°24'28", long 92°27'47", in SW1/4 NE1/4 sec.27, T.88 N., R.14 W., Black Hawk County, on left bank 35 ft (11 m) downstream from bridge on State Highway 58, 0.2 mi (0.3 km) northwest of Chicago Great Western Railway tracks at the west edge of Hudson, 4.5 mi (7.2 km) upstream from Prescotts Creek, and 9.6 mi (15.4 km) upstream from mouth.

DRAINAGE AREA.--303 mi² (785 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 865.03 ft (263.66 m) above mean sea level.

AVERAGE DISCHARGE.--23 years, 163 ft³/s (4.62 m³/s), 7.31 in/yr (186 mm/yr), 118,100 acre-ft/yr (146 hm³/yr); median of yearly mean discharges, 140 ft³/s (3.96 m³/s), 6.3 in/yr (160 mm/yr), 101,000 acre-ft/yr (125 hm³/yr).

EXTREMES.--Current year: Maximum discharge, about 4,300 ft³/s (122 m³/s) Mar. 21, gage height, 16.22 ft (4.944 m), backwater from ice; minimum daily, 21 ft³/s (0.59 m³/s) Sept. 24-28.

Period of record: Maximum discharge, 19,300 ft³/s (547 m³/s) July 9, 1969, gage height, 18.23 ft (5.557 m); minimum daily, 1.9 ft³/s (54 dm³/s) Jan. 21-23, July 30, 1956.

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

REVISIONS.--WSP 1438: Drainage area.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42	744	74	67	77	58	1,340	488	142	209	44	33
2	40	457	75	60	76	58	835	428	137	188	42	31
3	41	305	90	70	77	58	367	394	139	176	41	29
4	42	238	85	85	78	58	390	360	144	165	39	28
5	43	199	80	90	79	58	402	335	159	158	37	30
6	61	173	85	88	70	58	979	305	139	160	36	31
7	68	155	130	80	69	57	1,600	283	127	144	35	28
8	55	143	150	78	68	56	1,390	272	121	131	33	26
9	50	134	140	76	66	58	1,160	256	123	122	35	25
10	48	136	180	85	64	60	2,150	243	138	119	34	26
11	56	148	150	100	62	62	983	257	142	111	36	25
12	96	150	125	160	60	64	642	305	153	105	37	24
13	73	142	110	180	58	65	562	281	156	100	39	24
14	66	129	100	160	56	66	539	262	154	96	36	23
15	61	121	110	140	56	67	581	239	570	91	33	24
16	59	121	130	130	57	68	550	222	464	85	32	24
17	56	114	120	120	58	80	547	209	588	80	32	24
18	54	110	130	110	59	120	505	202	608	75	31	24
19	51	108	120	100	60	500	483	196	1,010	72	35	23
20	51	103	115	95	61	1,800	428	187	573	68	39	22
21	50	97	110	93	62	4,000	381	183	462	64	33	22
22	50	98	100	92	63	3,000	401	178	799	61	31	22
23	49	97	95	91	64	2,300	436	172	568	68	30	22
24	49	93	83	90	58	1,820	526	165	503	74	28	21
25	50	87	70	92	50	578	437	160	381	64	39	21
26	48	83	100	90	52	474	371	155	334	59	36	21
27	48	97	110	88	56	400	405	147	297	55	30	21
28	49	85	100	85	58	358	1,100	144	264	52	29	21
29	56	88	90	82	-----	313	927	155	236	49	56	22
30	63	85	77	80	-----	315	592	155	224	47	54	23
31	377	-----	73	78	-----	506	-----	146	-----	45	38	-----
TOTAL	2,002	4,840	3,307	3,035	1,774	17,635	22,009	7,484	9,855	3,093	1,130	740
MEAN	64.6	161	107	97.9	63.4	569	734	241	329	99.8	36.5	24.7
MAX	377	744	180	180	79	4,000	2,150	488	1,010	209	56	33
MIN	40	83	70	60	50	56	367	144	121	45	28	21
CFSM	.21	.53	.35	.32	.21	1.88	2.42	.80	1.09	.33	.12	.08
IN.	.25	.59	.41	.37	.22	2.17	2.70	.92	1.21	.38	.14	.09
AC-FT	3,970	9,600	6,560	6,020	3,520	34,980	43,650	14,840	19,550	6,130	2,240	1,470

CAL YR 1974 TOTAL 87,974 MEAN 241 MAX 5,110 MIN 37 CFSM .80 IN 10.80 AC-FT 174,500
WTR YR 1975 TOTAL 76,904 MEAN 211 MAX 4,000 MIN 21 CFSM .70 IN 9.44 AC-FT 152,500

PEAK DISCHARGE (BASE, 1,200 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-21	--	--	* 4,300	4-10	0700	14.29	2,300
4-2	0015	12.94	1,610	4-28	2215	12.17	1,370
4-7	2400	13.42	1,830				

* About.

IOWA RIVER BASIN

05464000 CEDAR RIVER AT WATERLOO, IOWA

LOCATION.--Lat 42°29'44", long 92°20'03", in NW1/4 NW1/4 sec.25, T.89 N., R.13 W., Black Hawk County, on left bank at foot of East Seventh Street, 0.3 mi (0.5 km) upstream from Eleventh Avenue Bridge in Waterloo, 1.1 mi (1.8 km) downstream from Black Hawk Creek, and at mile 187.9 (302.3 km) above mouth of Iowa River.

DRAINAGE AREA.--5,146 mi² (13,328 km²).

PERIOD OF RECORD.--October 1940 to current year. Prior to April 1941, monthly discharge only, published in WSP 1308.

GAGE.--Water-stage recorder. Datum of gage is 824.14 ft (251.20 m) above mean sea level.

AVERAGE DISCHARGE.--35 years, 2,798 ft³/s (79.2 m³/s), 7.38 in/yr (187 mm/yr), 2,027,000 acre-ft/yr (2,500 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 24,100 ft³/s (683 m³/s) May 1, gage height, 12.86 ft (3.920 m); minimum daily, 587 ft³/s (16.6 m³/s) Jan. 12.

Period of record: Maximum discharge, 75,700 ft³/s (2,170 m³/s) Mar. 29, 1951, gage height, 21.85 ft (6.663 m); minimum daily, 152 ft³/s (4.30 m³/s) Jan. 28, 1959.

Flood of Mar. 16, 1929, reached a stage of about 20 ft (6 m), determined by Corps of Engineers, from information by City of Waterloo, discharge, 65,000 ft³/s (1,840 m³/s). Flood of Apr. 2, 1933, reached a stage about 0.5 ft (0.15 m) lower than Mar. 16, 1929, from information by City of Waterloo, discharge, 61,000 ft³/s (1,730 m³/s).

REMARKS.--Records good except those for winter period, which are fair. Slight diurnal fluctuation during low flow caused by powerplant above station.

REVISIONS (WATER YEARS).--WSP 1438: Drainage area. WSP 1558: 1950.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,070	2,910	1,080	931	897	848	7,470	23,300	4,450	5,840	1,200	1,590
2	997	2,780	1,010	710	885	935	7,490	18,100	4,430	6,420	1,130	1,500
3	949	2,310	993	741	885	803	5,220	13,100	4,150	7,180	1,030	1,370
4	956	2,040	1,200	855	902	848	4,810	10,700	4,020	5,780	1,080	1,320
5	968	1,840	1,050	906	870	852	4,880	9,800	3,990	4,650	1,150	1,340
6	1,110	1,700	1,390	1,080	790	843	6,290	9,330	4,750	4,440	1,120	1,210
7	1,080	1,590	1,460	1,070	786	790	8,330	8,690	5,260	4,280	1,080	1,160
8	1,220	1,520	1,240	1,060	813	763	9,610	7,680	4,820	4,090	1,050	1,130
9	1,070	1,460	864	1,090	758	742	10,000	6,780	4,270	3,780	1,040	1,120
10	1,040	1,460	1,140	1,170	775	833	11,700	6,100	4,000	3,410	1,070	1,070
11	1,340	1,480	1,380	818	829	838	12,200	5,820	3,960	3,090	1,100	1,030
12	1,110	1,460	1,340	587	800	821	10,000	5,860	4,090	2,860	1,080	1,010
13	1,160	1,450	1,350	900	792	756	9,550	6,220	4,880	2,720	1,040	984
14	1,180	1,400	1,280	1,100	789	752	9,360	6,450	5,720	2,590	1,040	942
15	1,170	1,350	1,350	1,070	805	810	9,600	6,310	6,460	2,450	1,040	964
16	1,160	1,280	1,390	1,060	808	824	10,100	5,600	6,590	2,320	1,010	987
17	1,130	1,280	1,300	1,050	821	885	10,100	4,980	6,460	2,190	980	957
18	1,110	1,290	1,160	1,040	823	1,420	9,700	4,550	6,200	2,060	975	947
19	1,080	1,320	1,100	1,090	806	2,310	9,240	4,160	6,720	1,930	1,180	952
20	1,060	1,280	1,020	1,140	816	6,420	9,140	3,950	7,180	1,820	1,180	887
21	1,050	1,250	1,070	975	868	13,200	9,300	3,900	8,140	1,760	1,230	890
22	1,050	1,360	1,160	942	901	17,600	9,250	3,720	9,440	1,750	1,180	898
23	1,040	1,220	1,240	922	818	17,700	8,750	2,920	9,710	1,630	1,320	915
24	1,040	1,210	1,130	944	829	16,800	8,590	3,090	9,190	1,630	2,420	882
25	1,030	1,300	1,080	942	861	14,900	8,780	3,200	8,150	1,540	2,380	871
26	1,020	1,170	863	958	837	12,100	9,170	3,140	7,200	1,530	2,290	857
27	1,020	1,120	1,170	942	824	10,300	9,400	3,200	6,230	1,460	3,550	855
28	975	1,060	1,230	944	855	7,750	9,950	3,400	5,700	1,420	3,380	833
29	962	1,040	1,150	934	-----	6,070	13,200	4,220	5,990	1,370	2,980	873
30	1,180	1,070	990	919	-----	5,690	19,500	4,400	6,440	1,340	2,020	907
31	1,880	-----	1,100	887	-----	5,720	-----	4,350	-----	1,400	1,770	-----
TOTAL	34,207	45,000	36,280	29,777	23,243	151,923	280,690	207,020	178,590	90,730	46,095	31,251
MEAN	1,103	1,500	1,170	961	830	4,901	9,356	6,678	5,953	2,927	1,487	1,042
MAX	1,880	2,910	1,460	1,170	902	17,700	19,500	23,300	9,710	7,180	3,550	1,590
MIN	949	1,040	863	587	758	742	4,810	2,920	3,960	1,340	975	833
CFSM	.21	.29	.23	.19	.16	.95	1.82	1.30	1.16	.57	.29	.20
IN.	.25	.33	.26	.22	.17	1.10	2.03	1.50	1.29	.66	.33	.23
AC-FT	67,850	89,260	71,960	59,060	46,100	301,300	556,700	410,600	354,200	180,000	91,430	61,990

CAL YR 1974 TOTAL 1,466,177 MEAN 4,017 MAX 34,300 MIN 863 CFSM .78 IN 10.60 AC-FT 2,908,000
WTR YR 1975 TOTAL 1,154,806 MEAN 3,164 MAX 23,300 MIN 587 CFSM .61 IN 8.35 AC-FT 2,291,000

PEAK DISCHARGE (BASE, 13,000 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-22	0445	10.77	17,800	5-1	0730	12.86	24,100
4-11	0145	9.19	13,000				

05464500 CEDAR RIVER AT CEDAR RAPIDS, IOWA

LOCATION.--Lat 41°58'14", long 91°40'01", in SE1/4 NW1/4 sec.28, T.83 N., R.7 W., Linn County, on right bank 400 ft (122 m) upstream from bridge on Eighth Avenue in Cedar Rapids, 2.7 mi (4.3 km) upstream from Prairie Creek, and at mile 112.7 (181.3 km) upstream from mouth of Iowa River.

DRAINAGE AREA.--6,510 mi² (16,861 km²).

PERIOD OF RECORD.--October 1902 to current year. Monthly discharge only for some periods, published in WSP 1308.

GAGE.--Water-stage recorder. Datum of gage is 700.47 ft (213.50 m) above mean sea level. Prior to Aug. 20, 1920, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--73 years, 3,276 ft³/s (92.8 m³/s), 6.83 in/yr (173 mm/yr), 2,373,000 acre-ft/yr (2,930 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 32,800 ft³/s (929 m³/s) Mar. 24, gage height, 10.84 ft (3.304 m); minimum daily, 760 ft³/s (21.5 m³/s) Sept. 26 (result of gate repair at dam 0.6 mi (1 km) upstream).
Period of record: Maximum discharge, 73,000 ft³/s (2,070 m³/s) Mar. 31, 1961, gage height, 19.66 ft (5.992 m); maximum gage height, 20.0 ft (6.10 m) Mar. 18, 1929; minimum discharge, 53 ft³/s (1.50 m³/s) Jan. 6, 1950, caused by construction operations upstream; minimum daily, 212 ft³/s (6.00 m³/s) Dec. 10, 1949.
Flood in June 1851 reached a stage of about 20 ft (6 m), discharge, 65,000 ft³/s (1,840 m³/s), estimated.

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

REVISIONS (WATER YEARS).--WSP 955: 1924. WSP 1308: 1904, 1906-13, 1915, 1917, 1919-24, 1928, 1930. WSP 1438: Drainage area. WSP 1558: 1915-18 (M), 1920 (M), 1922 (M), 1929, 1933, 1943.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,350	2,260	1,590	1,800	1,310	1,330	8,920	15,200	6,120	8,040	1,530	2,280
2	1,250	4,290	1,500	1,500	1,250	1,420	10,000	19,100	5,910	7,700	1,500	1,960
3	1,190	4,930	1,190	1,050	1,270	1,260	10,800	24,300	5,860	7,480	1,360	1,790
4	1,050	4,150	1,190	1,010	1,230	1,140	9,220	23,600	5,690	8,240	1,270	1,660
5	1,140	3,520	1,310	962	1,250	1,180	7,380	17,800	5,400	7,870	1,140	1,650
6	1,390	3,160	1,770	928	1,400	1,370	7,700	13,500	5,170	6,470	1,200	1,560
7	1,700	2,870	2,230	1,330	1,300	1,260	8,780	11,700	5,400	5,740	1,210	1,510
8	1,750	2,640	2,920	1,520	1,400	1,450	10,100	10,800	6,060	5,420	1,170	1,350
9	1,630	2,470	2,030	1,800	1,450	1,280	11,700	9,930	6,100	5,130	1,140	1,290
10	1,630	2,470	1,590	2,050	1,500	1,120	14,100	8,700	5,570	4,820	1,150	1,260
11	1,450	2,530	1,750	2,610	1,150	1,240	14,700	7,990	5,270	4,400	1,160	1,230
12	1,430	2,610	2,210	1,590	1,200	1,410	15,800	7,820	5,100	4,050	1,200	1,180
13	1,800	2,610	2,610	1,270	1,500	1,830	15,900	7,460	5,040	3,680	1,230	1,140
14	1,700	2,470	2,640	1,370	1,400	1,750	13,600	7,480	5,400	3,450	1,160	1,130
15	1,680	2,390	2,980	1,450	1,250	1,530	12,500	7,600	7,060	3,300	1,110	1,090
16	1,630	2,260	2,840	1,700	1,170	1,270	12,100	7,570	9,180	3,120	1,110	1,050
17	1,590	2,160	2,670	1,800	1,150	1,390	12,200	7,180	9,570	2,930	1,110	1,070
18	1,540	2,050	2,400	1,900	1,140	1,730	12,500	6,640	10,500	2,760	1,090	1,090
19	1,480	2,050	2,100	2,000	1,190	4,390	12,500	6,150	10,900	2,620	1,070	1,070
20	1,430	2,050	1,750	2,100	1,220	9,810	12,000	5,740	10,600	2,430	1,110	1,050
21	1,370	1,970	1,680	2,000	1,140	17,900	11,300	5,440	10,300	2,190	1,340	1,030
22	1,350	1,920	1,900	1,850	1,120	21,900	11,000	5,430	9,950	2,170	1,290	999
23	1,330	1,950	1,970	1,700	1,250	27,800	11,100	5,490	10,700	2,240	1,310	983
24	1,310	1,970	2,000	1,520	1,260	31,900	11,000	4,810	13,600	2,190	1,220	998
25	1,330	1,800	1,800	1,590	1,100	28,700	10,500	4,310	15,000	2,050	1,560	1,000
26	1,310	1,750	1,500	1,770	1,350	24,100	10,300	4,450	14,500	1,940	2,530	760
27	1,290	1,820	1,190	1,500	1,460	20,400	10,500	4,280	11,400	1,840	2,330	906
28	1,270	1,680	1,800	1,450	1,160	16,700	11,100	4,180	9,470	1,750	2,810	950
29	1,330	1,610	2,180	1,450	-----	13,900	12,000	4,340	8,070	1,680	3,730	979
30	1,410	1,560	2,180	1,410	-----	12,100	13,400	5,620	7,660	1,610	3,650	950
31	1,500	-----	1,920	1,540	-----	10,300	-----	6,410	-----	1,540	3,140	-----
TOTAL	44,610	73,970	61,390	49,520	35,570	264,860	344,700	281,020	246,650	120,850	48,930	36,965
MEAN	1,439	2,466	1,980	1,597	1,270	8,544	11,490	9,065	8,222	3,898	1,578	1,232
MAX	1,800	4,930	2,980	2,610	1,500	31,900	15,900	24,300	15,000	8,240	3,730	2,280
MIN	1,050	1,560	1,190	928	1,100	1,120	7,380	4,180	5,040	1,540	1,070	760
CFSM	.22	.38	.30	.25	.20	1.31	1.77	1.39	1.26	.60	.24	.19
IN.	.25	.42	.35	.28	.20	1.51	1.97	1.61	1.41	.69	.28	.21
AC-FT	88,480	146,700	121,800	98,220	70,550	525,300	683,700	557,400	489,200	239,700	97,050	73,320

CAL YR 1974 TOTAL 2,036,830 MEAN 5,580 MAX 35,900 MIN 1,050 CFSM .86 IN 11.64 AC-FT 4,040,000
WTR YR 1975 TOTAL 1,609,035 MEAN 4,408 MAX 31,900 MIN 760 CFSM .68 IN 9.19 AC-FT 3,192,000

PEAK DISCHARGE (BASE, 12,000 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-21	0745	10.43	30,900	5-3	2145	9.26	25,600
3-24	1300	10.84	32,800	6-25	2115	7.03	15,600
4-12	2400	7.27	16,400				

IOWA RIVER BASIN

05464640 PRAIRIE CREEK AT FAIRFAX, IOWA

LOCATION.--Lat 41°55'22", long 91°47'02", in SE1/4 SW1/4 sec.9, T.82 N., R.8 W., Linn County, on right bank 12 ft (4 m) upstream from bridge on State Highway 149 at west side of Fairfax, and 10.7 mi (17.2 km) upstream from mouth.

DRAINAGE AREA.--178 mi² (461 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 737.00 ft (224.64 m) above mean sea level.

AVERAGE DISCHARGE.--9 years, 142 ft³/s (4.02 m³/s), 10.83 in/yr (275 mm/yr), 102,900 acre-ft/yr (127 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,350 ft³/s (123 m³/s) Mar. 20, gage height, 11.81 ft (3.600 m); minimum daily, 7.6 ft³/s (0.22 m³/s) Sept. 3, 4.
Period of record: Maximum discharge, 6,160 ft³/s (174 m³/s) May 16, 1974, gage height, 13.66 ft (4.164 m); minimum daily, 3.7 ft³/s (105 dm³/s) Dec. 26, 1966, Jan. 19, 1967.

An outstanding flood occurred in June 1944, stage and discharge unknown.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37	115	35	40	62	44	277	114	160	114	20	8.6
2	35	118	45	65	60	43	156	110	140	105	20	8.4
3	35	84	85	90	58	42	133	111	150	100	21	7.6
4	38	71	70	70	56	41	130	106	130	92	18	7.6
5	37	63	50	80	54	40	136	104	110	91	17	14
6	42	56	52	73	50	40	266	98	100	91	16	21
7	54	51	80	60	47	41	284	92	90	83	14	14
8	47	48	100	45	46	42	214	92	80	78	13	11
9	44	48	95	40	45	43	680	90	85	73	14	9.3
10	41	54	90	50	46	43	863	89	89	70	21	8.6
11	41	86	80	110	48	43	345	90	90	65	16	8.5
12	46	87	70	150	49	43	287	92	88	62	17	8.5
13	46	76	65	160	50	42	252	89	80	59	16	8.0
14	50	65	70	130	51	42	231	87	75	57	15	8.0
15	47	59	90	110	52	43	223	85	350	55	14	8.0
16	47	57	94	100	53	45	209	81	180	50	13	8.7
17	42	57	80	92	54	50	199	81	190	46	13	9.7
18	37	56	70	86	54	190	191	80	450	44	13	10
19	36	56	65	82	54	1,500	190	78	400	41	15	11
20	34	53	60	78	54	2,940	172	78	250	38	16	9.4
21	33	48	57	75	54	3,210	154	78	210	36	37	9.1
22	33	49	54	72	53	2,610	151	81	200	35	19	9.1
23	34	50	52	70	52	1,610	151	76	180	37	12	9.1
24	34	49	50	80	51	1,530	154	75	518	37	8.7	8.9
25	34	41	70	140	50	345	141	74	297	32	8.7	8.1
26	32	54	80	130	48	215	127	77	214	30	9.4	8.0
27	33	63	70	90	47	182	136	70	175	29	8.2	8.2
28	34	56	58	80	45	188	148	75	152	27	8.0	8.8
29	36	65	50	75	-----	247	140	100	135	24	10	10
30	42	30	45	70	-----	163	126	250	124	23	11	11
31	47	-----	42	66	-----	176	-----	190	-----	22	9.9	-----
TOTAL	1,228	1,865	2,074	2,659	1,443	15,404	6,866	2,993	5,492	1,746	463.9	290.2
MEAN	39.6	62.2	66.9	85.8	51.5	497	229	96.5	183	55.3	15.0	9.67
MAX	54	118	100	160	62	3,210	863	250	518	114	37	21
MIN	32	30	35	40	45	40	126	70	75	22	8.0	7.6
CFSM	.22	.35	.38	.48	.29	2.79	1.29	.54	1.03	.32	.08	.05
IN.	.26	.39	.43	.56	.30	3.22	1.43	.63	1.15	.36	.10	.06
AC-FT	2,440	3,700	4,110	5,270	2,860	30,550	13,620	5,940	10,890	3,460	920	576

CAL YR 1974 TOTAL 82,901.0 MEAN 227 MAX 4,100 MIN 24 CFSM 1.28 IN 17.33 AC-FT 164,400
WTR YR 1975 TOTAL 42,524.1 MEAN 117 MAX 3,210 MIN 7.6 CFSM .66 IN 8.89 AC-FT 84,350

PEAK DISCHARGE (BASE, 1,200 FT³/S).--Mar. 20 (2215) 4,350 ft³/s (11.81 ft); Apr. 10 (0345) 1,500 ft³/s (7.34 ft).

05465000 CEDAR RIVER NEAR CONESVILLE, IOWA

LOCATION.--Lat 41°24'36", long 91°17'06", in SW1/4 SW1/4 sec.2, T.76 N., R.4 W., Muscatine County, on right bank 10 ft (3 m) downstream from bridge on county highway G28, 3.4 mi (5.5 km) northeast of Conesville, 5.2 mi (8.4 km) downstream from Wapsinonoc Creek, 10.7 mi (17.2 km) upstream from mouth, and at mile 39.8 (64.0 km) upstream from mouth of Iowa River.

DRAINAGE AREA.--7,785 mi² (20,163 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 581.95 ft (177.38 m) above mean sea level. Prior to Feb. 2, 1940, and Apr. 11, 1952, to July 1, 1954, nonrecording gage, Feb. 2, 1940, to Apr. 10, 1952, and July 2, 1954, to Sept. 16, 1963, water-stage recorder, at site 150 ft (46 m) downstream on left bank at same datum.

AVERAGE DISCHARGE.--36 years, 4,458 ft³/s (126 m³/s), 7.78 in/yr (198 mm/yr), 3,230,000 acre-ft/yr (3,980 hm³/yr); median of yearly mean discharges, 4,180 ft³/s (118 m³/s), 7.3 in/yr (185 mm/yr), 3,030,000 acre-ft/yr (3,740 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 31,600 ft³/s (895 m³/s) Mar. 26, gage height, 13.88 ft (4.231 m); minimum daily, 1,090 ft³/s (30.9 m³/s) Sept. 28.

Period of record: Maximum discharge, 70,800 ft³/s (2,010 m³/s) Apr. 2, 1961, gage height, 16.62 ft (5.066 m); maximum gage height, 16.85 ft (5.136 m) Apr. 12, 1965; minimum daily discharge, 250 ft³/s (7.08 m³/s) Nov. 28, 1955, result of freezeup.

Flood in March 1929 reached a stage of 15.8 ft (4.82 m), from information by local residents to Corps of Engineers.

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

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

REVISIONS (WATER YEARS).--WSP 1438: Drainage area. WSP 1708: 1956.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,790	2,030	2,190	2,410	2,210	1,750	11,300	12,300	6,580	7,710	2,390	3,360
2	1,790	2,260	2,090	2,250	2,170	1,800	10,600	13,400	6,620	7,710	2,360	3,210
3	1,650	2,820	2,030	1,980	2,110	1,850	10,400	15,200	6,570	7,610	2,220	2,590
4	1,600	3,460	1,940	1,620	1,990	1,900	10,900	17,700	6,530	7,260	2,100	2,310
5	1,600	4,280	1,780	1,490	1,900	1,900	10,200	21,300	6,490	7,610	2,000	2,290
6	1,550	3,940	1,790	1,570	1,800	1,770	8,630	21,700	6,170	7,730	1,910	2,340
7	1,680	3,600	2,010	1,420	1,700	1,820	8,860	16,800	5,860	6,760	1,790	2,250
8	1,870	3,350	2,490	1,520	2,000	1,790	9,500	12,500	5,770	5,990	1,710	2,030
9	2,080	3,150	2,750	1,800	2,200	1,590	10,400	11,500	6,170	5,610	1,700	1,920
10	2,060	3,070	2,730	2,120	2,000	1,610	12,100	10,700	6,420	5,330	1,700	1,760
11	2,020	3,160	2,540	2,900	2,200	1,720	13,800	9,640	6,110	5,070	1,700	1,680
12	1,990	3,250	2,290	1,920	2,400	1,730	14,700	8,820	5,810	4,780	1,690	1,620
13	1,890	3,210	2,370	1,330	2,300	1,750	15,100	8,320	5,630	4,520	1,690	1,560
14	2,050	3,200	2,660	1,590	2,100	1,730	15,800	8,150	5,560	4,260	1,690	1,500
15	2,220	3,080	3,000	1,750	2,000	1,750	14,900	7,750	5,720	4,170	1,680	1,460
16	2,120	2,950	3,520	1,490	1,900	1,850	12,800	7,750	6,730	4,000	1,630	1,440
17	2,080	2,890	3,640	2,000	1,900	2,580	12,000	7,710	8,430	3,790	1,570	1,420
18	2,040	2,800	3,370	2,300	1,900	5,970	12,000	7,410	9,300	3,620	1,530	1,390
19	1,990	2,710	3,190	2,400	1,850	10,800	12,300	6,940	10,200	3,490	1,530	1,390
20	1,950	2,640	2,940	2,500	1,800	15,800	12,300	6,490	11,300	3,380	1,590	1,400
21	1,880	2,590	2,630	2,470	1,800	17,700	11,800	6,210	10,700	3,260	1,740	1,340
22	1,840	2,520	2,370	2,500	1,900	19,700	11,500	5,990	10,200	3,120	1,540	1,300
23	1,800	2,490	2,350	2,810	2,000	23,900	11,500	5,760	10,200	2,980	1,650	1,270
24	1,770	2,500	2,340	2,590	2,100	26,300	11,500	5,720	10,500	2,960	1,620	1,230
25	1,770	2,500	2,380	2,780	2,200	29,100	11,500	5,450	13,500	2,940	1,630	1,210
26	1,760	2,380	2,260	2,890	1,900	30,800	11,100	4,990	14,500	2,860	1,630	1,200
27	1,760	2,280	2,070	2,570	1,800	27,900	11,000	4,860	14,700	2,770	1,770	1,190
28	1,730	2,300	1,830	2,590	1,700	24,300	11,400	4,750	12,400	2,670	2,120	1,090
29	1,750	2,260	1,900	2,380	-----	21,600	11,500	4,640	10,000	2,580	2,440	1,130
30	1,830	2,230	2,320	2,400	-----	17,200	11,600	5,550	8,450	2,510	2,780	1,200
31	2,030	-----	2,490	2,290	-----	12,500	-----	5,850	-----	2,450	3,110	-----
TOTAL	57,940	85,900	76,260	66,630	55,830	314,460	352,990	291,850	253,120	141,600	58,210	51,080
MEAN	1,869	2,863	2,460	2,149	1,994	10,140	11,770	9,415	8,437	4,565	1,878	1,703
MAX	2,220	4,280	3,640	2,900	2,400	30,800	15,800	21,700	14,700	7,730	3,110	3,360
MIN	1,550	2,030	1,780	1,330	1,700	1,590	8,630	4,640	5,560	2,450	1,530	1,090
CFSM	.24	.37	.32	.28	.26	1.30	1.51	1.21	1.08	.59	.24	.22
IN	.28	.41	.36	.32	.27	1.50	1.69	1.39	1.21	.68	.28	.24
AC-FT	114,900	170,400	151,300	132,200	110,700	623,700	700,200	578,900	502,100	280,700	115,500	101,300

CAL YR 1974 TOTAL 2,566,240 MEAN 7,031 MAX 40,200 MIN 1,550 CFSM .90 IN 12.26 AC-FT 5,090,000
WTR YR 1975 TOTAL 1,805,770 MEAN 4,947 MAX 30,800 MIN 1,090 CFSM .64 IN 8.63 AC-FT 3,582,000

PEAK DISCHARGE (BASE, 12,000 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-26	0815	13.88	31,600	5-5	2300	13.11	22,100
4-14	1845	12.16	15,900	6-27	0545	11.65	14,900

05470000 SOUTH SKUNK RIVER NEAR AMES, IOWA

LOCATION.--Lat 42°04'05", long 93°37'02", in NW1/4 SW1/4 sec.23, T.84 N., R.24 W., Story County, on left bank 2.5 mi (4.0 km) north of Ames, 3.5 mi (5.6 km) downstream from Keigley Branch, 5.2 mi (8.4 km) upstream from Squaw Creek, and at mile 228.1 (367.0 km) upstream from mouth of Skunk River.

DRAINAGE AREA.--315 mi² (816 km²).

PERIOD OF RECORD.--July 1920 to September 1927, October 1932 to current year. Monthly discharge only for some periods, published in WSP 1308. Prior to October 1966, published as Skunk River near Ames.

GAGE.--Water-stage recorder. Concrete control since July 21, 1934. Datum of gage is 893.61 ft (272.37 m) above mean sea level (Iowa Highway Commission benchmark). Prior to Aug. 25, 1921, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--50 years, 150 ft³/s (4.25 m³/s), 6.47 in/yr (164 mm/yr), 108,700 acre-ft/yr (134 hm³/yr); median of yearly mean discharges, 110 ft³/s (3.12 m³/s) 4.7 in/yr (119 mm/yr), 79,700 acre-ft/yr (98.3 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 5,230 ft³/s (148 m³/s) June 28, gage height, 9.98 ft (3.042 m); minimum daily, 8.5 ft³/s (0.24 m³/s) Oct. 1-4.

Period of record: Maximum discharge, 8,630 ft³/s (244 m³/s) June 10, 1954, gage height, 13.66 ft (4.164 m); maximum gage height, 13.90 ft (4.237 m) May 20, 1944; no flow at times in 1934, 1937, 1953-57.

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

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

REVISIONS (WATER YEARS).--WSP 1438: Drainage area. WSP 1308: 1921, 1925-26, 1934-35 (M), 1937 (M), 1939 (M), 1947-50 (M), WRD Iowa. 1967: 1965, 1974: 1973 (P).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.5	1,030	75	54	42	56	440	537	374	1,120	39	70
2	8.5	659	60	28	41	63	380	473	350	910	37	53
3	8.5	482	90	51	40	61	407	467	441	740	36	37
4	8.5	394	92	61	40	60	475	449	511	626	34	31
5	10	344	90	67	39	58	633	420	515	593	32	46
6	36	301	110	71	35	55	774	382	396	650	29	39
7	73	272	140	51	38	54	689	362	330	554	27	31
8	45	254	75	80	37	52	609	353	306	468	23	25
9	31	238	134	74	37	50	888	335	406	416	22	21
10	24	235	142	89	38	48	862	315	610	367	23	20
11	49	228	132	54	38	47	660	317	791	331	25	20
12	88	212	130	93	38	40	554	329	1,250	295	25	17
13	88	205	139	91	35	36	516	312	905	265	25	15
14	74	190	133	87	32	40	536	297	700	246	18	14
15	62	175	169	81	30	50	687	278	666	221	19	13
16	56	171	146	79	30	90	668	261	596	197	15	14
17	52	166	128	74	30	600	616	247	907	177	14	15
18	46	161	114	70	28	1,580	560	237	1,140	154	15	13
19	40	162	112	66	26	1,810	518	226	1,520	134	23	12
20	37	149	112	62	26	1,800	474	214	1,140	121	24	11
21	33	135	99	60	26	1,280	443	200	810	104	17	10
22	34	132	93	57	26	994	509	197	1,910	93	14	8.8
23	36	134	89	55	30	838	637	193	1,910	103	13	8.8
24	34	116	66	53	30	600	671	186	1,290	103	12	9.0
25	33	106	62	51	30	450	579	177	1,870	82	15	9.2
26	30	100	80	50	43	446	604	166	2,020	76	15	9.6
27	29	98	85	48	47	413	686	149	4,340	70	14	10
28	30	96	75	46	51	440	1,040	161	4,300	62	12	11
29	35	95	72	45	-----	480	937	319	1,970	52	150	13
30	60	88	66	45	-----	420	669	441	1,390	48	359	13
31	869	-----	61	43	-----	380	-----	391	-----	44	123	-----
TOTAL	2,068.0	7,128	3,171	1,946	983	13,391	18,721	9,391	35,664	9,422	1,249	619.4
MEAN	66.7	238	102	62.8	35.1	432	624	303	1,189	304	40.3	20.6
MAX	869	1,030	169	93	51	1,810	1,040	537	4,340	1,120	359	70
MIN	8.5	88	60	28	26	36	380	149	306	44	12	8.8
CFSM	.21	.76	.32	.20	.11	1.37	1.98	.96	3.77	.97	.13	.07
IN.	.24	.84	.37	.23	.12	1.58	2.21	1.11	4.21	1.11	.15	.07
AC-FT	4,100	14,140	6,290	3,860	1,950	26,560	37,130	18,630	70,740	18,690	2,480	1,230

CAL YR 1974 TOTAL 124,058.4 MEAN 340 MAX 5,430 MIN 8.0 CFSM 1.08 IN 14.65 AC-FT 246,100
WTR YR 1975 TOTAL 103,753.4 MEAN 284 MAX 4,340 MIN 8.5 CFSM .90 IN 12.25 AC-FT 205,800

PEAK DISCHARGE (BASE, 1,500 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-20	0330	5.94	2,170	6-25	1000	6.19	2,340
6-19	1515	5.09	1,570	6-28	0530	9.98	5,230
6-22	2245	6.12	2,290				

SKUNK RIVER BASIN

05470500 SQUAW CREEK AT AMES, IOWA

LOCATION.--Lat 42°01'21", long 93°37'45", in NE1/4 NW1/4 sec.10, T.83 N., R.24 W., Story County, on left bank 65 ft (20 m) downstream from Lincoln Way Bridge in Ames, 0.1 mi (0.2 km) downstream from College Creek, and 1.8 mi (2.9 km) upstream from mouth.

DRAINAGE AREA.--204 mi² (528 km²).

PERIOD OF RECORD.--May 1919 to April 1927, May 1965 to current year. Monthly discharge only for some periods, published in WSP 1308.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 881.00 ft (268.53 m) above mean sea level (levels by Iowa State University). Prior to Mar. 11, 1925, nonrecording gage at site 0.6 mi (1.0 km) upstream at different datum. Mar. 11, 1925, to Apr. 30, 1927, nonrecording gage at site 65 ft (20 m) upstream at datum about 4 ft (1 m) higher.

AVERAGE DISCHARGE.--18 years, 122 ft³/s (3.46 m³/s), 8.12 in/yr (206 mm/yr), 88,390 acre-ft/yr (109 hm³/yr); median of yearly mean discharges, 98 ft³/s (2.78 m³/s), 6.5 in/yr (165 mm/yr), 71,000 acre-ft/yr (87.5 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 11,300 ft³/s (320 m³/s) June 27, gage height, 14.00 ft (4.267 m); minimum daily, 2.0 ft³/s (0.057 m³/s), Sept. 29.

Period of record: Maximum discharge, 11,300 ft³/s (320 m³/s) June 27, 1975, gage height, 14.00 ft (4.267 m); no flow at times most years.

Flood of June 4, 1918, reached a stage of 14.5 ft (4.42 m), from flood marks, site and datum used 1919-25, discharge, 6,900 ft³/s (195 m³/s). Flood of Mar. 1, 1965, reached a stage of 10.7 ft (3.26 m), from graph based on gage readings, at present site and datum, discharge, 4,200 ft³/s (119 m³/s).

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

REVISIONS (WATER YEARS).--WSP 1308: Drainage area, 1920-22 (M), 1923, 1924-25 (M), 1926, 1927 (M), WRD Iowa. 1966: 1965, WRD Iowa. 1971: 1970 (M).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.0	436	36	25	26	28	350	366	326	1,040	36	6.6
2	4.3	228	32	21	26	28	319	333	316	787	33	5.5
3	4.2	166	40	30	26	27	273	319	496	609	32	6.0
4	7.6	139	43	38	25	27	310	302	436	488	29	8.1
5	7.2	110	44	43	25	26	429	289	359	448	26	17
6	26	84	53	45	25	26	551	272	288	453	23	9.5
7	18	67	64	37	25	25	477	237	253	359	20	7.2
8	12	62	43	45	25	25	443	254	231	291	19	4.9
9	8.9	65	62	44	25	25	820	231	306	252	17	4.1
10	8.5	68	67	54	25	25	636	212	379	228	23	4.2
11	33	76	68	46	25	26	494	207	778	205	26	4.7
12	35	66	67	43	25	27	423	204	1,060	176	22	6.6
13	26	67	67	41	25	28	384	201	747	163	25	4.2
14	22	63	68	39	25	32	378	196	675	148	18	3.3
15	19	56	84	38	25	45	431	194	715	138	15	3.6
16	21	58	94	36	25	90	405	194	593	138	14	3.8
17	17	55	74	35	24	500	369	186	663	118	13	4.1
18	15	55	81	34	24	560	332	174	1,110	109	27	4.1
19	14	55	69	33	24	980	306	156	1,370	97	35	3.8
20	14	54	68	32	24	1,350	279	132	881	95	39	3.4
21	13	51	66	30	24	1,020	279	130	683	79	22	3.1
22	13	48	61	29	24	723	306	126	1,100	73	17	3.3
23	14	49	51	28	24	586	476	126	816	86	15	2.7
24	14	46	39	28	24	510	439	124	1,150	81	20	2.8
25	16	40	33	27	24	424	371	116	1,700	68	22	2.6
26	14	44	55	26	25	323	419	111	2,890	60	13	2.9
27	15	46	60	26	26	364	515	106	7,110	56	15	2.4
28	15	44	56	26	27	440	790	138	2,850	51	12	5.6
29	23	44	48	26	-----	520	575	535	1,650	47	18	2.0
30	72	42	41	26	-----	397	434	486	1,280	42	11	2.3
31	502	-----	33	26	-----	359	-----	379	-----	38	8.4	-----
TOTAL	1,029.7	2,484	1,767	1,057	697	9,566	13,013	7,036	33,210	7,023	664.4	144.1
MEAN	33.2	82.8	57.0	34.1	24.9	309	434	227	1,107	227	21.4	4.80
MAX	502	436	94	54	27	1,350	820	535	7,110	1,040	39	17
MIN	4.2	40	32	21	24	25	273	106	231	38	8.4	2.0
CFSM	.16	.41	.28	.17	.12	1.51	2.13	1.11	5.43	1.11	.10	.02
IN.	.19	.45	.32	.19	.13	1.74	2.37	1.28	6.06	1.28	.12	.03
AC-FT	2,040	4,930	3,600	2,100	1,380	18,970	25,810	13,960	65,870	13,930	1,320	286
CAL YR 1974	TOTAL 80,029.0 MEAN 219 MAX 2,100 MIN 4.2 CFSM 1.07 IN 14.59 AC-FT 158,700											
WTR YR 1975	TOTAL 77,691.2 MEAN 213 MAX 7,110 MIN 2.0 CFSM 1.04 IN 14.17 AC-FT 154,100											

PEAK DISCHARGE (BASE, 1,000 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-20	--	--	* 1,700	6-24	0930	4.84	1,330
6-12	0015	4.49	1,200	6-26	1200	9.75	3,430
6-18	1830	5.96	1,720	6-27	0800	14.00	11,300
6-22	1015	4.80	1,320				

* About.

05471000 SOUTH SKUNK RIVER BELOW SQUAW CREEK NEAR AMES, IOWA

LOCATION.--Lat 42°00'31", long 93°35'37", in NE1/4 NW1/4 sec.13, T.83 N., R.24 W., Story County, on right bank 15 ft (5 m) downstream from bridge on county highway, 0.2 mi (0.3 km) downstream from Squaw Creek, 0.2 mi (0.3 km) upstream from bridge on U.S. Highway 30, 2 mi (3.2 km) southeast of Ames, and at mile 222.6 (358.2 km) upstream from mouth of Skunk River.

DRAINAGE AREA.--556 mi² (1,440 km²).

PERIOD OF RECORD.--October 1952 to current year. Prior to October 1966, published as Skunk River below Squaw Creek near Ames.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 857.10 ft (261.24 m) above mean sea level. Prior to Oct. 1, 1973, at datum 10.00 ft higher.

AVERAGE DISCHARGE.--23 years, 298 ft³/s (8.44 m³/s), 7.28 in/yr (185 mm/yr), 215,900 acre-ft/yr (266 hm³/yr); median of yearly mean discharges, 250 ft³/s (7.08 m³/s), 6.1 in/yr (155 mm/yr), 181,000 acre-ft/yr (223 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 14,700 ft³/s (416 m³/s) June 27, gage height, 25.57 ft (7.794 m); minimum daily, 11 ft³/s (0.31 m³/s) Sept. 23, 24.

Period of record: Maximum discharge, 14,700 ft³/s (416 m³/s) June 27, 1975, gage height, 25.57 ft (7.794 m); no flow at times most years.

Flood of May 19, 1944, reached a stage of 13 ft (4 m), from floodmarks, discharge, 10,000 ft³/s (283 m³/s), datum then in use.

REMARKS.--Records good except those for winter period, which are poor. Low flows are affected by pumpage by City of Ames from surficial aquifer and do not represent the natural flow of the stream.

REVISIONS.--WSP 1438: Drainage area.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	1350	114	132	90	120	910	814	647	1940	77	102
2	19	947	110	100	89	134	700	776	636	1540	71	68
3	19	449	114	132	87	136	643	730	913	1260	68	47
4	19	338	130	156	85	132	661	710	972	1050	63	40
5	25	336	142	160	84	130	560	700	911	974	58	62
6	79	330	164	160	84	126	560	610	710	939	52	46
7	86	322	190	159	83	120	1160	588	579	767	47	37
8	71	314	135	180	83	118	1000	632	509	641	42	30
9	65	304	180	170	83	118	1900	571	740	555	39	27
10	63	302	196	190	84	116	1530	527	1010	481	46	24
11	97	287	210	150	84	116	1190	526	1470	425	50	22
12	127	261	214	206	83	116	1000	526	2250	397	44	22
13	124	250	217	198	82	116	932	495	1620	374	50	20
14	115	229	212	192	81	118	943	470	1440	349	39	18
15	105	217	264	188	80	126	1160	438	1440	321	34	17
16	99	217	260	180	80	250	1130	411	1200	291	29	18
17	93	212	247	170	79	890	1030	390	1650	261	27	17
18	84	207	253	158	79	2500	943	379	2210	234	46	17
19	77	207	243	148	80	3100	875	368	2780	214	48	16
20	72	193	236	138	80	3490	882	340	1990	198	63	14
21	72	182	222	132	81	2200	762	311	1460	179	38	13
22	60	182	202	128	82	1700	806	303	2760	162	29	12
23	59	187	180	120	83	1380	1190	301	2630	182	26	11
24	56	174	154	116	86	1400	1100	278	2250	180	24	11
25	55	154	138	114	90	1000	814	265	3420	150	42	12
26	52	142	170	110	96	800	966	255	4910	132	25	13
27	51	142	202	106	104	660	1230	236	11200	122	26	13
28	51	136	202	102	112	800	2080	273	8520	111	22	14
29	59	128	191	97	---	940	1190	769	3850	100	165	15
30	103	120	156	94	---	820	966	904	2450	91	395	16
31	1180	---	148	92	---	720	---	733	---	84	156	---
TOTAL	3256	8819	5796	4478	2394	24492	30813	15629	69127	14704	1941	793
MEAN	105	294	187	144	85.5	790	1027	504	2304	474	62.6	26.4
MAX	1180	1350	264	206	112	3490	2080	904	11200	1940	395	102
MIN	19	120	110	92	79	116	560	236	509	84	22	11
CFSM	.19	.53	.34	.26	.15	1.42	1.85	.91	4.14	.85	.11	.05
IN.	.22	.59	.39	.30	.16	1.64	2.06	1.05	4.63	.98	.13	.05
AC-FT	6460	17490	11500	8880	4750	48580	61120	31000	137100	29170	3850	1570

CAL YR 1974 TOTAL 215234 MEAN 590 MAX 7190 MIN 18 CFSM 1.06 IN 14.40 AC-FT 426900
WTR YR 1975 TOTAL 182242 MEAN 499 MAX 11200 MIN 11 CFSM .90 IN 12.19 AC-FT 361500

PEAK DISCHARGE (BASE, 2,500 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-20	--	--	* 3,990	6-22	1815	18.76	3,240
6-18	2000	18.23	2,950	6-27	1330	25.57	14,700

* About.

SKUNK RIVER BASIN

05471200 INDIAN CREEK NEAR MINGO, IOWA

LOCATION.--Lat 41°48'17", long 93°18'26", in NW1/4 NW1/4 sec.28, T.81 N., R.21 W., Jasper County, on right bank 30 ft (9 m) downstream from bridge on State Highway 117, 0.7 mi (1.1 km) downstream from Wolf Creek, 2.9 mi (4.7 km) northwest of Mingo, and 3.3 mi (5.3 km) upstream from Clear Creek.

DRAINAGE AREA.--276 mi² (715 km²).

PERIOD OF RECORD.--May 1958 to September 1975 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 810.47 ft (247.03 m) above mean sea level.

AVERAGE DISCHARGE.--17 years, 182 ft³/s (5.15 m³/s), 8.96 in/yr (228 mm/yr), 131,900 acre-ft/yr (163 hm³/yr); median of yearly mean discharges, 160 ft³/s (4.53 m³/s), 7.9 in/yr (201 mm/yr), 116,000 acre-ft/yr (143 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 6,660 ft³/s (189 m³/s) June 28, gage height, 15.52 ft (4.730 m); minimum daily, 8.3 ft³/s (0.24 m³/s) Aug. 9.

Period of record: Maximum discharge, 7,380 ft³/s (209 m³/s) June 12, 1966, gage height, 16.41 ft (5.002 m); minimum daily, 0.14 ft³/s (4.0 dm³/s) Jan. 11, 12, 1968.

Flood of May 20, 1944, reached a stage of 21.4 ft (6.52 m), from information by local residents, discharge not determined.

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

REVISIONS (WATER YEARS).--WSP 1728: 1958 (M), 1959 (M).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	649	84	52	51	47	689	475	289	706	16	121
2	14	480	90	70	50	47	445	444	270	588	15	75
3	14	343	80	75	50	47	315	410	474	492	14	71
4	14	268	54	80	52	48	318	371	551	422	13	62
5	14	222	38	230	54	49	387	360	542	382	12	63
6	20	190	66	210	52	49	487	302	410	390	9.8	64
7	30	160	110	160	46	50	456	302	335	335	9.4	56
8	23	146	95	110	47	48	413	349	292	280	9.1	48
9	18	139	110	70	46	47	603	331	346	236	8.3	41
10	17	144	130	90	45	46	591	309	556	206	10	39
11	16	150	120	95	46	45	465	296	534	179	13	48
12	19	144	110	100	46	45	401	285	603	158	12	39
13	39	142	105	130	45	45	371	261	524	138	12	33
14	37	137	100	130	44	45	364	250	559	122	16	28
15	29	126	140	105	42	47	395	232	2,390	107	11	26
16	31	123	160	90	43	54	404	214	1,190	95	11	25
17	27	121	150	80	43	480	388	201	1,060	82	9.3	25
18	24	112	140	78	44	1,650	357	192	2,300	71	30	25
19	22	110	140	75	44	1,500	320	190	3,260	63	22	24
20	21	108	120	70	45	2,050	278	181	1,180	57	18	21
21	19	99	110	64	45	1,140	256	252	934	51	32	19
22	20	92	95	62	45	824	265	230	1,560	46	18	18
23	19	92	85	60	45	674	410	212	1,070	50	14	16
24	20	91	75	64	45	626	432	190	1,280	51	12	15
25	19	80	60	80	46	444	370	175	1,190	38	14	15
26	18	80	70	75	46	318	425	158	1,110	33	15	14
27	19	89	80	70	47	368	769	146	3,150	30	12	14
28	18	83	75	64	47	595	1,590	151	5,190	26	12	14
29	20	80	70	58	-----	581	940	184	1,200	23	460	14
30	26	78	62	55	-----	395	670	273	869	19	449	14
31	374	-----	68	52	-----	422	-----	314	-----	18	214	-----
TOTAL	1,015	4,878	2,992	2,814	1,301	12,826	14,574	8,240	35,218	5,494	1,522.9	1,087
MEAN	32.7	163	96.5	90.8	46.5	414	486	266	1,174	177	49.1	36.2
MAX	374	649	160	230	54	2,050	1,590	475	5,190	706	460	121
MIN	14	78	38	52	42	45	256	146	270	18	8.3	14
CFSM	.12	.59	.35	.33	.17	1.50	1.76	.96	4.25	.64	.18	.13
IN.	.14	.66	.40	.38	.18	1.73	1.96	1.11	4.75	.74	.21	.15
AC-FT	2,010	9,680	5,930	5,580	2,580	25,440	28,910	16,340	69,850	10,900	3,020	2,160

CAL YR 1974 TOTAL 117,193.0 MEAN 321 MAX 4,550 MIN 13 CFSM 1.16 IN 15.80 AC-FT 232,500
WTR YR 1975 TOTAL 91,961.9 MEAN 252 MAX 5,190 MIN 8.3 CFSM .91 IN 12.39 AC-FT 182,400

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-20	0015	13.44	3,390	6-19	0630	13.88	3,930
4-28	0315	11.86	2,080	6-28	0845	15.52	6,660
6-15	1530	12.80	2,740				

05471500 SOUTH SKUNK RIVER NEAR OSKALOOSA, IOWA

LOCATION.--Lat 41°21'19", long 92°39'31", in NW1/4 SW1/4 sec.25, T.76 N., R.16 W., Mahaska County, on right bank 400 ft (122 m) upstream from bridge on U.S. Highway 63, 0.3 mi (0.5 km) downstream from Painter Creek, 4.0 mi (6.4 km) north of Oskaloosa, 53.7 mi (86.4 km) upstream from confluence with North Skunk River, and at mile 147.3 (237.0 km) upstream from mouth of Skunk River.

DRAINAGE AREA.--1,635 mi² (4,234 km²).

PERIOD OF RECORD.--October 1945 to current year. Prior to October 1966, published as Skunk River near Oskaloosa. Prior to October 1948, monthly discharge only, published in WSP 1308.

GAGE.--Water-stage recorder. Datum of gage is 685.50 ft (208.94 m) above mean sea level. Prior to Nov. 21, 1947, nonrecording gage at site 400 ft (122 m) downstream at same datum.

AVERAGE DISCHARGE.--30 years, 889 ft³/s (25.2 m³/s), 7.38 in/yr (187 mm/yr), 644,100 acre-ft/yr (794 hm³/yr); median of yearly mean discharges, 790 ft³/s (22.4 m³/s) 6.6 in/yr (168 mm/yr), 572,000 acre-ft/yr (705 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 9,740 ft³/s (276 m³/s) July 2, gage height, 19.62 ft (5.980 m); minimum daily, 143 ft³/s (4.05 m³/s) Sept. 27.

Period of record: Maximum discharge, 20,000 ft³/s (566 m³/s) June 15, 1947, gage height, 21.26 ft (6.480 m), from floodmarks; maximum gage height, 22.52 ft (6.864 m) Feb. 3, 1973, backwater from ice; minimum daily discharge, 1.8 ft³/s (51 dm³/s) Oct. 11-13, 1956.

Flood in May 1944 reached a stage of 25.8 ft (7.86 m), from floodmarks, discharge, 37,000 ft³/s (1,050 m³/s), from rating curve extended above 18,000 ft³/s (510 m³/s) on basis of velocity-area study.

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

REVISIONS.--WSP 1438: Drainage area.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	169	1,310	432	620	410	310	2,300	2,780	1,500	9,420	419	810
2	163	1,770	414	570	400	320	2,600	2,220	1,300	9,680	395	578
3	159	1,580	380	520	390	320	2,210	1,890	1,300	8,830	373	459
4	158	1,250	450	480	380	320	1,920	1,640	1,600	5,700	354	398
5	158	1,020	600	450	370	320	1,880	1,460	1,900	3,370	337	619
6	164	890	500	500	360	310	1,810	1,320	1,800	2,680	318	503
7	182	809	450	540	340	310	2,280	1,220	1,500	2,460	297	380
8	187	740	450	560	320	300	2,360	1,160	1,300	2,200	280	335
9	192	697	540	580	300	300	2,420	1,110	1,100	1,880	276	315
10	198	691	700	750	290	290	3,110	1,070	1,400	1,670	276	299
11	190	751	600	1,000	280	290	3,260	1,030	2,300	1,510	261	293
12	196	715	500	470	280	280	2,680	1,010	2,300	1,380	257	281
13	203	677	460	400	280	280	2,300	991	3,210	1,280	283	249
14	234	654	430	500	270	270	2,130	971	2,740	1,190	265	228
15	250	622	470	580	270	290	2,040	978	3,690	1,120	241	214
16	234	594	540	600	270	1,100	2,160	999	5,210	1,040	250	200
17	224	578	520	590	270	3,300	2,200	986	3,700	976	292	196
18	215	564	500	580	270	4,820	2,160	960	4,270	917	321	194
19	200	551	800	570	270	5,650	2,030	936	6,200	863	386	194
20	192	541	1,200	550	280	6,470	1,860	915	6,780	812	293	182
21	184	524	1,150	540	320	7,590	1,720	960	6,970	763	253	169
22	179	506	1,100	520	400	8,290	1,680	1,050	5,480	725	255	162
23	181	498	1,100	500	330	7,090	1,650	1,250	5,750	694	291	159
24	180	490	900	500	300	5,290	1,990	1,000	5,770	675	219	154
25	177	466	700	540	280	3,730	2,410	930	5,490	664	256	150
26	172	442	600	530	290	2,800	2,130	900	5,630	626	260	145
27	167	436	640	500	300	2,350	1,940	860	6,520	577	223	143
28	169	436	720	480	310	4,030	3,310	840	7,110	537	213	149
29	178	428	750	460	-----	3,840	4,670	880	7,830	505	454	179
30	183	432	720	440	-----	3,260	3,610	1,250	8,620	475	1,160	176
31	704	-----	660	420	-----	2,600	-----	1,600	-----	450	1,120	-----
TOTAL	6,342	21,662	19,976	16,840	8,830	76,720	70,820	37,166	120,270	65,669	10,878	8,513
MEAN	205	722	644	543	315	2,475	2,361	1,199	4,009	2,118	351	284
MAX	704	1,770	1,200	1,000	410	8,290	4,670	2,780	8,620	9,680	1,160	810
MIN	158	428	380	400	270	270	1,650	840	1,100	450	213	143
CFSM	.13	.44	.39	.33	.19	1.51	1.44	.73	2.45	1.30	.21	.17
IN.	.14	.49	.45	.38	.20	1.75	1.61	.85	2.74	1.49	.25	.19
AC-FT	12,580	42,970	39,620	33,400	17,510	152,200	140,500	73,720	238,600	130,300	21,580	16,890

CAL YR 1974 TOTAL 744,162 MEAN 2,039 MAX 12,400 MIN 158 CFSM 1.25 IN 16.93 AC-FT 1,476,000
WTR YR 1975 TOTAL 463,686 MEAN 1,270 MAX 9,680 MIN 143 CFSM .78 IN 10.55 AC-FT 919,700

PEAK DISCHARGE (BASE, 5,000 FT³/S)

3-22 0945 18.70 8,380 7-2 0645 19.62 9,740
6-21 0730 17.68 7,150

SKUNK RIVER BASIN

05472500 NORTH SKUNK RIVER NEAR SIGOURNEY, IOWA

LOCATION.--Lat 41°18'03", long 92°12'16", in NE1/4 SE1/4 sec.14, T.75 N., R.12 W., Keokuk County, on right bank 20 ft (6 m) downstream from bridge on State Highway 149, 1.2 mi (1.9 km) downstream from Cedar Creek, 2.2 mi (3.5 km) south of Sigourney, 4.0 mi (6.4 km) upstream from Bridge Creek, and 16.2 mi (26.1 km) upstream from confluence with South Skunk River.

DRAINAGE AREA.--730 mi² (1,890 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 651.53 ft (198.59 m) above mean sea level. Prior to June 10, 1953, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--30 years, 435 ft³/s (12.3 m³/s), 8.09 in/yr (205 mm/yr), 315,200 acre-ft/yr (389 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,430 ft³/s (125 m³/s) Mar. 22, gage height, 17.40 ft (5.304 m); minimum daily, 43 ft³/s (1.22 m³/s) Aug. 10, 11.
Period of record: Maximum discharge, 27,500 ft³/s (779 m³/s) Mar. 31, 1960, gage height, 25.33 ft (7.721 m); minimum daily, 0.1 ft³/s (2.8 dm³/s) Oct. 7 to Nov. 15, 1956.
Flood in May 1944 reached a stage of 22.8 ft (6.95 m), from floodmark, discharge, 14,500 ft³/s (411 m³/s).

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

REVISIONS (WATER YEARS).--WSP 1438: Drainage area. WSP 1558: 1946-47 (M).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	80	397	114	160	220	220	857	623	565	447	57	227
2	80	959	104	150	210	210	833	540	436	365	55	150
3	66	535	94	160	200	190	665	498	365	314	53	111
4	62	323	105	140	200	170	568	472	392	278	52	91
5	64	246	115	130	210	160	630	442	624	251	50	480
6	69	207	120	160	200	160	679	414	578	232	50	370
7	72	181	180	160	180	170	765	406	419	227	47	227
8	72	161	450	155	170	180	724	419	341	221	45	158
9	73	147	620	150	170	170	806	433	312	188	44	121
10	78	144	420	190	170	160	1,330	421	345	170	43	102
11	70	192	340	550	160	160	1,370	371	454	156	43	89
12	69	270	340	850	150	170	989	359	474	145	45	84
13	70	276	310	620	150	180	822	357	457	136	58	78
14	82	222	280	450	140	170	736	325	397	129	47	74
15	93	198	420	500	140	200	701	303	368	123	52	69
16	85	183	622	520	130	600	687	289	880	119	49	64
17	78	171	612	470	130	1,700	642	266	646	113	46	62
18	72	169	360	440	140	2,200	665	250	616	106	69	61
19	69	168	320	400	150	2,600	699	237	925	99	74	61
20	66	164	300	360	170	2,910	643	226	1,560	94	140	61
21	65	161	270	330	250	3,620	549	231	838	88	123	59
22	63	150	250	310	800	4,290	515	235	607	85	76	56
23	63	140	270	300	700	3,940	803	284	558	82	90	52
24	64	140	260	280	500	3,320	1,030	264	575	102	86	49
25	64	140	210	340	350	2,490	893	230	997	80	69	47
26	64	134	200	420	270	1,140	710	218	938	80	65	46
27	66	124	220	500	230	853	623	223	531	75	66	45
28	64	116	210	400	230	1,310	737	229	1,050	70	74	44
29	63	119	210	300	-----	2,000	819	227	1,490	66	691	47
30	65	114	200	260	-----	1,870	805	430	618	62	440	56
31	80	-----	180	240	-----	1,050	-----	717	-----	59	581	-----
TOTAL	2,191	6,651	8,706	10,395	6,720	38,563	23,295	10,939	19,356	4,762	3,480	3,241
MEAN	70.7	222	281	335	240	1,244	777	353	645	154	112	108
MAX	93	959	622	850	800	4,290	1,370	717	1,560	447	691	480
MIN	62	114	94	130	130	160	515	218	312	59	43	44
CFSM	.10	.30	.38	.46	.33	1.70	1.06	.48	.88	.21	.15	.15
IN.	.11	.34	.44	.53	.34	1.97	1.19	.56	.99	.24	.18	.17
AC-FT	4,350	13,190	17,270	20,620	13,330	76,490	46,210	21,700	38,390	9,450	6,900	6,430

CAL YR 1974 TOTAL 350,834 MEAN 961 MAX 13,500 MIN 62 CFSM 1.32 IN 17.88 AC-FT 695,900

WTR YR 1975 TOTAL 138,299 MEAN 379 MAX 4,290 MIN 43 CFSM .52 IN 7.05 AC-FT 274,300

PEAK DISCHARGE (BASE, 3,800 FT³/S).--Mar. 22 (0200) 4,430 ft³/s (17.40 ft).

05473500 BIG CREEK NEAR MOUNT PLEASANT, IOWA

LOCATION.--Lat. 41°00'52", long 91°34'49", in NW1/4 NW1/4 sec.29, T.72 N. R.6 W., Henry County, on left bank 12 ft (4 m) downstream from bridge on county highway, 100 ft (30 m) downstream from Lynn Creek, 0.7 mi (1.1 km) downstream from Brandywine Creek, and 3.7 mi (6.0 km) northwest of Court House at Mount Pleasant.

DRAINAGE AREA.--106 mi² (275 km²).

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 630.53 ft (192.19 m) above mean sea level.

AVERAGE DISCHARGE.--20 years, 67.0 ft³/s (1.90 m³/s), 8.58 in/yr (218 mm/yr), 48,540 acre-ft/yr (59.8 hm³/yr); median of yearly mean discharges, 47 ft³/s (1.33 m³/s), 6.0 in/yr (152 mm/yr), 34,100 acre-ft/yr (42.0 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,700 ft³/s (48.1 m³/s) Mar. 29, gage height, 9.43 ft (2.874 m); no flow July 29 to Aug. 13.

Period of record: Maximum discharge, 10,500 ft³/s (297 m³/s) Apr. 22, 1973, gage height, 25.58 ft (7.797 m), on basis of contracted-opening measurement at gage at gage height 18.51 ft (5.642 m) and contracted-opening measurements of the 1973 peak flow at sites 2 mi (3 km) upstream [63 mi² (163 km²)] and 6 mi (10 km) downstream [115 mi² (298 km²)]; no flow at times most years.

Flood of Aug. 3, 1948, reached a stage of about 27 ft (8.2 m), from floodmarks established by local residents, discharge not determined.

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

REVISIONS (WATER YEARS).--WSP 1628: 1958 (M).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.2	10	5.9	28	15	22	146	31	161	12	0	44
2	1.4	9.2	5.1	27	14	17	125	29	207	10	0	25
3	1.8	5.7	4.3	25	14	15	90	30	85	9.1	0	15
4	2.0	4.1	4.0	17	17	14	84	30	46	8.5	0	9.7
5	2.7	3.7	4.3	16	18	14	106	29	36	8.3	0	237
6	5.4	1.9	8.2	16	12	17	199	28	29	8.9	0	210
7	5.5	2.0	76	15	11	230	163	27	25	8.3	0	82
8	4.6	1.3	101	15	11	280	112	32	22	6.7	0	44
9	3.7	1.3	59	16	10	130	85	28	22	5.3	0	34
10	3.2	4.9	36	26	11	60	67	24	22	4.2	0	27
11	2.5	26	26	54	12	40	56	26	21	3.5	0	22
12	3.3	17	22	45	11	35	51	27	20	3.4	0	16
13	4.6	9.4	18	42	10	40	46	23	18	2.8	0	13
14	5.2	7.2	19	40	10	25	45	22	18	2.3	4.7	10
15	4.6	5.1	127	36	11	60	44	23	48	1.6	4.8	9.5
16	2.6	5.4	99	32	12	462	41	21	29	1.3	2.4	8.0
17	1.5	6.8	55	28	55	987	41	20	42	.98	2.6	7.6
18	.97	7.2	35	23	110	1,020	56	19	26	.58	6.2	6.8
19	.77	8.4	28	20	50	573	52	18	20	.54	18	7.0
20	.72	6.8	24	16	35	343	39	17	16	.34	19	6.0
21	.86	5.2	21	16	240	292	35	21	15	.13	21	5.9
22	.81	4.7	20	15	450	413	35	20	17	.05	5.8	4.9
23	.79	5.3	18	14	110	365	70	18	52	3.8	2.7	6.4
24	.58	6.4	17	45	50	409	88	19	33	2.1	4.3	5.8
25	.60	5.4	16	180	30	214	58	35	23	1.1	10	5.4
26	1.2	4.8	15	35	27	123	46	41	30	.68	16	3.6
27	2.1	6.7	16	24	29	206	43	38	45	.34	15	7.0
28	2.8	4.0	15	20	26	595	45	30	26	.11	13	3.3
29	5.4	3.7	16	22	-----	556	41	30	16	0	1,090	4.7
30	6.1	5.1	15	17	-----	271	36	99	13	0	622	2.8
31	7.4	-----	17	16	-----	173	-----	58	-----	0	129	-----
TOTAL	86.80	194.7	942.2	941	1,411	8,001	2,145	913	1,183	107.05	1,986.5	883.4
MEAN	2.80	6.49	30.4	30.4	50.4	258	71.5	29.5	39.4	3.45	64.1	29.4
MAX	7.4	25	127	180	450	1,020	199	99	207	12	1,090	237
MIN	.58	1.3	4.0	14	10	14	35	17	13	0	0	2.8
CFSM	.03	.06	.29	.29	.48	2.43	.67	.28	.37	.03	.60	.28
IN.	.03	.07	.33	.33	.50	2.81	.75	.32	.42	.04	.70	.31
AC-FT	172	386	1,870	1,870	2,800	15,870	4,250	1,810	2,350	212	3,940	1,750

CAL YR 1974 TOTAL 31,565.98 MEAN 86.5 MAX 1,850 MIN .54 CFSM .82 IN 11.08 AC-FT 62,610
WTR YR 1975 TOTAL 18,794.65 MEAN 51.5 MAX 1,090 MIN 0 CFSM .49 IN 6.60 AC-FT 37,280

PEAK DISCHARGE (BASE, 900 FT³/S).--Mar. 17 (2015) 1,570 ft³/s (9.09 ft); Aug. 29 (1015) 1,700 ft³/s (9.43 ft).

SKUNK RIVER BASIN

05474000 SKUNK RIVER AT AUGUSTA, IOWA

LOCATION.--Lat 40°45'13", long 91°16'40", in NE1/4 NE1/4 sec.26, T.69 N., R.4 W., Des Moines County, on left bank 300 ft (91 m) upstream from bridge on State Highway 394 at Augusta, 2.0 mi (3.2 km) upstream from Long Creek, and at mile 12.6 (20.1 km).

DRAINAGE AREA.--4,303 mi² (11,144 km²).

PERIOD OF RECORD.--September to November 1913, October 1914 to current year. Monthly discharge only for some periods, published in WSP 1308.

GAGE.--Water-stage recorder. Datum of gage is 521.24 ft (158.87 m) above mean sea level. Prior to Nov. 15, 1913, nonrecording gage at site 400 ft (122 m) upstream at datum about 0.7 ft (0.2 m) higher. May 27, 1915, to Jan. 14, 1935, nonrecording gage at site 400 ft (122 m) upstream at present datum.

AVERAGE DISCHARGE.--61 years (1914-75), 2,352 ft³/s (66.6 m³/s), 7.42 in/yr (188 mm/yr), 1,704,000 acre-ft/yr (2,101 hm³/yr); median of yearly mean discharges, 2,170 ft³/s (61.5 m³/s), 6.8 in/yr (173 mm/yr), 1,570,000 acre-ft/yr (1,940 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 14,200 ft³/s (402 m³/s) Mar. 29, gage height, 12.86 ft (3.917 m); minimum daily, 290 ft³/s (8.21 m³/s) Sept. 30.

Period of record: Maximum discharge, 66,800 ft³/s (1,892 m³/s) Apr. 23, 1973, gage height, 27.05 ft (8.245 m); minimum daily, 7 ft³/s (198 dm³/s) Aug. 27 to Sept. 1, 1934.

Flood of June 1, 1903, reached a stage of about 21 ft (6 m), discharge, about 45,000 ft³/s (1,270 m³/s). Stage and discharge for flood of April 1973 are believed to be the greatest since 1851.

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

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

REVISIONS (WATER YEARS).--WSP 1308: 1915 (M), 1919-27 (M), 1932-34 (M), 1936, 1937-38 (M), 1942 (M). WSP 1438: Drainage area, WRD Iowa 1971: 1966 (M).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	540	642	791	1,350	1,350	1,300	7,450	4,950	2,510	6,800	653	2,680
2	532	740	800	1,200	1,300	1,100	6,500	5,050	3,410	6,820	625	2,300
3	524	1,310	746	900	1,270	1,050	5,600	5,210	3,340	6,960	589	1,740
4	808	2,590	564	1,000	1,230	1,000	5,040	5,210	2,880	7,270	558	1,300
5	492	2,500	520	1,250	1,200	1,050	4,780	4,720	2,520	7,580	536	1,450
6	476	2,030	700	1,400	1,000	1,100	4,700	4,640	2,390	7,840	514	2,480
7	460	1,700	1,200	850	930	2,340	4,920	4,910	2,870	8,020	489	3,130
8	401	1,470	1,700	840	870	2,500	4,870	5,190	2,790	7,730	461	2,170
9	409	1,320	1,900	900	830	1,800	4,790	5,450	2,470	5,730	442	1,450
10	418	1,290	2,100	1,100	800	1,400	4,890	5,420	2,220	4,090	423	1,100
11	415	1,440	2,200	1,400	780	1,300	5,210	5,330	2,100	3,050	410	950
12	445	1,360	1,810	1,800	770	1,250	5,500	5,190	2,140	2,550	396	970
13	481	1,510	1,450	1,900	760	1,200	5,430	4,930	2,530	2,230	469	920
14	544	1,510	1,620	1,800	760	1,150	5,090	4,630	2,890	2,020	644	820
15	521	1,390	2,350	2,100	750	1,200	4,640	4,300	3,300	1,850	661	692
16	538	1,260	3,000	2,100	750	2,100	4,210	3,960	3,560	1,700	477	612
17	577	1,200	2,700	1,700	1,050	7,230	4,000	3,610	3,530	1,580	421	564
18	573	1,140	2,200	1,800	1,200	13,000	5,190	3,260	4,150	1,470	399	517
19	548	1,100	1,800	1,900	1,150	13,400	5,370	2,890	4,260	1,370	456	493
20	516	1,080	1,500	1,700	1,000	11,800	5,110	2,530	4,490	1,280	614	464
21	484	1,040	1,350	1,500	1,500	10,700	4,360	2,260	4,780	1,190	755	440
22	477	990	1,250	1,300	4,000	10,000	3,840	2,080	5,280	1,110	1,140	424
23	471	980	1,200	1,100	5,600	10,400	4,180	1,910	5,730	1,090	728	409
24	447	970	1,250	1,000	4,500	10,900	5,910	1,820	5,970	1,030	568	378
25	443	910	1,250	2,300	3,500	11,400	7,410	2,270	6,480	945	492	355
26	436	870	1,150	2,400	2,700	12,300	5,870	4,220	6,640	885	532	325
27	435	870	1,250	2,000	2,000	12,800	5,050	3,010	6,660	853	516	310
28	437	830	1,150	1,700	1,600	13,700	4,530	1,950	6,530	826	452	297
29	444	782	1,100	1,500	-----	13,500	4,310	1,820	6,310	793	2,610	304
30	455	791	1,100	1,450	-----	9,990	4,660	1,940	6,460	743	7,890	290
31	508	-----	1,200	1,400	-----	8,370	-----	2,030	-----	696	6,580	-----
TOTAL	14,955	37,615	44,901	46,640	45,050	192,330	153,410	116,690	121,190	98,101	32,500	30,334
MEAN	482	1,254	1,448	1,505	1,609	6,204	5,114	3,764	4,040	3,165	1,048	1,011
MAX	577	2,590	3,000	2,400	5,500	13,700	7,450	5,450	6,660	8,020	7,890	3,130
MIN	401	642	520	840	750	1,000	3,840	1,820	2,100	696	396	290
CFSM	.11	.29	.34	.35	.37	1.44	1.19	.87	.94	.74	.24	.24
IN.	.13	.33	.39	.40	.39	1.66	1.33	1.01	1.05	.85	.28	.26
AC-FT	29,660	74,610	89,060	92,510	89,360	381,500	304,300	231,500	240,400	194,600	64,460	60,170

CAL YR 1974 TOTAL 1,694,490 MEAN 4,642 MAX 27,200 MIN 401 CFSM 1.08 IN 14.65 AC-FT 3,361,000
WTR YR 1975 TOTAL 933,716 MEAN 2,558 MAX 13,700 MIN 290 CFSM .59 IN 8.07 AC-FT 1,852,000

PEAK DISCHARGE (BASE, 15,000 FT³/S).--No peak above base.

05474500 MISSISSIPPI RIVER AT KEOKUK, IOWA
(National stream-quality accounting network station)

LOCATION.--Lat 40°23'37", long 91°22'27", in SE1/4 SW1/4 sec.30, T.65 N., R.4 W., Lee County, near right bank in tailwater of dam and powerplant of Union Electric Co. at Keokuk, 0.2 mi (0.3 km) upstream from bridge on U.S. Highway 136, 2.7 mi (4.3 km) upstream from Des Moines River, and at mile 364.2 (586.0 km) upstream from Ohio River.

DRAINAGE AREA.--119,000 mi² (308,000 km²), approximately.

PERIOD OF RECORD.--January 1878 to current year.

GAGE.--Water-stage recorder. Datum of gage is 477.41 ft (145.51 m) above mean sea level (levels by Corps of Engineers); 477.83 ft (145.64 m) above mean sea level, adjustment of 1912; 477.34 ft (145.49 m) above mean gulf level; and 484.65 ft (147.72 m) above Memphis datum. Jan. 1, 1878, to May 1913, nonrecording gage at Galland (formerly Nashville), 8 mi (12.9 km) upstream; zero of gage was set to low-water mark of 1864, or 496.94 ft (151.47 m) above mean sea level, adjustment of 1912.

AVERAGE DISCHARGE.--97 years, 62,570 ft³/s (1,770 m³/s), 7.14 in/yr (181 mm/yr), 45,330,000 acre-ft/yr (55,900 hm³/yr).

EXTREMES.--Current year: Maximum daily discharge, 252,000 ft³/s (7,140 m³/s) May 9, 10; minimum daily, 22,500 ft³/s (637 m³/s) Oct. 5.

Period of record: Maximum daily discharge, 344,000 ft³/s (9,740 m³/s) Apr. 24, 1973; maximum gage height, 23.35 ft (7.117 m) Apr. 24, 1973; minimum daily discharge, 5,000 ft³/s (142 m³/s) Dec. 27, 1933.

Flood of June 6, 1851, reached a stage of 21.0 ft (6.40 m), present site and datum, estimated as 13.5 ft (4.11 m) at Galland, discharge, 360,000 ft³/s (10,200 m³/s).

REMARKS.--Discharge computed from records of operation of turbines in powerplant and spillway gates in dam. Minor flow regulation caused by powerplant since 1913 and navigation dams. Records for May 1913 to September 1937 adjusted for change in contents in Keokuk Reservoir, those after September 1937 unadjusted. Records of chemical and biological analysis, water temperatures and suspended-sediment discharge for the current year are published in part 2 of this report.

COOPERATION.--Records furnished by Union Electric Co., formerly Mississippi River Power Co.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 197 TO SEPTEMBER 197													
DAY	MEAN VALUES												
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1	33500	36700	45400	41400	45300	48600	162000	170000	98300	118000	40400	66000	
2	32000	41500	46500	40900	45000	44000	145000	181000	97800	116000	33300	61700	
3	31500	44200	40200	38800	44300	39400	130000	192000	96900	112000	28900	51800	
4	25200	49700	36200	35000	43500	39300	130000	202000	96100	112000	30500	54500	
5	22500	51400	28200	34500	42500	41300	121000	213000	95700	111000	37700	60400	
6	25000	52700	30200	37400	41100	43200	114000	227000	92000	112000	38600	59900	
7	29200	50200	42800	35700	39700	46400	110000	239000	95500	116000	39700	57200	
8	36800	48600	47000	36100	33700	50900	107000	250000	92300	119000	36100	48000	
9	32800	46700	37000	37200	32400	52700	108000	252000	86900	113000	28900	44300	
10	35200	44400	49000	34500	34800	50800	107000	252000	83900	109000	28100	35200	
11	34500	48300	42500	35100	33000	47400	106000	250000	78700	105000	28900	27600	
12	34000	50700	36500	38300	34700	43400	108000	248000	79100	105000	28500	31700	
13	35600	55500	36400	35000	35400	43600	112000	242000	78200	102000	28600	34300	
14	36300	60000	37800	33000	34500	45000	112000	236000	75900	100000	33000	36100	
15	38200	56100	39500	36000	32200	43700	112000	231000	72500	102000	33700	42400	
16	36200	55000	46700	38000	35400	45200	114000	222000	77000	100000	31200	43300	
17	35900	50600	56500	38900	39300	60000	116000	214000	84300	98400	31600	45200	
18	35600	43500	58200	39400	37500	88000	123000	202000	88300	93600	30600	49700	
19	34400	39400	53900	37700	40600	99800	124000	195000	97600	94800	30100	50600	
20	32000	40000	49300	37000	43100	115000	128000	185000	98800	84100	29700	46700	
21	29700	44500	47800	38300	44400	121000	129000	176000	100000	83300	33200	40600	
22	28100	45700	46000	38400	53500	145000	131000	165000	107000	76500	36900	40900	
23	30300	46300	45300	41200	54600	165000	132000	153000	109000	71900	30400	40400	
24	30700	45800	43900	39400	54400	171000	137000	140000	108000	67600	32900	39300	
25	33100	45200	43700	42000	51700	198000	138000	133000	112000	62400	53000	32000	
26	31900	44200	35800	47800	51300	198000	140000	131000	118000	59800	61300	33600	
27	32400	44700	37000	49000	52200	203000	137000	118000	123000	51700	60300	33000	
28	35300	43200	42300	46200	50200	204000	138000	110000	125000	46200	62700	30100	
29	34900	42700	40800	44000	---	194000	149000	104000	123000	42500	71300	33600	
30	32500	42300	41700	47300	---	180000	159000	100000	119000	45000	82200	39700	
31	36100	---	41200	47200	---	169000	---	97600	---	45300	75200	---	
TOTAL	1011400	1409800	1325300	1220700	1180300	3035700	3779000	5830600	2909800	2775100	1246500	1309800	
MEAN	32630	46990	42750	39380	42150	97930	126000	188100	96990	89520	40210	43660	
MAX	38200	60000	58200	49000	54600	204000	162000	252000	125000	119000	82200	66000	
MIN	22500	36700	28200	33000	32200	39300	106000	97600	72500	42500	28100	27600	
CFSM	.27	.39	.36	.33	.35	.82	1.06	1.58	.82	.75	.34	.37	
IN.	.32	.44	.41	.38	.37	.95	1.18	1.82	.91	.87	.39	.41	
AC-FT	2006000	2796000	2629000	2421000	2341000	6021000	7496000	11560000	5772000	5504000	2472000	2598000	
CAL YR 1974 TOTAL	31430000	MEAN	86110	MAX	260000	MIN	22500	CFSM	.72	IN	9.83	AC-FT	62340000
WTR YR 1975 TOTAL	27034000	MEAN	74070	MAX	252000	MIN	22500	CFSM	.62	IN	8.45	AC-FT	53620000

DES MOINES RIVER BASIN

05475500 DES MOINES RIVER AT ESTHERVILLE, IOWA

LOCATION.--Lat 43°23'51", long 94°50'38", in SW1/4 SE1/4 sec.10, T.99 N., R.34 W., Emmet County, on right bank in city park, 1,200 ft (366 m) downstream from bridge on State Highway 9 at Estherville, 0.1 mi (0.2 km) upstream from School Creek, 2.3 mi (3.7 km) upstream from Brown Creek, and at mile 404.2 (650.4 km).

DRAINAGE AREA.--1,372 mi² (3,553 km²).

PERIOD OF RECORD.--October 1951 to current year. Prior to November 1951, monthly discharge only, published in WSP 1728.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,247.55 ft (380.25 m) above mean sea level.

AVERAGE DISCHARGE.--24 years, 296 ft³/s (8.38 m³/s), 2.93 in/yr (74 mm/yr), 214,500 acre-ft/yr (264 hm³/yr); median of yearly mean discharges, 220 ft³/s (6.23 m³/s), 2.2 in/yr (56 mm/yr), 159,000 acre-ft/yr (196 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,320 ft³/s (65.7 m³/s) Apr. 25, gage height, 8.01 ft (2.441 m); minimum daily, 1.5 ft³/s (0.042 m³/s) Jan. 14-18.

Period of record: Maximum discharge, 16,000 ft³/s (453 m³/s) Apr. 12, 1969, gage height, 17.68 ft (5.389 m), from floodmark; minimum daily, 0.2 ft³/s (5.7 dm³/s) Sept. 21, 22, 28, Oct. 19, 1958.

REMARKS.--Records good except those for winter period, which are fair. Diurnal fluctuation at low flow caused by powerplant 0.3 mi (0.5 km) above station which discharges an average daily flow of about 0.5 ft³/s (14 dm³/s) into river from subterranean wells.

REVISIONS.--WSP 1438: Drainage area.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	25	14	8.0	5.2	6.0	95	1,430	394	479	50	42
2	24	23	13	8.0	5.3	5.9	89	1,340	373	445	54	53
3	22	22	12	8.0	5.4	5.9	83	1,280	355	407	48	44
4	26	22	11	8.0	5.6	6.0	80	1,230	538	380	42	41
5	22	22	10	8.0	5.7	6.1	101	1,190	485	367	87	44
6	17	20	9.9	7.9	5.8	6.2	160	1,060	420	363	58	47
7	15	19	9.0	7.9	5.8	6.3	281	948	379	335	48	45
8	16	18	8.4	7.6	5.7	6.5	310	884	350	315	42	43
9	14	19	8.3	6.8	5.6	6.6	324	860	339	297	40	45
10	15	20	8.1	5.8	5.5	6.7	360	832	336	286	39	52
11	17	21	8.0	4.8	5.4	6.8	392	688	349	259	43	69
12	14	19	8.0	1.8	5.4	6.8	476	904	369	244	39	62
13	14	16	7.8	1.6	5.3	7.0	590	824	361	230	38	45
14	12	15	7.8	1.5	5.3	7.1	770	760	361	219	36	34
15	17	16	7.8	1.5	5.2	7.4	827	708	436	206	36	28
16	18	17	7.8	1.5	5.3	7.6	844	656	486	193	36	25
17	15	18	7.8	1.5	5.4	8.1	1,050	610	530	183	28	22
18	14	19	7.8	1.5	5.6	15	1,240	570	617	177	22	25
19	13	19	7.8	1.6	5.7	60	1,250	534	580	169	31	23
20	12	19	7.8	1.6	5.8	122	1,250	494	542	152	31	20
21	12	19	7.8	1.6	5.9	134	1,170	458	558	131	43	22
22	14	19	7.8	1.6	5.5	146	1,100	488	1,360	121	67	22
23	13	19	7.8	2.0	5.4	154	1,430	472	1,270	116	68	21
24	19	18	7.9	3.5	5.6	152	1,270	436	1,000	89	68	18
25	17	17	7.9	4.4	5.7	118	1,090	542	837	62	51	16
26	13	17	8.0	4.8	5.8	104	1,640	772	730	50	42	15
27	13	16	8.0	5.0	5.9	95	1,780	652	661	47	39	13
28	13	14	8.0	5.0	5.9	100	2,100	566	618	46	36	12
29	19	14	8.0	5.0	-----	100	1,720	518	563	46	36	11
30	19	14	8.0	5.1	-----	110	1,560	477	517	52	35	10
31	22	-----	8.0	5.2	-----	106	-----	431	-----	48	34	-----
TOTAL	514	556	269.3	138.1	155.7	1,629.0	25,432	23,784	16,714	6,514	1,367	969
MEAN	16.6	18.5	8.69	4.45	5.56	52.5	648	767	557	210	44.1	32.3
MAX	26	25	14	8.0	5.9	154	2,100	1,430	1,360	479	87	69
MIN	12	14	7.8	1.5	5.2	5.9	80	431	336	46	22	10
CFSM	.01	.01	.006	.003	.004	.04	.62	.56	.41	.15	.03	.02
IN.	.01	.02	.007	.003	.004	.04	.69	.64	.45	.18	.04	.03
AC-FT	1,020	1,100	534	274	309	3,230	50,440	47,180	33,150	12,920	2,710	1,920

CAL YR 1974 TOTAL 60,441.3 MEAN 166 MAX 1,200 MIN 7.8 CFSM .12 IN 1.64 AC-FT 119,900
WTR YR 1975 TOTAL 78,042.1 MEAN 214 MAX 2,100 MIN 1.5 CFSM .16 IN 2.12 AC-FT 154,800

PEAK DISCHARGE (BASE, 1,500 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
4-26	1900	8.01	2,320	6-22	1915	6.25	1,540
4-28	0400	7.73	2,200				

05476750 DES MOINES RIVER AT HUMBOLDT, IOWA

LOCATION.--Lat 42°43'12", long 94°13'06", in SE1/4 SW1/4 sec.1, T.91 N., R.29 W., Humboldt County, on left bank 5 ft (2 m) downstream from First Avenue bridge in city of Humboldt, about 700 ft (213 m) below dam, 3.2 mi (5.1 km) upstream from Indian Creek, 3.9 mi (6.3 km) upstream from East Fork Des Moines River, and at mile 334.3 (537.9 km).

DRAINAGE AREA.--2,256 mi² (5,843 km²).

PERIOD OF RECORD.--October 1964 to current year. Prior to October 1970, published as West Fork Des Moines River at Humboldt.

GAGE.--Water-stage recorder. Datum of gage is 1,053.54 ft (321.12 m) above mean sea level. Prior to Oct. 3, 1966, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--11 years, 680 ft³/s (19.3 m³/s), 4.86 in/yr (123 mm/yr), 585,400 acre-ft/yr (722 hm³/yr); median of yearly mean discharges, 680 ft³/s (19.3 m³/s) 4.1 in/yr (104 mm/yr), 493,000 acre-ft/yr (608 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 6,020 ft³/s (170 m³/s) Apr. 30, gage height, 9.10 ft (2.774 m); minimum daily, 25 ft³/s (0.71 m³/s) Feb. 5.

Period of record: Maximum discharge, 18,000 ft³/s (510 m³/s) Apr. 14, 1969, gage height, 15.40 ft (4.694 m); minimum daily, 20 ft³/s (0.57 m³/s) Jan. 10-12, 1968.

Flood of June 23, 1947, reached a stage of 12.2 ft (3.72 m), discharge, 11,000 ft³/s (312 m³/s) at present site and datum.

REMARKS.--Records fair except those for winter period, which are poor. Daily nonrecording gage readings available in district office for period Mar. 7, 1940, to Sept. 30, 1964. Discharge not published for this period because of extreme regulation at dam 700 ft (213 m) upstream from gage. Power generation and streamflow regulation discontinued August 1964.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	78	97	62	50	32	54	283	5,630	1,610	1,490	204	178
2	78	97	55	50	34	49	308	5,000	1,390	1,420	200	171
3	54	87	55	49	35	45	351	4,080	1,320	1,290	186	164
4	82	85	55	49	28	50	365	3,420	1,340	1,140	200	161
5	82	92	65	48	25	52	320	3,190	2,080	1,080	193	148
6	90	90	66	49	27	48	445	2,840	2,840	1,030	182	157
7	74	90	60	49	30	46	632	2,600	2,620	980	193	148
8	76	85	41	50	33	51	1,100	2,610	2,010	931	145	141
9	70	92	51	50	36	54	1,760	2,360	1,720	882	164	137
10	76	94	58	46	36	54	2,190	2,180	1,620	805	158	136
11	70	87	66	42	37	47	2,200	2,100	1,720	734	158	138
12	82	82	67	38	37	45	2,300	2,440	1,880	656	171	138
13	78	79	69	36	37	42	2,620	3,060	1,880	659	161	144
14	90	76	66	31	35	42	2,530	2,870	1,770	629	154	159
15	78	78	64	29	33	44	2,590	2,470	1,660	602	151	155
16	70	82	60	31	36	54	2,790	2,120	1,710	572	145	149
17	80	92	56	31	38	70	2,890	1,880	1,840	524	142	145
18	80	94	60	34	40	95	2,910	1,710	2,520	548	216	144
19	80	80	60	34	43	105	2,840	1,580	2,600	460	248	137
20	80	68	66	30	43	140	2,910	1,470	3,180	460	236	217
21	80	63	64	32	41	160	2,890	1,370	3,030	420	225	133
22	80	57	67	30	40	189	2,550	1,280	2,640	380	182	196
23	74	70	65	31	42	470	2,460	1,220	2,600	355	292	160
24	76	72	55	32	44	560	2,510	1,200	2,940	340	410	120
25	78	45	54	32	44	520	2,740	1,190	3,180	320	330	116
26	66	42	61	31	43	512	2,750	1,190	2,830	288	300	116
27	85	48	63	30	41	470	2,660	1,190	2,370	260	264	115
28	85	53	61	30	44	435	3,740	1,360	2,000	248	232	119
29	94	62	58	30	-----	304	5,360	1,380	1,740	224	216	119
30	92	64	54	31	-----	317	5,920	1,770	1,630	216	216	114
31	104	-----	53	32	-----	371	-----	1,820	-----	208	186	-----
TOTAL	2,462	2,303	1,857	1,167	1,034	5,495	67,914	70,580	64,270	20,151	6,460	4,375
MEAN	79.4	76.8	59.9	37.6	36.9	177	2,264	2,277	2,142	650	208	146
MAX	104	97	69	50	44	560	5,920	5,630	3,180	1,490	410	217
MIN	54	42	41	29	25	42	283	1,190	1,320	208	142	114
CFSM	.04	.03	.03	.02	.02	.08	1.00	1.01	.95	.29	.09	.06
IN.	.04	.04	.03	.02	.02	.09	1.12	1.16	1.06	.33	.11	.07
AC-FT	4,880	4,570	3,680	2,310	2,050	10,900	134,700	140,000	127,500	39,970	12,810	8,680

CAL YR 1974 TOTAL 196,870 MEAN 539 MAX 2,830 MIN 41 CFSM .24 IN 3.25 AC-FT 390,500
WTR YR 1975 TOTAL 248,068 MEAN 680 MAX 5,920 MIN 25 CFSM .30 IN 4.09 AC-FT 492,000

PEAK DISCHARGE (BASE, 2,800 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
4-18	--	--	* 2,900	6-6	1915	6.65	2,940
4-26	1145	6.74	2,880	6-20	1415	6.91	3,240
4-30	1030	9.10	6,020	6-25	0700	6.86	3,180
5-13	1545	6.83	3,140				

* About.

DES MOINES RIVER BASIN

05479000 EAST FORK DES MOINES RIVER AT DAKOTA CITY, IOWA

LOCATION.--Lat. 42°43'26", long 94°11'30", in NW1/4 SE1/4 sec.6, T.91 N., R.28 W., Humboldt County, on right bank 50 ft (15 m) upstream from old mill dam, in city park at east edge of Dakota City, 500 ft (152 m) upstream from bridge on county highway P56, 0.6 mi (1.0 km) downstream from bridge on State Highway 3, 3.4 mi (5.5 km) upstream from confluence with Des Moines River, and at mile 333.8 (537.1 km) upstream from mouth of Des Moines River.

DRAINAGE AREA.--1,308 mi² (3,387 km²).

PERIOD OF RECORD.--March 1940 to current year. Prior to October 1954, published as "near Hardy".

GAGE.--Water-stage recorder. Datum of gage is 1,038.71 ft (316.60 m) above mean sea level. Prior to Oct. 1, 1954, nonrecording gage at site 8 mi (12.9 km) upstream at different datum.

AVERAGE DISCHARGE.--35 years, 498 ft³/s (14.1 m³/s), 5.17 in/yr (131 mm/yr), 360,800 acre-ft/yr (445 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,840 ft³/s (109 m³/s) May 1, gage height, 13.98 ft (4.261 m); minimum daily, 14 ft³/s (0.40 m³/s) Jan. 12.

Period of record: Maximum discharge, 18,800 ft³/s (532 m³/s) June 21, 1954, gage height, 16.95 ft (5.166 m), from floodmark, site and datum then in use; minimum daily, 5.0 ft³/s (142 dm³/s) Sept. 23, 1948.

Flood of June 21, 1954, reached a stage of 24.02 ft (7.321 m), discharge, 17,400 ft³/s (493 m³/s) at present site. Flood of September 1938 reached a stage of 17.4 ft (5.30 m), discharge, about 22,000 ft³/s (0.62 m³/s) site and datum in use during the period 1940-54.

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

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

REVISIONS (WATER YEARS).--WSP 1438: Drainage area. WSP 1508: 1944, 1945-47 (M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31	48	24	26	20	29	510	3,790	1,100	1,090	65	52
2	29	37	24	26	19	29	400	3,690	1,120	963	63	43
3	33	37	26	26	19	30	540	3,420	1,140	857	60	40
4	34	35	27	25	19	29	640	3,050	1,190	769	57	36
5	35	33	28	25	20	28	610	2,660	1,330	704	54	53
6	41	33	31	27	22	28	600	2,350	1,460	669	51	44
7	40	33	33	28	23	27	740	2,160	1,520	649	49	35
8	36	32	34	28	24	26	900	2,010	1,650	618	47	33
9	34	34	28	27	25	25	1,100	1,830	1,830	561	50	31
10	33	35	29	22	26	24	1,380	1,670	1,960	514	50	30
11	34	34	29	18	27	24	1,500	1,600	2,070	472	51	31
12	33	33	29	14	28	24	1,580	1,680	2,200	427	50	29
13	35	32	29	15	29	24	1,690	1,700	2,230	388	44	28
14	34	31	29	16	30	24	1,780	1,600	2,150	357	42	29
15	34	30	28	17	30	24	1,890	1,510	2,120	325	41	28
16	33	31	27	18	30	34	2,020	1,430	2,120	291	39	27
17	32	30	26	19	30	64	2,090	1,350	2,090	262	38	28
18	33	31	24	20	30	124	2,170	1,270	2,040	231	52	26
19	32	34	25	21	29	174	2,210	1,170	2,060	203	50	27
20	26	33	25	22	29	244	2,180	1,080	2,200	183	50	27
21	27	31	25	23	28	400	2,090	977	2,190	161	41	25
22	32	31	25	24	27	550	2,000	887	2,200	141	34	26
23	30	30	24	25	27	750	1,970	806	2,230	129	31	25
24	29	29	23	25	27	800	1,920	738	2,220	122	48	23
25	27	26	20	24	26	740	1,790	687	2,190	112	101	24
26	29	23	22	23	26	730	1,660	652	2,030	103	85	22
27	28	25	23	22	26	740	1,660	611	1,790	94	64	23
28	28	26	25	22	27	770	2,510	610	1,560	84	53	24
29	32	26	25	21	-----	850	3,220	692	1,380	77	56	28
30	33	25	25	21	-----	900	3,490	844	1,230	72	79	28
31	42	-----	25	20	-----	780	-----	1,030	-----	69	62	-----
TOTAL	1,009	948	817	690	723	9,045	48,840	49,554	54,600	11,698	1,657	925
MEAN	32.5	31.6	26.4	22.3	25.8	292	1,628	1,599	1,820	377	53.5	30.8
MAX	42	48	34	28	30	900	3,490	3,790	2,230	1,090	101	53
MIN	26	23	20	14	19	24	400	610	1,100	69	31	22
CFSM	.02	.02	.02	.02	.02	.22	1.24	1.22	1.39	.29	.04	.02
IN.	.03	.03	.02	.02	.02	.26	1.39	1.41	1.55	.33	.05	.03
AC-FT	2,000	1,880	1,620	1,370	1,430	17,940	96,870	98,290	108,300	23,200	3,290	1,830
CAL YR 1974	TOTAL 195,987 MEAN 537 MAX 2,400 MIN 20 CFSM .41 IN 5.57 AC-FT 388,700											
WTR YR 1975	TOTAL 180,506 MEAN 495 MAX 3,790 MIN 14 CFSM .38 IN 5.13 AC-FT 358,000											

PEAK DISCHARGE (BASE, 1,500 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
4-19	0645	11.78	2,210	6-13	0100	11.83	2,240
5-1	1645	13.98	3,840	6-20	1430	11.80	2,220
5-12	2300	11.03	1,720	6-25	0745	11.85	2,260

DES MOINES RIVER BASIN

91

05480000 LIZARD CREEK NEAR CLARE, IOWA

LOCATION.--Lat 42°32'35", long 94°20'45", in NE1/4 NE1/4 sec.11, T.89 N., R.30 W., Webster County, on right bank 20 ft (6 m) downstream from bridge on county highway, 2.3 mi (3.7 km) downstream from Drainage ditch 3, 3.0 mi (4.8 km) south of Clare, and 8.2 mi (13.2 km) upstream from South Lizard Creek.

DRAINAGE AREA.--257 mi² (666 km²).

PERIOD OF RECORD.--March 1940 to current year. Prior to April 1940, monthly discharge only, published in WSP 1308. Prior to October 1954, published as North Lizard Creek near Clare.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,079.30 ft (328.97 m) above mean sea level. Prior to May 6, 1953, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--35 years, 98.5 ft³/s (2.79 m³/s), 5.20 in/yr (132 mm/yr)k 71,360 acre-ft/yr (88.0 hm³/yr); median of yearly mean discharges, 82 ft³/s (2.32 m³/s); 4.3 in/yr (109 mm/yr), 59,400 acre-ft/yr (73.2 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,300 ft³/s (65.1 m³/s) Apr. 29, gage height, 8.26 ft (2.518 m); minimum daily, 0.66 ft³/s (0.019 m³/s) Dec. 9.

Period of record: Maximum discharge, 10,000 ft³/s (283 m³/s) June 23, 1947, gage height, 16.0 ft (4.88 m), from floodmark, from rating curve extended above 5,300 ft³/s (150 m³/s); no flow Sept. 30, 1943, Aug. 27-29, 1956, Jan. 15, 16, 1968.

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

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

REVISIONS (WATER YEARS).--WSP 1508: 1940, 1942, 1944-46 (M), 1947-48.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.8	13	2.6	1.3	1.9	1.8	104	665	282	192	13	9.9
2	1.8	8.8	1.9	1.1	1.9	1.8	104	478	236	169	13	7.0
3	1.6	5.5	1.5	1.4	2.0	1.8	104	425	212	150	13	7.7
4	2.0	6.4	1.4	1.6	2.0	1.8	111	398	198	135	12	6.4
5	1.9	4.4	1.3	1.6	2.0	1.8	118	325	201	123	10	9.0
6	6.0	4.3	1.1	1.7	2.0	1.9	140	267	188	114	9.6	14
7	5.7	3.1	.90	1.8	2.0	1.9	194	269	167	100	9.1	15
8	7.0	3.3	.74	1.9	2.0	1.9	270	328	152	91	8.7	11
9	4.3	3.8	.66	2.0	2.0	1.9	380	337	154	83	7.6	7.6
10	3.1	5.5	.90	2.1	2.0	1.9	420	283	200	75	7.1	7.1
11	3.9	5.6	1.1	2.3	2.0	2.0	421	286	298	69	8.5	6.9
12	3.9	5.9	1.2	2.5	2.0	2.0	422	616	468	63	9.3	7.6
13	5.3	6.1	1.4	1.7	2.0	2.0	398	522	408	59	12	6.0
14	5.0	4.5	1.8	1.3	2.0	2.0	376	390	330	55	12	5.5
15	5.1	3.6	2.4	1.1	2.0	2.1	363	317	304	52	9.8	4.9
16	5.5	3.3	2.9	1.3	1.9	2.5	346	266	282	46	8.5	4.9
17	5.3	3.2	2.6	1.3	1.9	3.5	328	233	267	42	7.5	4.9
18	3.9	4.2	2.3	1.4	1.9	20	269	213	252	39	7.6	4.9
19	3.2	4.6	2.1	1.5	1.9	395	285	196	606	38	8.2	4.6
20	3.4	4.9	1.9	1.5	1.9	350	267	179	605	37	9.9	4.1
21	3.3	4.9	1.8	1.6	1.9	270	223	163	463	36	15	4.7
22	3.6	4.8	1.6	1.7	1.8	220	213	144	466	32	16	4.3
23	2.2	4.1	1.4	1.7	1.8	150	264	130	405	29	15	4.0
24	2.3	3.6	1.2	1.8	1.8	106	340	120	397	30	12	3.4
25	2.8	3.7	1.0	1.8	1.8	88	266	113	498	26	11	3.3
26	2.9	4.0	.90	1.8	1.8	81	222	111	464	22	11	3.1
27	3.6	3.5	1.2	1.8	1.8	76	366	115	362	20	9.9	2.5
28	2.9	3.4	1.6	1.9	1.8	90	1,350	116	288	18	9.9	3.0
29	4.4	3.2	1.8	1.9	-----	108	1,940	201	247	16	10	4.2
30	6.5	3.0	1.7	1.9	-----	120	1,060	368	216	15	11	4.3
31	11	-----	1.5	1.9	-----	112	-----	350	-----	14	11	-----
TOTAL	125.2	142.2	48.40	52.2	53.8	2,220.6	11,664	8,934	9,616	1,990	328.2	185.8
MEAN	4.04	4.74	1.56	1.68	1.92	71.6	389	288	321	64.2	10.6	5.19
MAX	11	13	2.9	2.5	2.0	395	1,940	665	606	192	16	15
MIN	1.6	3.0	.66	1.1	1.8	1.8	104	111	152	14	7.1	2.5
CFSM	.02	.02	.006	.007	.008	.28	1.51	1.12	1.25	.25	.04	.02
IN.	.02	.02	.007	.007	.007	.32	1.69	1.29	1.39	.29	.05	.03
AC-FT	248	282	96	104	107	4,400	23,140	17,720	19,070	3,950	651	369

CAL YR 1974 TOTAL 42,057.20 MEAN 115 MAX 1,250 MIN .66 CFSM .45 IN 6.09 AC-FT 83,420
WTR YR 1975 TOTAL 35,360.40 MEAN 96.9 MAX 1,940 MIN .66 CFSM .38 IN 5.12 AC-FT 70,140

PEAK DISCHARGE (BASE, 800 FT³/S).--Apr. 29 (0330) 2,300 ft³/s (8.26 ft).

05480500 DES MOINES RIVER AT FORT DODGE, IOWA

LOCATION.--Lat 42°30'22", long 94°12'04", in NW1/4 SW1/4 sec.19, T.89 N., R.28 W., Webster County, on right bank 400 ft (122 m) upstream from Soldier Creek, 1,800 ft (549 m) downstream from Illinois Central Railroad bridge in Fort Dodge, 2,000 ft (610 m) downstream from Lizard Creek, and at mile 314.6 (506.2 km).

DRAINAGE AREA.--4,190 mi² (10,852 km²).

PERIOD OF RECORD.--April 1905 to July 1906 (no winter records), October 1913 to September 1927 (published as "at Kato"), October 1946 to current year. Monthly discharge only for some periods, published in WSP 1308.

GAGE.--Water-stage recorder. Datum of gage is 969.38 ft (295.47 m) above mean sea level. See WSP 1728 for history of changes prior to Dec. 8, 1949.

AVERAGE DISCHARGE.--43 years (1913-27, 1946-75), 1,388 ft³/s (39.3 m³/s) 4.50 in/yr (114 mm/yr), 1,006,000 acre-ft/yr (1,240 hm³/yr); median of yearly mean discharges, 1,170 ft³/s (33.1 m³/s), 3.8 in/yr (96 mm/yr), 848,000 acre-ft/yr (1,050 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 12,200 ft³/s (346 m³/s) Apr. 29, gage height, 9.05 ft (2.758 m); minimum daily, 69 ft³/s (1.95 m³/s) Jan. 20-22. Period of record: Maximum discharge, 35,600 ft³/s (1,010 m³/s) Apr. 8, 1965, gage height, 17.79 ft (5.422 m); maximum gage height, 19.62 ft (5.980 m), from floodmark, June 23, 1947, present site and datum; minimum daily discharge, 14 ft³/s (0.40 m³/s) Nov. 3, 1955.

REMARKS.--Records good except those for winter period, which are poor. Occasional minor regulation caused by dam 0.8 mi (1.3 km) upstream from gage.

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

REVISIONS (WATER YEARS).--WSP 1438: Drainage area. WSP 1308: 1924, 1925 (M).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	168	226	118	80	82	124	1,100	10,800	3,200	2,840	316	278
2	168	197	110	79	83	124	980	9,820	2,930	2,580	316	260
3	164	182	114	78	85	124	1,280	8,650	2,750	2,280	304	252
4	171	179	116	77	86	124	1,220	7,550	2,690	2,030	300	235
5	186	174	120	76	87	124	1,260	6,510	3,060	1,850	286	320
6	207	166	122	75	90	124	1,460	5,650	4,070	1,720	288	232
7	172	163	124	74	93	124	1,870	5,150	4,100	1,610	303	236
8	144	161	124	74	96	124	2,760	4,950	3,670	1,520	215	218
9	145	170	118	74	100	126	4,200	4,660	3,600	1,450	257	204
10	138	187	114	74	104	126	4,430	4,230	3,690	1,310	262	200
11	153	181	114	74	108	128	4,220	4,160	4,310	1,220	255	209
12	149	176	116	73	110	128	4,300	4,850	4,960	1,130	267	198
13	143	169	116	72	112	130	4,620	5,340	5,040	1,060	258	190
14	151	169	114	72	114	134	4,700	4,840	4,950	998	238	200
15	144	155	112	71	116	140	4,860	4,220	4,710	932	229	209
16	142	153	106	70	118	146	5,130	3,750	4,480	862	222	202
17	141	162	104	70	120	200	5,350	3,430	4,390	771	221	195
18	135	165	102	70	122	1,400	5,420	3,150	4,360	690	286	193
19	138	168	100	70	120	1,800	5,480	2,910	4,830	696	321	184
20	135	171	100	69	120	1,640	5,440	2,690	5,680	661	329	201
21	132	160	99	69	120	1,400	5,190	2,460	5,830	613	340	234
22	135	154	99	69	122	1,300	4,850	2,280	5,470	568	297	176
23	144	144	98	70	122	1,420	4,920	2,130	5,110	542	270	255
24	140	140	97	70	124	1,620	5,000	1,970	5,440	517	482	180
25	138	136	95	71	124	1,500	4,930	1,910	7,820	486	496	167
26	134	132	93	72	124	1,320	4,730	1,810	6,810	457	428	167
27	138	128	90	74	124	1,160	4,790	1,810	5,400	425	375	161
28	143	127	88	75	126	1,500	9,910	2,070	4,270	388	337	174
29	171	130	86	77	-----	1,540	11,800	2,390	3,640	363	326	174
30	169	132	85	79	-----	1,430	11,700	2,910	3,170	343	314	176
31	214	-----	82	80	-----	1,260	-----	3,270	-----	331	295	-----
TOTAL	4,752	4,857	3,276	2,278	3,052	22,540	137,900	132,320	134,430	33,243	9,433	6,280
MEAN	153	162	106	73.5	109	727	4,597	4,268	4,481	1,072	304	209
MAX	214	226	124	80	126	1,800	11,800	10,800	7,820	2,840	496	320
MIN	132	127	82	69	82	124	980	1,810	2,690	331	215	161
CFSM	.04	.04	.03	.02	.03	.17	1.10	1.02	1.07	.26	.07	.05
IN.	.04	.04	.03	.02	.03	.20	1.22	1.17	1.19	.30	.08	.06
AC-FT	9,430	9,630	6,500	4,520	6,050	44,710	273,500	262,500	266,600	65,940	18,710	12,460

CAL YR 1974 TOTAL 501,193 MEAN 1,373 MAX 8,240 MIN 82 CFSM .33 IN 4.45 AC-FT 994,100
WTR YR 1975 TOTAL 494,361 MEAN 1,354 MAX 11,800 MIN 69 CFSM .32 IN 4.39 AC-FT 980,600

PEAK DISCHARGE (BASE, 6,000 FT³/S).--Apr. 29 (2315) 12,200 ft³/s (9.05 ft); June 25 (0915) 10,000 ft³/s (8.17 ft).

05481000 BOONE RIVER NEAR WEBSTER CITY, IOWA

LOCATION.--Lat 42°26'01", long 93°48'12", in NW1/4 SE1/4 sec.18, T.88 N., R.25 W., Hamilton County, on right bank 100 ft (30 m) upstream from bridge on State Highway 17, 2.5 mi (4.0 km) southeast of junction of U.S. Highway 20 and State Highway 17 in Webster City, and 3.2 mi (5.1 km) downstream from Brewers Creek.

DRAINAGE AREA.--844 mi² (2,185 km²).

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 989.57 ft (301.62 m) above mean sea level. Prior to June 26, 1940, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--35 years, 386 ft³/s (10.9 m³/s), 6.21 in/yr (158 mm/yr), 279,700 acre-ft/yr (345 hm³/yr); median of yearly mean discharges, 320 ft³/s (9.06 m³/s), 5.1 in/yr (130 mm/yr), 232,000 acre-ft/yr (286 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 5,810 ft³/s (165 m³/s) Apr. 29, gage height, 9.45 ft (2.880 m); minimum daily, 17 ft³/s (0.48 m³/s) Sept. 27.
Period of record: Maximum discharge, 20,300 ft³/s (575 m³/s) June 22, 1954, gage height, 18.55 ft (5.654 m); minimum daily, 1.6 ft³/s (45 dm³/s) Sept. 30, Oct. 1, 1956.
Maximum stage since 1896, 19.1 ft (5.82 m) about June 10, 1918, from floodmarks, from information by local resident, discharge, 21,500 ft³/s (609 m³/s). Flood of June 18, 1932, reached a stage of 16.0 ft (4.88 m), discharge, 15,000 ft³/s (425 m³/s).

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

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

REVISIONS (WATER YEARS).--WSP 1438: Drainage area. WSP 1308: 1940 (M), WSP 1708: 1956.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	205	47	34	34	55	490	4,280	1,150	689	52	46
2	20	154	66	34	34	65	420	2,810	976	606	53	43
3	19	119	67	35	34	78	378	1,960	1,020	538	55	36
4	19	105	50	35	33	66	492	1,660	968	475	51	32
5	19	93	41	35	33	61	566	1,480	1,080	449	46	44
6	51	79	35	36	33	66	820	1,260	1,090	457	43	44
7	39	70	43	36	33	96	1,020	1,080	944	448	40	45
8	35	66	56	36	32	83	1,080	974	791	419	37	38
9	28	66	34	36	32	67	1,200	877	798	363	36	34
10	26	72	33	36	32	57	1,300	792	1,080	315	35	31
11	50	72	32	36	32	59	1,150	792	1,790	280	38	29
12	64	67	32	35	32	58	1,060	1,060	2,970	248	38	26
13	51	64	32	35	32	57	993	1,160	2,810	223	56	25
14	43	61	32	35	32	55	1,010	1,110	2,400	203	47	26
15	37	59	35	35	32	55	1,210	1,000	2,160	186	42	27
16	34	61	39	35	31	54	1,180	896	1,960	169	35	24
17	35	58	50	35	31	239	1,110	794	1,820	150	31	23
18	32	55	54	35	31	1,220	1,050	728	2,030	134	36	22
19	31	54	56	35	32	1,910	1,160	685	2,160	125	96	21
20	30	52	56	35	32	1,800	1,130	640	1,850	122	91	20
21	32	51	33	35	33	1,540	990	595	1,670	108	69	20
22	30	52	32	35	34	1,330	936	550	1,560	99	50	21
23	30	52	32	35	36	1,120	1,120	510	1,410	100	44	21
24	29	47	31	35	38	1,070	1,330	472	1,320	91	43	19
25	30	45	31	35	40	817	1,150	440	1,240	81	87	18
26	29	48	31	35	42	549	1,000	413	1,190	78	65	18
27	29	52	31	34	45	380	1,400	386	1,470	72	71	17
28	32	53	31	34	50	405	3,960	396	1,110	67	66	23
29	34	45	32	34	-----	435	5,460	781	920	64	55	24
30	49	36	32	34	-----	400	4,700	1,390	789	59	45	23
31	152	-----	33	34	-----	445	-----	1,340	-----	55	48	-----
TOTAL	1,163	2,113	1,239	1,084	965	14,692	40,865	33,311	44,526	7,473	1,601	840
MEAN	37.5	70.4	40.0	35.0	34.5	474	1,362	1,075	1,484	241	51.6	28.0
MAX	152	205	67	36	50	1,910	5,460	4,280	2,970	689	96	46
MIN	19	36	31	34	31	54	378	386	789	55	31	17
CFSM	.04	.08	.05	.04	.04	.56	1.61	1.27	1.76	.29	.06	.03
IN.	.05	.09	.05	.05	.04	.65	1.80	1.47	1.96	.33	.07	.04
AC-FT	2,310	4,190	2,460	2,150	1,910	29,140	81,060	66,070	88,320	14,820	3,180	1,670
CAL YR 1974	TOTAL 193,471	MEAN 530	MAX 3,290	MIN 16	CFSM .63	IN 8.53	AC-FT 383,700					
WTR YR 1975	TOTAL 149,872	MEAN 411	MAX 5,460	MIN 17	CFSM .49	IN 6.61	AC-FT 297,300					

PEAK DISCHARGE (BASE, 2,200 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-19	2145	6.03	2,280	6-12	2030	6.73	3,080
4-29	0500	9.45	5,810	6-18	1800	5.97	2,440

DES MOINES RIVER BASIN

05481300 DES MOINES RIVER NEAR STRATFORD, IOWA

LOCATION.--Lat 42°15'04", long 93°59'52", in NW1/4 NE1/4 sec.21, T.86 N., R.27 W., Webster County, on right bank 6 ft (2 m) downstream from bridge on State Highway 175, 0.1 mi (0.2 km) downstream from Skillet Creek, 4.0 mi (6.4 km) southwest of Stratford, 7.3 mi (11.7 km) downstream from Boone River and at mile 276.7 (445.2 km).

DRAINAGE AREA.--5,452 mi² (14,120 km²).

PERIOD OF RECORD.--April 1920 to current year in reports of Geological Survey. Published as "near Boone" 1920-67. Monthly discharge only for some periods, published in WSP 1308. December 1904 to April 1920 (fragmentary gage heights during high-water periods only) in reports of U.S. Weather Bureau.

GAGE.--Water-stage recorder. Datum of gage is 894.00 ft (272.49 m) above mean sea level. Prior to May 1, 1920, nonrecording gage 16.6 mi (26.7 km) downstream at datum 23.49 ft (7.16 m) lower. Oct. 9, 1924, to Jan. 10, 1933, nonrecording gage 17.6 mi (28.3 km) downstream at datum 26.53 ft (8.70 m) lower. Jan. 11, 1933, to Sept. 30, 1934, nonrecording gage 17.9 mi (28.8 km) downstream at datum 22.25 ft (6.78 m) lower. Oct. 1, 1934, to Feb. 6, 1935, nonrecording gage and Feb. 7, 1935 to Sept. 30, 1967, water-stage recorder 17.9 mi (28.8 km) downstream at datum 21.84 ft (6.66 m) lower.

AVERAGE DISCHARGE.--55 years, 1,780 ft³/s (50.4 m³/s), 4.43 in/yr (113 mm/yr), 1,290,000 acre-ft/yr (1,590 hm³/yr); median of yearly mean discharges, 1,610 ft³/s (45.6 m³/s), 4.0 in/yr (102 mm/yr), 1,166,000 acre-ft/yr (1,440 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 22,400 ft³/s (634 m³/s) June 25, gage height, 19.36 ft (5.901 m); minimum daily, 138 ft³/s (3.91 m³/s) Jan. 9, 10.

Period of record: Maximum discharge, 57,400 ft³/s (1,630 m³/s) June 22, 1954, gage height, 25.35 ft (7.727 m), from graph based on hourly gage readings, site and datum then in use; no flow for a short time on Jan. 9, 25, 1938, caused by manipulation of gates in control dam, site then in use; minimum daily discharge, 17 ft³/s (0.48 m³/s) Jan. 28, 1940, unaffected by gate operation, site then in use.

Flood of May 30, 1903, reached a stage of 25.4 ft (7.74 m), from high-water mark, site and datum then in use, discharge, 43,600 ft³/s (1,230 m³/s). Flood of June 22, 1954, reached a stage of 29.7 ft (9.05 m), from floodmark, present site and datum, discharge, 54,200 ft³/s (1,530 m³/s).

REMARKS.--Records good except those for winter period, which are poor. Occasional minor regulation caused by dam at Fort Dodge.

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

REVISIONS (WATER YEARS).--WSP 1438: Drainage area. WSP 1508: 1925-27, 1934. WSP 1708: 1955.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	188	538	168	150	166	222	2540	17800	5180	5030	445	367
2	175	528	168	148	170	228	2000	15800	4780	4480	438	349
3	171	429	170	146	172	230	1800	13100	4800	4010	423	323
4	173	376	172	144	176	234	2100	11100	4540	3590	402	307
5	178	355	176	142	178	240	2490	9610	4480	3290	390	318
6	263	333	182	140	180	242	2930	8340	5410	3120	370	400
7	261	392	184	140	182	244	3420	7560	5750	2910	361	304
8	222	285	186	140	180	246	3960	7090	5300	2760	377	296
9	206	285	182	138	178	248	4850	6700	5100	2600	296	280
10	201	314	176	138	176	248	6950	6180	5380	2250	312	254
11	220	321	172	140	174	248	6720	5820	7780	2160	328	250
12	274	307	164	140	174	250	6170	6260	10200	2010	323	253
13	222	302	154	142	174	250	6300	7280	9870	1840	349	244
14	228	298	146	144	176	252	6560	7120	8630	1730	333	237
15	226	283	144	146	180	256	7050	6350	7810	1610	300	236
16	224	275	142	148	182	272	7090	5600	7280	1480	288	250
17	210	268	142	150	184	320	7170	5060	7260	1360	272	248
18	206	266	144	154	184	820	7200	4650	7740	1190	269	238
19	204	277	148	158	184	5300	7330	4320	8220	1130	340	231
20	194	270	150	160	186	4750	7350	3990	8680	1110	430	226
21	200	265	154	162	184	4350	7120	3690	8650	1020	424	218
22	194	262	160	162	186	3900	6770	3470	8040	929	407	320
23	197	253	164	162	188	3480	6840	3280	7430	888	361	210
24	203	230	168	162	190	3100	7220	3030	7520	823	313	261
25	198	214	172	164	196	2700	7050	2870	16900	762	609	220
26	195	194	168	166	204	2550	6620	2770	14700	706	650	197
27	193	180	164	166	210	2350	6540	2650	13000	641	538	194
28	194	166	160	168	216	2200	12200	2910	8740	593	489	200
29	210	168	156	170	---	2500	18500	3610	6860	539	461	203
30	245	168	152	168	---	2300	19000	4750	5770	502	432	203
31	435	---	152	166	---	2440	---	5420	---	468	381	---
TOTAL	6710	8802	5040	4724	5130	46970	199840	198180	231800	57531	12111	7847
MEAN	216	293	163	152	183	1515	6661	6393	7727	1856	391	262
MAX	435	538	186	170	216	5300	19000	17800	16900	5030	650	400
MIN	171	166	142	138	166	222	1800	2650	4480	468	269	194
CFSM	.04	.05	.03	.03	.03	.28	1.22	1.17	1.42	.34	.07	.05
IN.	.05	.06	.03	.03	.04	.32	1.36	1.35	1.58	.39	.08	.05
AC-FT	13310	17460	10000	9370	10160	93160	396400	393100	459800	114100	24020	15560

CAL YR 1974 TOTAL 819493 MEAN 2245 MAX 13600 MIN 142 CFSM .41 IN 5.59 AC-FT 1625000
WTR YR 1975 TOTAL 784685 MEAN 2150 MAX 19000 MIN 138 CFSM .39 IN 5.35 AC-FT 1556000

PEAK DISCHARGE (BASE, 7,000 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
4-20	0215	11.60	7,410	6-12	1915	13.70	10,600
4-24	1500	11.50	7,280	6-20	2145	12.59	8,860
4-30	0030	18.28	19,400	6-25	1700	19.36	22,400
5-13	1800	11.62	7,440				

05481650 DES MOINES RIVER NEAR SAYLORVILLE, IOWA

LOCATION.--Lat 41°40'50", long 93°40'07", near center of sec.5, T.79 N., R.24 W., Polk County, near center of span on downstream side of bridge on county highway F42, 2.0 mi (3.2 km) west of Saylorville, 2.1 mi (3.4 km) downstream from Rock Creek, 2.4 mi (3.9 km) upstream from Beaver Creek, and at mile 211.6 (340.5 km).

DRAINAGE AREA.--5,841 mi² (15,128 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 787.42 ft (240.01 m) above mean sea level (levels by Corps of Engineers). Prior to Aug. 6, 1970, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--14 years, 2,668 ft³/s (75.6 m³/s), 6.21 in/yr (158 mm/yr), 1,933,000 acre-ft/yr (2,380 hm³/yr); median of yearly mean discharges, 2,280 ft³/s (64.6 m³/s) 5.3 in/yr (135 mm/yr), 1,650,000 acre-ft/yr (2,030 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 19,100 ft³/s (541 m³/s) May 1, gage height, 18.53 ft (5.65 m); minimum daily, 130 ft³/s (3.68 m³/s) Dec. 4.
Period of record: Maximum discharge, 47,400 ft³/s (1,340 m³/s) Apr. 10, 1965, gage height, 24.02 ft (7.321 m); minimum daily, 44 ft³/s (1.25 m³/s) Jan. 10, 1968.
Maximum stage since at least 1893, 24.5 ft (7.47 m), present gage datum, June 24, 1954, from floodmarks, discharge, 60,000 ft³/s (1,700 m³/s).

REMARKS.--Records good except those for winter period, which are fair. Records of chemical and biological analyses, water temperatures, and suspended-sediment discharge for the current year are published in Part 2 of this report.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	303	665	200	160	240	250	2,990	18,800	5,880	6,610	590	439
2	259	593	170	200	230	250	3,310	18,900	5,620	5,800	554	407
3	269	584	150	150	220	270	2,570	17,600	5,190	4,440	537	398
4	257	546	130	200	220	270	2,210	15,300	5,240	3,970	518	383
5	249	475	285	200	210	280	2,450	12,600	4,910	4,090	497	398
6	253	433	308	180	210	290	2,840	10,400	4,770	3,940	465	381
7	290	405	321	190	210	290	3,150	9,020	5,500	3,720	449	369
8	336	397	260	170	200	290	3,590	8,370	5,810	3,450	433	386
9	328	406	299	170	200	280	4,700	7,600	5,650	3,190	431	356
10	296	367	314	180	200	280	6,750	7,280	5,510	2,980	435	345
11	286	365	316	300	200	280	7,430	6,730	6,240	2,690	390	332
12	310	361	310	220	200	280	7,040	6,370	8,650	2,440	411	315
13	320	359	301	240	200	280	6,520	6,720	10,100	2,270	427	298
14	342	354	289	250	200	280	6,590	7,460	10,900	2,100	426	292
15	323	349	316	260	200	280	6,810	7,300	10,800	1,850	417	284
16	310	338	256	260	200	330	7,110	6,600	9,330	1,810	402	275
17	288	338	280	260	210	700	7,270	5,540	8,550	1,680	374	277
18	283	337	270	260	210	1,900	7,290	5,640	9,180	1,550	399	288
19	271	328	260	260	220	2,600	7,260	5,050	10,900	1,430	408	278
20	266	334	250	260	220	4,890	7,270	4,570	10,300	1,300	380	278
21	258	324	260	250	230	6,960	7,360	4,260	9,790	1,300	420	274
22	253	317	265	250	230	6,670	7,200	4,140	9,640	1,260	450	269
23	253	316	270	240	240	5,030	7,360	3,890	8,880	1,130	453	274
24	252	309	275	240	240	4,710	7,450	3,670	8,480	1,090	436	288
25	269	294	280	240	250	4,330	7,530	3,420	8,520	991	421	248
26	294	286	230	250	260	3,940	7,260	3,210	11,900	926	405	304
27	265	284	220	250	260	3,310	7,000	3,050	17,900	851	639	277
28	258	258	210	260	250	3,340	8,070	2,990	16,500	799	587	244
29	265	262	210	260	-----	3,180	10,900	3,830	11,600	739	600	239
30	285	221	220	260	-----	3,230	15,500	4,640	7,920	678	516	230
31	545	-----	190	250	-----	3,070	-----	5,380	-----	632	470	-----
TOTAL	9,036	11,205	7,915	7,120	6,160	62,350	190,780	230,530	260,160	71,716	14,350	9,426
MEAN	291	374	255	230	220	2,011	6,359	7,436	8,672	2,313	463	314
MAX	545	665	321	300	260	6,960	15,500	18,900	17,900	6,610	639	439
MIN	249	221	130	150	200	250	2,210	2,990	4,770	632	374	230
CFSM	.05	.06	.04	.04	.04	.34	1.09	1.27	1.48	.40	.08	.05
IN.	.06	.07	.05	.05	.04	.40	1.22	1.47	1.66	.46	.09	.06
AC-FT	17,920	22,230	15,700	14,120	12,220	123,700	378,400	457,300	516,000	142,200	28,460	18,700

CAL YR 1974 TOTAL 965,186 MEAN 2,644 MAX 15,200 MIN 130 CFSM .45 IN 6.15 AC-FT 1,914,000
WTR YR 1975 TOTAL 880,748 MEAN 2,413 MAX 18,900 MIN 130 CFSM .41 IN 5.61 AC-FT 1,747,000

PEAK DISCHARGE (BASE, 8,000 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
5-1	2200	18.53	19,100	6-27	1715	18.44	18,800
5-14	1700	15.40	11,500				

DES MOINES RIVER BASIN

05481950 BEAVER CREEK NEAR GRIMES, IOWA

LOCATION.--Lat 41°41'18", long 93°44'08", 200 ft (61 m) east of southwest corner of sec.35, T.80 N., R.25 W., Polk County, on right bank 6 ft (2 m) upstream from bridge on Northwest 70th Avenue, 0.5 mi (0.8 km) downstream from Little Beaver Creek, 2.5 mi (4.0 km) east of Grimes and 6 mi (9.7 km) upstream from mouth.

DRAINAGE AREA.--358 mi² (927 km²).

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

GAGE.--Water-stage recorder and concrete and steel sheeting broad-crested control. Datum of gage is 806.98 ft (245.97 m) above mean sea level. Prior to Aug. 31, 1966, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--15 years, 206 ft³/s (5.83 m³/s), 7.81 in/yr (198 mm/yr), 149,200 acre-ft/yr (184 hm³/yr); median of yearly mean discharges, 200 ft³/s (5.66 m³/s) 7.6 in/yr (193 mm/yr), 145,000 acre-ft/yr (179 hm³/yr).

EXTREMES.--Current year: Maximum discharge, about 2,500 ft³/s (70.8 m³/s) Mar. 18; maximum gage height, 11.61 ft (3.538 m) Mar. 18, backwater from ice jam; minimum daily discharge, 2.5 ft³/s (0.071 m³/s) Aug. 9.
Period of record: Maximum discharge, 7,340 ft³/s (208 m³/s) May 19, 1974, gage height, 14.69 ft (4.478 m); no flow Sept. 8, 11-13, 1970, Sept. 17, 18, Oct. 7-17, 1971.

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

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.8	251	29	45	31	50	338	487	310	439	27	38
2	6.9	203	27	50	31	52	312	393	286	392	18	26
3	8.2	147	27	60	32	58	302	367	273	348	20	17
4	9.0	101	29	50	32	80	281	348	266	322	11	14
5	8.4	81	32	42	32	170	312	333	260	288	9.6	40
6	13	63	40	35	31	180	310	316	245	264	7.9	42
7	11	57	55	30	30	180	312	314	233	233	6.9	33
8	7.9	52	65	27	29	170	314	336	225	208	4.5	27
9	8.4	54	68	25	28	160	436	325	239	182	2.5	19
10	9.6	59	70	32	28	150	664	314	250	146	3.0	13
11	7.9	48	70	50	30	150	503	303	441	141	3.5	23
12	6.4	39	40	45	31	170	413	295	1,060	135	3.0	20
13	9.6	43	48	42	32	160	362	287	1,150	130	6.4	11
14	12	38	55	38	33	180	367	278	1,010	124	23	10
15	14	39	60	35	34	190	365	272	1,220	112	12	10
16	12	38	54	32	35	230	365	263	1,190	106	9.6	9.6
17	7.9	39	60	34	36	1,600	358	252	870	97	7.1	9.6
18	6.4	39	82	35	38	2,200	322	250	1,210	85	12	8.5
19	5.5	36	70	36	39	2,300	312	246	1,860	78	18	7.1
20	4.9	38	60	35	40	2,100	302	241	1,970	72	17	5.9
21	4.9	37	45	32	41	1,980	275	235	1,430	68	15	5.9
22	4.9	37	42	33	42	866	275	225	948	57	10	5.5
23	4.9	36	39	34	42	576	374	225	763	57	7.9	4.9
24	5.5	31	36	37	43	542	436	221	824	62	4.9	4.9
25	5.5	29	33	35	44	436	392	213	948	58	11	4.9
26	5.5	30	29	34	45	362	360	207	729	51	9.6	4.5
27	5.5	28	25	33	46	343	460	199	810	46	103	4.5
28	5.9	24	29	33	47	428	965	202	655	42	85	5.9
29	17	24	32	32	-----	509	984	278	554	37	154	5.5
30	37	32	35	32	-----	444	721	329	492	34	76	4.8
31	201	-----	40	31	-----	365	-----	345	-----	32	51	-----
TOTAL	474.4	1,773	1,426	1,145	1,002	17,381	12,492	8,899	22,721	4,446	749.4	435.0
MEAN	15.3	59.1	46.0	36.9	35.8	561	416	287	757	143	24.2	14.5
MAX	201	251	82	60	47	2,300	984	487	1,970	439	154	42
MIN	4.9	24	25	25	28	50	275	199	225	32	2.5	4.5
CFSM	.04	.17	.13	.10	.10	1.57	1.16	.80	2.11	.40	.07	.04
IN.	.05	.18	.15	.12	.10	1.81	1.30	.92	2.36	.46	.08	.05
AC-FT	941	3,520	2,830	2,270	1,990	34,480	24,780	17,650	45,070	8,820	1,490	863

CAL YR 1974 TOTAL 129,663.4 MEAN 355 MAX 6,370 MIN 4.1 CFSM .99 IN 13.47 AC-FT 257,200
WTR YR 1975 TOTAL 72,943.8 MEAN 200 MAX 2,300 MIN 2.5 CFSM .56 IN 7.58 AC-FT 144,700

PEAK DISCHARGE (BASE, 1,500 FT³/S).--Mar. 18 (time unknown) about 2,500 ft³/s; June 19 (2130) 2,060 ft³/s (10.07 ft).

05482140 STORM LAKE AT STORM LAKE, IOWA

LOCATION.--Lat. 42°37'27", long 95°10'30", in NW1/4 SE1/4 sec.11, T.90 N., R.37 W., Buena Vista County, about 300 ft (91 m) south of swimming beach in Storm Lake State Park, 0.5 mi (0.8 km) southeast of park entrance at intersection of U.S. Highway 71 and Memorial Drive and 1.3 mi (2.1 km) upstream from lake outlet.

DRAINAGE AREA.--28.3 mi² (73.3 km²).

PERIOD OF RECORD.--April 1970 to September 1975 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 1,384.32 ft (421.94 m) above mean sea level. Prior to Dec. 3, 1971, nonrecording gage at site 3 mi (4.8 km) upstream at west side of lake at datum 6.89 ft (2.10 m) higher.

EXTREMES.--Current year: Maximum gage height, 15.30 ft (4.663 m) Apr. 28; minimum observed, 13.20 ft (4.023 m) Nov. 25.

Period of record: Maximum gage height observed, 8.51 ft (2.594 m) June 8, 1971, site and datum then in use; minimum observed, 6.00 ft (1.829 m) Oct. 2, 1970, site and datum then in use.

REMARKS.--Lake is formed by concrete dam with ungated spillway at elevation 1,398.56 ft (426.281 m) above mean sea level. Lake is used for conservation and recreation. Area of lake is approximately 3,000 acres (1,210 km²).

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13.62	13.45						14.95	14.39	14.56	13.92	13.64
2	13.60	13.44						14.88	14.40	14.53	14.00	13.62
3	13.59	13.42				13.40		14.85	14.38	14.50	13.99	13.61
4	13.59	13.41						14.80	14.41	14.47	13.96	13.59
5	13.57	13.39						14.77	14.40	14.45	13.93	13.66
6	13.61	13.40	13.27					14.65	14.38	14.42	13.90	13.65
7	13.57	13.40	13.28					14.66	14.35	14.39	13.86	13.64
8	13.55	13.38	13.29					14.68	14.31	14.36	13.86	13.60
9	13.65	13.37	13.26					14.65	14.35	14.35	13.84	13.57
10	13.55	13.39	13.26					14.64	14.37	14.31	13.86	13.59
11	13.54	13.42	13.26					14.66	14.43	14.30	13.84	13.60
12	13.53	13.40	13.25					14.65	14.47	14.25	13.85	13.58
13	13.53	13.38	13.25					14.64	14.45	14.23	13.83	13.55
14	13.55	13.40	13.25					14.65	14.46	14.23	13.80	13.54
15	13.53	13.35	13.29				14.37	14.58	14.48	14.21	13.80	13.53
16	13.50	13.35	13.30				14.38	14.55	14.48	14.20	13.79	13.51
17	13.49	13.35	13.30				14.40	14.54	14.44	14.17	13.75	13.49
18	13.47	13.34					14.45	14.50	14.52	14.15	13.78	13.52
19	13.47	13.36					14.55	14.50	14.67	14.10	13.80	13.54
20	13.42	13.36					14.45	14.49	14.68	14.09	13.81	13.50
21	13.44	13.31		13.39			14.48	14.45	14.68	14.08	13.81	13.46
22	13.44	13.32					14.47	14.43	14.71	14.05	13.77	13.43
23	13.41	13.32					14.56	14.42	14.69	14.07	13.80	13.40
24	13.41	13.34					14.56	14.40	14.65	14.06	13.77	13.38
25	13.40	13.27					14.55	14.37	14.66	14.03	13.74	13.38
26	13.40	13.30					14.53	14.38	14.69	14.03	13.69	13.37
27	13.39	13.30					14.67	14.34	14.68	13.88	13.66	13.36
28	13.38	13.28					15.08	14.36	14.65	13.96	13.66	13.35
29	13.42	13.27			-----		15.15	14.43	14.63	13.94	13.67	13.35
30	13.41				-----		15.04	14.42	14.59	13.92	13.66	13.36
31	13.45	-----			-----		-----	14.40	-----	13.90	13.64	-----
MEAN	13.50							14.57	14.52	14.20	13.81	13.51
MAX	13.62							14.95	14.71	14.56	14.00	13.66
MIN	13.38							14.34	14.31	13.88	13.64	13.35

DES MOINES RIVER BASIN

05482170 BIG CEDAR CREEK NEAR VARINA, IOWA

LOCATION.--Lat 42°41'16", long 94°47'52", in NE1/4 NE1/4 sec.24, T.91 N., R.34 W., Pocahontas County, on left bank 5 ft (2 m) downstream from bridge on county highway N33, 2.0 mi (3.2 km) downstream from Drainage ditch 21, 3.6 mi (5.6 km) upstream from Drainage ditch 74, and 5.5 mi (8.8 km) northeast of Varina.

DRAINAGE AREA.--80.0 mi² (207 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 1,225.12 ft (373.42 m) above mean sea level.

AVERAGE DISCHARGE.--16 years, 36.4 ft³/s (1.03 m³/s), 6.18 in/yr (157 mm/yr), 26,370 acre-ft/yr (32.5 hm³/yr); median of yearly mean discharges, 31 ft³/s (0.88 m³/s), 5.3 in/yr (135 mm/yr), 22,500 acre-ft/yr (27.7 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,250 ft³/s (35.4 m³/s) Apr. 28, gage height, 10.88 ft (3.316 m); no flow for many days.

Period of record: Maximum discharge, 2,080 ft³/s (58.9 m³/s) Aug. 31, 1962, gage height, 13.68 ft (4.170 m); maximum gage height, 15.05 ft (4.587 m) Apr. 6, 1965, backwater from ice; no flow at times in 1964, 1967, 1968, 1972, 1975.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.37	1.2	.07			0	15	281	91	54	2.6	1.8
2	.48	.93	.05			0	52	224	79	51	3.8	1.6
3	.50	.58	.04			0	160	202	70	45	2.5	1.5
4	.50	.50	.03			0	450	167	77	40	2.1	1.2
5	.65	.47	.02			0	560	125	70	37	2.0	6.3
6	.83	.50	.02			0	660	99	60	33	1.7	3.2
7	.64	.48	.02			0	750	110	55	29	1.5	2.1
8	.52	.46	.01			0	790	152	52	26	1.3	1.6
9	.51	.57	0			0	820	129	62	24	1.3	1.3
10	.46	.99	0			0	730	103	80	23	1.1	1.2
11	.55	.70	0			0	630	234	90	22	2.6	1.4
12	.55	.50	0			0	540	301	116	20	3.4	1.3
13	.60	.40	.01			0	455	187	101	18	1.5	.97
14	.61	.33	.02			0	370	138	88	17	1.1	.87
15	.50	.39	.02			0	250	105	85	14	1.0	.78
16	.48	.49	.01			0	150	88	78	12	.98	.91
17	.48	.55	0			1.0	105	80	72	11	.95	.88
18	.46	.60	0			2.0	85	71	181	9.7	2.9	.93
19	.45	.55	0			3.0	98	66	351	9.3	22	.82
20	.45	.48	0			3.6	69	58	206	8.9	22	.78
21	.39	.35	0			3.9	63	53	159	7.3	12	.78
22	.40	.40	0			4.1	63	54	204	6.6	6.5	.68
23	.53	.31	0			4.3	133	54	186	7.0	5.0	.68
24	.57	.24	0			4.4	109	50	156	7.4	4.5	.63
25	.55	.14	0			4.5	81	47	121	5.3	3.6	.64
26	.50	.14	0			4.5	126	44	104	4.7	3.0	.66
27	.48	.15	0			4.4	348	39	90	4.3	2.6	.65
28	.49	.14	0			4.3	960	49	75	3.9	2.3	.93
29	.90	.11	0			4.2	562	147	67	3.4	3.2	1.7
30	1.3	.09	0			4.1	383	169	60	3.1	2.3	.88
31	1.4	---	0			4.0	---	115	---	2.8	2.1	---
TOTAL	18.10	13.74	.32	0	0	56.3	10567	3741	3286	559.7	125.43	39.67
MEAN	.58	.46	.010	0	0	1.82	352	121	110	18.1	4.05	1.32
MAX	1.4	1.2	.07	0	0	4.5	960	301	351	54	22	6.3
MIN	.37	.09	0	0	0	0	15	39	52	2.8	.95	.63
CFSM	.007	.006	.0001	0	0	.02	4.40	1.51	1.38	.23	.05	.02
IN.	.008	.006	0	0	0	.03	4.91	1.74	1.53	.26	.06	.02
AC-FT	36	27	.6	0	0	112	20960	7420	6520	1110	249	79

CAL YR 1974	TOTAL	9679.83	MEAN	26.5	MAX	201	MIN	0	CFSM	.33	IN	4.50	AC-FT	19200
WTR YR 1975	TOTAL	18407.26	MEAN	50.4	MAX	960	MIN	0	CFSM	.63	IN	8.56	AC-FT	36510

PEAK DISCHARGE (BASE, 400 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
4-9	--	--	* 800	5-11	2000	6.78	413
4-12	--	--	* 600	6-18	2330	7.04	452
4-28	0300	10.88	1,250				

* About.

05482300 NORTH RACCOON RIVER NEAR SAC CITY, IOWA

LOCATION.--Lat 42°20'28", long 94°59'05", in NE1/4 NW1/4 sec.24, T.87 N., R.36 W., Sac County, on right bank 15 ft (5 m) downstream from bridge on county highway, 0.2 mi (0.3 km) upstream from Indian Creek, 0.9 mi (1.4 km) downstream from Drainage ditch 73, and 5.6 mi (9.0 km) south of Sac City.

DRAINAGE AREA.--713 mi² (1,846 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 1,144.60 ft (348.87 m) above mean sea level (levels by Iowa Natural Resources Council).

AVERAGE DISCHARGE.--17 years.. 301 ft³/s (8.52 m³/s), 5.73 in/yr (146 mm/yr), 218,100 acre-ft/yr (269 hm³/yr); median of yearly mean discharges, 270 ft³/s (7.65 m³/s), 5.1 in/yr (130 mm/yr), 196,000 acre-ft/yr (242 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,570 ft³/s (129 m³/s) Apr. 28, gage height, 14.35 ft (4.374 m); minimum daily, 7.4 ft³/s (0.21 m³/s) Jan. 19-21.
Period of record: Maximum discharge, 10,800 ft³/s (306 m³/s) Sept. 1, 1962, gage height, 18.12 ft (5.523 m); minimum daily, 1.0 ft³/s (28 dm³/s) Jan. 25 to Feb. 5, 1959.
Flood of June 21, 1954, reached a stage of 15.61 ft (4.758 m), from floodmark, discharge, 7,000 ft³/s (198 m³/s).

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	33	21	11	11	16	435	3050	829	703	64	50
2	19	32	19	11	11	16	400	2180	706	619	64	45
3	19	31	18	11	12	16	350	1770	651	550	80	42
4	19	28	17	10	12	16	460	1530	619	491	70	38
5	19	26	16	10	12	16	560	1230	613	445	60	48
6	24	26	16	10	12	17	627	1030	560	406	57	59
7	25	26	16	10	12	17	800	1030	503	368	53	60
8	24	26	16	9.7	13	17	1090	1190	466	329	49	48
9	22	26	16	9.4	13	17	1380	1140	468	278	46	45
10	22	29	16	9.1	13	17	1480	951	532	258	46	42
11	20	28	16	9.0	13	17	1040	1040	634	242	51	44
12	21	27	16	8.8	13	18	1040	2070	942	226	51	40
13	21	26	16	8.6	14	18	1030	1750	1040	206	52	35
14	21	26	16	8.3	14	19	812	1300	881	192	47	31
15	23	25	15	8.0	14	20	818	1040	809	178	43	31
16	22	26	15	7.9	14	22	821	862	763	164	40	30
17	21	29	15	7.7	14	26	772	751	702	150	39	29
18	23	31	15	7.5	14	30	714	682	879	137	60	28
19	25	31	15	7.4	15	43	777	629	2370	144	87	27
20	25	30	14	7.4	15	69	762	581	2440	127	460	27
21	25	29	14	7.4	15	110	634	536	2190	118	350	23
22	24	28	14	7.7	15	220	629	489	2110	110	178	27
23	24	28	14	8.4	15	390	845	496	1870	107	123	24
24	24	28	14	8.9	15	480	1150	504	1640	107	99	22
25	24	26	14	9.3	15	465	889	449	1370	103	84	20
26	24	24	13	9.7	15	437	734	422	1630	95	73	21
27	24	25	13	10	15	357	1320	386	1550	88	67	21
28	24	25	13	10	16	375	3660	454	1160	82	60	22
29	26	24	12	10	---	405	4350	938	936	76	63	27
30	27	23	12	11	---	430	4010	1240	802	72	56	25
31	33	---	12	11	---	460	---	1030	---	68	55	---
TOTAL	713	822	469	285	382	4576	34389	32750	32665	7239	2727	1037
MEAN	23.0	27.4	15.1	9.20	13.6	148	1146	1056	1089	234	88.0	34.6
MAX	33	33	21	11	16	480	4350	3050	2440	703	460	60
MIN	19	23	12	7.4	11	16	350	386	466	68	39	20
CFSM	.03	.04	.02	.01	.02	.21	1.61	1.48	1.53	.33	.12	.05
IN.	.04	.04	.02	.01	.02	.24	1.79	1.71	1.70	.38	.14	.05
AC-FT	1410	1630	930	566	758	9080	68210	64960	64790	14360	5410	2060

CAL YR 1974 TOTAL 93785.0 MEAN 257 MAX 2250 MIN 12 CFSM .36 IN 4.89 AC-FT 186000
WTR YR 1975 TOTAL 118054.2 MEAN 323 MAX 4350 MIN 7 CFSM .45 IN 6.16 AC-FT 234200

PEAK DISCHARGE (BASE, 2,000 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
4-28	2115	14.35	4,570	6-19	1800	11.12	2,590
5-12	1145	10.37	2,160				

LOCATION.--Lat 42°18'15", long 95°02'30", in NW1/4 SE1/4 sec.33, T.87 N., R.36 W., Sac County, on south shore across from swimming beach at Lake View and 2 mi (3.2 km) upstream from lake outlet.

PERIOD OF RECORD.--April 1970 to September 1975 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 1,218.50 ft (371.40 m) above mean sea level and 2.00 ft (0.61 m) below crest of spillway of dam at outlet. Prior to June 25, 1970, nonrecording gage at lake outlet.

EXTREMES.--Current year: Maximum gage height, 2.67 ft (0.814 m) Apr. 27; minimum, 1.30 ft (0.396 m) Sept. 30.
Period of record: Maximum gage height, 3.45 ft (1.052 m) Feb. 20, 1971; minimum, 0.59 ft (0.180 m) Oct. 27, 1971.

REMARKS.--Lake is formed by concrete dam with ungated overflow spillway at elevation 1,220.50 ft (372.008 m) above mean sea level. Lake is used for conservation and recreation. Area of lake is approximately 957 acres (390 hm²).

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.69	1.61	1.57	1.59	1.75	1.80	2.46	2.55	2.27	2.27	1.76	1.58
2	1.69	1.60	1.57	1.61	1.75	1.80	2.45	2.53	2.26	2.25	1.77	1.58
3	1.69	1.59	1.57	1.63	1.75	1.80	2.43	2.51	2.25	2.23	1.75	1.55
4	1.68	1.59	1.56	1.63	1.78	1.79	2.44	2.49	2.25	2.22	1.74	1.56
5	1.65	1.59	1.56	1.63	1.80	1.80	2.43	2.46	2.22	2.20	1.72	1.59
6	1.64	1.58	1.56	1.63	1.80	1.81	2.44	2.48	2.20	2.18	1.70	1.59
7	1.65	1.58	1.56	1.63	1.79	1.84	2.44	2.47	2.20	2.16	1.68	1.56
8	1.64	1.59	1.55	1.64	1.80	1.84	2.45	2.47	2.21	2.14	1.63	1.55
9	1.64	1.60	1.55	1.64	1.80	1.84	2.48	2.45	2.24	2.12	1.62	1.55
10	1.64	1.60	1.55	1.67	1.80	1.85	2.49	2.44	2.23	2.10	1.63	1.53
11	1.64	1.58	1.55	1.75	1.80	1.85	2.48	2.46	2.29	2.07	1.66	1.55
12	1.63	1.57	1.55	1.74	1.80	1.86	2.47	2.46	2.30	2.05	1.68	1.54
13	1.64	1.58	1.54	1.73	1.80	1.86	2.45	2.44	2.30	2.03	1.65	1.54
14	1.60	1.58	1.55	1.73	1.79	1.87	2.45	2.39	2.31	2.02	1.65	1.53
15	1.61	1.60	1.59	1.74	1.79	1.86	2.44	2.37	2.30	2.01	1.63	1.52
16	1.60	1.60	1.59	1.75	1.79	1.86	2.45	2.38	2.32	1.99	1.62	1.51
17	1.60	1.60	1.58	1.75	1.80	1.86	2.42	2.34	2.30	1.96	1.60	1.52
18	1.59	1.60	1.58	1.74	1.81	1.87	2.41	2.32	2.36	1.92	1.60	1.48
19	1.58	1.58	1.58	1.75	1.81	1.88	2.39	2.32	2.40	1.92	1.60	1.43
20	1.59	1.57	1.58	1.74	1.81	1.93	2.38	2.31	2.39	1.91	1.59	1.42
21	1.59	1.60	1.59	1.76	1.81	2.12	2.42	2.28	2.39	1.89	1.57	1.43
22	1.55	1.59	1.60	1.75	1.81	2.29	2.42	2.29	2.39	1.89	1.57	1.43
23	1.55	1.56	1.59	1.75	1.81	2.39	2.44	2.27	2.37	1.89	1.52	1.42
24	1.55	1.55	1.59	1.75	1.81	2.46	2.45	2.24	2.38	1.87	1.54	1.41
25	1.54	1.57	1.59	1.75	1.80	2.45	2.45	2.23	2.38	1.86	1.49	1.40
26	1.53	1.57	1.59	1.75	1.80	2.45	2.49	2.24	2.37	1.85	1.48	1.39
27	1.54	1.54	1.60	1.75	1.80	2.50	2.49	2.22	2.35	1.83	1.54	1.39
28	1.55	1.55	1.60	1.75	1.80	2.51	2.60	2.28	2.34	1.83	1.57	1.39
29	1.56	1.55	1.59	1.76	-----	2.50	2.60	2.29	2.32	1.79	1.60	1.38
30	1.57	1.57	1.59	1.75	-----	2.49	2.58	2.28	2.30	1.78	1.60	1.36
31	1.60	-----	1.59	1.75	-----	2.48	-----	2.27	-----	1.75	1.60	-----
MEAN	1.61	1.58	1.57	1.71	1.80	2.05	2.46	2.37	2.31	2.00	1.62	1.49
MAX	1.69	1.61	1.60	1.76	1.81	2.51	2.60	2.55	2.40	2.27	1.77	1.59
MIN	1.53	1.54	1.54	1.59	1.75	1.79	2					

05482500 NORTH RACCOON RIVER NEAR JEFFERSON, IOWA

LOCATION.--Lat 41°59'17", long 94°22'36", in SW1/4 NW1/4 sec.20, T.83 N., R.30 W., Greene County, on right bank 5 ft (2 m) downstream from bridge on State Highway 4, 0.1 mi (0.2 km) downstream from Drainage ditch 33, and 40, 1.9 mi (3.1 km) south of Jefferson, and 4.2 mi (6.8 km) upstream from Hardin Creek.

DRAINAGE AREA.--1,619 mi² (4,193 km²).

PERIOD OF RECORD.--March 1940 to current year. Prior to April 1940, monthly discharge only, published in WSP 1308. Prior to October 1955, published as Raccoon River near Jefferson.

GAGE.--Water-stage recorder. Datum of gage is 967.09 ft (294.77 m) above mean sea level. Prior to Apr. 22, 1946, nonrecording gage at site 4 mi (6.4 km) upstream at different datum. Apr. 22 to June 25, 1946, nonrecording gage, June 26, 1946 to Sept. 30, 1955, water-stage recorder, Oct. 1, 1955 to Apr. 30, 1958, nonrecording gage, at present site and datum.

AVERAGE DISCHARGE.--35 years, 684 ft³/s (19.4 m³/s), 5.74 in/yr (146 mm/yr), 495,600 acre-ft/yr (611 hm³/yr); median of yearly mean discharges, 600 ft³/s (17.0 m³/s), 5.0 in/yr (127 mm/yr), 435,000 acre-ft/yr (536 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 7,190 ft³/s (204 m³/s) May 1, gage height, 13.82 ft (4.212 m); minimum daily, 29 ft³/s (0.82 m³/s) Jan. 14.
Period of record: Maximum discharge, 29,100 ft³/s (824 m³/s) June 23, 1947, gage height, 22.3 ft (6.80 m); minimum daily, 0.6 ft³/s (0.017 m³/s) Oct. 5, 1956.

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

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

REVISIONS (WATER YEARS).--WSP 1438: Drainage area. WSP 1508: 1940 (M), 1950-51.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	64	105	97	54	39	53	1500	7090	2250	1700	138	132
2	64	112	102	53	39	53	1350	6690	1820	1520	141	116
3	64	104	104	52	39	54	1180	4870	1630	1390	126	110
4	64	98	104	50	40	54	1250	3550	1550	1270	125	107
5	68	91	104	48	40	56	1370	3060	1460	1160	121	112
6	85	89	102	47	40	57	1530	2540	1400	1070	123	106
7	95	86	99	44	41	58	1710	2200	1330	965	114	106
8	78	82	98	41	42	59	1950	2130	1250	880	104	105
9	73	87	97	38	42	60	2570	2230	1200	808	97	103
10	72	94	95	34	43	61	3050	2220	1210	728	103	101
11	77	93	92	32	44	62	3040	2010	1500	668	102	92
12	86	92	90	30	45	62	2450	2010	2270	624	105	98
13	78	95	88	30	46	62	2240	3130	2840	576	112	89
14	74	93	86	29	46	63	2190	3120	2970	536	109	89
15	71	88	83	30	46	64	1970	2450	2400	498	96	80
16	71	84	80	30	47	66	1890	2080	2050	460	92	77
17	70	82	77	31	48	98	1880	1820	1890	404	84	74
18	70	82	75	32	48	210	1790	1640	2020	370	98	70
19	68	81	72	32	49	425	1710	1510	2290	334	105	70
20	68	80	70	32	50	640	1730	1420	3730	310	102	68
21	68	80	67	33	50	1200	1770	1360	3940	300	110	67
22	68	80	65	34	51	2660	1650	1270	3630	276	396	65
23	67	80	64	35	52	2520	1690	1280	3320	245	372	64
24	65	78	62	36	52	2250	2000	1290	3250	236	262	63
25	64	77	61	37	52	1900	2340	1240	3500	227	194	63
26	65	76	59	37	53	1500	2080	1160	2850	215	210	63
27	67	75	58	37	53	1460	1860	1100	2740	199	287	60
28	68	75	58	38	53	1420	5210	1070	2660	174	339	59
29	71	77	57	39	---	1480	5890	1150	2260	176	194	57
30	83	89	56	39	---	1540	6480	1980	1920	166	155	57
31	98	---	55	39	---	1530	---	2440	---	148	135	---
TOTAL	2244	2605	2477	1173	1290	21777	69320	73110	69130	18533	4851	2523
MEAN	72.4	86.8	79.9	37.8	46.1	702	2311	2358	2304	601	156	84.1
MAX	98	112	104	54	53	2660	6480	7090	3940	1700	396	132
MIN	64	75	55	29	39	53	1180	1070	1200	148	84	57
CFSM	.04	.05	.05	.02	.03	.43	1.43	1.46	1.42	.37	.10	.05
IN.	.05	.06	.06	.03	.03	.50	1.59	1.68	1.59	.43	.11	.06
AC-FT	4450	5170	4910	2330	2560	43190	137500	145000	137100	36960	9620	5000

CAL YR 1974 TOTAL 304044 MEAN 833 MAX 6090 MIN 55 CFSM .51 IN 6.99 AC-FT 603100
WTR YR 1975 TOTAL 269133 MEAN 737 MAX 7090 MIN 29 CFSM .46 IN 6.18 AC-FT 533800

PEAK DISCHARGE (BASE, 4,000 FT³/S).--Apr. 28 (1815) 6,060 ft³/s (12.84 ft); May 1 (1545) 7,190 ft³/s (13.82 ft).

DES MOINES RIVER BASIN

05483000 EAST FORK HARDIN CREEK NEAR CHURDAN, IOWA

LOCATION.--Lat 42°06'27", long 94°22'12", in SE1/4 SW1/4 sec.5, T.84 N., R.30 W., Greene County, on left bank 35 ft (11 m) upstream from bridge on county highway E26, 1.6 mi (2.6 km) upstream from small left-bank tributary, 4.4 mi (7.1 km) upstream from mouth, and 6.5 mi (10.5 km) southeast of Churdan.

DRAINAGE AREA.--24.0 mi² (62.2 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 1,050.90 ft (320.31 m) above mean sea level.

AVERAGE DISCHARGE.--23 years, 9.90 ft³/s (0.280 m³/s), 5.60 in/yr (142 mm/yr), 7,170 acre-ft/yr (8.84 hm³/yr); median of yearly mean discharges, 7.7 ft³/s (0.218 m³/s), 4.4 in/yr (112 mm/yr), 5,600 acre-ft/yr (6.90 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 195 ft³/s (5.52 m³/s) Apr. 28, gage height, 5.39 ft (1.643 m); maximum gage height, 6.83 ft (2.012 m) Mar. 18, backwater from ice; no flow on many days.
Period of record: Maximum discharge, 413 ft³/s (11.7 m³/s) May 5, 1960, gage height, 8.92 ft (2.719 m), from rating curve extended above 270 ft³/s (7.65 m³/s); no flow at times most years.

REMARKS.--Records good except those for winter period or those below 2.0 ft³/s (0.057 m³/s), which are poor. Small diversion for irrigation above station.

REVISIONS (WATER YEARS).--WSP 1438: Drainage area. WSP 1708: 1954-55, 1957 (M).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.01	.92	.20	.61	.01	29	13	53	19	11	.24	0
2	.01	.84	.29	.52	.01	35	13	46	18	10	.28	0
3	.01	.66	.20	.44	.01	38	13	36	18	9.3	.19	0
4	.02	.66	.20	.37	.01	41	13	28	19	8.7	.16	0
5	.03	.66	.22	.31	.01	43	13	23	18	8.2	.14	.03
6	.57	.59	.25	.26	0	45	14	21	17	7.6	.12	.03
7	.28	.52	.24	.22	0	38	15	20	15	6.7	.09	.02
8	.17	.52	.18	.19	0	34	23	21	15	6.3	.06	.01
9	.10	.66	.10	.16	0	20	46	22	16	5.7	.05	.01
10	.10	.84	.20	.13	0	10	30	20	15	5.3	.09	0
11	.53	.75	.29	.10	0	4.3	24	19	78	5.0	.13	0
12	.59	.84	.34	.09	0	2.2	21	19	72	4.6	.10	0
13	.38	.76	.34	.07	0	1.2	20	19	44	4.2	.17	0
14	.20	.71	.27	.06	0	.98	21	19	34	3.8	.10	0
15	.17	.65	.45	.05	0	.92	23	16	29	3.3	.05	0
16	.17	.62	.63	.04	0	15	22	16	27	2.9	.04	0
17	.17	.60	.74	.04	0	106	20	16	24	2.3	.03	0
18	.14	.58	.31	.03	0	128	17	15	30	2.0	.23	0
19	.17	.57	.88	.03	0	102	18	15	33	1.7	.13	0
20	.17	.55	.94	.03	0	76	16	15	28	1.6	.04	0
21	.14	.51	.98	.03	0	46	18	15	24	1.1	.03	0
22	.17	.49	1.0	.02	0	30	20	15	21	1.0	.02	0
23	.20	.46	1.1	.02	0	26	26	15	19	.90	.02	0
24	.24	.43	.98	.02	.01	20	24	14	17	.71	.01	0
25	.24	.40	1.2	.02	.03	15	22	14	17	.59	0	0
26	.24	.36	1.3	.02	.20	12	20	14	16	.52	0	0
27	.24	.32	1.4	.02	5.7	12	25	15	14	.43	.03	0
28	.28	.28	1.3	.02	17	17	161	15	13	.38	.01	0
29	.38	.15	1.1	.01	---	20	107	18	12	.35	.01	0
30	.59	.10	.86	.01	---	15	68	20	11	.30	.01	0
31	1.2	---	.74	.01	---	14	---	20	---	.26	.01	---
TOTAL	7.91	17.00	19.73	3.95	22.99	996.60	886	634	733	116.74	2.59	.10
MEAN	.26	.57	.64	.13	.82	32.1	29.5	20.5	24.4	3.77	.084	.003
MAX	1.2	.92	1.4	.61	17	128	161	53	78	11	.28	.03
MIN	.01	.10	.10	.01	0	.92	13	14	11	.26	0	0
CFSM	.01	.02	.03	.005	.03	1.34	1.23	.85	1.02	.16	.004	.0001
IN.	.01	.03	.03	.006	.04	1.54	1.37	.98	1.14	.18	.004	0
AC-FT	16	34	39	7.8	46	1980	1760	1260	1450	232	5.1	.2

CAL YR 1974 TOTAL 6475.10 MEAN 17.7 MAX 265 MIN 0 CFSM .74 IN 10.04 AC-FT 12840
WTR YR 1975 TOTAL 3440.61 MEAN 9.43 MAX 161 MIN 0 CFSM .39 IN 5.33 AC-FT 6820

PEAK DISCHARGE (BASE, 150 FT³/S).--Apr. 28 (0215) 195 ft³/s (5.39 ft).

05483600 MIDDLE RACCOON RIVER AT PANORA, IOWA

LOCATION.--Lat 41°41'14", long 94°22'15", in NE1/4 NW1/4 sec.5, T.79 N., R.30 W., Guthrie County, on left bank 15 ft (5 m) downstream from bridge on county highway, 0.2 mi (0.3 km) southwest of Panora, 1.5 mi (2.4 km) upstream from Andy's Branch, and 1.7 mi (2.7 km) downstream from Lake Panorama.

DRAINAGE AREA.--440 mi² (1,139 km²).

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 991.20 ft (302.12 m) above mean sea level.

AVERAGE DISCHARGE.--17 years, 224 ft³/s (6.34 m³/s), 6.91 in/yr (176 mm/yr), 162,300 acre-ft/yr (200 hm³/yr); median of yearly mean discharges, 170 ft³/s (4.81 m³/s), 5.2 in/yr (132 mm/yr), 123,000 acre-ft/yr (152 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,420 ft³/s (95.9 m³/s) Apr. 29, gage height, 8.36 ft (2.548 m); minimum daily, 35 ft³/s (0.99 m³/s) Sept. 24-27, 29, 30.

Period of record: Maximum discharge, 14,000 ft³/s (396 m³/s) May 19, 1974, gage height, 14.80 ft (4.511 m), from rating curve extended above 5,200 ft³/s (147 m³/s) by step-backwater analysis; minimum daily, 1.0 ft³/s (28 dm³/s) June 19, 1969, result of construction of dam at Lake Panorama; minimum daily discharge excluding construction period and operation of Lake Panorama, 10 ft³/s (0.28 m³/s) Jan. 7-13, 1968.

Flood of June 10, 1953, reached a stage of 14.3 ft (4.36 m), from floodmark, discharge, about 14,000 ft³/s (396 m³/s).

REMARKS.--Records good. City of Panora diverts approximately 100 acre-ft/yr (0.123 hm³/yr) above station. Flow regulated by dam on Lake Panorama since August 1970.

REVISIONS (WATER YEARS).--WRD IOWA 1974: 1973 (P).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	43	225	58	65	55	63	560	737	273	177	58	77
2	42	176	58	66	55	64	450	443	218	205	59	72
3	42	139	57	65	55	65	360	510	215	213	56	70
4	42	113	56	66	56	67	400	516	217	210	55	75
5	43	240	56	62	55	69	480	382	210	201	54	93
6	53	284	55	59	54	74	580	368	197	196	51	84
7	55	172	57	58	53	75	480	409	181	108	49	76
8	61	362	58	58	53	71	431	315	136	57	47	69
9	60	249	58	59	52	71	796	204	144	76	46	62
10	58	314	59	65	52	69	938	275	121	95	48	59
11	64	214	59	62	52	67	746	308	485	105	50	62
12	66	57	60	60	51	66	597	184	415	109	50	57
13	68	60	62	59	51	65	517	68	440	109	55	54
14	71	61	65	57	51	62	481	245	528	110	56	51
15	63	62	75	56	51	60	456	466	576	109	55	49
16	61	64	70	56	51	70	423	242	507	106	53	47
17	59	68	62	55	51	395	404	207	454	102	51	46
18	59	70	59	55	51	1,210	389	221	1,500	97	55	46
19	56	74	59	55	51	1,180	375	225	818	93	56	45
20	53	294	59	55	51	2,060	380	220	708	89	58	43
21	52	330	60	54	51	2,290	372	212	379	85	55	42
22	53	180	60	54	52	2,020	380	203	366	83	53	40
23	52	65	60	54	52	1,600	460	200	392	86	50	37
24	52	64	60	54	53	1,360	518	193	830	98	50	35
25	53	62	60	54	55	625	495	188	767	90	55	35
26	52	61	61	55	57	379	448	131	515	82	52	35
27	52	61	62	55	59	548	698	75	411	77	1,340	35
28	51	61	64	55	61	802	2,520	116	381	73	144	36
29	54	60	66	55	-----	1,070	3,000	172	339	68	67	35
30	73	60	67	55	-----	891	1,830	498	287	65	78	35
31	220	-----	67	55	-----	680	-----	423	-----	61	79	-----
TOTAL	1,883	4,302	1,889	1,793	1,491	18,188	20,964	8,956	13,010	3,435	3,085	1,602
MEAN	60.7	143	60.9	57.8	53.3	587	699	289	434	111	99.5	53.4
MAX	220	362	75	66	61	2,290	3,000	737	1,500	213	1,340	93
MIN	42	57	55	54	51	60	360	68	121	57	46	35
CFSM	.14	.33	.14	.13	.12	1.33	1.59	.66	.99	.25	.23	.12
IN.	.16	.36	.16	.15	.13	1.54	1.77	.76	1.10	.29	.26	.14
AC-FT	3,730	8,530	3,750	3,560	2,960	36,080	41,580	17,760	25,810	6,810	6,120	3,180

CAL YR 1974 TOTAL 118,068 MEAN 323 MAX 11,000 MIN 42 CFSM .73 IN 9.98 AC-FT 234,200
WTR YR 1975 TOTAL 80,598 MEAN 221 MAX 3,000 MIN 35 CFSM .50 IN 6.81 AC-FT 159,900

PEAK DISCHARGE (BASE, 2,500 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
4-29	0430	8.36	3,420	8-27	1245	7.90	2,870
6-18	1415	7.88	2,850				

DES MOINES RIVER BASIN

05484000 SOUTH RACCOON RIVER AT REDFIELD, IOWA

LOCATION.--Lat 41°34'48", long 94°10'58", in SW1/4 SW1/4 sec.3, T.78 N., R.29 W., Dallas County, on left bank 15 ft (5 m) downstream from bridge on county highway at Redfield, 0.8 mi (1.3 km) downstream from bridge on U.S. Highway 6, 1.0 mi (1.6 km) downstream from Middle Raccoon River, and 15.6 mi (25.1 km) upstream from mouth.

DRAINAGE AREA.--988 mi² (2,558 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 895.43 ft (273.23 m) above mean sea level. Prior to June 12, 1946, nonrecording gage, and June 12, 1946, to Sept. 30, 1966, water-stage recorder at site 20 ft (6 m) upstream at same datum.

AVERAGE DISCHARGE.--35 years, 451 ft³/s (12.8 m³/s), 6.20 in/yr (157 mm/yr), 325,700 acre-ft/yr (403 hm³/yr); median of yearly mean discharges, 380 ft³/s (10.8 m³/s), 5.2 in/yr (132 mm/yr), 275,000 acre-ft/yr (339 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 10,200 ft³/s (289 m³/s) Apr. 28, gage height, 15.45 ft (4.709 m); minimum daily, 73 ft³/s (2.07 m³/s) Jan. 2-4.

Period of record: Maximum discharge, 35,000 ft³/s (991 m³/s) July 2, 1958, gage height, 29.04 ft (8.851 m), from floodmark; minimum daily, 19 ft³/s (0.54 m³/s) July 27, 1940, Nov. 30, 1955.

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

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

REVISIONS (WATER YEARS).--WSP 1438: Drainage area. WSP 1508: 1940.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	96	547	128	74	124	156	1,180	2,330	579	588	132	225
2	94	373	124	73	122	156	950	1,290	454	551	125	196
3	97	285	120	73	122	156	800	1,270	468	547	129	172
4	101	245	116	73	124	156	860	1,230	487	526	126	223
5	102	217	110	74	124	158	1,000	1,030	474	506	120	442
6	125	462	106	74	126	158	1,400	882	405	481	127	353
7	164	349	102	75	126	158	1,280	1,090	370	430	117	244
8	141	253	95	76	128	156	1,110	1,040	336	400	114	213
9	131	250	93	78	130	156	2,270	678	314	275	113	193
10	130	340	89	89	130	154	1,940	699	362	277	113	168
11	134	466	87	100	130	154	1,570	719	1,540	285	123	503
12	154	189	86	122	128	152	1,340	709	1,310	291	120	349
13	154	154	86	132	128	150	1,190	471	874	291	125	213
14	151	155	86	144	128	150	1,120	470	1,020	291	138	180
15	143	147	86	154	130	150	1,100	822	1,520	285	139	169
16	132	152	86	154	132	480	1,000	636	1,200	273	128	161
17	136	154	86	154	134	1,040	948	491	1,380	246	118	151
18	128	158	87	152	138	2,600	914	496	4,200	238	156	151
19	125	160	88	148	142	3,460	882	506	3,130	217	172	151
20	125	226	88	146	144	3,600	870	490	2,060	212	151	141
21	120	244	87	142	146	3,050	838	469	1,290	201	134	132
22	120	190	85	140	148	2,600	865	456	975	192	117	127
23	122	174	84	138	150	2,140	1,420	443	906	193	112	125
24	122	162	82	136	152	1,900	1,300	436	1,830	224	106	120
25	116	144	80	134	152	1,150	1,150	422	4,030	207	200	116
26	114	137	78	132	154	700	1,030	413	1,640	190	185	111
27	114	138	77	130	154	1,200	1,340	281	1,340	181	1,860	114
28	122	134	76	128	154	2,340	7,700	334	984	172	1,480	147
29	130	130	75	128	-----	2,200	4,960	439	839	164	442	166
30	174	130	74	126	-----	1,690	3,310	720	750	151	398	156
31	876	-----	74	124	-----	1,370	-----	771	-----	141	285	-----
TOTAL	4,693	6,865	2,821	3,631	3,800	33,840	47,637	22,533	37,147	9,106	7,905	5,912
MEAN	151	229	91.0	117	136	1,092	1,588	727	1,238	294	255	197
MAX	876	547	128	154	154	3,600	7,700	2,330	4,200	588	1,860	503
MIN	94	130	74	73	122	150	800	281	314	141	106	111
CFSM	.15	.23	.09	.12	.14	1.11	1.61	.74	1.25	.30	.26	.20
IN.	.18	.26	.11	.14	.14	1.27	1.79	.85	1.40	.34	.30	.22
AC-FT	9,310	13,620	5,600	7,200	7,540	67,120	94,490	44,690	73,680	18,060	15,680	11,730

CAL YR 1974 TOTAL 273,556 MEAN 749 MAX 15,600 MIN 74 CFSM .76 IN 10.30 AC-FT 542,600
WTR YR 1975 TOTAL 185,890 MEAN 509 MAX 7,700 MIN 73 CFSM .52 IN 7.00 AC-FT 368,700

PEAK DISCHARGE (BASE, 5,000 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
4-28	1300	15.45	10,200	6-25	0145	12.40	6,720
6-18	1845	14.28	8,680				

05484500 RACCOON RIVER AT VAN METER, IOWA

LOCATION.--Lat 41°32'02", long 93°56'59", in SW1/4 SW1/4 sec.22, T.78 N., R.27 W., Dallas County, on right bank 100 ft (30 m) downstream from bridge on county highway R16, 0.3 mi (0.5 km) northeast of Van Meter, 0.7 mi (1.1 km) upstream from small left bank tributary, 1.2 mi (1.9 km) downstream from confluence of North and South Raccoon River, and 30 mi (48.3 km) upstream from mouth.

DRAINAGE AREA.--3,441 mi² (8,912 km²).

PERIOD OF RECORD.--April 1915 to current year. Prior to October 1934, monthly discharge only, published in WSP 1308.

GAGE.--Water-stage recorder. Datum of gage is 841.16 ft (256.39 m) above mean sea level. See WSP 1308 for history of changes prior to Aug. 8, 1934.

AVERAGE DISCHARGE.--60 years, 1,314 ft³/s (37.2 m³/s), 5.19 in/yr (132 mm/yr), 952,000 acre-ft/yr (1,170 hm³/yr); median of yearly mean discharges, 1,120 ft³/s (31.7 m³/s), 4.4 in/yr (112 mm/yr), 811,000 acre-ft/yr (1,000 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 14,300 ft³/s (405 m³/s) June 18, gage height, 14.01 ft (4.270 m); minimum daily, 176 ft³/s (5.0 m³/s) Dec. 2.

Period of record: Maximum discharge, 41,200 ft³/s (1,170 m³/s) June 13, 1947, gage height, 21.37 ft (6.514 m), from floodmark; maximum gage height, 21.77 ft (6.635 m) July 3, 1958; minimum daily discharge, 10 ft³/s (0.28 m³/s) Jan. 22-31, 1940.

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

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

REVISIONS (WATER YEARS).--WSP 1308: 1927 (M). WSP 1438: Drainage area. WSP 1508: 1915 (M), 1916-17, 1918-23 (M), 1925 (M), 1926, 1933 (M), 1939 (M), 1947 (M), 1949 (M).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	186	912	190	258	184	254	3,200	10,600	3,500	3,120	371	642
2	184	621	176	256	184	260	2,800	9,420	3,210	2,720	350	542
3	185	519	240	254	184	262	2,380	9,000	2,840	2,460	338	475
4	191	454	270	252	186	268	2,440	7,680	2,630	2,280	324	494
5	195	406	284	250	190	272	2,710	5,470	2,560	2,100	307	749
6	208	545	296	250	194	278	3,140	4,630	2,310	1,970	294	750
7	266	512	312	248	196	282	3,450	4,330	2,120	1,830	281	561
8	273	416	298	244	198	286	3,340	3,990	1,970	1,610	270	493
9	279	622	280	236	204	288	5,040	3,540	1,950	1,440	257	454
10	265	528	254	220	206	292	5,660	3,500	1,900	1,380	267	422
11	254	623	240	210	210	294	5,700	3,480	4,010	1,340	268	636
12	282	447	230	204	210	298	5,110	3,260	4,720	1,290	294	681
13	286	322	234	200	210	302	4,280	2,980	4,990	1,240	299	463
14	294	321	240	194	210	304	3,950	3,770	5,600	1,190	328	393
15	286	304	250	188	210	310	3,840	4,130	6,670	1,120	322	369
16	264	311	260	186	210	600	3,560	3,610	5,550	1,040	294	357
17	254	311	276	184	212	2,000	3,390	2,990	4,880	965	272	355
18	245	307	288	182	214	5,240	3,280	2,690	8,280	910	277	339
19	231	301	296	182	218	5,900	3,120	2,470	9,970	805	334	322
20	222	311	300	180	220	8,600	2,950	2,300	6,410	770	311	299
21	216	496	290	180	222	10,400	2,970	2,150	6,210	677	283	280
22	214	568	284	180	226	8,910	3,020	2,020	5,990	642	299	272
23	217	387	280	180	230	7,100	3,830	1,910	5,440	630	303	264
24	220	288	276	178	234	5,030	3,840	1,860	5,520	634	533	249
25	221	277	270	178	238	4,450	3,910	1,860	8,880	618	622	240
26	213	256	268	178	242	3,530	3,970	1,840	6,160	562	551	238
27	209	255	266	180	246	3,470	3,770	1,720	6,070	535	3,540	238
28	214	240	262	180	250	4,440	11,200	1,620	4,690	483	4,100	283
29	229	220	260	182	-----	4,500	11,100	1,830	4,240	448	1,720	310
30	282	206	260	182	-----	3,960	10,900	2,120	3,650	419	1,290	300
31	986	-----	260	184	-----	3,580	-----	3,100	-----	397	890	-----
TOTAL	8,071	12,286	8,190	6,360	5,938	85,960	131,850	115,870	142,920	37,645	20,209	12,473
MEAN	260	410	264	205	212	2,773	4,395	3,738	4,764	1,214	652	416
MAX	986	912	312	258	260	10,400	11,200	10,600	9,970	3,120	4,100	750
MIN	184	206	176	178	184	254	2,380	1,620	1,900	397	257	238
CFSM	.08	.12	.08	.06	.06	.81	1.28	1.09	1.38	.35	.19	.12
IN.	.09	.13	.09	.07	.06	.93	1.43	1.25	1.55	.41	.22	.13
AC-FT	16,010	24,370	16,240	12,620	11,780	170,600	261,500	229,800	283,500	74,670	40,080	24,740
CAL YR 1974	TOTAL 795,040 MEAN 2,178 MAX 26,800 MIN 176 CFSM .63 IN 8.60 AC-FT 1,577,000											
WTR YR 1975	TOTAL 587,772 MEAN 1,610 MAX 11,200 MIN 176 CFSM .47 IN 6.35 AC-FT 1,166,000											

PEAK DISCHARGE (BASE, 8,500 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-21	1100	12.34	11,300	6-25	1030	11.92	10,700
4-28	1745	13.90	14,100	6-27	0200	10.59	8,630
6-18	2400	14.01	14,300				

DES MOINES RIVER BASIN

05484800 WALNUT CREEK AT DES MOINES, IOWA

LOCATION.--Lat 41°35'14", long 93°42'11", in SW1/4 SE1/4 sec.2, T.78 N., R.25 W., Polk County, on left bank, 25 ft (8 m) downstream from bridge on 63rd Street in Des Moines, and 2.2 mi (3.5 km) upstream from Raccoon River.

DRAINAGE AREA.--80.9 mi² (210 km²).

PERIOD OF RECORD.--October 1971 to current year.

GAGE.--Water-stage recorder. Datum of gage is 801.04 ft above mean sea level (levels by Iowa Natural Resources Council).

EXTREMES.--Current year: Maximum discharge, 5,800 ft³/s (164 m³/s) Aug. 27, gage height, 17.00 ft (5.182 m); minimum daily, 0.90 ft³/s (0.025 m³/s) Oct. 22, 23, 25.

Period of record: Maximum discharge, 9,000 ft³/s (255 m³/s) July 1, 1973, gage height, 17.72 ft (5.401 m); minimum daily, 0.10 ft³/s (0.003 m³/s) Oct. 1, 3, 5, 12, 17, 1971.

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

REVISIONS.--Revised figures of discharge, in cubic feet per second, for high water periods in water years 1973 and 1974, superseding figures published in WRD Iowa, 1973 and 1974, are given below:

Date	Discharge	Date	Discharge
1973		1974	
Feb. 1	1,480	June 9	3,280
July 1	4,280		
July 2	1,700		

Month	Cfs-days	Max	Min	Mean	Cfsm	Runoff	
						inches	acre-ft
Feb 1973	4,826	1,480	43	172	2.13	2.22	9,570
July 1973	11,844	4,280	80	382	4.72	5.44	23,490
WTR YR 1973	54,507.2	4,280	7.2	149	1.84	25.18	108,100
June 1974	7,356	3,280	58	245	3.03	3.38	14,590
CAL YR 1973	54,369.2	4,280	7.2	149	1.84	25.01	107,800
WTR YR 1974	39,306.8	3,280	1.6	108	1.33	18.13	78,250

REVISED PEAK DISCHARGE.--1973: Feb. 1 (1600) 2,350 cfs (14.00 ft); July 4, (0545) 1,670 cfs (12.56 ft). 1974: Oct. 11 (1730) 1,770 cfs (12.74 ft); Apr. 28 (2300) 1,740 cfs (12.73 ft); May 19 (1145) 1,760 cfs (12.78 ft).

REVISIONS (WATER YEARS).--WRD Iowa 1973: 1972; WRD Iowa 1975: 1973-74.

DES MOINES RIVER BASIN

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05484800 WALNUT CREEK AT DES MOINES, IOWA--CONTINUED

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	44	17	8.0	8.8	13	50	139	104	94	6.2	108
2	1.9	23	17	7.0	8.6	12	55	127	91	84	5.4	56
3	1.7	17	5.0	6.0	8.4	13	65	107	82	73	5.1	29
4	2.4	14	5.2	5.0	8.2	14	51	94	90	68	4.7	17
5	2.4	12	5.6	4.6	8.0	14	54	84	76	67	4.5	12
6	4.4	12	20	4.7	7.6	14	59	102	70	59	4.8	14
7	2.1	10	18	5.0	7.4	14	53	146	62	53	5.6	18
8	2.1	12	14	5.2	7.2	12	76	199	61	46	5.0	22
9	2.3	15	12	5.5	7.0	11	136	145	197	41	5.6	31
10	2.2	21	11	40	7.0	10	112	127	143	37	11	28
11	6.4	17	11	6.0	7.2	10	85	115	244	31	8.6	24
12	3.2	13	10	6.0	7.4	9.7	79	102	257	28	4.1	22
13	4.4	15	10	9.5	7.7	9.4	72	92	188	26	11	20
14	3.2	12	13	10	8.0	9.0	75	85	257	24	7.2	22
15	2.7	13	22	10	8.4	11	65	76	357	23	5.7	21
16	2.4	13	18	9.5	9.0	40	60	71	233	22	16	20
17	2.1	13	17	8.8	11	320	65	67	170	20	10	19
18	2.1	13	16	8.3	15	438	65	68	789	19	33	17
19	2.1	12	15	8.0	14	311	65	60	422	17	8.1	17
20	1.7	12	13	7.9	15	224	70	57	282	17	3.2	16
21	1.7	12	12	7.8	23	169	70	53	251	16	2.0	16
22	.90	11	11	7.8	20	127	76	46	264	16	2.8	15
23	.90	11	10	11	16	111	76	41	237	17	1.5	15
24	1.0	11	10	15	19	154	76	37	187	15	7.0	14
26	.90	12	10	14	25	82	95	38	164	13	79	14
26	1.0	13	9.8	13	22	65	97	36	168	12	14	14
27	1.2	16	9.6	12	19	175	194	31	248	10	2250	13
28	1.6	16	9.4	11	18	228	418	82	151	9.3	415	13
29	2.4	15	9.2	10	---	144	227	95	138	8.8	451	13
30	58	16	9.1	9.6	---	75	167	135	111	7.9	212	13
31	133	---	9.0	9.0	---	61	---	123	---	7.9	142	---
TOTAL	255.80	446	378.9	295.2	342.9	2900.1	2908	2780	6094	981.9	3741.1	673
MEAN	8.25	14.9	12.2	9.52	12.2	93.6	96.9	89.7	203	31.7	121	22.4
MAX	133	44	22	40	25	438	418	199	789	94	2250	108
MIN	.90	10	5.0	4.6	7.0	9.0	50	31	61	7.9	1.5	12
CFSM	.10	.18	.15	.12	.15	1.16	1.20	1.11	2.51	.39	1.50	.28
IN.	.12	.21	.17	.14	.16	1.33	1.34	1.28	2.80	.45	1.72	.31
AC-FT	607	885	752	586	680	5750	5770	5510	12090	1950	7420	1330

CAL YR 1974 TOTAL 30993.60 MEAN 84.9 MAX 3280 MIN .90 CFSM 1.05 IN 14.25 AC-FT 61480
WTR YR 1975 TOTAL 21796.90 MEAN 59.7 MAX 2250 MIN .90 CFSM .74 IN 10.02 AC-FT 43230

PEAK DISCHARGE (BASE, 600 FT³/S, REVISED)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
4-27	2330	9.08	736	8-27	0930	17.00	5,800
6-15	0015	8.82	670	8-29	0915	10.19	948
6-18	1300	11.53	1,440				

05485500 DES MOINES RIVER BELOW RACCOON RIVER AT DES MOINES, IOWA

LOCATION.--Lat 41°34'30", long 93°35'48", in NE1/4 SE1/4 sec.10, T.78 N., R.24 W., Polk County, on right bank 10 ft (3 m) downstream from bridge on Southeast 14th Street at Des Moines, 0.8 mi (1.3 km) downstream from Raccoon River and Scott Street Dam, and at mile 200.7 (322.9 km).

DRAINAGE AREA.--9,879 mi² (25,586 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 762.52 ft (232.42 m) above mean sea level. Prior to Oct. 1, 1951, and Oct. 1, 1953, to Sept. 30, 1959, water-stage recorder above Scott Street Dam, 0.8 mi (1.3 km) upstream at datum 11.16 ft (3.40 m) higher. Oct. 1, 1951, to Sept. 30, 1953, and Oct. 1, 1959 to Sept. 30, 1961, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--35 years, 4,133 ft³/s (117 m³/s), 5.68 in/yr (144 mm/yr), 2,994,000 acre-ft/yr (3,692 hm³/yr); median of yearly mean discharges, 3,490 ft³/s (98.8 m³/s) 4.8 in/yr (122 mm/yr), 2,529,000 acre-ft/yr (3,118 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 33,200 ft³/s (940 m³/s) May 2, gage height, 23.61 ft (7.196 m); minimum daily, 300 ft³/s (8.50 m³/s) Jan. 11.

Period of record: Maximum discharge, 77,000 ft³/s (2,180 m³/s) June 26, 1947, gage height, 20.8 ft (6.34 m) in gage well, 21.6 ft (6.58 m) from outside floodmark, site and datum then in use; minimum daily, 55 ft³/s (1.56 m³/s) Oct. 19, 1956.

Maximum stage since at least 1893, that of June 26, 1947, site and datum then in use. Flood of May 31, 1903, reached a stage of 20.9 ft (6.37 m), from flood profile) at Scott Street site and datum, by office of Des Moines City Engineer.

REMARKS.--Records good except those for winter period, which are poor. Des Moines municipal water supply is taken from infiltration galleries on Raccoon River, 3.5 mi (5.6 km) above station. Average daily pumpage was about 50 ft³/s (1.42 m³/s). At times, water is pumped from Raccoon River into recharge basins, or into Waterworks Reservoir (capacity, 4,800 acre-ft). Effluent from sewage treatment plant enters the river 2.3 mi (3.7 km) below station. Net effect of diversions not known.

COOPERATION.--Eleven discharge measurements furnished by Corps of Engineers. Average monthly pumpage from galleries furnished by Des Moines Water Works.

REVISIONS (WATER YEARS).--WSP 1438: Drainage area. WSP 1508: 1943 (P).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	481	2,040	448	400	420	500	7,430	31,900	9,410	11,000	1,090	1,710
2	464	1,560	370	370	410	540	7,520	32,800	9,630	9,400	1,060	1,430
3	453	1,350	330	330	400	600	6,150	31,100	9,080	7,920	1,000	1,280
4	464	1,600	350	360	400	580	5,530	28,200	8,760	6,720	965	1,200
5	458	1,080	400	380	450	560	6,180	22,300	8,300	6,800	947	1,320
6	493	947	400	400	540	570	7,220	18,300	7,900	6,470	866	1,420
7	487	1,050	760	400	530	570	8,290	16,400	7,930	6,050	814	1,410
8	607	929	420	410	520	580	8,640	15,400	8,230	5,570	790	1,260
9	581	947	460	420	510	560	11,000	13,600	8,410	5,050	758	1,120
10	548	1,050	480	560	500	470	14,800	12,600	8,520	4,650	798	1,020
11	529	947	550	300	490	440	16,200	12,000	9,540	4,300	782	974
12	555	1,020	568	450	480	420	16,000	11,200	14,900	4,020	750	1,020
13	600	806	614	540	470	500	14,300	11,000	17,000	3,740	750	1,060
14	607	726	656	560	460	550	13,300	12,000	17,700	3,500	782	938
15	587	574	774	580	450	568	13,300	12,900	18,600	3,240	790	830
16	568	614	660	540	460	584	13,400	12,000	18,500	3,080	790	774
17	529	670	580	530	460	1,690	13,400	10,200	16,100	2,520	766	758
18	517	670	530	510	460	7,860	13,300	9,380	16,300	2,610	726	726
19	499	798	500	500	450	9,170	13,200	8,760	25,900	2,440	750	702
20	493	702	470	490	460	15,000	12,900	8,060	21,200	2,260	758	656
21	470	678	540	480	460	19,900	12,900	7,540	19,100	2,200	734	628
22	464	866	640	470	470	19,600	12,900	7,080	18,500	2,100	689	587
23	464	839	620	460	480	14,900	13,100	6,660	17,100	2,020	737	567
24	481	642	540	450	500	13,300	14,200	6,380	15,900	1,940	721	555
25	481	600	480	470	500	11,600	14,300	6,040	18,700	1,830	1,230	548
26	511	561	420	500	490	9,450	14,300	5,820	19,000	1,700	941	511
27	481	555	470	520	480	8,050	14,100	5,520	25,400	1,620	5,110	523
28	475	529	500	510	480	9,780	18,800	5,460	24,200	1,510	7,710	523
29	499	517	500	500	-----	9,680	26,200	6,200	19,500	1,400	4,180	529
30	561	487	450	480	-----	9,360	28,400	7,550	13,600	1,300	2,670	535
31	1,570	-----	480	450	-----	8,290	-----	8,650	-----	1,180	2,110	-----
TOTAL	16,977	26,354	15,960	14,320	13,180	176,222	391,260	403,000	452,910	120,140	43,564	27,114
MEAN	548	878	515	462	471	5,685	13,040	13,000	15,100	3,875	1,405	904
MAX	1,570	2,040	774	580	540	19,900	28,400	32,800	25,900	11,000	7,710	1,710
MIN	453	487	330	300	400	420	5,530	5,460	7,900	1,180	689	511
CFSM	.06	.09	.05	.05	.05	.58	1.32	1.32	1.53	.39	.14	.09
IN.	.06	.10	.06	.05	.05	.66	1.47	1.52	1.71	.45	.16	.10
AC-FT	33,670	52,270	31,660	28,400	26,140	349,500	776,100	799,400	898,300	238,300	86,410	53,780
CAL YR 1974	TOTAL 2,080,762 MEAN 5,701 MAX 44,800 MIN 330 CFSM .58 IN 7.84 AC-FT 4,127,000											
WTR YR 1975	TOTAL 1,701,001 MEAN 4,660 MAX 32,800 MIN 300 CFSM .47 IN 6.41 AC-FT 3,374,000											

PEAK DISCHARGE (BASE, 15,000 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-21	1515	20.01	21,600	6-19	1300	22.17	27,500
4-11	1715	17.96	16,400	6-27	1730	21.93	26,200
5-2	0230	23.61	33,200				

05485640 FOURMILE CREEK AT DES MOINES, IOWA

LOCATION.--Lat 41°36'50", long 93°32'43", in NE1/4 NE1/4 sec.32, T.79 N., R.23 W., Polk County, on right bank 20 ft (6 m) downstream from bridge on Easton Blvd., 4.4 mi (7.1 km) downstream from Muchiknock Creek and 5.0 mi (8.0 km) upstream from Des Moines River.

DRAINAGE AREA.--92.7 mi² (240 km²).

PERIOD OF RECORD.--October 1971 to current year.

GAGE.--Water-stage recorder. Datum of gage is 795.866 ft (242.580 m) above mean sea level.

EXTREMES.--Current year: Maximum discharge, 1,820 ft³/s (51.5 m³/s) June 18, gage height, 10.95 ft (3.338 m); minimum daily, 1.4 ft³/s (0.040 m³/s) Oct. 1.

Period of record: Maximum discharge, 5,340 ft³/s (151 m³/s) (revised) June 9, 1974, gage height, 14.84 ft (4.523 m); minimum daily, 0.06 ft³/s (0.017 m³/s) Oct. 6, 1971.

REVISIONS.--The maximum discharge for water year 1974 has been revised to 5,340 ft³/s (151 m³/s) June 9, 1974, gage height, 14.84 ft (4.523 m), from manometer, 14.2 ft (4.33 m) from outside floodmark, superseding figures published in WRD Iowa, 1974.

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

REVISIONS.--Revised figures of discharge in cubic foot per second for the water year 1974, superseding those published in Water Resources Data for Iowa, 1974, are given herewith:

Date	Discharge	Date	Discharge	Date	Discharge	Date	Discharge
May 18	3,170	June 14	330	Aug. 9	20	Sept. 5	2.3
19	1,620	15	534	10	19	6	2.5
20	1,020	16	288	11	20	7	3.3
21	767	17	233	12	11	8	2.3
22	484	18	215	13	13	9	2.0
23	364	19	2,830	14	12	10	2.0
24	296	20	562	15	10	11	1.8
25	247	21	347	16	17	12	2.8
26	486	22	733	17	15	13	1.3
27	443	23	503	18	15	14	5.0
28	464	24	312	19	7.7	15	3.0
29	512	25	254	20	5.9	16	2.5
30	367	26	218	21	4.3	17	2.1
31	276	27	183	22	3.7	18	2.0
June 1	224	28	175	23	3.0	19	1.8
2	194	29	159	24	2.8	20	1.8
3	174	30	142	25	7.0	21	1.8
4	158	July 1	125	26	12	22	2.0
5	143	2	118	27	4.0	23	1.5
6	136	3	110	28	2.8	24	1.5
7	124	4	134	29	2.5	25	1.5
8	124	5	112	30	3.2	26	1.5
9	3,570	6	96	31	2.8	27	1.8
10	875	7	86	Sept. 1	2.5	28	5.4
11	520	Aug. 6	8.6	2	4.6	29	2.8
12	408	7	8.5	3	3.2	30	2.1
13	332	8	8.4	4	2.5		

Month	cfs days	Mean	Max	Min	cfsm	inches	Runoff acre-ft
May 1974	14,329	462	3,170	86	4.98	5.75	28,420
June 1974	15,000	500	3,570	124	5.39	6.02	29,750
July 1974	1,481.3	47.8	134	6.2	.52	.59	2,940
August 1974	280.3	9.04	20	2.5	.10	.11	556
September 1974	110.0	3.67	28	1.5	.04	.04	218
Water year 1974	55,564.6	152	3,570	1.5	1.64	22.27	110,200

REVISED PEAK DISCHARGE.--1973-74: May 18 (1400) 5,010 ft³/s (14.61 ft); June 9 (1100) 5,340 ft³/s (14.84 ft); June 19 (0500) 4,550 ft³/s (14.28 ft).

DES MOINES RIVER BASIN

05485640 FOURMILE CREEK AT DES MOINES, IOWA--CONTINUED

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	79	7.1	3.5	29	19	102	115	26	126	3.5	7.0
2	1.7	31	8.1	9.0	29	17	85	99	26	99	3.5	5.7
3	1.8	21	7.6	15	30	16	77	92	32	84	3.2	6.2
4	2.0	15	6.7	14	32	18	82	79	45	75	2.8	8.4
5	2.3	13	6.1	13	33	20	100	67	37	78	2.4	23
6	10	12	18	14	33	19	108	55	26	68	2.4	13
7	5.0	12	30	15	31	18	101	55	22	53	2.4	8.2
8	3.7	11	28	16	29	17	93	119	18	50	2.4	6.8
9	4.0	10	33	18	29	17	153	161	122	45	2.4	6.0
10	2.8	12	29	20	30	18	149	115	162	42	2.4	4.8
11	4.6	14	26	21	30	16	126	104	150	39	10	7.4
12	9.1	11	23	23	30	14	107	89	167	35	14	5.9
13	6.4	10	20	25	28	10	93	77	106	32	9.6	4.8
14	9.1	11	17	28	27	13	88	67	158	28	9.6	4.5
15	4.6	10	22	25	26	20	84	63	326	27	9.6	4.7
16	5.4	10	31	22	26	100	76	56	199	22	9.6	4.8
17	4.0	10	29	30	27	500	76	49	165	19	9.6	4.5
18	3.7	9.1	30	55	28	632	75	44	923	16	11	4.3
19	3.0	9.1	29	45	29	610	62	39	641	17	11	3.8
20	3.0	8.6	30	40	28	707	53	36	325	11	5.7	3.5
21	3.7	8.1	29	43	27	630	62	32	214	9.1	5.1	3.4
22	5.0	8.1	28	40	25	598	53	32	418	9.1	4.2	3.2
23	4.6	8.1	23	39	23	638	104	32	252	7.6	3.6	2.9
24	5.4	7.6	20	37	21	380	120	32	315	7.6	5.7	2.7
25	8.4	6.1	17	35	23	310	93	33	203	7.6	18	2.5
26	5.9	6.6	15	34	24	270	83	31	180	7.6	6.0	2.6
27	3.0	7.1	12	33	22	230	139	28	1070	7.6	45	2.1
28	4.6	7.1	10	32	20	475	424	28	376	7.1	12	3.7
29	13	6.1	8.0	31	---	282	253	28	260	5.2	53	2.4
30	21	6.6	7.0	30	---	340	161	28	178	4.4	19	2.0
31	124	---	5.0	29	---	254	---	27	---	4.4	10	---
TOTAL	286.2	390.3	604.6	834.5	769	7208	3382	1912	7142	1043.3	308.7	164.8
MEAN	9.23	13.0	19.5	26.9	27.5	233	113	61.7	238	33.7	9.96	5.49
MAX	124	79	33	55	33	707	424	161	1070	126	53	23
MIN	1.4	6.1	5.0	3.5	20	10	53	27	18	4.4	2.4	2.0
CFSM	.10	.14	.21	.29	.30	2.51	1.22	.67	2.57	.36	.11	.06
IN.	.11	.16	.24	.33	.31	2.89	1.36	.77	2.87	.42	.12	.07
AC-FT	568	774	1200	1660	1530	14300	6710	3790	14170	2070	612	327

CAL YR 1974 TOTAL 45191.3 MEAN 124 MAX 3570 MIN 1.4 CFSM 1.34 IN 18.14 AC-FT 89640
WTR YR 1975 TOTAL 24045.4 MEAN 65.9 MAX 1070 MIN 1.4 CFSM .71 IN 9.65 AC-FT 47690

PEAK DISCHARGE (BASE, 500 FT²/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-19	1815	8.82	986	6-14	2300	7.40	582
3-28	0030	7.84	692	6-18	1410	10.95	1,820
3-30	1530	8.05	755	6-27	1500	10.70	1,700
4-28	0445	7.35	562				

05486000 NORTH RIVER NEAR NORWALK, IOWA

LOCATION.--Lat 41°27'25", long 93°39'10", in NW1/4 SW1/4 sec.20, T.77 N., R.24 W., Warren County, on left bank 10 ft (3 m) downstream from bridge on county highway R57, 1.7 mi (2.7 km) southeast of Norwalk, 5.2 mi (8.4 km) upstream from Middle Creek, and 6.2 mi (10.0 km) downstream from Badger Creek.

DRAINAGE AREA.--349 mi² (904 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 788.45 ft (240.32 m) above mean sea level (levels by Corps of Engineers). Prior to June 12, 1946, nonrecording gage at same site and datum. Jan. 7 to Oct. 11, 1960, nonrecording gage at site 2.1 mi (3.4 km) upstream at different datum.

AVERAGE DISCHARGE.--35 years, 179 ft³/s (5.07 m³/s), 6.97 in/yr (177 mm/yr), 129,700 acre-ft/yr (160 hm³/s/yr); median of yearly mean discharges, 150 ft³/s (4.25 m³/s), 5.8 in/yr (147 mm/yr), 108,700 acre-ft/yr (134 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,380 ft³/s (124 m³/s) Mar. 20, gage height, 21.69 ft (6.611 m); minimum daily, 4.6 ft³/s (0.13 m³/s) Oct. 1.
Period of record: Maximum discharge, 32,000 ft³/s (906 m³/s) June 13, 1947, gage height, 25.3 ft (7.71 m), from floodmark, from rating curve extended above 9,100 ft³/s (258 m³/s) on basis of velocity-area studies; no flow at times during period 1954-58.

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

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

REVISIONS (WATER YEARS).--WSP 1438: Drainage area. WSP 1508: 1946.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.6	322	15	25	40	40	334	321	207	383	16	38
2	4.7	241	16	20	39	41	267	272	155	335	15	31
3	5.5	91	17	19	39	43	158	265	157	287	13	22
4	5.7	52	16	22	38	45	254	255	508	251	13	19
5	5.8	38	14	21	37	47	275	223	241	225	12	95
6	6.4	30	16	20	36	50	335	196	171	203	12	172
7	6.2	26	32	20	35	50	330	227	127	187	11	98
8	5.8	23	54	20	32	48	272	1,140	104	160	10	51
9	7.5	21	52	21	30	47	739	1,020	121	139	10	40
10	8.0	22	45	37	30	47	807	425	394	121	10	39
11	6.9	28	38	140	30	46	489	320	451	109	9.4	41
12	7.6	31	34	150	30	45	372	273	1,530	97	9.4	64
13	8.2	32	32	100	30	44	312	238	1,090	89	9.4	49
14	9.6	30	33	84	31	43	294	206	471	81	9.6	37
15	9.2	26	45	60	31	42	294	183	371	75	9.6	27
16	9.8	25	90	52	32	55	284	162	325	63	10	22
17	10	24	100	48	32	500	250	145	354	56	9.8	20
18	14	23	75	44	33	1,500	228	133	685	50	9.4	18
19	10	23	50	41	33	2,290	221	123	1,760	44	9.2	16
20	9.2	23	35	39	33	3,900	213	112	2,090	40	8.7	14
21	8.6	22	34	37	34	3,140	186	103	914	39	8.0	13
22	8.2	19	35	36	34	2,370	197	96	645	37	7.8	12
23	8.8	18	36	35	35	935	293	89	646	35	7.5	11
24	12	17	34	36	35	810	688	80	431	33	7.1	10
25	11	16	30	45	36	538	468	74	1,230	33	8.5	9.6
26	9.2	17	26	60	37	303	350	74	2,050	31	9.3	9.3
27	8.0	16	23	75	38	469	308	74	2,920	27	251	9.2
28	7.8	16	22	74	39	1,480	609	73	2,760	23	396	9.5
29	7.8	15	24	58	-----	1,390	731	108	820	21	201	11
30	11	15	25	47	-----	590	436	191	469	19	86	16
31	82	-----	25	43	-----	428	-----	248	-----	18	47	-----
TOTAL	329.1	1,302	1,123	1,529	959	21,376	10,994	7,449	24,197	3,311	1,245.7	1,023.5
MEAN	10.6	43.4	36.2	49.3	34.3	690	366	240	807	107	40.2	34.1
MAX	82	322	100	150	40	3,900	807	1,140	2,920	383	396	172
MIN	4.6	15	14	19	30	40	158	73	104	18	7.1	9.2
CFSM	.03	.12	.10	.14	.10	1.98	1.05	.69	2.31	.31	.12	.10
IN.	.04	.14	.12	.16	.10	2.28	1.17	.79	2.58	.35	.13	.11
AC-FT	653	2,580	2,230	3,030	1,900	42,400	21,810	14,780	47,990	6,570	2,470	2,030

CAL YR 1974 TOTAL 110,008.2 MEAN 301 MAX 6,770 MIN 4.2 CFSM .86 IN 11.73 AC-FT 218,200
WTR YR 1975 TOTAL 74,838.3 MEAN 205 MAX 3,900 MIN 4.6 CFSM .59 IN 7.98 AC-FT 148,400

PEAK DISCHARGE (BASE, 1,700 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-20	0815	21.69	4,380	6-20	1730	19.92	1,970
3-29	0300	19.66	1,860	6-27	1845	20.99	2,980
5-8	2245	19.41	1,760				

DES MOINES RIVER BASIN

05485490 MIDDLE RIVER NEAR INDIANOLA, IOWA

LOCATION.--Lat 41°25'27", long 93°35'09", in SW1/4 SE1/4 sec.35, T.77 N., R.24 W., Warren County, on right bank 10 ft (3 m) downstream from bridge on county highway, 0.4 mi (0.6 km) upstream from Cavitt Creek, 1.5 mi (2.4 km) upstream from bridge on U.S. Highway 69, and 4.6 mi (7.4 km) northwest of Indianola.

DRAINAGE AREA.--503 mi² (1,302 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 776.15 ft (236.57 m) above mean sea level (Corps of Engineers bench mark). Prior to June 11, 1946, June 9, 1947, to Nov. 23, 1948, and Sept. 8, 1951, to Oct. 30, 1952, nonrecording gage and June 11, 1946, to June 8, 1947 (destroyed by flood), Nov. 24, 1948, to Sept. 7, 1951, Sept. 1, 1952, to Sept. 30, 1962, water-stage recorder at site 1.6 mi (2.6 km) downstream at datum 2.81 ft (0.86 m) lower.

AVERAGE DISCHARGE.--35 years, 258 ft³/s (7.31 m³/s) 6.97 in/yr (177 mm/yr), 186,900 acre-ft/yr (230 hm³/yr); median of yearly mean discharges, 240 ft³/s (6.80 m³/s) 6.5 in/yr (165 mm/yr), 174,000 acre-ft/yr (215 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 7,890 ft³/s (223 m³/s) June 25, gage height, 20.43 ft (6.227 m); minimum daily, 12 ft³/s (0.340 m³/s) Oct. 5, 8-10.
Period of record: Maximum discharge, 34,000 ft³/s (963 m³/s) June 13, 1947, gage heights: 26.40 ft (8.047 m), from floodmark, former site and datum; 28.27 ft (8.617 m), from floodmark, present site and datum; minimum daily, 0.66 ft³/s (19 dm³/s) Oct. 4, 1968.

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

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

REVISIONS (WATER YEARS).--WSP 1438: Drainage area. WSP 1508: 1940 (M), 1941, 1944, 1946, 1949 (M).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	211	20	25	61	45	453	414	210	501	52	39
2	13	211	19	18	56	45	385	328	161	425	49	33
3	13	98	20	23	52	45	292	302	475	368	48	32
4	13	65	21	27	51	47	305	280	810	325	46	32
5	12	49	23	30	50	50	368	256	358	292	42	128
6	13	40	26	26	49	52	450	232	239	263	40	73
7	14	36	50	25	47	53	418	262	178	235	38	58
8	12	33	65	24	45	54	368	1,490	144	213	34	56
9	12	31	75	23	42	55	1,150	745	149	183	34	44
10	12	30	65	65	40	56	1,110	433	366	163	33	34
11	14	33	58	210	41	59	666	342	1,220	153	33	84
12	18	34	53	160	40	63	486	290	2,130	146	32	55
13	19	36	50	180	39	66	430	253	778	139	31	33
14	19	36	50	200	39	60	392	229	497	136	30	28
15	16	32	65	200	38	60	380	205	383	133	28	26
16	27	30	95	150	39	80	370	185	338	127	27	27
17	24	29	75	110	40	1,000	332	167	331	119	25	25
18	20	29	65	90	42	3,200	312	155	2,600	111	26	23
19	17	29	86	80	42	2,950	318	146	3,880	105	25	22
20	14	29	94	72	42	3,820	300	135	1,410	97	23	20
21	13	28	60	64	42	2,990	266	124	753	94	22	20
22	13	27	40	58	43	2,620	247	116	711	89	21	19
23	14	27	37	54	45	1,210	365	110	637	86	20	19
24	15	25	33	50	48	945	644	104	881	83	20	18
25	14	24	30	80	50	612	497	101	6,300	80	31	17
26	13	24	33	85	50	425	383	99	3,530	77	26	16
27	13	24	31	90	48	886	362	98	3,280	72	78	16
28	14	22	28	85	46	2,470	613	106	1,220	67	125	18
29	14	20	26	78	-----	1,330	1,180	117	779	62	115	19
30	16	20	24	73	-----	792	583	170	608	59	68	20
31	109	-----	23	67	-----	573	-----	275	-----	55	49	-----
TOTAL	563	1,362	1,440	2,522	1,267	26,713	14,425	8,269	35,356	5,058	1,273	1,055
MEAN	18.2	45.4	46.5	81.4	45.3	862	481	267	1,179	163	41.1	35.2
MAX	109	211	95	210	61	3,820	1,180	1,490	6,300	501	125	128
MIN	12	20	19	18	38	45	247	98	144	55	20	16
CFSM	.04	.09	.09	.16	.09	1.71	.96	.53	2.34	.32	.08	.07
IN.	.04	.10	.11	.19	.09	1.98	1.07	.61	2.61	.37	.09	.08
AC-FT	1,120	2,700	2,860	5,000	2,510	52,990	28,610	16,400	70,130	10,030	2,520	2,090

CAL YR 1974 TOTAL 139,605 MEAN 382 MAX 9,550 MIN 12 CFSM .76 IN 10.32 AC-FT 276,900
WTR YR 1975 TOTAL 99,303 MEAN 272 MAX 6,300 MIN 12 CFSM .54 IN 7.34 AC-FT 197,000

PEAK DISCHARGE (BASE, 4,500 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-20	0900	16.07	4,550	6-25	1100	20.43	7,890
6-19	0230	18.01	5,910				

05487470 SOUTH RIVER NEAR ACKWORTH, IOWA

LOCATION.--Lat 41°20'14", long 93°29'10", in SE1/4 SE1/4 sec.34, T.76 N., R.23 W., Warren County, on right bank 15 ft (5 m) downstream from bridge on county highway, 0.5 mi (0.8 km) downstream from Otter Creek, and 2.2 mi (3.6 km) southwest of Ackworth.

DRAINAGE AREA.--460 mi² (1,191 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 769.97 ft (234.69 m) above mean sea level (levels by Corps of Engineers). Prior to June 12, 1946, nonrecording gage, June 13, 1946, to Apr. 13, 1960, water-stage recorder, and Apr. 14, 1960, to Sept. 30, 1961, nonrecording gage, all at site 4.0 mi (6.4 km) downstream at datum 8.06 ft (2.46 m) lower.

AVERAGE DISCHARGE.--35 years, 246 ft³/s (6.97 m³/s), 7.26 in/yr (184 mm/yr), 178,200 acre-ft/yr (220 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 9,060 ft³/s (257 m³/s) June 27, gage height, 21.73 ft (6.623 m); minimum daily, 5.3 ft³/s (0.15 m³/s) Sept. 24-26.

Period of record: Maximum discharge, 34,000 ft³/s (963 m³/s) June 5, 1947, gage height, 24.60 ft (7.498 m), site and datum then in use; maximum gage height, 29.07 ft (8.861 m) June 10, 1974; no flow Sept. 19 to Oct. 13, 1956.

Flood in June 1930 reached a stage of 24.5 ft (7.47 m), from information by local residents, discharge, about 30,000 ft³/s (850 m³/s), at site 4.0 mi (6.4 km) downstream.

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

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

REVISIONS (WATER YEARS).--WSP 1438: Drainage area. WSP 1508: 1941, 1945 (M), 1946.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.1	448	17	16	52	48	282	225	133	249	9.9	9.6
2	5.9	133	16	13	50	46	192	188	119	178	8.9	8.8
3	6.0	46	16	15	51	44	206	177	275	137	7.8	9.6
4	6.6	26	16	14	54	43	239	165	212	113	7.3	13
5	8.0	19	16	14	70	58	330	140	105	98	7.0	51
6	7.2	17	21	14	66	80	365	130	77	85	7.0	67
7	7.3	15	100	14	62	78	256	272	65	72	6.9	39
8	7.5	13	90	14	56	78	203	1,500	56	62	6.4	21
9	8.5	12	60	15	50	78	1,470	718	119	51	6.4	12
10	6.7	17	39	330	45	77	813	313	204	45	6.4	10
11	7.2	28	37	700	42	76	397	222	754	41	7.1	96
12	14	26	35	160	40	70	265	180	888	39	8.7	23
13	14	25	35	120	40	60	207	155	251	35	6.9	21
14	12	22	45	105	41	52	228	137	149	32	7.1	14
15	9.6	21	150	95	42	50	248	121	119	29	6.4	9.8
16	8.1	21	130	85	43	320	211	112	112	26	6.5	9.2
17	6.7	21	75	75	44	3,500	182	110	129	24	7.3	8.3
18	7.0	20	62	66	45	5,030	200	105	2,030	20	7.6	7.7
19	6.7	21	58	68	47	3,140	356	95	2,160	19	7.9	6.9
20	6.5	20	50	67	50	2,950	250	75	495	17	8.3	6.0
21	6.7	19	45	58	55	1,870	183	73	262	16	8.4	5.4
22	6.5	19	40	50	60	2,010	165	69	361	16	7.9	5.7
23	6.8	20	35	48	100	1,010	798	67	216	16	7.4	5.4
24	6.8	19	30	50	90	860	797	59	1,320	15	7.1	5.3
25	7.0	18	26	58	80	358	358	60	6,070	13	14	5.3
26	7.3	18	27	70	67	238	271	60	1,460	12	15	5.3
27	6.4	18	26	110	57	1,940	452	52	5,600	11	26	5.5
28	8.5	17	27	80	51	3,090	1,700	50	2,410	11	46	7.5
29	9.1	16	24	70	-----	896	581	65	835	10	21	7.5
30	11	16	22	62	-----	438	319	141	480	9.4	13	6.4
31	645	-----	19	56	-----	366	-----	223	-----	9.3	10	-----
TOTAL	882.6	1,151	1,389	2,712	1,550	28,954	12,524	6,059	27,466	1,510.7	323.6	502.2
MEAN	28.5	38.4	44.8	87.5	55.4	934	417	195	916	48.7	10.4	16.7
MAX	645	448	150	700	100	5,030	1,700	1,500	6,070	249	46	96
MIN	5.9	12	16	13	40	43	165	50	56	9.3	6.4	5.3
CFSM	.06	.08	.10	.19	.12	2.03	.91	.42	1.99	.11	.02	.04
IN.	.07	.09	.11	.22	.13	2.34	1.01	.49	2.22	.12	.03	.04
AC-FT	1,750	2,280	2,760	5,380	3,070	57,430	24,840	12,020	54,480	3,000	642	996

CAL YR 1974 TOTAL 139,172.6 MEAN 381 MAX 15,000 MIN 5.9 CFSM .83 IN 11.25 AC-FT 276,000
WTR YR 1975 TOTAL 85,024.1 MEAN 233 MAX 6,070 MIN 5.3 CFSM .51 IN 6.88 AC-FT 168,600

PEAK DISCHARGE (BASE, 5,000 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-17	2300	20.96	8,360	6-27	1415	21.73	9,060
6-25	0445	20.72	8,150				

DES MOINES RIVER BASIN

05487980 WHITE BREAST CREEK NEAR DALLAS, IOWA

LOCATION.--Lat. 41°14'41", long 93°16'08", in NW1/4 NW1/4 sec.3, T.74 N., R.21 W., Marion County, on left bank 15 ft (5 m) downstream from bridge on county highway, 0.5 mi (0.8 km) downstream from Kirk Branch, and 1.7 mi (2.7 km) northwest of Dallas.

DRAINAGE AREA.--342 mi² (886 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 759.12 ft (231.38 m) above mean sea level, datum of 1929 (Corps of Engineers bench mark).

AVERAGE DISCHARGE.--13 years, 190 ft³/s (5.38 m³/s), 7.54 in/yr (192 mm/yr), 137,700 acre-ft/yr (170 hm³/yr); median of yearly mean discharges, 160 ft³/s (4.53 m³/s), 6.4 in/yr (162 mm/yr), 116,000 acre-ft/yr (143 hm³/yr).

EXTREMES.--Current year: Maximum discharge, about 4,200 ft³/s (119 m³/s) Mar. 17, gage height, 18.37 ft (5.599 m), backwater from ice; minimum daily, 1.0 ft³/s (0.028 m³/s) Sept. 29.

Period of record: Maximum discharge, 9,430 ft³/s (267 m³/s) Oct. 11, 1973, gage height, 26.04 ft (7.937 m); minimum daily, 0.07 ft³/s (2.0 dm³/s) Sept. 29, 1968.

Flood of June 11, 1962, reached a stage of 28.87 ft (8.800 m), from floodmark, discharge, about 12,000 ft³/s (340 m³/s). Flood of June 6, 1947, may have been slightly higher.

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

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.6	1,010	12	28	36	90	217	146	194	241	3.8	5.0
2	3.4	232	14	28	35	84	154	133	123	150	4.5	8.9
3	4.6	85	10	30	37	78	102	122	133	149	5.0	8.5
4	5.0	44	9.5	28	41	76	162	109	170	144	4.9	16
5	5.9	34	9.0	29	40	74	260	98	117	136	4.4	116
6	7.5	24	35	30	38	73	350	87	64	129	3.9	65
7	7.1	18	230	30	35	72	252	115	43	122	3.2	38
8	5.7	16	250	31	30	72	195	875	34	112	2.4	20
9	5.4	14	160	32	27	72	545	635	132	58	2.7	7.5
10	5.6	19	120	550	25	72	652	235	222	20	3.7	5.9
11	6.3	60	100	700	26	71	320	165	319	16	4.5	38
12	9.5	48	80	250	27	70	242	132	685	14	4.0	213
13	20	44	65	100	26	69	204	104	243	12	5.0	85
14	29	34	85	105	24	68	199	88	143	11	5.6	22
15	22	25	500	120	24	70	220	75	110	9.3	3.7	8.9
16	11	24	290	95	25	600	211	63	105	8.9	4.1	6.2
17	7.7	22	100	75	27	2,000	186	54	121	8.2	6.7	4.0
18	6.0	21	75	60	29	2,510	202	48	248	6.7	4.4	2.2
19	5.0	22	80	52	31	2,400	320	42	1,090	5.4	5.0	2.2
20	4.8	22	70	47	34	1,570	279	35	407	4.7	3.7	2.2
21	4.7	19	65	43	70	983	214	45	164	4.3	2.0	2.2
22	4.6	17	60	41	400	1,100	176	41	158	4.4	1.8	2.4
23	4.6	17	60	40	250	1,140	881	30	156	4.9	2.8	2.4
24	4.8	18	43	45	160	890	1,070	25	662	5.0	2.9	2.4
25	5.0	16	33	110	140	336	418	21	2,030	5.3	4.7	2.2
26	5.2	13	25	90	130	235	266	54	598	4.5	15	2.1
27	5.0	14	25	80	110	680	223	30	1,760	4.1	17	2.0
28	5.5	15	27	70	100	1,800	251	34	1,670	3.6	12	1.4
29	7.0	13	28	58	-----	872	244	54	482	3.0	21	1.0
30	10	12	26	50	-----	322	182	647	472	2.7	5.6	1.2
31	600	-----	28	43	-----	266	-----	460	-----	2.7	6.2	-----
TOTAL	830.5	1,972	2,714.5	3,090	1,977	18,815	9,197	4,802	12,855	1,401.7	176.2	693.8
MEAN	26.8	65.7	87.6	99.7	70.6	607	307	155	429	45.2	5.68	23.1
MAX	600	1,010	500	700	400	2,510	1,070	875	2,030	241	21	213
MIN	2.6	12	9.0	28	24	68	102	21	34	2.7	1.8	1.0
CFSM	.08	.19	.26	.29	.21	1.77	.90	.45	1.25	.13	.02	.07
IN.	.09	.21	.30	.34	.22	2.05	1.00	.52	1.40	.15	.02	.08
AC-FT	1,650	3,910	5,380	6,130	3,920	37,320	18,240	9,520	25,500	2,780	349	1,380

CAL YR 1974 TOTAL 88,870.0 MEAN 243 MAX 6,580 MIN 2.5 CFSM .71 IN 9.67 AC-FT 176,300
WTR YR 1975 TOTAL 58,524.7 MEAN 160 MAX 2,510 MIN 1.0 CFSM .47 IN 6.37 AC-FT 116,100

PEAK DISCHARGE (BASE, 3,000 FT³/S).--Mar. 17 (time unknown) about 4,200 ft³/s; June 25 (0015) 3,560 ft³/s (16.72 ft).

05488100 LAKE RED ROCK NEAR PELLA, IOWA

LOCATION.--Lat 41°22'11", long 92°58'48", in NE1/4 NW1/4 sec.19, T.76 N., R.18 W., Marion County, at outlet works near right end of Red Rock Dam on Des Moines River, 1.4 mi (2.3 km) upstream from Lake Creek, 4.5 mi (7.2 km) southwest of Pella and at mile 142.3 (229.0 km).

DRAINAGE AREA.--12,323 mi² (31,917 km²).

PERIOD OF RECORD.--March 1969 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, 579,000 acre-ft (714 hm³) May 16, elevation, 752.40 ft (229.332 m); minimum daily contents, 70,800 acre-ft (87.3 hm³) Feb. 1, minimum observed elevation, 722.59 ft (220.245 m) Dec. 2.

Period of record: Maximum contents, 1,700,000 acre-ft (2,100 hm³) May 14, 1973, elevation, 777.95 ft (237.119 m); minimum, 65,400 acre-ft (80.6 hm³) Jan. 1, 1974, elevation, 721.92 ft (220.041 m).

REMARKS.--Reservoir is formed by earthfill dam completed in 1969. Storage began in March 1969. Releases controlled through 14 concrete conduits extending through the concrete ogee spillway section into the stilling basin. Inlet invert elevation at 690 ft (210 m) above mean sea level. Maximum design discharge through the conduits is 37,500 ft³/s (1,060 m³/s) but normal flood control operation limits maximum outflow to 30,000 ft³/s (850 m³/s). Spillway section consists of 5 Tainter gates, 41 ft (12 m) wide and 46 ft (14 m) high, on concrete ogee crest at elevation 736 ft (224 m). The storage capacity of the reservoir at full flood-control pool level, 780 ft (238 m), is 1,830,000 acre-ft (2,260 hm³) and that of conservation pool level, 725 feet (221 m), is 90,000 acre-feet (111 hm³). Reservoir is used for flood control, low-flow augmentation, conservation and recreation. Normal operation will maintain an elevation of 725 ft (221 m) with minimum release of 300 ft³/s (8.50 m³/s) and maximum release of 30,000 ft³/s (850 m³/s) during the non-growing season, providing discharges at Ottumwa and Keosauqua do not exceed 30,000 ft³/s (850 m³/s) and 35,000 ft³/s (991 m³/s) respectively.

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

Note--Includes 90,000 acre-feet sedimentation storage below elevation 725 ft.

722	66,200	740	292,000	760	825,000
725	90,000	745	392,000	765	1,020,000
730	142,000	750	517,000	770	1,250,000
735	208,400	755	653,000		

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	98,100	122,000	76,800	76,400	70,800	74,600	266,000	179,000	268,000	370,000	99,000	98,400
2	98,100	123,000	74,700	76,200	70,900	75,200	243,000	232,000	250,000	357,000	99,000	94,900
3	98,300	122,000	75,200	75,700	70,900	76,600	222,000	290,000	232,000	338,000	98,800	95,000
4	98,500	120,000	75,800	75,700	71,500	77,000	202,000	342,000	219,000	320,000	98,200	94,800
5	98,900	118,000	76,300	74,600	72,200	76,600	183,000	383,000	203,000	300,000	98,300	95,100
6	99,200	115,000	76,600	75,100	72,700	76,300	165,000	415,000	188,000	280,000	98,100	93,900
7	99,600	113,000	76,200	76,100	72,800	76,000	147,000	443,000	174,000	260,000	98,300	92,400
8	99,800	111,000	75,400	76,700	73,000	75,300	129,000	470,000	163,000	241,000	98,600	90,000
9	100,000	112,000	74,900	77,200	73,200	75,900	119,000	494,000	154,000	222,000	99,800	90,600
10	100,000	112,000	74,600	77,600	73,200	76,800	119,000	516,000	146,000	204,000	100,000	91,400
11	101,000	112,000	74,500	78,100	73,400	78,100	120,000	532,000	139,000	189,000	101,000	91,200
12	102,000	111,000	74,300	78,700	73,600	79,300	119,000	543,000	139,000	176,000	101,000	90,500
13	103,000	111,000	74,300	78,700	73,700	80,700	116,000	554,000	142,000	163,000	101,000	90,000
14	103,000	111,000	74,400	72,500	73,600	81,800	110,000	566,000	144,000	151,000	99,600	89,800
15	104,000	111,000	74,600	71,900	73,600	83,100	103,000	577,000	146,000	140,000	99,200	90,000
16	105,000	111,000	74,400	73,100	73,800	87,500	98,600	578,000	149,000	128,000	100,000	90,200
17	105,000	110,000	73,500	73,900	73,800	104,000	99,700	575,000	155,000	119,000	100,000	90,200
18	105,000	110,000	74,600	73,500	73,600	145,000	100,000	562,000	158,000	112,000	100,000	90,800
19	105,000	109,000	75,000	72,300	73,200	167,000	97,700	543,000	170,000	106,000	99,200	90,900
20	106,000	108,000	76,200	72,100	73,100	181,000	95,600	521,000	196,000	101,000	98,100	90,900
21	106,000	108,000	77,100	72,800	73,200	194,000	96,300	499,000	220,000	99,900	97,700	90,200
22	106,000	107,000	77,700	73,400	72,600	207,000	96,200	477,000	242,000	98,000	97,900	90,200
23	106,000	107,000	77,600	73,700	72,800	211,000	98,100	454,000	251,000	98,500	98,300	90,100
24	107,000	106,000	76,800	73,700	72,900	210,000	99,600	431,000	255,000	98,400	98,900	90,100
25	107,000	103,000	75,900	73,600	72,500	220,000	97,100	405,000	273,000	98,100	100,000	89,900
26	107,000	98,600	75,900	73,600	72,400	234,000	94,900	379,000	305,000	98,000	99,800	89,600
27	107,000	93,600	76,200	73,800	72,300	253,000	94,100	354,000	335,000	97,900	107,000	89,400
28	108,000	90,000	76,300	73,400	72,900	289,000	96,900	330,000	365,000	97,800	118,000	89,500
29	109,000	86,700	76,300	72,800	-----	307,000	109,000	313,000	374,000	98,300	124,000	89,500
30	110,000	82,100	76,400	72,000	-----	303,000	135,000	297,000	377,000	98,900	117,000	89,900
31	117,000	-----	76,500	71,200	-----	290,000	-----	282,000	-----	99,000	106,000	-----
MAX	117,000	123,000	77,700	78,700	73,800	307,000	266,000	578,000	377,000	370,000	124,000	98,400
MIN	98,100	82,100	73,500	71,200	70,800	74,600	94,100	179,000	139,000	97,800	97,700	89,400
CAL YR 1974	MAX 040,000	MIN 66,600										
WTR YR 1975	MAX 578,000	MIN 70,800										
+	727.74	724.16	723.32	723.14	722.90	739.99	729.04	738.41	744.44	725.21	726.76	725.15
*	+18,900	-34,900	-5,600	-5,800	+1,700	+217,100	-155,000	+147,000	+95,000	-278,000	+7,000	-16,100
CAL YR 1974	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
WTR YR 1975	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

+ Elevation, in feet, at end of month.

* Change in contents, in acre-feet.

DES MOINES RIVER BASIN

05488500 DES MOINES RIVER NEAR TRACY, IOWA

LOCATION.--Lat 41°16'53", long 92°51'34", in NW1/4 SE1/4 sec.19, T.75 N., R.17 W., Mahaska County, on right bank 250 ft (76 m) upstream from abandoned Bellefontaine Bridge, 0.5 mi (0.8 km) downstream from bridge on State Highway 92, 0.8 mi (1.3 km) east of Tracy, 3.1 mi (5.0 km) upstream from Cedar Creek, 6.4 mi (10.3 km) downstream from English Creek, and at mile 130.4 (209.8 km).

DRAINAGE AREA.--12,479 mi² (32,321 km²).

PERIOD OF RECORD.--March 1920 to current year. Monthly discharge only for some periods, published in WSP 1308.

GAGE.--Water-stage recorder. Datum of gage is 670.91 ft (204.49 m) above mean sea level. Prior to June 26, 1940, and June 30, 1952, to Nov. 4, 1960, nonrecording gage, and June 27, 1940, to June 29, 1952, water-stage recorder, at site 250 ft (76 m) downstream at same datum.

AVERAGE DISCHARGE.--55 years, 4,660 ft³/s (132 m³/s), 5.07 in/yr (129 mm/yr), 3,376,000 acre-ft/yr (4,160 hm³/yr); median of yearly mean discharges, 3,970 ft³/s (122 m³/s), 4.3 in/yr (109 mm/yr), 2,880,000 acre-ft/yr (3,550 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 25,100 ft³/s (711 m³/s) Mar. 23, gage height, 14.11 ft (4.301 m); minimum daily, 450 ft³/s (12.7 m³/s) Dec. 3, 4.
Period of record: Maximum discharge, 155,000 ft³/s (4,390 m³/s), June 14, 1947, gage height, 26.5 ft (8.08 m); minimum daily, 40 ft³/s (1.13 m³/s) Jan. 29 to Feb. 1, 1940.
Maximum stage since 1851, that of June 14, 1947. Flood of May 31, 1903, reached a stage of about 25 ft (7 m), discharge, about 130,000 ft³/s (3,680 m³/s). Minimum daily discharge since at least 1910, that of Jan. 29 to Feb. 1, 1940.

REMARKS.--Records good except those for winter period, which are fair. Flow regulated by Lake Red Rock since March 12, 1969 (see sta. 05488100).

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

REVISIONS (WATER YEARS).--WSP 1438: Drainage area. WSP 1508: 1920 (M), 1922 (M), 1933.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	513	2,260	3,280	910	1,100	817	21,000	9,790	17,100	16,300	1,400	6,160
2	513	2,750	2,370	920	1,080	820	20,000	4,810	16,800	17,500	1,390	4,050
3	513	2,720	450	960	970	802	18,200	4,830	16,600	17,600	1,370	2,260
4	513	2,710	450	1,100	830	931	16,300	4,830	16,400	17,400	1,370	1,420
5	522	2,690	693	1,120	830	1,330	16,100	4,820	15,700	17,200	1,260	2,410
6	513	2,690	711	890	1,000	1,250	16,500	4,770	14,900	17,000	1,020	2,860
7	513	2,680	1,250	513	1,050	1,270	17,400	5,050	14,100	16,300	975	2,700
8	513	2,280	1,880	585	950	1,360	17,500	5,130	13,200	15,200	872	2,670
9	513	1,350	1,720	780	900	1,040	17,500	5,180	13,100	13,900	874	2,010
10	513	1,070	1,120	860	980	813	17,500	5,210	13,800	12,900	861	976
11	522	1,200	1,100	950	950	754	17,100	5,380	14,900	12,100	909	1,490
12	522	1,600	1,150	1,000	940	628	17,000	5,380	15,100	10,900	999	1,700
13	531	1,620	1,290	2,500	920	630	16,800	5,390	16,700	10,700	1,130	1,690
14	522	1,070	1,300	3,500	900	624	16,300	5,420	17,800	10,000	1,350	1,570
15	522	1,060	1,340	1,900	880	638	15,900	5,710	17,800	9,150	1,240	1,250
16	522	1,050	1,580	740	840	856	15,300	8,990	17,900	8,710	1,030	1,070
17	522	1,050	1,970	840	820	1,660	13,800	14,000	18,000	7,440	1,010	960
18	522	1,100	2,230	1,120	860	4,520	13,100	17,200	17,500	6,420	1,130	960
19	522	1,230	1,530	1,600	921	9,540	14,100	18,800	16,900	5,440	1,340	956
20	531	1,220	675	900	815	17,800	13,800	18,700	18,100	4,450	1,340	951
21	522	1,230	693	693	864	21,400	12,600	18,700	17,700	3,550	1,230	950
22	531	1,180	810	800	1,260	24,000	12,200	18,200	17,200	2,750	843	910
23	522	1,050	940	900	1,740	25,000	13,200	18,400	17,100	2,510	832	808
24	522	1,080	1,610	1,000	1,240	23,700	15,700	18,300	17,700	2,320	830	801
25	522	1,830	1,720	1,100	1,280	11,000	16,300	18,400	17,200	2,290	987	800
26	522	3,430	1,330	1,210	1,260	5,120	15,400	18,200	15,800	2,090	1,310	800
27	522	3,400	702	1,250	1,090	5,120	14,400	17,900	15,800	1,990	1,840	800
28	522	2,920	910	1,410	901	5,580	14,900	17,300	16,700	1,780	4,780	807
29	531	1,930	910	1,290	-----	6,160	17,900	15,500	17,300	1,410	6,690	829
30	540	2,570	910	1,380	-----	12,100	16,500	16,000	17,000	1,410	7,240	810
31	980	-----	910	1,360	-----	18,000	-----	16,600	-----	1,410	7,040	-----
TOTAL	16,613	56,020	39,534	36,081	28,171	205,263	480,300	352,890	491,900	270,120	56,492	48,428
MEAN	536	1,867	1,275	1,164	1,006	6,621	16,010	11,380	16,400	8,714	1,822	1,614
MAX	980	3,430	3,280	3,500	1,740	25,000	21,000	18,800	18,100	17,600	7,240	6,160
MIN	513	1,050	450	513	815	624	12,200	4,770	13,100	1,410	830	800
AC-FT	32,950	111,100	78,420	71,570	55,880	407,100	952,700	700,000	975,700	535,800	112,100	96,060
CAL YR 1974	TOTAL	2,885,244	MEAN	7,905	MAX	22,500	MIN	450	AC-FT	5,723,000		
WTR YR 1975	TOTAL	2,081,812	MEAN	5,704	MAX	25,000	MIN	450	AC-FT	4,129,000		

05489000 CEDAR CREEK NEAR BUSSEY, IOWA

LOCATION.--Lat 41°13'09", long 92°54'38", at SW corner sec.11, T.74 N., R.18 W., Marion County, on left bank 10 ft (3 m) downstream from bridge on State Highway 156, 0.8 mi (1.3 km) downstream from North Cedar Creek, 1.6 mi (2.6 km) northwest of Bussey, 3.0 mi (4.8 km) upstream from Honey Creek, and 8.9 mi (14.3 km) upstream from mouth.

DRAINAGE AREA.--374 mi² (969 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 682.15 ft (207.92 m) above mean sea level (levels by Corps of Engineers). Prior to Feb. 21, 1949, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--28 years, 196 ft³/s (5.55 m³/s), 7.12 in/yr (181 mm/yr), 142,000 acre-ft/yr (175 hm³/yr); median of yearly mean discharges, 170 ft³/s (4.81 m³/s), 6.2 in/yr (157 mm/yr), 123,000 acre-ft/yr (152 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,420 ft³/s (96.9 m³/s) June 25, gage height, 16.33 ft (4.977 m); minimum daily, 2.6 ft³/s (0.074 m³/s) Sept. 27.

Period of record: Maximum discharge, 29,300 ft³/s (830 m³/s) May 9, 1950, gage height, 27.50 ft (8.382 m); maximum gage height, 28.06 ft (8.553 m) July 2, 1958; no flow Sept. 6-20, 1955, Oct. 11, 12, 1956.

Flood in June 1946 reached a stage of 28.45 ft (8.672 m) on upstream side and 28.05 ft (8.550 m) on downstream side of bridge, levels to floodmarks by Corps of Engineers, discharge, 31,500 ft³/s (892 m³/s).

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

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

REVISIONS.--WSP 1438: Drainage area.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.0	591	25	27	28	80	207	140	135	207	5.1	9.7
2	3.8	135	23	26	26	70	159	121	96	91	4.9	5.5
3	3.5	67	26	23	25	60	120	115	73	67	5.0	6.1
4	5.1	49	23	25	28	53	172	109	66	55	4.3	8.3
5	4.1	40	20	26	27	50	263	101	62	48	4.2	223
6	4.2	33	38	24	26	53	421	94	47	45	4.3	110
7	8.1	29	450	25	24	57	273	114	39	40	4.3	42
8	7.9	26	270	26	22	65	198	728	35	34	3.7	26
9	7.5	25	110	28	22	68	1,200	427	60	28	4.6	26
10	4.6	31	66	45	23	70	843	179	133	24	6.8	12
11	4.4	99	50	110	23	70	345	132	377	22	6.4	51
12	7.1	92	48	70	24	66	233	114	526	20	5.5	55
13	14	57	44	80	24	64	186	96	144	18	19	53
14	33	47	45	35	25	70	184	86	82	17	18	22
15	43	40	150	20	26	80	209	81	73	16	11	13
16	23	37	160	17	27	500	180	73	64	15	11	9.1
17	12	38	80	18	28	2,530	160	65	59	14	17	7.5
18	12	36	58	20	30	1,960	424	62	70	12	17	7.1
19	8.1	35	45	22	36	971	782	58	217	12	9.8	6.8
20	6.5	34	40	26	45	846	347	53	88	11	6.6	6.4
21	6.5	30	37	30	110	575	216	61	54	10	5.7	5.5
22	5.8	27	34	32	1,600	796	181	66	43	9.5	4.2	4.9
23	6.4	29	38	31	600	561	650	53	36	9.4	3.4	3.9
24	6.4	30	33	30	190	540	1,210	45	33	12	4.4	3.6
25	7.1	28	26	80	150	233	505	41	2,500	10	35	3.2
26	7.2	24	24	100	140	157	270	56	699	8.4	34	2.8
27	7.0	23	25	75	130	691	210	66	567	7.4	19	2.6
28	7.5	24	27	50	90	2,290	323	56	265	6.7	20	2.8
29	9.7	22	31	40	-----	713	362	75	116	6.4	82	3.9
30	15	24	26	35	-----	307	183	667	1,040	5.8	28	5.2
31	818	-----	29	30	-----	256	-----	372	-----	5.5	15	-----
TOTAL	1,113.5	1,802	2,101	1,226	3,549	14,902	11,016	4,506	7,799	887.1	419.2	737.9
MEAN	35.9	60.1	67.8	39.5	127	481	367	145	260	28.6	13.5	24.6
MAX	818	591	450	110	1,600	2,530	1,210	728	2,500	207	82	223
MIN	3.5	22	20	17	22	50	120	41	33	5.5	3.4	2.6
CFSM	.10	.16	.18	.11	.34	1.29	.98	.39	.70	.08	.04	.07
IN.	.11	.18	.21	.12	.35	1.48	1.10	.45	.78	.09	.04	.07
AC-FT	2,210	3,570	4,170	2,430	7,040	29,560	21,850	8,940	15,470	1,760	831	1,460

CAL YR 1974 TOTAL 108,417.5 MEAN 297 MAX 8,970 MIN 3.5 CFSM .79 IN 10.78 AC-FT 215,000
WTR YR 1975 TOTAL 50,058.7 MEAN 137 MAX 2,530 MIN 2.6 CFSM .37 IN 4.98 AC-FT 99,290

PEAK DISCHARGE (BASE, 4,000 FT³/S).--No peak above base.

05489600 DES MOINES RIVER AT OTTUMWA, IOWA

LOCATION.--Lat 41°00'39", long 92°24'40", in SE1/4 NE1/4 sec.25, T.72 N., R.14 W., Wapello County, on right bank 15 ft (4 m) downstream from Wabash Railroad Bridge at Ottumwa, 0.4 mi (0.6 km) downstream from Ottumwa powerplant, 6.5 mi (10.5 km) upstream from Village Creek, 9.5 mi (16.3 km) downstream from South Avery Creek, and at mile 94.1 (151.4 km).

DRAINAGE AREA.--13.374 mi² (34.638 km²).

PERIOD OF RECORD.--March 1917 to current year (published as "at Eldon" October 1930 to March 1935). Monthly discharge only for some periods, published in WSP 1308.

GAGE.--Water-stage recorder. Datum of gage is 622.00 ft (189.59 m) above mean sea level. Prior to Sept. 30, 1930, nonrecording gages at Market Street Bridge half a mile upstream at datum 0.83 ft (0.25 m) higher. Oct. 1, 1930, to Mar. 31, 1935, nonrecording gage at Eldon 15 mi (24.1 km) downstream at different datum. Apr. 1, 1935, to Oct. 25, 1963, water-stage recorder at site 1,100 ft (335 m) downstream at Vine Street Bridge at datum 0.77 ft (0.23 m) higher.

AVERAGE DISCHARGE.--58 years, 5,080 ft³/s (144 m³/s), 5.16 in/yr (131 mm/yr), 3,680,000 acre-ft/yr (4,540 hm³/yr); median of yearly mean discharges, 4,350 ft³/s (123 m³/s), 4.4 in/yr (112 mm/yr), 3,150,000 acre-ft/yr (3,880 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 24,900 ft³/s (705 m³/s) Mar. 22, gage height, 9.13 ft (2.783 m); minimum daily, 485 ft³/s (13.7 m³/s) Oct. 20.

Period of record: Maximum discharge, 135,000 ft³/s (3,820 m³/s) June 7, 1947, gage height, 20.2 ft (6.16 m), site and datum then in use; minimum daily, 30 ft³/s (0.85 m³/s) Jan. 27-29, 31, Feb. 2, 3, 5-7, 1940.

Maximum stage since at least 1850, that of June 7, 1947. Flood of May 31, 1903, reached a stage of 19.4 ft (5.91 m), former site and datum at Vine Street Bridge or about 22 ft (6.71 m) at Market Street Bridge, from information by Corps of Engineers and U.S. Weather Bureau, discharge about 140,000 ft³/s (3,960 m³/s).

REMARKS.--Records good except those for winter period, which are fair. Prior to Dec. 12, 1958, and since Nov. 30, 1960, diurnal fluctuation at low flow caused by powerplant above station. Flow regulated by Lake Red Rock since March 12, 1969 (see sta. 05488100).

REVISIONS (WATER YEARS).--WSP 525: 1917-20. WSP 1308: 1917-23 (M), 1925-27 (M), 1931. WSP 1438: Drainage area.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	636	3,030	3,660	1,300	1,400	1,300	19,700	13,500	17,100	16,300	1,490	7,290
2	572	3,070	3,960	1,000	1,200	1,600	20,000	7,590	16,900	17,200	1,540	5,550
3	608	3,000	1,920	1,300	1,150	1,250	18,500	5,820	16,700	17,500	1,580	3,600
4	603	2,840	539	1,200	1,050	1,150	16,900	5,830	16,500	17,400	1,460	1,860
5	700	2,830	614	1,400	950	1,600	16,300	5,840	16,200	17,300	1,570	2,250
6	644	2,880	1,040	1,600	870	1,820	16,500	5,630	15,100	17,100	1,180	3,520
7	535	2,730	2,170	1,170	1,050	1,900	17,300	6,020	14,800	16,800	1,010	3,220
8	563	2,780	2,600	689	1,150	1,800	17,500	6,840	13,600	15,800	940	3,020
9	611	1,860	2,500	925	1,100	1,890	17,800	7,000	13,600	14,500	846	2,880
10	593	1,230	2,160	1,520	1,200	1,360	18,500	6,470	13,600	13,600	862	1,540
11	615	1,380	2,010	1,200	1,100	1,320	17,400	6,480	15,200	13,200	822	1,440
12	622	1,580	1,840	600	1,050	1,130	17,000	6,500	15,600	11,800	967	1,880
13	602	1,950	2,050	1,000	1,000	941	16,900	6,430	16,100	11,400	1,080	1,960
14	662	1,530	1,850	2,700	990	985	16,500	6,450	17,500	11,300	1,260	1,960
15	630	1,050	2,000	3,800	980	1,060	16,100	6,460	17,700	10,200	1,500	1,640
16	595	1,150	2,100	2,500	980	2,650	15,900	7,620	17,800	9,900	1,150	1,320
17	570	1,120	2,200	1,050	970	6,180	14,900	12,400	17,800	8,920	1,100	1,150
18	550	1,190	2,300	900	970	8,170	14,000	15,400	18,000	7,750	1,000	1,040
19	538	1,160	2,500	1,250	960	9,630	14,900	18,300	16,800	6,650	1,220	1,060
20	485	1,300	1,700	1,700	970	15,600	15,100	18,400	17,800	5,520	1,430	1,020
21	536	1,270	1,200	1,000	1,200	20,200	13,600	18,400	17,700	4,580	1,350	972
22	570	1,300	1,100	760	2,500	22,400	12,900	18,300	17,400	3,700	1,150	1,000
23	531	1,160	1,200	700	2,600	23,800	13,600	17,900	16,700	3,050	709	940
24	548	1,060	1,700	1,100	2,000	24,100	16,200	18,000	17,900	2,870	731	740
25	502	1,160	2,010	1,300	1,600	17,700	17,200	18,100	19,500	2,680	938	770
26	496	2,680	2,110	1,500	2,500	8,040	16,400	18,000	17,800	2,610	1,110	876
27	527	4,130	1,740	1,400	1,800	7,270	15,200	17,800	16,200	2,430	1,500	876
28	542	4,080	1,240	1,450	1,550	10,400	15,000	17,700	16,700	2,240	3,120	876
29	525	2,930	1,360	1,500	-----	8,650	17,200	16,100	17,200	1,830	6,360	972
30	639	2,650	1,340	1,400	-----	9,980	18,000	15,600	17,800	1,530	7,620	956
31	1,210	-----	1,370	1,500	-----	15,600	-----	16,700	-----	1,700	7,440	-----
TOTAL	18,560	62,080	58,083	42,414	36,840	231,556	493,000	367,780	499,300	289,360	56,035	58,178
MEAN	599	2,069	1,874	1,368	1,316	7,470	16,430	11,866	16,640	9,334	1,808	1,939
MAX	1,210	4,130	3,960	3,800	2,600	24,100	20,000	18,400	19,500	17,500	7,620	7,290
MIN	485	1,050	539	600	870	941	12,900	5,630	13,600	1,530	709	740
AC-FT	36,810	123,100	115,200	84,130	73,070	459,300	977,900	729,500	990,400	573,900	111,100	115,400
WTR YR 1974	TOTAL	3,136,989	MEAN	8,594	MAX	26,600	MIN	485	AC-FT	6,222,000		
CAL YR 1975	TOTAL	2,213,186	MEAN	6,064	MAX	24,100	MIN	485	AC-FT	4,390,000		

05490500 DES MOINES RIVER AT KEOSAUQUA, IOWA

LOCATION.--Lat 40°43'40", long 91°57'34", in SE1/4 SW1/4 sec.36, T.69 N., R.10 W., Van Buren County, on right bank 10 ft (3 m) upstream from bridge on State Highway 1 at Keosauqua, 4.0 mi (6.4 km) downstream from Chequest Creek, and at mile 51.3 (82.5 km).

DRAINAGE AREA.--14,038 mi² (36,358 km²).

PERIOD OF RECORD.--May 1903 to July 1906, April to December 1910, August 1911 to current year. Monthly discharge only for some periods, published in WSP 1308.

GAGE.--Water-stage recorder. Datum of gage is 547.35 ft (166.84 m) above mean sea level. Prior to Dec. 24, 1933, nonrecording gage, and Dec. 25, 1933, to Sept. 30, 1972, water-stage recorder, same site at datum 10.00 ft (3.05 m) higher.

AVERAGE DISCHARGE.--66 years (1903-5, 1911-75), 5,526 ft³/s (156 m³/s) 5.35 in/yr (136 mm/yr), 4,004,000 acre-ft/yr (4,940 hm³/yr); median of yearly mean discharges, 4,930 ft³/s (140 m³/s), 4.8 in/yr (122 mm/yr), 3,570,000 acre-ft/yr (4,400 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 25,500 ft³/s (722 m³/s) Mar. 24, gage height, 18.51 ft (5.642 m); minimum daily, 360 ft³/s (15.9 m³/s) Oct. 23.

Period of record: Maximum discharge, 146,000 ft³/s (4,130 m³/s) June 1, 1903, gage height, 27.85 ft (8.489 m), from floodmark, datum then in use; minimum daily, 40 ft³/s (1.13 m³/s) Jan. 30, 1940.
Flood of June 1, 1851, reached a stage of 24 ft (7 m), discharge not determined).

REMARKS.--Records good except those for winter period, which are poor. Prior to Dec. 21, 1958, and since Nov. 30, 1960, some diurnal fluctuation at medium and low stages caused by powerplant at Ottumwa. Flow regulated by Lake Red Rock since March 12, 1969 (see sta 05488100).

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

REVISIONS (WATER YEARS).--WSP 525: 1913-20. WSP 1438: Drainage area. WSP 1508: 1903, 1905-6, 1915-18 (M), 1922 (M), 1924-26 (M), 1932-34 (M), 1937, 1942 (M).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	637	1,890	2,480	1,500	1,600	1,700	18,600	16,400	17,500	18,100	1,770	7,180
2	639	3,320	3,460	1,400	1,500	1,300	21,000	10,600	17,800	17,100	1,560	6,610
3	562	3,220	3,500	1,200	1,300	1,700	19,800	5,820	17,100	18,100	1,600	4,970
4	574	3,000	1,880	1,400	1,200	1,300	18,200	5,420	16,900	18,200	1,560	3,310
5	602	2,990	631	1,500	1,100	1,100	16,900	5,360	16,600	18,000	1,470	2,420
6	692	2,900	670	1,600	1,000	1,700	17,200	5,420	15,800	17,800	1,570	2,690
7	659	2,980	1,550	1,800	900	2,000	17,500	5,310	15,000	17,500	1,190	3,660
8	624	2,800	2,820	1,300	1,100	2,100	17,800	5,990	14,200	16,800	1,040	3,200
9	587	2,860	2,570	800	1,300	2,100	18,100	6,690	13,600	15,500	995	3,080
10	587	1,930	2,240	1,100	1,200	2,000	19,500	6,280	13,700	14,500	932	2,860
11	595	1,600	2,100	1,600	1,400	1,660	18,400	5,900	14,400	13,500	944	2,030
12	663	1,740	2,000	1,300	1,200	1,500	17,500	5,950	15,700	12,600	918	2,020
13	715	1,880	1,900	700	1,100	1,300	17,300	5,900	15,800	11,400	1,130	2,120
14	762	2,160	2,100	1,200	1,070	1,200	17,000	5,820	17,300	11,200	1,290	2,040
15	804	1,640	2,200	3,000	1,040	1,400	16,500	5,870	18,000	10,600	1,380	2,020
16	725	1,210	2,300	4,200	1,000	2,720	16,100	5,990	18,000	9,690	1,540	1,660
17	674	1,290	2,400	2,800	1,000	7,640	15,500	9,040	18,000	9,270	1,280	1,380
18	647	1,280	2,500	1,200	1,000	9,950	15,400	14,000	18,200	8,130	1,200	1,200
19	623	1,330	2,600	1,000	1,000	9,800	16,100	17,200	17,800	7,050	1,120	1,110
20	602	1,310	2,800	1,300	1,000	13,000	15,600	18,700	17,400	6,110	1,430	1,110
21	602	1,440	2,100	1,800	1,000	19,500	14,600	18,800	18,200	5,080	1,650	1,090
22	598	1,390	1,300	1,300	1,300	22,600	13,200	18,700	17,800	4,330	1,410	1,040
23	560	1,440	1,200	900	2,700	24,700	13,600	18,300	17,300	3,460	1,240	1,080
24	611	1,300	1,300	740	2,800	25,300	16,600	18,500	17,400	3,100	847	1,040
25	614	1,190	1,800	1,200	2,100	22,700	17,800	19,000	20,000	2,730	1,050	846
26	618	1,250	2,100	1,600	1,700	12,200	17,100	20,600	19,500	2,670	1,160	853
27	591	3,140	2,200	1,800	2,700	6,840	15,900	18,600	17,200	2,580	1,210	883
28	579	3,680	1,900	1,500	2,000	11,500	15,200	18,600	16,900	2,420	1,570	887
29	610	3,600	1,300	1,550	-----	11,000	16,300	18,000	17,600	2,280	5,090	923
30	652	2,440	1,400	1,600	-----	8,230	18,400	16,400	18,100	1,870	7,240	971
31	845	-----	1,450	1,500	-----	13,000	-----	17,400	-----	1,620	7,420	-----
TOTAL	19,853	64,200	62,451	47,390	39,310	244,740	508,700	370,560	508,800	303,290	55,806	66,283
MEAN	640	2,140	2,015	1,529	1,404	7,895	16,960	11,950	16,950	9,784	1,800	2,209
MAX	845	3,680	3,500	4,200	2,800	25,300	21,000	20,600	20,000	18,200	7,420	7,180
MIN	560	1,190	631	700	900	1,100	13,200	5,310	13,600	1,620	847	846
AC-FT	39,380	127,300	123,900	94,000	77,970	485,400	1,009M	735,000	1,009M	601,600	110,700	131,500
CAL YR 1974	TOTAL 3,360,912		MEAN 9,208		MAX 34,600		MIN 560		AC-FT 6,666,000			
WTR YR 1975	TOTAL 2,291,383		MEAN 6,278		MAX 25,300		MIN 560		AC-FT 4,545,000			

BIG SIOUX RIVER BASIN

06483500 ROCK RIVER NEAR ROCK VALLEY, IOWA

LOCATION.--Lat 43°11'58", long 96°20'22", in NW1/4 NE1/4 sec.25, T.97 N., R.47 W., Sioux County, on downstream side of bridge on U.S. Highway 18, 1.8 mi (2.9 km) west of Rock Valley, and at mile 15.9 (25.6 km).

DRAINAGE AREA.--1,600 mi² (4,144 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 1,211.81 ft (369.36 m) above mean sea level. Prior to Aug. 13, 1952, nonrecording gage (June 4, 1949, to Aug. 12, 1952, supplementary water-stage recorder operating above 6.2 ft (1.9 m) gage height) at same site and datum.

AVERAGE DISCHARGE.--27 years, 300 ft³/s (8.50 m³/s), 2.55 in/yr (65 mm/yr), 217,400 acre-ft/yr (268 hm³/yr); median of yearly mean discharges, 250 ft³/s (7.08 m³/s), 2.1 in/yr (53 mm/yr), 181,000 acre-ft/yr (223 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,370 ft³/s (67.1 m³/s) Apr. 30, gage height, 8.71 ft (2.655 m); minimum daily, 6.2 ft³/s (0.18 m³/s) Feb. 10-20.

Period of record: Maximum discharge, 40,400 ft³/s (1,140 m³/s) Apr. 7, 1969, gage height, 17.32 ft (5.279 m); no flow Feb. 20-23, Feb. 27 to Mar. 8, 1959.

Flood in 1897 reached a stage of 17.0 ft (5.18 m), discharge not determined, from information by State Highway Commission.

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

REVISIONS.--WSP 1439: Drainage area.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	37	28	15	7.2	7.0	309	1270	180	363	52	190
2	23	37	24	15	7.3	7.0	318	1000	166	324	51	170
3	22	35	22	14	7.3	7.0	327	902	160	292	50	160
4	22	36	22	14	7.3	7.0	309	826	357	265	49	150
5	22	35	23	14	7.3	7.0	309	758	1350	242	48	141
6	22	35	24	14	7.3	7.0	499	690	889	222	47	135
7	22	37	23	14	7.2	7.0	1080	634	492	200	46	130
8	22	36	21	14	7.0	7.0	1690	576	399	184	46	125
9	22	37	21	14	6.5	7.0	2120	530	369	174	45	120
10	22	37	21	14	6.2	7.0	2000	502	357	156	45	115
11	22	38	22	12	6.2	7.0	1770	485	342	152	44	111
12	22	40	24	10	6.2	7.0	1670	488	414	147	43	111
13	21	41	25	9.5	6.2	7.0	1670	510	482	141	42	103
14	32	35	25	9.0	6.2	7.2	1560	516	426	136	42	98
15	46	35	24	8.5	6.2	7.4	1370	471	444	128	41	94
16	44	35	22	8.0	6.2	9.0	1370	435	516	125	40	88
17	41	35	20	7.6	6.2	15	1320	399	610	119	40	83
18	36	37	18	7.4	6.2	35	1350	372	778	112	39	79
19	34	39	17	7.2	6.2	60	1220	345	848	108	39	76
20	33	38	17	7.0	6.2	100	1050	318	835	106	123	74
21	33	37	17	7.0	6.3	250	880	292	862	102	196	73
22	32	37	16	7.0	6.4	700	774	275	1100	97	516	72
23	32	36	16	7.0	6.4	1240	742	260	1430	97	1640	71
24	32	37	16	7.0	6.6	1520	844	252	1190	103	2030	71
25	32	35	15	7.0	6.6	804	844	242	866	90	876	70
26	31	35	15	7.2	6.8	583	826	240	682	80	530	70
27	32	35	15	7.2	6.8	435	943	232	576	70	402	69
28	32	35	15	7.2	7.0	306	1120	222	510	62	321	68
29	34	23	15	7.2	---	309	1860	212	447	59	262	68
30	35	31	15	7.2	---	327	1960	202	399	56	230	67
31	37	---	15	7.2	---	330	---	192	---	54	210	---
TOTAL	915	1086	513	306.4	185.5	7128.6	34104	14648	18476	4566	8185	3052
MEAN	29.5	36.2	19.8	9.88	6.63	230	1137	473	616	147	264	102
MAX	46	41	28	15	7.3	1520	2120	1270	1430	363	2030	190
MIN	21	31	15	7.0	6.2	7.0	309	192	160	54	39	67
CFSM	.02	.02	.01	.006	.004	.14	.71	.30	.39	.09	.17	.06
IN.	.02	.03	.01	.007	.004	.17	.79	.34	.43	.11	.19	.07
AC-FT	1810	2150	1220	608	368	14140	67650	29050	36650	9060	16230	6050

CAL YR 1974 TOTAL 42089.0 MEAN 115 MAX 948 MIN 15 CFSM .07 IN .98 AC-FT 83480
WTR YR 1975 TOTAL 93265.5 MEAN 256 MAX 2120 MIN 6.2 CFSM .16 IN 2.17 AC-FT 185000

PEAK DISCHARGE (BASE, 3,000 FT³/S).--No peak above base.

06485500 BIG SIOUX RIVER AT AKRON, IOWA
(National stream-quality accounting network station)

LOCATION.--Lat 42°49'42", Long 96°33'45", in NW1/4 SW1/4 sec.31, T.93 N., R.48 W., Plymouth County, Iowa, on left bank at west edge of Akron, 0.6 mi (1.0 km) downstream from bridge on State Highway 48, and 2.3 mi (3.7 km) upstream from Union Creek.

DRAINAGE AREA.--9,030 mi² (23,390 km²), approximately, of which about 1,970 mi² (5,100 km²) is probably noncontributing.

PERIOD OF RECORD.--October 1928 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,118.90 ft (341.041 m) above mean sea level. Prior to Dec. 3, 1934, nonrecording gage at bridge 300 ft (91 m) upstream at same datum.

AVERAGE DISCHARGE.--47 years, 842 ft³/s (23.85 m³/s), 610,000 acre-ft/yr (752 hm³/yr); median of yearly mean discharges, 730 ft³/s (20.7 m³/s), 529,000 acre-ft/yr (652 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,920 ft³/s (82.7 m³/s) May 1, gage height, 9.76 ft (2.975 m); minimum daily discharge, 26 ft³/s (0.74 m³/s) Jan. 14.
Period of record: Maximum discharge, 80,800 ft³/s (2,290 m³/s) Apr. 9, 1969, gage height, 22.99 ft (7.007 m); minimum daily, 7 ft³/s (0.20 m³/s) Feb. 26-28, 1936.

REMARKS.--Records good except those for the winter period, which are poor. Records of chemical analyses and water temperatures for the water year 1975 are published in Part 2 of Water Resources Data for South Dakota, 1975.

REVISIONS (WATER YEARS).--WSP 1309: 1929 (M), 1931-33 (M), 1936 (M), 1938 (M), 1940 (M). WSP 1389: Drainage area.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	76	106	72	68	43	62	330	2660	415	593	138	359
2	76	104	69	66	50	58	280	2110	388	536	205	319
3	78	105	68	64	56	59	330	1860	368	488	216	291
4	80	103	74	63	55	60	400	1720	489	449	368	264
5	82	103	80	61	54	61	480	1590	1030	410	300	283
6	85	101	80	60	53	63	536	1440	1410	378	234	271
7	83	99	86	59	52	64	657	1310	1090	349	205	240
8	85	98	83	57	50	65	1150	1220	752	325	193	227
9	87	100	84	53	50	66	1860	1130	633	299	173	218
10	86	104	86	47	51	67	2510	1050	577	283	158	207
11	85	102	90	37	52	66	2430	1010	554	267	153	192
12	85	101	93	32	54	66	2310	986	566	254	145	189
13	87	94	86	28	55	65	2340	974	577	246	142	193
14	90	86	86	26	56	63	2410	969	640	238	133	183
15	87	74	84	27	57	60	2350	962	658	223	128	176
16	104	98	82	27	56	63	2220	913	648	208	131	172
17	116	101	78	27	56	67	2260	861	706	198	124	170
18	113	105	77	28	55	75	2280	804	837	189	115	172
19	109	111	76	28	53	90	2220	762	978	183	115	174
20	105	112	77	29	50	120	2090	707	1060	174	116	166
21	98	108	79	30	52	180	1930	668	1080	166	154	166
22	99	111	80	31	55	250	1720	637	1340	162	245	166
23	99	114	79	32	57	350	1590	608	1450	168	494	159
24	96	109	78	36	59	500	1590	578	1610	176	1540	151
25	94	92	76	45	60	650	1780	555	1430	162	2060	147
26	94	91	75	45	62	780	1780	542	1110	161	1230	140
27	94	86	74	44	63	500	1780	518	923	149	772	140
28	94	84	73	43	64	390	1850	499	821	142	587	138
29	99	80	71	41	---	330	2060	484	738	134	777	138
30	103	75	70	40	---	350	2610	458	670	135	490	138
31	112	---	69	38	---	390	---	437	---	131	418	---
TOTAL	2881	2957	2435	1312	1530	6030	50133	31022	25548	7976	12259	5949
MEAN	92.9	98.6	78.5	42.3	54.6	195	1671	1001	852	257	395	158
MAX	116	114	93	68	64	780	2610	2660	1610	593	2060	359
MIN	76	74	68	26	43	58	280	437	368	131	115	138
AC-FT	5710	5870	4830	2600	3030	11960	99440	61530	50670	15820	24320	11800

CAL YR 1974 TOTAL 107517 MEAN 295 MAX 1830 MIN 68 AC-FT 213300
WTR YR 1975 TOTAL 150032 MEAN 411 MAX 2660 MIN 26 AC-FT 297600

MISSOURI RIVER MAIN STEM

06486000 MISSOURI RIVER AT SIOUX CITY, IOWA
(National stream-quality accounting network station)

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

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

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

GAGE.--Water-stage recorder. Datum of gage is 1,056.98 ft (322.17 m) above mean sea level. Sept. 2, 1878, to Dec. 31, 1905, nonrecording gages at various locations within 1.7 mi (2.7 km) of present site and at various datums. Jan. 1, 1906, to Feb. 14, 1935, nonrecording gage, and Feb. 15, 1935 to Sept. 30, 1969, water-stage recorder at present site at datum 19.98 ft (6.09 m) higher, and Oct. 1, 1969 to Sept. 30, 1970 at datum 20.00 ft (6.10 m) higher.

AVERAGE DISCHARGE.--78 years, 31,910 ft³/s (904 m³/s), 23,120,000 acre-ft/yr (28,500 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 64,900 ft³/s (1,840 m³/s) Sept. 6, gage height, 26.41 ft (8.050 m); maximum gage height, 26.66 ft (8.126 m) Aug. 26; minimum daily discharge, 8,000 ft³/s (227 m³/s) Jan. 12; minimum gage height not determined, occurred during period of no gage-height record Jan. 12.

Period of record: Maximum discharge, 441,000 ft³/s (12,500 m³/s) Apr. 14, 1952, gage height, 24.28 ft (7.401 m), datum then in use; minimum, 2,500 ft³/s (70.8 m³/s) Dec. 29, 1941; minimum gage height, -6.60 ft (-2.012 m), datum then in use, Dec. 14, 1968, result of freezeup.

REMARKS.--Records good except those for winter period, which are poor. Flow partly regulated by upstream main-stem reservoirs. Records of chemical and biological analyses, water temperatures, and suspended-sediment discharges for the current year are published in Part 2 of this report.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35400	34000	19500	18500	17800	18000	27600	30300	36200	43600	62600	63600
2	35900	32800	19200	18500	17800	17900	26800	31600	36700	43300	63600	63900
3	36200	32300	19000	18800	18500	17800	29000	31600	37300	43600	62900	63900
4	36200	32300	18700	18400	18500	17800	28800	29800	37000	45800	62600	63600
5	35900	33000	18700	18500	16500	17900	29800	30000	37300	48600	62900	64200
6	36400	33600	18800	18200	14000	18700	30000	29800	37300	49800	62600	63900
7	36400	33600	18700	17900	15000	18400	30300	30800	36700	49800	62600	63900
8	36200	33300	17800	18500	17500	17900	31000	30600	36400	49800	62600	63200
9	36200	33300	17500	18200	17500	17900	31300	30000	37300	50100	62300	63200
10	36400	33300	19000	18300	17500	17900	30600	30000	38900	49800	63600	63600
11	37300	32800	18700	11600	18000	18000	29800	30600	42500	50100	63200	63900
12	37600	33000	19200	8000	19000	18200	29000	30300	42000	49800	63600	63200
13	37300	33000	18900	11500	18500	18300	29300	30000	41100	49200	63200	62900
14	37600	33800	18900	17000	18000	17200	30800	31000	41700	49200	62900	62900
15	35400	33000	19000	19000	18000	18000	30300	31300	42800	49200	62900	62900
16	35400	33000	18800	20000	18500	18700	30000	33600	42200	49800	63600	63200
17	34800	33300	18000	20000	18500	19500	30000	35100	42800	52200	63200	63200
18	34600	33600	18900	20000	18500	19900	31000	35100	44200	54900	63200	63900
19	34800	33600	19300	20000	18500	18900	31000	34800	42500	56400	62900	63600
20	34600	33600	19400	19500	18500	18700	30800	34300	40300	57000	62600	63200
21	34800	33300	19200	19000	18500	18500	31000	34600	39500	57600	62600	62600
22	35100	33300	19200	18500	18500	18900	31300	34600	39200	58800	63200	62600
23	34600	33600	19400	18500	18500	21000	31000	35400	38600	60300	63900	62900
24	34600	32600	18500	18500	18500	23400	29800	37800	38600	60600	62900	62900
25	34300	29800	18200	19000	18000	20500	28800	37300	38400	61000	63200	62900
26	33800	27800	19000	19000	18000	21600	30000	37300	38100	62000	63600	63200
27	33600	25400	19700	18500	17900	25000	30600	37000	39200	62300	63200	63200
28	33800	23200	19000	18500	18000	27100	30600	37600	43000	62300	63200	63200
29	34600	21100	18900	18000	---	25700	30000	36700	45000	63200	63600	62600
30	34600	19900	18700	18000	---	25700	28600	35600	44400	62600	63600	62600
31	34300	---	18700	18000	---	27800	---	35900	---	62600	63200	---
TOTAL	1098700	944200	584500	553900	500500	620800	898900	1030400	1197200	1665300	1955800	1898600
MEAN	35440	31470	18850	17870	17880	20030	29960	33240	39910	53720	63080	63290
MAX	37600	34000	19700	20000	19000	27800	31300	37600	45000	63200	63900	64200
MIN	19900	19900	17500	8000	14000	17200	26600	29900	36200	43300	62300	62600
AC-FT	2179000	1873000	1159000	1099000	992700	1231000	1785000	2044000	2375000	3303000	3879000	3766000

CAL YR 1974	TOTAL	10564500	MEAN	28940	MAX	40000	MIN	13000	AC-FT	20950000
WTR YR 1975	TOTAL	12948800	MEAN	35480	MAX	64200	MIN	8000	AC-FT	25680000

06600100 FLOYD RIVER AT ALTON, IOWA

LOCATION.--Lat 42°58'55", long 96°00'03", in NE1/4 NE1/4 sec.11, T.94 N., R.44 W., Sioux County, on left bank at downstream side of Chicago and Northwestern Railway Company bridge at east edge of Alton, 34.3 mi (55.2 km) upstream from West Branch Floyd River at mile 58.1 (93.5 km).

DRAINAGE AREA.--265 mi² (686 km²).

PERIOD OF RECORD.--October 1955 to current year. Prior to December 1955, monthly discharge only, published in WSP 1730.

GAGE.--Water-stage recorder. Datum of gage is 1,269.55 ft (386.96 m) above mean sea level.

AVERAGE DISCHARGE.--20 years, 47.1 ft³/s (1.33 m³/s), 2.41 in/yr (61 mm/yr), 34,120 acre-ft/yr (42.1 hm³/yr); median of yearly mean discharges, 44 ft³/s (1.25 m³/s), 2.3 in/yr (58 mm/yr), 31,900 acre-ft/yr (39.3 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,490 ft³/s (98.8 m³/s) June 5, gage height, 16.55 ft (5.044 m); minimum daily, 1.2 ft³/s (0.034 m³/s) Jan. 17, 18.
Period of record: Maximum discharge, 12,200 ft³/s (346 m³/s) Mar. 28, 1962, gage height, 18.35 ft (5.593 m); no flow at times in 1956, 1958-59, 1965, 1968.
Flood in June 1953 reached a discharge of about 45,500 ft³/s (1,290 m³/s), from information by Corps of Engineers.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	28	13	9.4	1.5	2.8	160	325	72	171	20	58
2	15	25	13	9.2	1.5	2.6	152	274	69	160	22	51
3	16	23	13	9.2	1.5	2.3	140	255	69	148	27	47
4	16	21	13	9.0	1.5	2.3	139	235	862	139	25	41
5	17	20	13	8.8	1.5	2.5	147	211	2380	128	20	49
6	16	19	13	8.6	1.4	2.4	408	187	522	113	20	42
7	16	18	22	8.6	1.4	2.3	698	179	311	101	19	37
8	17	18	28	8.6	1.3	2.2	528	170	246	94	19	33
9	16	18	12	8.6	1.3	2.2	694	164	230	90	18	30
10	16	19	12	8.0	1.3	2.2	709	157	235	81	17	29
11	16	19	11	5.0	1.3	2.2	422	165	232	57	18	31
12	17	19	11	3.0	1.4	2.1	322	247	327	66	19	34
13	16	19	12	2.5	1.4	1.9	277	248	327	66	21	31
14	16	13	14	2.0	1.4	1.8	281	202	269	61	21	28
15	17	15	16	1.5	1.4	2.0	312	174	282	56	19	26
16	17	17	22	1.3	1.5	3.5	314	152	311	50	19	25
17	17	19	12	1.2	1.6	8.0	317	139	361	46	19	24
18	18	20	11	1.2	1.6	20	305	130	363	41	23	31
19	17	19	11	1.3	1.6	35	342	121	488	39	27	31
20	17	19	11	1.4	1.6	400	274	113	420	37	129	26
21	16	18	11	1.5	1.7	1500	223	105	351	34	89	24
22	17	17	11	1.5	1.7	1230	209	99	692	34	88	22
23	17	18	11	1.5	1.7	799	345	97	932	33	479	21
24	17	15	10	1.5	1.8	468	456	95	530	33	349	19
25	17	12	10	1.8	2.0	132	338	89	356	30	160	19
26	16	13	10	1.6	2.5	120	315	84	293	29	113	18
27	16	15	9.8	1.5	2.7	130	431	79	270	25	91	17
28	17	14	9.8	1.5	3.0	150	671	80	241	23	78	16
29	19	13	9.6	1.5	---	170	856	87	212	21	75	17
30	20	13	9.6	1.5	---	150	422	83	190	21	69	17
31	25	---	9.4	1.5	---	130	---	75	---	20	64	---
TOTAL	524	536	394	125	46	5479	11207	4821	12443	2047	2177	894
MEAN	16.9	17.9	12.7	4.04	1.65	177	374	156	415	66.0	70.2	29.8
MAX	25	28	28	9.4	3.0	1500	856	325	2380	171	479	58
MIN	14	12	9.4	1.2	1.3	1.8	139	75	69	20	17	16
CFSM	.06	.07	.05	.02	.006	.67	1.41	.59	1.57	.25	.26	.11
IN.	.07	.08	.06	.02	.006	.77	1.57	.68	1.75	.29	.31	.13
AC-FT	1040	1060	782	249	91	10870	22230	9560	24680	4060	4320	1770

CAL YR 1974 TOTAL 14684.9 MEAN 40.2 MAX 850 MIN 5.9 CFSM .15 IN 2.06 AC-FT 29130
WTR YR 1975 TOTAL 40693.9 MEAN 111 MAX 2380 MIN 1.2 CFSM .42 IN 5.71 AC-FT 96728

PEAK DISCHARGE (BASE, 800 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-21	1100	14.62	1,960	6-5	0300	16.55	3,490
4-29	0700	11.80	1,050	6-23	0200	12.65	1,220

06600300 WEST BRANCH FLOYD RIVER NEAR STRUBLE, IOWA

LOCATION.--Lat 42°55'15", long 96°10'30", in NE1/4 NE1/4 sec.32, T.94 N., R.45 W., Sioux County, on right bank at downstream side of bridge on county highway 862, 0.2 mi (0.3 km) west of U.S. Highway 75, 0.8 mi (1.3 km) downstream from Orange City slough, 2.2 mi (3.5 km) northeast of Struble, 14 mi (22.5 km) upstream from Floyd River, and at mile 39.3 (63.2 km).

DRAINAGE AREA.--181 mi² (469 km²).

PERIOD OF RECORD.--October 1955 to current year. Prior to December 1955, monthly discharge only, published in WSP 1730.

GAGE.--Water-stage recorder. Datum of gage is 1,239.40 ft (377.77 m) above mean sea level (State Highway Commission benchmark).

AVERAGE DISCHARGE.--20 years, 30.5 ft³/s (0.86 m³/s), 2.29 in/yr (58 mm/yr), 22,100 acre-ft/yr (27.2 hm³/yr); median of yearly mean discharges, 27 ft³/s (0.76 m³/s), 2.0 in/yr (51 mm/yr), 19,600 acre-ft/yr (24.2 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,430 ft³/s (68.8 m³/s) June 4, gage height, 13.58 ft (4.139 m); minimum daily, 0.40 ft³/s (0.011 m³/s) Feb. 8-12.

Period of record: Maximum discharge, 8,060 ft³/s (228 m³/s) Mar. 28, 1962, gage height, 15.63 ft (4.764 m); no flow at times most years.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.3	6.9	2.9	1.2	.60	.90	120	98	25	57	16	6.0
2	5.6	5.6	2.8	1.4	.60	.80	110	84	23	53	29	5.8
3	5.9	5.0	2.8	1.6	.60	.70	110	85	23	48	20	5.6
4	6.2	4.7	3.0	1.7	.60	.70	100	76	1480	46	14	5.4
5	5.9	5.0	3.5	1.8	.50	.90	100	68	838	43	12	8.0
6	4.7	5.0	3.2	1.8	.50	1.0	120	61	162	40	11	6.0
7	4.7	4.7	2.5	1.8	.50	.90	125	66	104	37	11	5.4
8	4.4	5.0	2.4	1.8	.40	.80	125	63	83	34	9.5	5.2
9	4.7	5.3	2.5	1.6	.40	.80	130	55	87	32	9.4	5.0
10	4.7	5.3	3.0	1.4	.40	.80	100	52	82	30	8.9	5.0
11	5.3	4.7	3.1	1.0	.40	.80	80	55	73	28	10	6.0
12	5.0	4.4	3.3	.80	.40	.70	90	79	324	27	10	5.5
13	5.3	3.7	3.5	.70	.50	.60	105	67	93	26	8.9	5.0
14	5.0	4.5	3.6	.70	.50	.60	104	57	71	25	9.0	4.8
15	4.7	5.6	3.7	.60	.50	.70	104	50	123	23	9.1	4.6
16	4.7	4.7	3.5	.60	.50	1.0	107	47	92	25	9.2	4.4
17	4.7	5.0	2.0	.60	.50	2.0	104	42	244	23	8.3	4.2
18	4.7	5.3	1.5	.60	.50	3.5	105	39	198	22	8.0	5.5
19	4.4	5.0	1.0	.60	.50	20	106	38	175	22	8.3	5.0
20	4.4	4.7	.90	.60	.50	200	85	36	181	21	7.8	4.6
21	4.2	5.0	.80	.60	.60	300	73	33	206	19	7.3	4.4
22	4.2	5.0	.70	.60	.60	250	70	32	546	20	13	4.2
23	4.2	4.4	.66	.60	.70	180	100	35	229	20	19	4.1
24	4.4	3.9	.62	.60	.70	140	96	34	155	22	18	4.0
25	4.2	5.0	.60	.60	.80	120	103	29	116	19	11	4.0
26	4.4	4.0	.60	.60	.80	120	244	27	96	19	8.0	3.9
27	4.4	4.2	.64	.60	.90	120	380	25	84	18	7.2	3.9
28	4.7	4.2	.68	.60	.90	120	267	26	76	16	7.0	3.8
29	5.0	3.5	.74	.60	---	120	170	29	67	16	6.6	3.7
30	5.9	3.2	.90	.60	---	120	119	26	62	15	6.4	3.7
31	9.0	---	1.0	.60	---	120	---	25	---	15	6.2	---
TOTAL	154.9	142.5	62.64	29.50	15.90	1948.20	3752	1539	6118	861	339.1	146.7
MEAN	5.00	4.75	2.02	.95	.57	62.8	125	49.6	204	27.8	10.9	4.89
MAX	9.0	6.9	3.7	1.8	.90	300	380	98	1480	57	29	8.0
MIN	4.2	3.2	.60	.60	.40	.60	70	25	23	15	6.2	3.7
CFSM	.03	.03	.01	.005	.003	.35	.69	.27	1.13	.15	.06	.03
IN.	.03	.03	.01	.006	.003	.40	.77	.32	1.26	.18	.07	.03
AC-FT	307	283	124	59	32	3860	7440	3050	12140	1710	673	291

CAL YR 1974 TOTAL 10164.34 MEAN 27.8 MAX 3560 MIN .60 CFSM .15 IN 2.09 AC-FT 20160
WTR YR 1975 TOTAL 15109.44 MEAN 41.4 MAX 1480 MIN .40 CFSM .23 IN 3.11 AC-FT 29970

PEAK DISCHARGE (BASE, 400 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-20	--	--	* 500	6-12	0615	8.90	758
4-27	0500	8.24	627	6-17	1515	7.86	519
6-4	1900	13.58	2,430	6-22	0900	9.35	872

* About.

06500500 FLOYD RIVER AT JAMES, IOWA

LOCATION.--Lat 42°34'36", long 96°18'43", in SE1/4 SE1/4 sec.30, T.90 N., R.46 W., Plymouth County, on right bank at downstream side of bridge on county highway C70, 0.2 mi (0.3 km) east of James, 14.3 mi (23.0 km) downstream from West Branch Floyd River, and at mile 9.5 (15.3 km).

DRAINAGE AREA.--882 mi² (2,284 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 1,092.59 ft (333.02 m) above mean sea level. Prior to Sept. 11, 1938, June 9 to Nov. 5, 1953, and Oct. 1, 1955, to May 22, 1957, nonrecording gage and May 23, 1957, to Sept. 30, 1970, water-stage recorder at same site at datum 10.0 ft (3.0 m) higher.

AVERAGE DISCHARGE.--40 years (1935-75), 179 ft³/s (5.07 m³/s), 2.76 in/yr (70 mm/yr), 129,700 acre-ft/yr (160 hm³/yr); median of yearly mean discharges, 150 ft³/s (4.25 m³/s), 2.3 in/yr (58 mm/yr), 109,000 acre-ft/yr (134 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,180 ft³/s (61.7 m³/s) June 6, gage height, 16.42 ft (5.005 m); minimum daily, 6.2 ft³/s (0.18 m³/s) Jan. 17-23.

Period of record: Maximum discharge, 71,500 ft³/s (2,020 m³/s) June 8, 1953, gage height, 25.3 ft (7.71 m), from floodmarks, datum then in use, from rating curve extended above 16,000 ft³/s (453 m³/s) on basis of contracted-opening and flow-over-embankment measurement of peak flow; minimum daily, 1 ft³/s (28 dm³/s) Aug. 20, 27, 1936, Feb. 10-23, 1959.

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

REVISIONS (WATER YEARS)WSP 1240: 1935 (M), 1936, 1937-38 (M), 1942, 1945. WSP 1440: Drainage area.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	43	54	37	10	8.6	10	330	643	212	380	99	100
2	43	54	37	9.6	8.8	10	352	594	209	363	103	93
3	43	55	37	9.2	9.0	10	326	540	194	330	100	84
4	41	54	38	8.8	9.2	10	349	500	272	308	94	79
5	40	52	40	8.4	9.4	10	373	457	1800	277	90	86
6	41	51	40	8.2	9.6	10	523	418	1900	273	85	86
7	42	50	39	8.0	9.6	10	983	396	763	258	81	80
8	40	49	36	7.8	9.6	10	1200	389	550	236	76	72
9	38	47	35	7.8	9.4	10	1130	362	483	234	74	69
10	36	47	36	7.6	9.0	10	1240	346	459	218	78	66
11	36	48	39	7.2	9.2	10	1090	339	453	206	83	67
12	35	49	41	6.8	9.4	10	834	351	556	193	89	65
13	37	50	41	6.6	9.4	10	731	438	592	180	72	62
14	37	45	40	6.6	9.4	10	667	393	496	180	59	62
15	38	42	38	6.4	9.4	11	662	375	477	172	59	59
16	37	48	35	6.3	9.4	12	664	366	502	164	64	59
17	37	50	30	6.2	9.4	14	660	322	497	155	62	58
18	36	51	28	6.2	9.4	16	663	291	677	144	58	59
19	34	50	26	6.2	9.4	20	692	277	695	139	56	56
20	40	49	24	6.2	9.4	50	653	264	750	135	54	61
21	38	48	22	6.2	9.4	500	559	253	731	129	78	59
22	36	48	20	6.2	9.6	1000	500	255	854	126	142	57
23	36	46	19	6.2	9.6	1200	595	267	1270	131	111	54
24	36	46	18	6.5	9.8	1120	754	246	1360	140	328	51
25	36	42	17	6.8	10	621	723	236	810	131	318	51
26	37	44	16	7.2	10	366	898	226	637	116	191	51
27	38	42	15	7.4	10	301	1040	214	573	102	143	51
28	37	37	14	7.6	10	361	1160	229	502	99	118	51
29	39	36	13	8.0	---	405	1170	231	457	98	139	49
30	43	36	12	8.2	---	346	1010	230	416	95	143	49
31	59	---	11	8.4	---	378	---	211	---	93	108	---
TOTAL	1209	1420	894	228.8	264.4	6861	22531	10659	20147	5805	3355	1946
MEAN	39.0	47.3	28.8	7.38	9.44	221	751	344	672	187	108	64.9
MAX	59	55	41	10	10	1200	1240	643	1900	380	328	100
MIN	34	36	11	6.2	8.6	10	326	211	194	93	54	49
CFSM	.04	.05	.03	.008	.01	.25	.85	.39	.76	.21	.12	.07
IN.	.05	.06	.04	.009	.01	.29	.95	.45	.85	.24	.14	.08
AC-FT	2400	2820	1770	454	524	13610	44690	21140	39960	11510	6650	3860

CAL YR 1974 TOTAL 38942.0 MEAN 107 MAX 1720 MIN 11 CFSM .12 IN 1.64 AC-FT 77240
WTR YR 1975 TOTAL 75320.2 MEAN 206 MAX 1900 MIN 6.2 CFSM .23 IN 3.18 AC-FT 149400

PEAK DISCHARGE (BASE, 2,500 FT³/S).--No peak above base.

MONONA-HARRISON DITCH BASIN

06602020 WEST FORK DITCH AT HORNICK, IOWA
(Formerly published as West Fork ditch at Holly Springs)

LOCATION.--Lat 42°13'37", long 96°04'40", in SW1/4 sec.27, T.86 N., R.45 W., Woodbury County, on left bank at upstream side of State Highway 141 bridge, 1.0 mi (1.6 km) east of Hornick, 9.2 mi (14.8 km) upstream from Wolf Creek, and 13.5 mi (21.7 km) north of Onawa.

DRAINAGE AREA.--403 mi² (1,044 km²).

PERIOD OF RECORD.--April 1939 to September 1969 (published as "at Holly Springs"), July 1974 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,045.82 ft (318.77 m) above mean sea level. Prior to June 16, 1959, nonrecording gage at site 3.0 mi (4.8 km) upstream and June 16, 1959 to Sept. 30, 1969, recording gage at site 2.2 mi (3.5 km) upstream at datum 7.0 ft (2.13 m) higher.

AVERAGE DISCHARGE.--31 years (1940-69, 1975) 96.1 ft³/s (2.72 m³/s), 3.24 in/yr (82 mm/yr), 69,620 acre-ft/yr, (85.8 hm³/yr); median of yearly mean discharges, 84 ft³/s (2.38 m³/s), 2.8 in/yr (71 mm/yr), 60,900 acre-ft/yr (75.1 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,400 ft³/s (68.0 m³/s) June 22, gage height, 15.30 ft (4.663 m); minimum daily, 10 ft³/s (0.28 m³/s) Jan. 22, 23.
Period of record: Maximum discharge, 12,400 ft³/s (351 m³/s) Mar. 28, 1962, gage height, 22.46 ft (6.846 m), site and datum then in use; maximum gage height, 25.2 ft (7.681 m) site and datum then in use, Mar. 30, 1960, from floodmark; minimum daily discharge, 0.2 ft³/s (0.006 m³/s) July 30, Aug. 17, 1956.

REMARKS.--Records good except those for winter period, which are poor. West Fork ditch is a dredged channel which diverts flow of West Fork Little Sioux River at Holly Springs and carries it 5.5 mi (8.8 km) south, thence southeast 6.5 mi (10.5 km) to a point 1.2 mi (1.9 km) west of Kennebec, where Wolf Creek enters from left. From this point, ditch roughly parallels Little Sioux River and becomes known as Monona-Harrison ditch.

REVISIONS (WATER YEARS).--WSP 1240: 1943, 1945 (M). WSP 1310: 1941 (M) 1944-46 (M). WSP 1440: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974												
DAY	OCT	NOV	DEC	JAN	FEB	MEAN VALUES MAR	APR	MAY	JUN	JUL	AUG	SEP
1										90	48	31
2										86	56	33
3										82	47	34
4										79	40	34
5										75	38	33
6										70	35	32
7										67	34	30
8										63	33	29
9										61	142	28
10										62	180	28
11										66	90	27
12										64	56	30
13										59	43	32
14										54	37	31
15										52	36	29
16										50	36	28
17										48	42	26
18										46	82	26
19										45	55	25
20										44	59	24
21										43	51	25
22										42	48	24
23										40	48	25
24										38	42	24
25										39	37	24
26										37	35	25
27										36	34	24
28										38	34	23
29										36	33	22
30										34	31	22
31										34	31	---
TOTAL										1680	1613	828
MEAN										54.2	52.0	27.6
MAX										90	180	34
MIN										34	31	22
CFSM										.13	.13	.07
IN.										.16	.15	.08
AC-FT										3330	3200	1640

MONONA-HARRISON DITCH BASIN

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06502020 WEST FORK DITCH AT HORNICK, IOWA--CONTINUED

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975												
DAY	OCT	NOV	DEC	JAN	FEB	MEAN VALUES MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	36	28	17	11	20	120	281	98	180	53	40
2	22	32	28	16	11	20	115	250	94	171	101	40
3	24	28	28	16	11	20	115	232	93	161	80	39
4	24	26	30	15	11	21	111	214	94	155	57	39
5	23	25	32	15	11	23	119	198	97	150	51	41
6	23	26	30	14	11	23	195	183	90	144	47	44
7	25	26	28	14	11	23	483	180	83	139	46	41
8	24	26	26	13	11	23	402	187	82	131	44	38
9	25	26	26	13	11	23	434	180	86	125	42	37
10	25	26	28	12	11	23	480	162	98	117	583	37
11	24	26	30	11	11	23	288	157	101	111	113	36
12	23	26	32	11	11	23	269	174	107	108	141	34
13	24	26	32	11	11	23	224	171	127	104	66	34
14	24	23	32	11	11	23	210	151	115	100	53	34
15	25	20	32	11	11	24	210	142	114	96	51	34
16	25	25	30	11	11	25	189	134	116	93	51	34
17	25	29	28	11	11	27	200	130	106	86	51	34
18	25	30	27	11	11	30	188	121	231	82	48	34
19	25	30	26	11	11	35	266	119	293	79	81	33
20	25	28	26	11	11	40	238	114	491	76	48	32
21	26	27	24	11	12	80	185	105	461	73	46	32
22	25	28	24	10	12	250	185	102	1960	70	43	31
23	26	28	23	10	12	260	201	105	1020	71	45	31
24	26	26	22	11	13	270	228	102	403	74	46	32
25	26	25	21	11	16	160	205	96	308	71	43	32
26	26	23	20	11	16	120	510	92	285	66	40	32
27	27	23	19	11	19	110	1190	90	281	61	40	32
28	28	24	19	11	20	110	1320	137	245	60	41	32
29	31	26	18	11	---	120	596	129	212	56	46	32
30	31	28	18	11	---	120	341	117	187	54	48	32
31	34	---	17	11	---	130	---	105	---	52	43	---
TOTAL	788	798	803	374	340	2212	9817	4660	8078	3116	2288	1053
MEAN	25.4	26.6	25.9	12.1	12.1	71.4	327	150	269	101	73.8	35.1
MAX	34	36	32	17	20	270	1320	281	1960	180	583	44
MIN	22	20	17	10	11	20	111	90	82	52	40	31
CFSM	.06	.07	.06	.03	.03	.18	.81	.37	.67	.25	.18	.09
IN.	.07	.07	.07	.03	.03	.20	.91	.43	.75	.29	.21	.10
AC-FT	1560	1580	1590	742	674	4390	19470	9240	16020	6180	4540	2090

CAL YR 1974 TOTAL 6510 MEAN 17.8 MAX 180 MIN 17 CFSM .04 IN .60 AC-FT 12910
WTR YR 1975 TOTAL 34327 MEAN 94.0 MAX 1960 MIN 10 CFSM .23 IN 3.17 AC-FT 68090

PEAK DISCHARGE (BASE, 1,800 FT³/S).--Apr. 27 (2130) 2,050 ft³/s (14.40 ft); June 22 (1545) 2,400 ft³/s (15.30 ft).

MONONA-HARRISON DITCH BASIN

06602400 MONONA-HARRISON DITCH NEAR TURIN, IOWA

LOCATION.--Lat 41°57'52", long 95°59'30", in NW1/4 NE1/4 sec.32, T.83 N., R.44 W., Monona County, on left pier at downstream side of bridge on county highway E54, 1.0 mi (1.6 km) west of gaging station on Little Sioux River near Turin, 4 mi (6.4 km) southwest of Turin, 5.2 mi (8.4 km) northeast of Blencoe, and 12.5 mi (20.1 km) upstream from mouth.

DRAINAGE AREA.--900 mi² (2,331 km²).

PERIOD OF RECORD.--January 1958 to current year. Records for April 1939 to January 1958 not equivalent owing to diversion from Little Sioux River through equalizer ditch 1.5 mi (2.4 km) upstream. Prior to May 1942, published as "near Blencoe".

GAGE.--Water-stage recorder. Datum of gage is 1,020.00 ft (310.90 m) above mean sea level (Corps of Engineers bench mark). Prior to May 7, 1942, non-recording gage at site 4.8 mi (7.7 km) downstream at datum 10.40 ft (3.17 m) lower. May 7, 1942, to Oct. 13, 1953, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--17 years, 221 ft³/s (6.26 m³/s), 3.51 in/yr (89 mm/yr), 160,100 acre-ft/yr (197 hm³/yr); median of yearly mean discharges, 200 ft³/s (5.66 m³/s), 3.2 in/yr (81 mm/yr), 145,000 acre-ft/yr (179 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 6,470 ft³/s (183 m³/s) Apr. 28, gage height, 14.32 ft (4.365 m); minimum daily, 38 ft³/s (1.08 m³/s) Nov. 15.

Period of record: Maximum discharge, 19,900 ft³/s (564 m³/s) Feb. 19, 1971, gage height, 23.03 ft (7.020 m); minimum daily, 8.5 ft³/s (241 dm³/s) Jan. 3-11, 1959.

REMARKS.--Records good except those for winter period, which are poor. Monona-Harrison ditch is a dug channel and is a continuation of West Fork ditch, paralleling the Little Sioux River, and discharging into the Missouri River 1.5 mi (2.4 km) upstream from the mouth of the Little Sioux River.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	56	84	50	46	43	47	271	549	209	328	94	87
2	52	73	50	46	42	42	200	474	201	302	149	85
3	50	59	50	47	42	40	300	447	197	283	213	73
4	50	56	52	48	42	42	250	414	199	265	126	82
5	50	54	56	45	42	50	261	378	205	251	102	82
6	50	56	65	44	42	54	361	348	195	239	94	85
7	50	57	70	46	42	43	569	332	179	225	98	75
8	45	61	60	50	42	42	586	328	177	213	94	66
9	49	61	50	48	41	41	536	325	191	205	84	62
10	47	59	48	47	41	41	620	290	209	197	491	62
11	49	61	50	46	41	41	435	275	211	189	636	93
12	45	57	71	45	41	40	388	279	187	187	267	103
13	50	57	76	44	41	40	355	288	191	185	169	61
14	50	45	68	43	40	40	346	253	185	181	126	59
15	49	38	59	42	40	46	336	233	183	173	111	59
16	50	62	46	42	40	71	313	221	193	167	111	61
17	49	68	45	43	41	84	311	215	191	145	120	62
18	50	71	45	44	44	94	294	207	434	135	145	66
19	49	71	45	45	48	126	332	203	1,430	137	185	61
20	49	64	45	46	55	300	353	199	1,350	139	127	57
21	47	61	45	46	45	489	292	189	1,860	126	100	56
22	54	62	45	44	43	538	290	183	4,090	116	94	59
23	50	62	45	44	43	685	437	259	3,240	126	103	57
24	49	59	45	46	43	646	351	219	1,040	141	111	57
25	49	50	44	50	43	454	304	183	669	139	102	62
26	50	62	44	49	43	323	616	189	655	129	100	64
27	54	59	45	48	50	275	1,670	183	602	124	102	68
28	56	54	48	47	45	273	5,120	247	472	109	107	69
29	62	52	47	46	-----	290	2,440	447	399	103	102	71
30	68	51	46	45	-----	270	830	261	361	98	109	73
31	68	-----	45	44	-----	298	-----	223	-----	89	102	-----
TOTAL	1,596	1,786	1,600	1,416	1,205	5,865	19,777	8,841	19,905	5,446	4,674	2,077
MEAN	51.5	59.5	51.6	45.7	43.0	189	659	285	664	176	151	69.2
MAX	68	84	76	50	55	685	5,120	549	4,090	328	636	103
MIN	45	38	44	42	40	40	200	183	177	89	84	56
CFSM	.06	.07	.06	.05	.05	.21	.73	.32	.74	.20	.17	.08
IN.	.07	.07	.07	.06	.05	.24	.82	.37	.82	.23	.19	.09
AC-FT	3,170	3,540	3,170	2,810	2,390	11,630	39,230	17,540	39,480	10,800	9,270	4,120

CAL YR 1974 TOTAL 49,729 MEAN 136 MAX 1,940 MIN 38 CFSM .15 IN 2.06 AC-FT 98,640

WTR YR 1975 TOTAL 74,188 MEAN 203 MAX 5,120 MIN 38 CFSM .23 IN 3.07 AC-FT 147,200

PEAK DISCHARGE (BASE, 2,500 FT³/S).--Apr. 28 (0800) 6,470 ft³/s (14.32 ft); June 22 (1700) 5,390 ft³/s (13.21 ft).

LOCATION.—Lat 43°28'11", long 95°07'25", in NE1/4 NW1/4 sec.20, T.100 N., R.36 W., Dickinson County, 2.3 mi (3.7 km) upstream from lake outlet and 2.3 mi (3.7 km) northwest of Orleans.

PERIOD OF RECORD.--May 1933 to current year (fragmentary prior to 1951). Prior to October 1949, published as "at Orleans".

EXTREMES.--Current year: Maximum gage height, 14.71 ft (4.484 m) June 22; minimum, 12.94 ft (3.944 m) Dec. 9.
Period of record: Maximum gage height observed, 15.74 ft (4.798 m) June 19, 1944; minimum observed, 6.75 ft (2.057 m) Oct. 20, 1935.

REMARKS.--Lake is formed by concrete dam with ungated spillway at elevation 1,401.4 ft (427.15 m) above mean sea level. Dam constructed in 1969. A previous outlet works had been constructed in 1944. Lake is used for conservation and recreation. Area of lake is approximately 5,700 acres (2,310 km²). Records of water temperatures for the current year are published in Part 2 of this report.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13.32	13.17	13.00	12.98	13.15	13.17	13.43	14.38	14.39	14.63	14.02	13.89
2	13.30	13.16	13.00	13.00	13.15	13.16	13.44	14.41	14.38	14.61	14.04	13.87
3	13.27	13.14	13.00	13.01	13.15	13.16	13.44	14.44	14.37	14.59	14.01	13.86
4	13.27	13.13	13.00	13.01	13.16	13.16	13.44	14.45	14.46	14.58	14.01	13.84
5	13.28	13.13	12.99	13.01	13.17	13.17	13.44	14.46	14.46	14.55	14.00	13.84
6	13.26	13.11	12.99	13.01	13.17	13.17	13.45	14.48	14.45	14.58	13.97	13.82
7	13.25	13.09	12.98	13.01	13.17	13.17	13.45	14.48	14.43	14.55	13.93	13.80
8	13.25	13.08	12.98	13.02	13.17	13.17	13.48	14.49	14.42	14.53	13.90	13.78
9	13.24	13.10	12.97	13.02	13.17	13.17	13.59	14.48	14.43	14.49	13.89	13.76
10	13.22	13.13	12.95	13.06	13.17	13.17	13.61	14.48	14.42	14.45	13.87	13.76
11	13.23	13.11	12.95	13.12	13.17	13.18	13.63	14.55	14.45	14.41	13.90	13.81
12	13.23	13.09	12.95	13.11	13.17	13.20	13.64	14.58	14.45	14.37	13.89	13.77
13	13.21	13.09	12.95	13.11	13.17	13.20	13.65	14.57	14.44	14.35	13.87	13.75
14	13.20	13.08	12.95	13.11	13.17	13.20	13.70	14.55	14.46	14.33	13.85	13.74
15	13.18	13.06	12.98	13.11	13.16	13.20	13.73	14.54	14.49	14.30	13.84	13.72
16	13.18	13.06	12.98	13.12	13.16	13.20	13.78	14.52	14.49	14.27	13.83	13.71
17	13.17	13.06	12.98	13.12	13.17	13.20	13.80	14.50	14.50	14.25	13.83	13.70
18	13.16	13.05	12.98	13.12	13.17	13.20	13.84	14.50	14.55	14.22	13.85	13.72
19	13.15	13.06	12.98	13.12	13.17	13.20	13.85	14.48	14.54	14.21	13.88	13.71
20	13.15	13.04	12.98	13.12	13.17	13.20	13.87	14.48	14.55	14.19	13.89	13.69
21	13.09	13.04	12.99	13.13	13.17	13.22	13.88	14.48	14.56	14.16	13.90	13.68
22	13.11	13.03	12.99	13.13	13.17	13.23	13.90	14.49	14.66	14.15	13.99	13.67
23	13.10	13.03	12.99	13.13	13.17	13.29	14.04	14.50	14.68	14.14	14.01	13.67
24	13.10	13.03	12.99	13.13	13.17	13.35	14.06	14.48	14.69	14.15	14.00	13.65
25	13.10	13.03	12.99	13.13	13.17	13.35	14.10	14.48	14.69	14.14	13.97	13.65
26	13.09	13.01	12.99	13.13	13.17	13.35	14.15	14.48	14.68	14.10	13.95	13.64
27	13.09	13.00	12.98	13.14	13.17	13.40	14.22	14.46	14.69	14.09	13.94	13.63
28	13.10	13.00	12.99	13.14	13.17	13.44	14.30	14.47	14.68	14.07	13.92	13.62
29	13.13	13.01	12.98	13.15	-----	13.43	14.34	14.47	14.67	14.05	13.92	13.62
30	13.15	13.02	12.98	13.15	-----	13.43	14.36	14.44	14.65	14.04	13.91	13.60
31	13.17	-----	12.98	13.15	-----	13.43	-----	14.41	-----	14.02	13	

WTR YR 1975 MEAN 13.63 MAX 14.69 MIN 12.95

06604200 WEST OKOBOJI LAKE AT LAKESIDE LABORATORY NEAR MILFORD, IOWA

LOCATION.--Lat 43°22'43", long 95°10'52", in NE1/4 SW1/4 sec.23, T.99 N., R.37 W., Dickinson County, at pumping station of Lakeside Laboratory on west shore, 2.3 mi (3.7 km) upstream from lake outlet and 3.8 mi (6.1 km) northwest of Milford.

DRAINAGE AREA.--125 mi² (324 km²).

PERIOD OF RECORD.--May 1933 to current year. Prior to October 1937, published as "at Arnolds Park". Prior to October 1966, published as Okoboji Lake at Lakeside Laboratory near Milford.

GAGE.--Water-stage recorder. Datum of gage is 1,391.75 ft (424.21 m) above mean sea level, 94.51 ft (28.81 m) above Iowa Lake Survey datum, and about 4.0 ft (1.2 m) below crest of spillway. Prior to June 17, 1938, nonrecording gage at State Pier at Arnolds Park at same datum.

EXTREMES.--Current year: Maximum gage height, 4.85 ft (1.478 m) June 21; minimum, 2.91 ft (0.887 m) Dec. 26-28. Period of record: Maximum gage height, 6.18 ft (1.884 m) July 7, 1962; minimum observed, 0.20 ft (0.061 m) Sept. 20, 1959.

REMARKS.--Lake is formed by concrete dam with ungated spillway at elevation 1,395.8 ft (425.44 m) above mean sea level. Lake is used for conservation and recreation. Area of lake is approximately 3,900 acres (1,580 hm²).

GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.30	3.14	2.99	2.92	3.09	3.14	3.57	4.74	4.42	4.67	3.98	4.09
2	3.26	3.15	2.98	2.92	3.09	3.14	3.57	4.74	4.42	4.65	4.02	4.08
3	3.24	3.15	2.98	2.92	3.09	3.14	3.58	4.75	4.45	4.62	3.99	4.06
4	3.24	3.15	2.97	2.92	3.10	3.14	3.59	4.71	4.72	4.60	3.99	4.04
5	3.24	3.14	2.98	2.93	3.11	3.14	3.58	4.71	4.77	4.57	3.98	4.04
6	3.21	3.11	2.98	2.93	3.12	3.14	3.60	4.70	4.77	4.56	3.96	4.02
7	3.20	3.10	2.98	2.93	3.12	3.14	3.63	4.69	4.74	4.51	3.92	4.00
8	3.20	3.09	2.96	2.93	3.12	3.15	3.68	4.68	4.72	4.49	3.87	3.98
9	3.18	3.10	2.95	2.93	3.12	3.15	3.77	4.65	4.73	4.44	3.88	3.97
10	3.16	3.12	2.94	2.96	3.12	3.15	3.81	4.63	4.70	4.40	3.86	3.96
11	3.17	3.11	2.93	3.04	3.12	3.15	3.83	4.71	4.73	4.37	3.87	4.00
12	3.17	3.09	2.93	3.04	3.12	3.17	3.85	4.74	4.73	4.33	3.87	3.96
13	3.15	3.08	2.93	3.04	3.12	3.17	3.87	4.71	4.72	4.30	3.86	3.95
14	3.15	3.06	2.93	3.04	3.13	3.18	3.93	4.70	4.72	4.26	3.84	3.92
15	3.14	3.05	2.93	3.04	3.13	3.18	3.95	4.67	4.72	4.24	3.83	3.90
16	3.13	3.05	2.93	3.04	3.13	3.18	4.00	4.66	4.70	4.21	3.82	3.90
17	3.12	3.04	2.92	3.05	3.13	3.20	4.02	4.62	4.68	4.19	3.80	3.89
18	3.12	3.02	2.92	3.05	3.13	3.21	4.09	4.62	4.69	4.16	3.82	3.90
19	3.10	3.03	2.92	3.05	3.13	3.27	4.09	4.60	4.68	4.15	3.86	3.87
20	3.09	3.02	2.92	3.05	3.13	3.36	4.10	4.59	4.68	4.14	3.88	3.86
21	3.05	3.01	2.92	3.06	3.13	3.40	4.11	4.57	4.68	4.10	3.90	3.85
22	3.06	3.00	2.92	3.07	3.13	3.41	4.12	4.57	4.81	4.10	4.14	3.84
23	3.05	3.00	2.92	3.07	3.13	3.41	4.29	4.57	4.82	4.09	4.17	3.83
24	3.05	3.00	2.92	3.07	3.14	3.47	4.31	4.55	4.82	4.10	4.17	3.82
25	3.04	2.99	2.92	3.07	3.14	3.48	4.35	4.52	4.81	4.08	4.15	3.80
26	3.04	2.98	2.91	3.08	3.14	3.46	4.43	4.51	4.78	4.04	4.14	3.79
27	3.04	2.99	2.91	3.08	3.14	3.50	4.57	4.49	4.76	4.05	4.12	3.78
28	3.05	2.99	2.91	3.08	3.14	3.54	4.71	4.50	4.76	4.02	4.11	3.78
29	3.09	2.99	2.92	3.08	-----	3.55	4.73	4.50	4.73	4.00	4.12	3.77
30	3.10	2.99	2.92	3.09	-----	3.56	4.75	4.48	4.71	3.99	4.11	3.76
31	3.14	-----	2.92	3.09	-----	3.57	-----	4.44	-----	3.97	4.10	-----
MEAN	3.14	3.06	2.94	3.02	3.12	3.29	4.02	4.62	4.71	4.27	3.97	3.91
MAX	3.30	3.15	2.99	3.09	3.14	3.57	4.75	4.75	4.82	4.67	4.17	4.09
MIN	3.04	2.98	2.91	2.92	3.09	3.14	3.57	4.44	4.42	3.97	3.80	3.76

WTR YR 1975 MEAN 3.67 MAX 4.82 MIN 2.91

06605850 LITTLE SIOUX RIVER AT LINN GROVE, IOWA

LOCATION.--Lat 42°53'24", long 95°14'30", in SW1/4 SW1/4 sec.5, T.93 N., R.37 W., Buena Vista County, on right bank at downstream side of bridge on State Highway 264, in Linn Grove, Iowa, and at mile 123.7 (199.0 km).

DRAINAGE AREA.--1,548 mi² (4,009 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 1,223.60 ft (372.95 m) above mean sea level.

EXTREMES.--Current year: Maximum discharge, 8,620 ft³/s (24.4 m³/s) Apr. 29, gage height, 17.85 ft (5.44 m); minimum daily, 7.9 ft³/s (0.22 m³/s) Jan. 15.

Period of record: Maximum discharge, 8,620 ft³/s (24.4 m³/s) Apr. 29, 1975; gage height, 17.85 ft (5.44 m); minimum daily, 7.9 ft³/s (0.22 m³/s) Jan. 15, 1975.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37	74	34	10	8.8	12	790	5,560	814	2,460	171	740
2	38	68	29	10	8.8	12	700	4,330	745	2,170	196	607
3	38	67	28	10	8.8	12	710	3,320	711	1,850	187	518
4	39	56	27	10	9.0	12	730	2,870	745	1,550	177	453
5	42	54	27	10	9.1	12	820	2,420	1,050	1,340	171	439
6	45	49	28	10	9.2	12	940	2,160	1,570	1,210	155	401
7	45	48	30	10	9.3	13	1,230	1,900	2,360	1,070	137	364
8	45	48	34	9.8	9.2	13	1,600	1,740	3,470	940	128	331
9	43	49	32	9.6	9.1	13	1,820	1,620	3,100	836	123	298
10	43	51	28	9.3	9.0	14	1,980	1,610	2,240	753	110	287
11	43	54	25	8.9	8.9	14	2,100	1,710	1,750	680	124	256
12	43	55	22	8.6	9.0	14	2,210	1,920	1,720	618	119	254
13	45	54	20	8.3	9.1	15	2,300	2,230	1,840	566	110	264
14	44	51	19	8.0	9.2	15	2,400	2,540	2,000	523	105	252
15	43	37	18	7.9	9.4	15	2,320	2,670	2,050	477	102	236
16	45	37	17	8.0	9.4	17	2,280	2,340	1,850	432	100	220
17	47	48	16	8.1	9.5	20	2,240	1,900	1,760	388	96	212
18	44	58	15	8.2	9.6	26	2,180	1,580	2,000	350	150	208
19	43	56	14	8.4	9.7	35	2,250	1,380	2,370	322	383	202
20	47	55	14	8.3	9.9	76	2,110	1,260	2,610	300	834	198
21	49	52	13	8.2	10	170	2,070	1,150	2,780	284	690	198
22	49	48	13	8.2	10	400	1,840	1,060	2,970	266	484	198
23	44	45	12	8.2	10	1,020	1,570	1,000	3,100	252	954	193
24	44	35	11	8.3	10	1,230	1,890	976	3,410	238	1,510	184
25	48	30	11	8.4	11	1,200	2,280	884	5,320	224	1,850	175
26	48	24	11	8.6	11	1,100	2,850	836	5,480	216	2,050	171
27	43	26	11	8.7	12	1,060	3,100	825	4,530	204	1,650	168
28	43	31	11	8.8	12	1,040	3,940	808	3,750	189	934	162
29	49	38	11	8.8	-----	1,010	8,560	820	3,210	177	948	160
30	56	38	10	8.8	-----	920	7,820	895	2,790	169	859	159
31	66	-----	10	8.8	-----	850	-----	884	-----	160	895	-----
TOTAL	1,398	1,436	601	275.2	270.0	10,372	69,630	57,198	74,095	21,214	16,502	8,508
MEAN	45.1	47.9	19.4	8.88	9.64	335	2,321	1,845	2,470	684	532	284
MAX	66	74	34	10	12	1,230	8,560	5,560	5,480	2,460	2,050	740
MIN	37	24	10	7.9	8.8	12	700	808	711	160	96	159
CFSM	.03	.03	.01	.006	.006	.22	1.50	1.19	1.60	.44	.34	.18
IN.	.03	.03	.01	.006	.006	.25	1.67	1.37	1.78	.51	.40	.20
AC-FT	2,770	2,850	1,190	546	536	20,570	138,100	113,500	147,000	42,080	32,730	16,880

CAL YR 1974 TOTAL 109,776.0 MEAN 301 MAX 1,450 MIN 10 CFSM .19 IN 2.64 AC-FT 217,700
WTR YR 1975 TOTAL 261,499.2 MEAN 716 MAX 8,560 MIN 7.9 CFSM .46 IN 6.28 AC-FT 518,700

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
4-14	1430	12.00	2,400	6-8	1430	14.36	3,590
4-19	-- g	11.55	2,250	6-15	0115	11.03	2,070
4-29	1500	17.85	8,620	6-25	1815	16.36	5,980
5-15	0600	12.77	2,720	8-26	1800	11.08	2,090

g. From graph based on daily wire weight gage reading.

06606600 LITTLE SIOUX RIVER AT CORRECTIONVILLE, IOWA

LOCATION.--Lat 42°28'20", long 95°47'49", in NE1/4 NW1/4 sec.1, T.88 N., R.43 W., Woodbury County, on right bank 10 ft (3 m) upstream from bridge on State Highway 31, 0.3 mi (0.5 km) upstream from Bacon Creek, 0.5 mi (0.8 km) west of Correctionville, 0.8 mi (1.3 km) downstream from Pierson Creek, and at mile 56.0 (90.1 km).

DRAINAGE AREA.--2,500 mi² (6,475 km²).

PERIOD OF RECORD.--May 1918 to July 1925, October 1928 to July 1932, June 1936 to current year. Monthly discharge only for some periods, published in WSP 1310.

GAGE.--Water-stage recorder. Datum of gage is 1,096.49 ft (334.21 m) above mean sea level. May 28, 1918, to July 1, 1925 and Oct. 29, 1928 to July 15, 1929, nonrecording gage 0.2 mi (0.3 km) downstream at datum 1.25 ft (0.38 m) lower. July 16, 1929, to July 2, 1932, and June 15, 1936, to Nov. 7, 1938, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--48 years, (1918-24, 1928-31, 1936-75), 703 ft³/s (19.9 m³/s), 3.82 in/yr (97 mm/yr), 509,300 acre-ft/yr (628 hm³/yr); median of yearly mean discharge, 550 ft³/s (15.6 m³/s), 3.0 in/yr (76 mm/yr), 398,000 acre-ft/yr (491 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 10,500 ft³/s (297 m³/s) May 2, gage height, 20.45 ft (6.233 m); minimum daily, 45 ft³/s (1.27 m³/s) Jan. 14-16.
Period of record: Maximum discharge, 29,800 ft³/s (844 m³/s) Apr. 7, 1965, gage height, 25.86 ft (7.882 m); minimum daily, 2.6 ft³/s (74 dm³/s) July 17, 25, 1936, caused by construction dam above gage.

Flood of June 23 or 24, 1891, reached a stage of 29.34 ft (8.943 m), present datum, from levels to floodmark by Soil Conservation Service (discharge not determined).

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

REVISIONS (WATER YEARS).--WSP 856: 1919. WSP 1240: 1924-25, 1931, 1932 (M), 1937, 1945 (M), 1947 (M), 1949 (M). WSP 1440: Drainage area.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	121	167	68	60	52	92	1210	9550	1500	4120	352	1100
2	121	180	67	60	56	90	1040	10500	1460	3520	506	1060
3	120	181	66	60	60	86	1120	8920	1390	3080	453	918
4	120	175	68	60	64	86	1130	7150	1320	2680	412	800
5	122	167	75	60	64	90	1190	5590	1390	2350	371	764
6	129	157	85	58	63	90	1500	4260	1880	2080	344	745
7	130	152	95	58	62	92	2020	3620	1820	1860	330	696
8	128	146	94	56	60	96	3000	3510	2220	1670	307	619
9	129	143	92	56	60	98	3450	3280	2900	1530	289	561
10	130	146	90	54	60	105	3650	2920	3390	1400	673	511
11	129	148	89	52	61	105	3790	2750	3300	1290	561	483
12	125	146	90	50	63	110	3810	3160	2740	1200	437	478
13	125	148	92	48	66	110	3830	3680	2480	1120	386	483
14	130	141	94	45	66	110	3790	3420	2480	1050	336	467
15	126	110	92	45	68	115	3760	3400	2560	977	309	449
16	127	130	85	45	70	130	3760	3490	2620	912	297	424
17	127	151	80	46	70	150	3770	3490	2510	838	281	407
18	126	151	75	47	70	200	3790	3130	2970	771	274	389
19	118	152	70	48	70	300	3830	2660	3550	710	368	368
20	118	151	68	48	72	400	3710	2360	3610	659	488	368
21	115	149	66	48	74	800	3390	2130	3630	618	1040	363
22	113	148	66	48	78	1500	3210	1950	4630	586	1100	353
23	115	148	64	48	80	2300	3560	1820	5270	573	1120	342
24	119	139	62	48	80	2510	4600	1730	5670	559	1410	341
25	119	120	60	50	82	2240	4160	1650	5300	523	1580	326
26	114	80	60	52	86	1720	4270	1600	4840	481	1760	319
27	114	74	60	52	90	1660	5540	1520	4940	450	1880	313
28	120	72	60	52	92	1690	7850	1490	5490	426	1940	310
29	136	70	60	52	---	1600	9240	1630	5770	400	1460	315
30	148	69	60	52	---	1370	9960	1590	5120	375	1260	306
31	159	---	60	52	---	1390	---	1520	---	351	1150	---
TOTAL	3873	4111	2313	1610	1939	21435	112930	109470	98750	39159	23474	15378
MEAN	125	137	74.6	51.9	69.3	691	3764	3531	3292	1263	757	513
MAX	159	181	95	60	92	2510	9960	10500	5770	4120	1940	1100
MIN	113	69	60	45	52	86	1040	1490	1320	351	274	306
CFSM	.05	.05	.03	.02	.03	.28	1.51	1.41	1.32	.51	.30	.21
IN.	.06	.06	.03	.02	.03	.32	1.68	1.63	1.47	.58	.35	.23
AC-FT	7680	8150	4590	3190	3850	42520	224000	217100	195900	77670	46560	30500

CAL YR 1974 TOTAL 215233 MEAN 590 MAX 3120 MIN 60 CFSM .24 IN 3.20 AC-FT 426900
WTR YR 1975 TOTAL 434442 MEAN 1190 MAX 10500 MIN 45 CFSM .48 IN 6.46 AC-FT 861700

PEAK DISCHARGE (BASE, 4,000 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
4-24	2330	15.40	4,960	6-29	0915	16.99	5,800
5-2	0615	20.45	10,500				

06607000 ODEBOLT CREEK NEAR ARTHUR, IOWA

LOCATION.--Lat 42°20'10", long 95°22'52", in SE1/4 NE1/4 sec.21, T.87 N., R.39 W., Ida County, near center of span on downstream side of bridge on county highway M27, 700 ft (213 m) south of State Highway 175, 1.0 mi (1.6 km) downstream from Hoskins Creek, 1.8 mi (2.9 km) west of Arthur, 4.6 mi (7.4 km) southeast of Ida Grove, and 6.5 mi (10.5 km) upstream from mouth.

DRAINAGE AREA.--39.3 mi² (102 km²).

PERIOD OF RECORD.--October 1957 to September 1975 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 1,258.57 ft (383.61 m) above mean sea level.

AVERAGE DISCHARGE.--18 years, 15.7 ft³/s (0.44 m³/s), 5.42 in/yr (138 mm/yr), 11,370 acre-ft/yr (14.0 hm³/yr); median of yearly mean discharges, 14 ft³/s (0.40 m³/s), 4.8 in/yr (122 mm/yr), 10,100 acre-ft/yr (12.5 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 535 ft³/s (15.2 m³/s) Apr. 27, gage height, 6.25 ft (1.905 m); maximum gage height, 7.18 ft (2.188 m) Mar. 20, backwater from ice; minimum daily discharge, 2.5 ft³/s (0.071 m³/s) Jan. 13 to Mar. 16.

Period of record: Maximum discharge, 5,200 ft³/s (147 m³/s) Aug. 30, 1962, gage height, 13.78 ft (4.200 m); maximum gage height, 14.11 ft (4.301 m) Mar. 31, 1965, backwater from ice; minimum daily discharge, 0.2 ft³/s (5.7 dm³/s) Jan. 2 to Feb. 27, 1959.

Flood of July 3, 1951, reached a stage of 11.95 ft (3.645 m), from floodmark, discharge, 4,320 ft³/s (122 m³/s), from contracted-opening measurement of peak flow.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.2	4.2	3.1	2.7	2.5	2.5	54	48	26	25	13	4.2
2	4.2	4.2	3.1	2.7	2.5	2.5	53	46	24	24	13	4.2
3	4.2	4.2	3.1	2.7	2.5	2.5	49	53	24	22	12	4.2
4	4.2	4.2	3.1	2.7	2.5	2.5	46	47	22	21	12	4.2
5	4.2	4.0	3.1	2.7	2.5	2.5	42	44	22	21	11	4.2
6	4.2	4.0	3.1	2.7	2.5	2.5	37	41	21	20	10	4.0
7	4.2	4.0	3.1	2.7	2.5	2.5	28	45	21	20	9.2	4.0
8	4.2	4.0	3.1	2.7	2.5	2.5	26	47	21	19	9.2	4.2
9	4.2	4.5	3.0	2.7	2.5	2.5	24	43	24	17	9.2	4.2
10	6.1	4.0	3.0	2.7	2.5	2.5	23	41	21	18	20	4.2
11	4.5	4.0	2.9	2.6	2.5	2.5	23	41	32	18	21	4.2
12	4.5	4.0	2.9	2.6	2.5	2.5	26	41	31	17	14	4.2
13	4.5	4.0	2.9	2.5	2.5	2.5	24	40	28	17	9.2	4.2
14	4.5	4.0	2.9	2.5	2.5	2.5	23	39	27	16	8.2	4.2
15	4.5	4.0	2.9	2.5	2.5	2.5	21	36	25	16	7.8	4.2
16	4.5	3.5	2.9	2.5	2.5	2.5	18	34	27	15	7.5	4.2
17	4.5	3.5	2.9	2.5	2.5	6.0	18	32	27	15	7.5	4.2
18	4.5	3.2	2.8	2.5	2.5	14	22	32	94	14	7.2	4.2
19	4.5	3.2	2.8	2.5	2.5	42	21	32	41	16	7.2	4.2
20	4.5	3.2	2.8	2.5	2.5	104	16	28	47	14	6.8	4.2
21	4.5	3.0	2.8	2.5	2.5	96	17	26	61	14	6.8	4.2
22	4.5	3.0	2.8	2.5	2.5	87	16	25	97	13	6.8	4.2
23	4.5	3.0	2.8	2.5	2.5	76	48	24	57	13	6.5	4.2
24	4.2	3.0	2.8	2.5	2.5	67	26	24	40	13	7.5	4.2
25	4.2	3.0	2.8	2.5	2.5	63	21	24	34	13	6.5	4.2
26	4.0	3.0	2.8	2.5	2.5	60	20	24	61	13	5.0	4.2
27	4.2	3.5	2.8	2.5	2.5	61	79	23	32	13	6.5	4.2
28	4.2	3.5	2.7	2.5	2.5	62	204	65	30	13	5.8	4.2
29	5.0	3.5	2.7	2.5	-----	61	69	33	27	13	5.0	4.2
30	5.0	3.3	2.7	2.5	-----	60	56	30	26	13	5.0	4.2
31	4.5	-----	2.7	2.5	-----	58	-----	28	-----	13	5.0	-----
TOTAL	137.7	109.7	89.9	79.7	70.0	957.0	1,150	1,136	1,070	509	281.4	125.6
MEAN	4.44	3.66	2.90	2.57	2.50	30.9	38.3	36.6	35.7	16.4	9.08	4.19
MAX	6.1	4.5	3.1	2.7	2.5	104	204	65	97	25	21	4.2
MIN	4.0	3.0	2.7	2.5	2.5	2.5	16	23	21	13	5.0	4.0
CFSM	.11	.09	.07	.07	.06	.79	.97	.93	.91	.42	.23	.11
IN.	.13	.10	.09	.08	.07	.91	1.09	1.08	1.01	.48	.27	.12
AC-FT	273	218	178	168	139	1,900	2,280	2,250	2,120	1,010	558	249

CAL YR 1974 TOTAL 5,007.3 MEAN 13.7 MAX 231 MIN 2.7 CFSM .35 IN 4.74 AC-FT 9,930
WTR YR 1975 TOTAL 5,716.0 MEAN 15.7 MAX 204 MIN 2.5 CFSM .40 IN 5.41 AC-FT 11,340

PEAK DISCHARGE (BASE, 500 FT³/S).--Apr. 27 (2200) 535 ft³/s (6.25 ft).

LITTLE SIOUX RIVER BASIN

06607200 MAPLE RIVER AT MAPLETON, IOWA

LOCATION.--Lat 42°09'28", long 95°48'27", in SE1/4 SE1/4 sec.23, T.85 N., R.43 W., Monona County, on right bank on downstream side of bridge on State Highway 175, 80 ft (24 m) downstream from Chicago & North Western Railway Co. bridge, 0.5 mi (0.8 km) southwest of Mapleton, 0.8 mi (1.3 km) downstream from Wilsey Creek, 2.0 mi (3.2 km) upstream from McClarey Creek, and 16.0 mi (25.7 km) upstream from mouth.

DRAINAGE AREA.--669 mi² (1,732 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 1,085.86 ft (330.97 m) above mean sea level. See WSP 1730 for history of changes prior to Sept. 20, 1956.

AVERAGE DISCHARGE.--34 years, 233 ft³/s (6.60 m³/s), 4.73 in/yr (120 mm/yr), 168,800 acre-ft/yr (208 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 11,200 ft³/s (317 m³/s) Apr. 27, gage height, 13.17 ft (4.014 m); minimum daily, 17 ft³/s (0.48 m³/s) Jan. 16.

Period of record: Maximum discharge, 15,700 ft³/s (445 m³/s) Feb. 19, 1971, gage height, 15.17 ft (4.624 m); maximum gage height, 22.1 ft (6.74 m) June 12, 1950; no flow Sept. 21, 22, 1945 caused by temporary dam above gage.

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

REVISIONS (WATER YEARS).--WSP 1310: 1942 (M), 1946 (M), 1948 (M). WSP 1440: Drainage area.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	73	96	50	37	39	58	534	906	420	550	201	141
2	75	91	50	36	39	56	478	754	400	519	1,060	132
3	77	84	50	35	39	56	446	772	380	486	418	123
4	82	84	54	34	39	58	454	679	500	460	268	131
5	86	80	60	33	39	60	514	612	470	441	218	172
6	91	80	64	32	39	62	722	558	446	429	193	169
7	91	77	60	31	39	60	1,010	542	435	398	178	142
8	91	77	60	30	39	60	1,090	758	439	377	169	130
9	91	75	62	28	39	60	1,020	628	439	359	164	125
10	91	77	65	26	39	60	972	556	450	344	919	126
11	93	80	68	24	39	60	795	533	499	332	565	172
12	86	77	70	22	39	58	736	616	645	328	525	136
13	86	77	70	20	39	55	692	677	722	317	313	126
14	91	78	70	19	39	58	654	575	633	309	264	121
15	91	72	65	18	39	60	612	505	637	298	239	118
16	82	78	60	17	39	60	624	467	620	283	227	116
17	80	84	55	18	39	70	608	440	582	271	216	116
18	75	84	50	19	39	90	582	419	870	262	210	114
19	75	82	49	19	39	150	612	416	1,880	291	235	108
20	77	75	48	20	39	250	582	424	1,240	284	217	104
21	75	68	47	20	42	400	522	435	926	247	207	102
22	75	70	46	22	42	600	522	424	1,400	242	194	102
23	75	70	45	24	48	900	800	420	1,140	256	183	101
24	73	66	45	28	55	1,200	885	362	883	266	172	100
25	73	58	44	34	65	840	722	348	755	248	168	99
26	70	56	43	40	65	498	1,000	340	1,110	236	164	100
27	68	54	42	41	62	446	2,430	330	1,240	229	160	102
28	68	52	41	40	60	534	5,200	800	733	219	154	104
29	93	50	40	39	-----	587	3,850	600	635	212	229	108
30	93	50	39	39	-----	558	1,320	500	583	199	177	105
31	98	-----	38	39	-----	587	-----	450	-----	188	157	-----
TOTAL	2,545	2,202	1,650	884	1,219	8,651	30,988	16,846	22,112	9,880	8,764	3,645
MEAN	82.1	73.4	53.2	28.5	43.5	279	1,033	543	737	319	283	122
MAX	98	96	70	41	65	1,200	5,200	906	1,880	550	1,060	172
MIN	68	50	38	17	39	55	446	330	380	188	154	99
CFSM	.12	.11	.08	.04	.07	.42	1.54	.81	1.10	.48	.42	.18
IN.	.14	.12	.09	.05	.07	.48	1.72	.94	1.23	.55	.49	.20
AC-FT	5,050	4,370	3,270	1,750	2,420	17,160	61,460	33,410	43,860	19,600	17,380	7,230

CAL YR 1974 TOTAL 87,208 MEAN 239 MAX 2,590 MIN 38 CFSM .36 IN 4.85 AC-FT 173,000
 VTR YR 1975 TOTAL 109,386 MEAN 300 MAX 5,200 MIN 17 CFSM .45 IN 6.08 AC-FT 217,000

PEAK DISCHARGE (BASE, 4,000 FT³/S).--Apr. 27 (2200) 11,200 ft³/s (13.17 ft).

06607500 LITTLE SIOUX RIVER NEAR TURIN, IOWA

LOCATION.--Lat 41°57'52", long 95°58'21", in NW1/4 NE1/4 sec.33, T.83 N., R.44 W., Monona County, on left bank on downstream side of bridge on county highway E54, 1.0 mi (1.6 km) east of gaging station on Monona-Harrison ditch near Turin, 2.5 mi (4.0 km) downstream from Maple River, 3.8 mi (6.1 km) south of Turin, 6.2 mi (10.0 km) northeast of Blencoe, and at mile 13.5 (21.7 km).

DRAINAGE AREA.--3,526 mi² (9,132 km²). Prior to Jan. 15, 1958, 4,426 mi² (11,463 km²), combined area above this station and Monona-Harrison ditch station 1.0 mi (1.6 km) west).

PERIOD OF RECORD.--January 1958 to current year. April 1939 to May 1942 at site 4.7 mi (7.6 km) downstream published as "near Blencoe", June 1942 to January 1958 at site 1,200 ft (366 m) east on old river channel; records not equivalent owing to diversion into Monona-Harrison ditch through equalizer ditch 1.5 mi (2.4 km) upstream.

GAGE.--Water-stage recorder. Datum of gage is 1,019.85 ft (310.85 m) above mean sea level (Corps of Engineers bench mark). Prior to July 15, 1958, nonrecording gages near present site at different datums. July 15 to Sept. 3, 1958, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--17 years, 1,117 ft³/s (31.6 m³/s), 4.30 in/yr (109 mm/yr), 809,300 acre-ft/yr (998 hm³/yr); median of yearly mean discharges, 1,140 ft³/s (32.3 m³/s), 4.4 in/yr (112 mm/yr), 826,000 acre-ft/yr (1,020 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 17,500 ft³/s (496 m³/s) Apr. 28, gage height, 23.24 ft (7.084 m); minimum daily, 94 ft³/s (2.66 m³/s) Jan. 12-16.
Period of record: Maximum discharge, about 30,000 ft³/s (850 m³/s) Feb. 19, 1971, gage height, 27.44 ft (8.364 m), backwater from ice; minimum daily, 22 ft³/s (0.62 m³/s) Feb. 10-22, 1959.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	220	302	130	116	130	185	2,010	10,600	2,100	5,870	625	1,450
2	226	293	125	114	140	180	1,900	10,600	2,000	4,860	1,190	1,350
3	236	295	120	112	150	175	1,850	11,300	1,950	4,210	1,090	1,200
4	252	302	140	110	150	170	1,800	9,710	1,900	3,710	820	1,140
5	241	302	160	108	145	175	1,740	7,840	1,860	3,260	670	1,110
6	232	296	180	106	145	180	1,900	6,120	2,070	2,870	715	1,100
7	226	292	160	104	145	180	2,440	4,980	2,400	2,600	730	1,060
8	262	292	150	102	145	180	3,390	4,620	2,460	2,390	750	973
9	265	290	145	100	145	180	4,390	4,550	3,000	2,190	770	900
10	258	282	150	98	145	180	4,700	4,000	3,780	2,010	1,800	825
11	255	279	160	96	145	180	4,740	3,660	4,180	1,850	2,290	835
12	243	276	170	94	145	180	4,620	3,760	3,980	1,720	2,110	816
13	235	275	190	94	145	180	4,550	4,710	3,570	1,600	910	756
14	223	262	190	94	145	180	4,470	4,600	3,320	1,500	700	758
15	216	250	170	94	145	180	4,310	4,410	3,310	1,410	610	726
16	220	255	160	94	145	190	4,330	4,450	3,460	1,320	543	700
17	220	268	155	96	145	210	4,300	4,530	3,430	1,250	516	678
18	222	280	150	100	145	300	4,330	4,310	3,810	1,140	613	654
19	217	286	145	105	145	500	4,340	3,900	5,800	1,130	571	601
20	232	271	140	110	145	800	4,390	3,570	5,490	1,090	559	567
21	233	262	138	115	150	1,400	4,100	3,200	5,170	981	667	553
22	253	265	135	115	160	2,000	3,770	2,950	7,090	983	1,310	539
23	274	262	134	120	160	2,800	4,390	2,700	6,870	992	1,360	526
24	238	244	132	125	170	3,910	4,730	2,500	7,170	962	1,520	492
25	238	235	130	130	190	3,610	5,710	2,400	7,070	916	1,820	486
26	225	232	128	130	200	2,910	5,770	2,300	6,720	865	2,100	475
27	226	208	125	130	195	2,400	7,290	2,200	6,940	803	2,290	461
28	240	175	124	130	190	2,370	14,500	2,700	6,550	757	2,390	459
29	261	150	122	130	-----	2,390	13,000	2,500	6,980	716	2,350	469
30	278	140	120	130	-----	2,230	11,300	2,300	6,950	670	1,900	460
31	293	-----	118	130	-----	2,060	-----	2,200	-----	650	1,600	-----
TOTAL	7,460	7,821	4,498	3,432	4,305	32,765	145,060	144,180	131,380	57,275	37,889	23,119
MEAN	241	261	145	111	154	1,057	4,835	4,651	4,379	1,848	1,222	771
MAX	293	302	190	130	200	3,910	14,500	11,300	7,170	5,870	2,390	1,450
MIN	216	140	118	94	130	170	1,740	2,200	1,860	650	516	459
CFSM	.07	.07	.04	.03	.04	.30	1.37	1.32	1.24	.52	.35	.22
IN.	.08	.08	.05	.04	.05	.35	1.53	1.52	1.39	.60	.40	.24
AC-FT	14,800	15,510	8,920	6,810	8,540	64,990	287,700	286,000	260,600	113,600	75,150	45,860

CAL YR 1974 TOTAL 327,654 MEAN 898 MAX 5,440 MIN 118 CFSM .25 IN 3.46 AC-FT 649,900
WTR YR 1975 TOTAL 599,184 MEAN 1,642 MAX 14,500 MIN 94 CFSM .47 IN 6.32 AC-FT 1,188,000

PEAK DISCHARGE (BASE, 4,500 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
4-11	0500	14.74	4,780	4-28	0445	23.24	17,500

SOLDIER RIVER BASIN

06608500 SOLDIER RIVER AT PISGAH, IOWA

LOCATION.--Lat 41°49'52", long 95°55'50", in NW1/4 NE1/4 sec.14, T.81 N., R.44 W., Harrison County, on left bank on downstream side of bridge on county highway F20, at west edge of Pisgah, 0.4 mi (0.6 km) downstream from Cobb Creek, 0.5 mi (0.8 km) upstream from Mogger Ditch, and 13.1 mi (21.1 km) upstream from mouth.

DRAINAGE AREA.--407 mi² (1,054 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 1,036.53 ft (315.93 m) above mean sea level. Prior to Oct. 11, 1954, nonrecording gage at same site and datum with supplementary water-stage recorder operating above 8.2 ft (2.5 m) gage height Mar. 2, 1946, to Sept. 24, 1953.

AVERAGE DISCHARGE.--35 years, 126 ft³/s (3.57 m³/s), 4.20 in/yr (107 mm/yr), 91,290 acre-ft/yr (113 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,950 ft³/s (112 m³/s) Apr. 28, gage height, 11.05 ft (3.368 m); minimum daily, 45 ft³/s (1.27 m³/s) Oct. 1, Jan. 11.
Period of record: Maximum discharge, 22,500 ft³/s (637 m³/s) June 12, 1950, gage height, 28.17 ft (8.586 m); minimum daily, 2 ft³/s (0.06 m³/s) Jan. 2-10, 1945.

REMARKS.--Records fair prior to July 9 and good thereafter, except those for winter period, which are poor.

REVISIONS (WATER YEARS).--WSP 956: 1940 (M). WSP 1240: 1940, 1941 (M), 1947. WSP 1440: Drainage area.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	45	86	60	56	57	74	251	226	144	126	75	56
2	53	70	59	56	57	74	179	211	140	124	131	54
3	54	62	58	56	57	76	211	346	132	119	111	53
4	54	58	58	54	56	80	225	219	140	127	75	64
5	54	58	58	54	56	80	250	192	137	133	67	88
6	80	59	60	54	56	80	278	180	118	139	63	90
7	64	61	62	54	56	80	294	250	112	113	61	61
8	59	63	60	54	56	80	288	569	110	108	58	54
9	57	67	58	54	56	80	271	248	128	103	57	54
10	57	69	50	50	56	80	224	206	146	101	61	54
11	56	73	64	45	56	80	196	191	155	98	98	66
12	56	72	67	54	56	80	191	191	192	99	85	95
13	57	69	66	58	56	80	176	186	133	97	74	64
14	60	69	66	56	56	80	193	174	123	95	64	59
15	57	66	65	56	56	82	172	169	134	91	60	56
16	57	70	64	56	56	90	161	161	153	87	61	54
17	53	69	62	57	56	100	161	156	173	84	62	56
18	54	69	60	58	56	120	169	152	268	81	403	56
19	54	67	60	58	58	200	191	147	339	89	103	54
20	53	64	60	58	60	600	150	134	384	90	77	53
21	52	61	60	58	64	718	179	130	290	82	65	52
22	52	61	58	58	68	449	174	125	795	81	61	51
23	52	63	58	58	68	414	195	125	266	224	60	51
24	52	63	58	58	70	400	246	125	216	114	60	49
25	52	61	58	58	74	290	172	125	276	89	63	49
26	52	60	38	58	74	237	182	130	248	82	61	51
27	52	63	58	58	74	268	362	125	237	79	60	48
28	56	61	58	57	74	417	1,800	135	167	78	66	49
29	70	61	58	57	-----	364	393	237	141	76	209	54
30	90	61	56	57	-----	305	277	169	132	73	104	51
31	93	-----	56	57	-----	276	-----	154	-----	69	67	-----
TOTAL	1,807	1,956	1,863	1,732	1,695	6,434	8,211	5,888	6,129	3,151	2,722	1,746
MEAN	58.3	65.2	60.1	55.9	60.5	208	274	190	204	102	87.8	58.2
MAX	93	86	67	58	74	718	1,800	569	795	224	403	95
MIN	45	58	56	45	56	74	150	125	110	69	57	48
CFSM	.14	.16	.15	.14	.15	.51	.67	.47	.50	.25	.22	.14
IN.	.17	.18	.17	.16	.15	.59	.75	.54	.56	.29	.25	.16
AC-FT	3,580	3,880	3,700	3,440	3,360	12,760	16,290	11,680	12,160	6,250	5,400	3,460

CAL YR 1974 TOTAL 52,834 MEAN 145 MAX 2,770 MIN 45 CFSM .36 IN 4.83 AC-FT 104,800
WTR YR 1975 TOTAL 43,334 MEAN 119 MAX 1,800 MIN 45 CFSM .29 IN 3.96 AC-FT 85,950

PEAK DISCHARGE (BASE, 5,000 FT³/S).--No peak above base.

06609500 BOYER RIVER AT LOGAN, IOWA

LOCATION.--Lat 41°38'33", long 95°46'57", in SE1/4 NW1/4 sec.19, T.79 N., R.42 W., Harrison County, on left bank 9 ft (3 m) downstream from Illinois Central Railroad bridge at Logan, 0.4 mi (0.6 km) downstream from Elk Grove Creek, 10.5 mi (16.9 km) upstream from Willow Creek, and 15.8 mi (25.4 km) upstream from mouth.

DRAINAGE AREA.--871 mi² (2256 km²).

PERIOD OF RECORD.--May 1918 to July 1925, November 1937 to current year. Monthly discharge only for some periods, published in WSP 1310.

GAGE.--Water-stage recorder. Datum of gage is 1,009.38 ft (307.66 m) above mean sea level (Chicago and Northwestern Railway Company bench mark). See WSP 1918 for history of changes prior to Oct. 18, 1960.

AVERAGE DISCHARGE.--43 years, 313 ft³/s (8.86 m³/s), 4.88 in/yr (124 mm/yr), 226,800 acre-ft/yr (280 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 10,200 ft³/s (289 m³/s) Apr. 28, gage height, 13.84 ft (4.218 m); minimum daily, 81 ft³/s (2.29 m³/s) Sept. 24, 25.
Period of record: Maximum discharge, 25,000 ft³/s (708 m³/s) Feb. 19, 1971, gage height, 22.65 ft (6.904 m), from floodmark; maximum gage height, 25.22 ft (7.687 m) Mar. 1, 1965, backwater from ice; minimum daily discharge, 1.5 ft³/s (42 dm³/s) July 16, 1938.

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

REVISIONS (WATER YEARS).--WSP 956: 1938-39. WSP 1240: 1918-19, 1920 (M), 1921, 1922 (M), 1924-25, 1938 (M), 1945. WSP 1440: Drainage area.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	110	184	125	120	110	108	833	1080	439	437	168	148
2	115	148	120	120	110	108	629	878	405	423	295	132
3	119	136	118	118	110	106	568	807	375	392	238	121
4	124	134	116	118	110	106	532	762	409	373	191	175
5	128	130	120	118	108	106	643	668	423	366	173	193
6	220	132	130	118	108	106	895	854	379	343	159	182
7	215	130	140	118	108	106	898	846	352	329	150	140
8	153	132	120	118	108	106	877	1240	339	312	144	124
9	142	136	130	118	108	106	1070	805	358	309	140	115
10	136	155	140	118	106	106	883	612	416	300	142	101
11	193	146	145	116	106	106	723	559	425	291	166	121
12	167	136	150	116	106	106	654	586	561	277	182	159
13	138	134	150	116	106	106	628	549	516	269	189	122
14	140	136	150	116	106	110	597	520	508	263	159	106
15	134	128	145	114	106	120	552	470	475	268	144	103
16	136	134	135	114	106	130	512	434	502	240	142	103
17	134	144	125	114	106	140	510	405	480	229	144	103
18	124	144	125	114	106	180	507	392	637	216	332	101
19	121	142	125	114	106	350	578	384	894	211	218	95
20	122	134	122	114	106	1000	518	370	1150	216	180	93
21	119	132	122	114	108	1810	509	343	715	212	159	90
22	121	132	122	112	110	1640	588	352	888	207	142	88
23	121	136	122	112	110	1600	637	370	844	274	138	84
24	124	128	120	112	110	1640	817	358	1060	341	132	81
25	128	120	120	112	110	913	699	334	2010	231	122	81
26	122	115	120	112	110	655	592	338	1000	209	122	84
27	122	130	120	110	110	752	628	341	644	197	121	84
28	130	122	120	110	108	1280	5330	358	630	190	237	90
29	153	118	120	110	---	1040	2710	472	525	181	791	95
30	164	116	120	110	---	788	1510	540	470	176	251	93
31	218	---	120	110	---	799	---	600	---	166	175	---
TOTAL	4383	4044	3958	3556	3022	16329	27627	17527	18830	8438	6046	3407
MEAN	141	136	128	115	108	527	921	565	628	272	195	114
MAX	220	184	150	120	110	1810	6330	1240	2010	437	791	193
MIN	110	116	116	110	106	106	507	334	339	166	121	81
CFSM	.16	.16	.15	.13	.12	.61	1.06	.65	.72	.31	.22	.13
IN.	.19	.17	.17	.15	.13	.70	1.18	.75	.80	.36	.26	.15
AC-FT	8690	8020	7850	7050	5990	32390	54800	34760	37350	16740	11990	6760

CAL YR 1974 TOTAL 174239 MEAN 477 MAX 11400 MIN 110 CFSM .55 IN 7.44 AC-FT 345600
WTR YR 1975 TOTAL 117167 MEAN 321 MAX 5330 MIN 81 CFSM .37 IN 5.00 AC-FT 232400

PEAK DISCHARGE (BASE, 6,000 FT³/S).--Apr. 28 (0300) 10,200 ft³/s (13.84 ft).

BOYER RIVER BASIN

06609600 WILLOW CREEK NEAR LOGAN, IOWA

LOCATION.--Lat 41°37'54", long 95°53'27", in NW1/4 NE1/4 sec. 30, T.79 N., R.43 W., Harrison County, on right bank on downstream side of bridge on County Highway F50, 5.5 mi (8.8 km) west of Logan, and 7.5 mi (12.1 km) upstream from mouth.

DRAINAGE AREA.--129 mi² (334 km²).

PERIOD OF RECORD.--October 1972 to September 1975 (discontinued). March 1948 to October 1971 in reports of U.S. Corps of Engineers. Published as "near Missouri Valley" prior to October 1972.

GAGE.--Water-stage recorder. Datum of gage is 1,005.40 ft (306.745 m) above mean sea level (levels by Corps of Engineers).

EXTREMES.--Current year: Maximum discharge, 3,220 ft³/s (91.2 m³/s) Aug. 18, gage height, 14.46 ft (4.407 m); minimum daily, 13 ft³/s (0.37 m³/s) Dec. 3, 4, Sept. 25.
 Period of record: Maximum discharge, 7,970 ft³/s (226 m³/s) May 18, 1974, gage height, 18.78 ft (5.724 m); minimum daily, 12 ft³/s (0.34 m³/s) Dec. 6, 7, 1972.
 Flood of June 15, 1957, reached a stage of 24.90 ft (7.590 m), discharge not determined, from information by Corps of Engineers.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	27	17	34	22	36	72	66	39	39	22	22
2	15	22	14	35	22	33	53	67	38	35	37	19
3	16	21	13	34	22	32	68	78	37	32	29	19
4	16	21	13	32	22	32	72	65	37	30	22	50
5	17	20	15	30	21	32	80	61	36	29	21	43
6	32	20	18	31	20	32	74	441	35	28	20	26
7	27	20	20	31	20	32	66	326	35	28	20	21
8	21	21	20	31	20	32	65	102	34	28	19	19
9	19	22	22	31	20	32	74	81	35	28	18	18
10	18	24	23	30	20	32	59	72	38	28	20	18
11	20	23	23	25	20	32	53	69	42	27	20	22
12	20	22	22	20	20	32	51	67	50	29	20	21
13	19	21	22	19	20	31	50	72	48	30	20	18
14	19	22	21	18	20	30	56	62	47	30	19	17
15	19	22	21	18	20	30	52	55	47	29	18	17
16	19	22	21	18	20	32	49	50	47	29	18	17
17	19	22	20	18	20	40	48	47	49	29	18	16
18	18	22	20	20	20	50	52	45	75	28	790	17
19	18	22	20	20	20	80	60	43	87	30	75	16
20	18	22	20	20	20	296	49	41	70	30	29	16
21	18	21	20	20	21	241	58	39	60	29	24	15
22	18	21	21	20	22	130	61	40	70	30	21	15
23	18	21	23	21	22	117	67	42	90	75	21	15
24	18	21	24	23	24	106	65	40	150	68	20	14
25	19	21	24	25	27	66	55	36	100	36	19	13
26	18	22	24	25	30	64	55	44	80	29	19	14
27	18	23	25	24	35	120	65	41	70	27	18	15
28	18	23	26	24	37	202	393	47	62	25	28	16
29	23	21	27	23	---	104	96	53	55	24	118	28
30	25	20	29	23	---	77	72	44	50	24	55	20
31	32	---	31	22	---	83	---	41	---	21	25	---
TOTAL	610	652	659	765	627	2288	2190	2377	1713	984	1623	597
MEAN	19.7	21.7	21.3	24.7	22.4	73.8	73.0	76.7	57.1	31.7	52.4	19.9
MAX	32	27	31	35	37	296	393	441	150	75	790	50
MIN	15	20	13	18	20	30	48	36	34	21	18	13
CFSM	.15	.17	.17	.19	.17	.57	.57	.59	.44	.25	.41	.15
IN.	.18	.19	.19	.22	.18	.66	.63	.69	.49	.28	.47	.17
AC-FT	1210	1290	1310	1520	1240	4540	4340	4710	3400	1950	3220	1180

CAL YR 1974	TOTAL	21127	MEAN	57.9	MAX	2230	MIN	13	CFSM	.45	IN	6.09	AC-FT	41910
WTR YR 1975	TOTAL	15085	MEAN	41.3	MAX	790	MIN	13	CFSM	.32	IN	4.35	AC-FT	29920

PEAK DISCHARGE (BASE, 500 FT²/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
4-28	0830	10.75	985	8-18	0730	14.46	3,220
5-5	1930	14.24	2,990				

06610000 MISSOURI RIVER AT OMAHA, NEBRASKA

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

DRAINAGE AREA.--322,800 mi² (836,052 km²), approximately.

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

GAGE.--Water-stage recorder. Datum of gage is 958.24 ft (292.07 m) above mean sea level. See WSP 1730 for history of changes prior to Sept. 30, 1936.

AVERAGE DISCHARGE.--47 years, 29,080 ft³/s (824 m³/s), 21,070,000 acre-ft/yr (26,000 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 70,200 ft³/s (1,990 m³/s) Aug. 18, gage height, 13.66 ft (4.164 m); minimum daily, 8,700 ft³/s (246 m³/s) Jan. 14; minimum gage height observed, 1.30 ft (0.396 m) Jan. 14. Period of record: Maximum discharge, 396,000 ft³/s (11,200 m³/s) Apr. 18, 1952, gage height, 30.20 ft (9.205 m); minimum, about 2,200 ft³/s (62.3 m³/s) Jan. 6, 1937; minimum gage height observed, -2.77 ft (-0.844 m) Jan. 10, 1957, result of freezeup.

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

REVISIONS.--WSP 761: Drainage area.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35000	35900	20000	18800	17900	18800	32700	44500	40900	51600	64600	64900
2	35900	35200	19700	18900	18000	19200	32200	42900	40800	50600	65700	64800
3	36200	34400	19800	18900	17600	19700	30200	42200	40000	49500	66200	65800
4	36100	33600	19700	19000	18200	19800	31700	41300	39600	49500	65700	65500
5	36200	33600	19800	18900	19300	19500	32400	39500	39400	50600	64700	66100
6	36200	33700	19900	18600	19100	19400	33200	40700	40500	51600	63000	64600
7	36200	34100	20000	18500	16800	19900	34500	40100	42500	53100	63100	64500
8	36600	34300	19900	18100	14200	20000	36600	37500	42900	53600	62600	64200
9	36300	33900	19600	18000	14900	19000	37900	38900	42200	53100	62100	64500
10	36400	34100	18700	19100	17200	18500	38700	38200	41800	52800	63100	64700
11	36800	34000	19300	18800	17700	18400	38000	37800	43500	52900	63600	64800
12	37400	34200	21300	16300	17800	18300	36800	37700	45800	52900	65100	65700
13	38100	34600	21200	9950	18500	18600	36300	37600	46300	53200	66300	66200
14	37900	34700	21400	8700	19200	19000	37500	37700	45900	53100	64700	65000
15	37000	33800	21200	12000	19000	18300	38300	37300	45700	52900	63200	65300
16	36100	33800	20800	17200	18300	17300	38500	37400	46300	52700	63600	65200
17	36000	33700	20200	20400	18600	18900	38200	37900	46900	52300	63700	65000
18	36000	33800	19500	20800	18900	20600	39200	39300	48800	52800	67200	65000
19	36400	34200	18800	20800	19300	23100	39700	39500	53600	54300	67700	65100
20	36700	34100	19400	20900	19300	25300	38500	38700	56100	56000	64800	65700
21	36600	33300	20000	20400	19100	27400	37000	38600	54100	57300	63400	65500
22	36500	33500	19800	19900	19000	27800	35700	39100	53300	58000	63300	64900
23	36600	34200	19000	19000	19200	28800	37700	39700	53200	59100	65300	64400
24	36600	34600	19400	18800	19100	34200	38100	39800	52800	60600	66500	65500
25	36500	34000	19200	18800	18900	35900	38100	40500	50700	61100	66300	65600
26	36400	31000	18200	19400	18900	30800	37800	41500	48200	62400	65500	65100
27	35900	28400	18000	19600	18800	29000	41500	40800	47000	63000	65300	64200
28	35500	26300	19500	19100	18800	30500	57500	41000	46300	62900	65800	63900
29	34800	23600	20200	18700	---	32000	54100	41500	47900	63100	66500	64300
30	35200	21700	19400	18300	---	31800	48800	42500	50600	63500	66000	64700
31	36100	---	19000	18100	---	32300	---	41400	---	63900	65100	---
TOTAL	1126200	984300	611900	562750	511600	732100	1147400	1233100	1393600	1724000	2009700	1950700
MEAN	36330	32810	19740	18150	18270	23620	38250	39780	46450	55610	64830	65020
MAX	38100	35900	21400	20900	19300	35900	57500	44500	56100	63900	67700	66200
MIN	34800	21700	18000	8700	14200	17300	30200	37300	39400	49500	62100	63900
AC-FT	2234000	1952000	1214000	1116000	1015000	1452000	2276000	2446000	2764000	3420000	3986000	3869000
CAL YR 1974 TOTAL	11195200			30670		MAX 47900	MIN 13300	AC-FT	22210000			
WTR YR 1975 TOTAL	13987350			38320		MAX 67700	MIN 8700	AC-FT	27740000			

INDIAN CREEK BASIN

06610500 INDIAN CREEK AT COUNCIL BLUFFS, IOWA

LOCATION.--Lat 41°17'32", long 95°49'59", in SE1/4 SW1/4 sec.18, T.75 N., R.43 W., Pottawattamie County, on left bank at downstream side of first bridge off State Highway 183, on Mud Hollow Road at north edge of Council Bluffs, 8.8 mi (14.2 km) upstream from mouth.

DRAINAGE AREA.--7.99 mi² (20.7 km²).

PERIOD OF RECORD.--July 1954 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,038.86 ft (316.64 m) above mean sea level (City of Council Bluffs bench mark). Prior to Apr. 12, 1955, nonrecording gage at site 0.2 mi (0.3 km) downstream at different datum.

AVERAGE DISCHARGE.--21 years, 1.60 ft³/s (0.045 m³/s), 2.72 in/yr (69 mm/yr), 1,160 acre-ft/yr (1.43 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 154 ft³/s (4.36 m³/s) June 18, gage height, 4.76 ft (1.451 m); no flow Sept. 25-30.

Period of record: Maximum discharge, 2,980 ft³/s (84.4 m³/s) Sept. 7, 1965, gage height, 15.36 ft (4.682 m); no flow at times most years.

Flood of June 20, 1942, reached a discharge of 9,200 ft³/s (260 m³/s), from information by Corps of Engineers.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.52	1.4	.90	.86	.88	.98	1.8	1.6	1.2	.80	.34	.30
2	.52	1.1	.90	.86	.88	.96	3.0	1.6	2.9	.80	.38	.26
3	.64	1.2	.90	.84	1.0	.92	3.5	1.5	2.0	.72	.30	.34
4	.68	1.1	.92	.80	1.1	1.1	2.3	1.4	1.4	.64	.26	1.3
5	.80	1.0	.94	.82	1.1	1.2	2.3	1.3	1.2	.60	.26	1.2
6	1.8	.96	.96	.82	.96	1.2	2.2	21	1.1	.68	.19	.45
7	1.1	.92	1.0	.82	.92	1.2	1.9	7.3	.96	.64	.08	.13
8	1.0	.80	1.0	.82	.88	1.2	2.1	3.0	.92	.64	.04	.11
9	.80	1.0	.88	.80	.88	1.3	2.0	2.3	1.2	.68	.02	.08
10	.76	1.1	.96	.70	.96	1.3	1.8	2.1	1.1	.72	.26	.11
11	.76	.96	.96	.70	.84	1.3	1.7	2.7	1.6	.88	.22	.16
12	.68	.92	.96	.72	.80	1.3	1.6	2.3	2.2	.38	.11	.16
13	.60	.96	1.0	.74	.80	1.3	1.6	2.1	1.4	.30	.38	.16
14	.68	.84	1.0	.76	.80	1.2	2.1	2.1	1.2	.26	.22	.13
15	.64	.90	1.0	.78	.80	1.2	1.8	1.9	1.1	.26	.19	.16
16	.64	.96	1.0	.82	.80	1.4	1.8	1.7	.96	.19	.19	.19
17	.56	.96	1.0	.84	.96	1.6	1.8	1.7	.92	.13	.22	.22
18	.48	.92	1.0	.84	.92	2.0	2.2	1.7	27	.16	.19	.26
19	.38	.96	1.0	.84	.88	2.5	2.3	3.2	3.9	.26	.22	.19
20	.34	.92	1.0	.86	.88	3.0	2.0	2.8	2.2	.30	.34	.11
21	.34	.88	1.0	.84	.88	3.0	2.1	1.3	1.9	.34	.19	.08
22	.34	.92	.96	.88	.88	2.9	1.7	1.2	1.8	.42	.16	.11
23	.34	.88	.90	.92	.88	2.8	3.3	1.3	2.7	.42	.13	.08
24	.45	.88	.90	.94	.88	2.8	2.3	1.2	.80	.34	.13	.06
25	.48	.72	.90	.96	.88	3.0	2.1	1.1	.80	.30	.16	0
26	.60	.68	.90	.96	.92	3.0	2.1	1.1	.64	.38	.16	0
27	.68	.84	.90	.96	.92	3.0	11	1.0	.88	.38	.16	0
28	.72	.72	.90	.96	.96	2.5	3.4	2.4	.88	.38	.19	0
29	.92	.90	.92	.92	---	2.2	2.0	1.4	.84	.38	.48	0
30	1.6	.90	.86	.92	---	2.0	1.7	1.5	.80	.42	.34	0
31	2.0	---	.86	.88	---	1.8	---	1.3	---	.34	.34	---
TOTAL	22.85	28.20	29.26	26.18	25.24	57.16	73.5	80.1	68.50	14.14	6.85	6.35
MEAN	.74	.94	.94	.84	.90	1.84	2.45	2.58	2.28	.46	.22	.21
MAX	2.0	1.4	1.0	.96	1.1	3.0	11	21	27	.88	.48	1.3
MIN	.34	.68	.86	.70	.80	.92	1.6	1.0	.64	.13	.02	0
CFSM	.09	.12	.12	.11	.11	.23	.31	.32	.29	.06	.03	.03
IN.	.11	.13	.14	.12	.12	.27	.34	.37	.32	.07	.03	.03
AC-FT	45	56	58	52	50	113	146	159	136	28	14	13

CAL YR 1974 TOTAL 454.71 MEAN 1.25 MAX 4 MIN 0 CFSM .16 IN 2.12 AC-FT 902
WTR YR 1975 TOTAL 438.33 MEAN 1.20 MAX 27 MIN 0 CFSM .15 IN 2.04 AC-FT 869

PEAK DISCHARGE (BASE, 700 FT³/S).--No peak above base.

06610520 MOSQUITO CREEK NEAR EARLING, IOWA

LOCATION.--Lat 41°45'10", long 95°27'50", in N1/2 SE1/4 sec.11, T.80 N., R.40 W., Shelby County, on right bank at stream-stabilization structure 1,300 ft (396 m) downstream from bridge on State Highway 191, 0.5 mi (0.8 km) downstream from small left-bank tributary and 2.3 mi (3.7 km) southwest of Earling.

DRAINAGE AREA.--32.0 mi² (82.9 km²).

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

GAGE.--Duplex water-stage recorder. Datum of gage is 1,222.56 ft (372.64 m) above mean sea level. Gage heights obtained of headwater (base gage) and tailwater (supplementary gage) elevations at stream-stabilization structure.

AVERAGE DISCHARGE.--10 years, 17.1 ft³/s (0.48 m³/s), 7.26 in/yr (184 mm/yr), 12,390 acre-ft/yr (15.3 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,800 ft³/s (79.3 m³/s) Apr. 28, gage height, 23.55 ft (7.178 m); minimum daily, 1.0 ft³/s (0.028 m³/s) Jan. 12-16.
Period of record: Maximum discharge, 12,000 ft³/s (340 m³/s) Sept. 11, 1972, gage height, 31.18 ft (9.504 m), from floodmarks; no flow for several days in 1970-72.

REMARKS.--Records fair except those for winter period, which are poor. Records of periodic chemical analyses for the current year are published in Part 2 of this report. The stabilization structure is a dam approximately 15 ft (5 m) high constructed of sheet piling and derrick stone. The crest of the cut-off piling is rectangular in shape at low stages and trapezoidal at high stages. Daily discharges computed from headwater gage readings.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.0	7.1	5.2	3.3	3.5	4.7	40	34	18	18	8.7	4.5
2	4.0	6.6	4.0	3.0	3.5	4.7	36	32	18	17	9.7	4.5
3	4.2	6.3	5.4	3.3	3.8	4.7	34	27	20	17	7.7	4.7
4	4.2	6.3	5.0	3.5	4.0	4.7	44	23	25	17	8.3	7.7
5	4.4	6.0	4.7	3.7	4.0	4.7	52	19	20	17	8.0	7.1
6	4.4	5.7	3.5	4.0	4.0	4.7	46	20	19	17	8.3	5.2
7	4.6	6.0	2.9	4.0	4.0	4.7	42	18	18	17	7.7	5.2
8	4.8	6.3	3.5	4.0	4.0	4.7	44	18	17	15	8.0	4.7
9	4.9	9.3	4.0	3.7	4.0	4.7	36	17	25	16	7.7	4.5
10	4.5	8.7	4.0	2.0	4.0	4.7	30	17	21	15	8.7	4.2
11	22	7.1	3.5	2.0	4.0	4.8	27	19	30	15	6.8	4.0
12	6.3	6.6	3.5	1.0	4.0	4.8	26	19	21	15	6.3	3.5
13	5.4	7.1	3.8	1.0	4.0	4.7	24	18	17	15	10	3.6
14	4.9	7.1	4.0	1.0	4.0	4.7	22	17	19	15	12	3.8
15	4.9	6.8	3.8	1.0	4.0	4.7	20	17	17	13	8.0	3.5
16	4.9	6.8	2.4	1.0	4.1	5.0	19	17	63	13	6.3	3.8
17	4.9	6.6	3.0	1.5	4.1	8.0	19	17	18	12	6.3	3.8
18	4.9	6.0	3.5	3.0	4.2	15	18	17	129	11	6.0	4.0
19	4.7	6.0	3.6	3.0	4.2	30	18	16	46	11	6.3	3.8
20	4.7	5.4	3.6	3.0	4.2	40	17	16	30	10	6.0	3.8
21	4.9	5.2	3.6	3.5	4.5	50	17	16	28	10	5.2	3.5
22	4.9	5.7	3.8	3.5	4.5	54	20	15	19	10	4.7	3.5
23	5.2	6.0	3.7	3.5	4.5	56	20	15	15	14	4.5	3.3
24	5.4	6.0	3.5	3.5	4.5	60	18	15	37	11	7.0	3.1
25	5.2	5.4	3.0	3.5	4.5	60	18	16	26	10	8.0	3.1
26	5.2	6.3	3.3	3.5	4.5	60	18	16	21	9.3	6.0	3.1
27	5.2	6.3	3.7	3.5	4.5	70	50	17	19	8.7	6.0	3.1
28	4.9	5.2	4.0	3.5	4.7	100	514	19	18	8.3	6.0	2.9
29	8.3	5.4	4.0	3.5	---	80	48	22	18	9.3	25	2.9
30	7.4	5.4	4.0	3.5	---	60	39	19	18	10	6.0	2.7
31	12	---	3.5	3.5	---	50	---	18	---	7.4	5.2	---
TOTAL	180.2	190.7	117.0	90.5	115.8	868.7	1376	586	810	405.0	240.4	121.3
MEAN	5.81	6.36	3.77	2.92	4.14	28.0	45.9	18.9	27.0	13.1	7.75	4.04
MAX	22	9.3	5.4	4.0	4.7	100	514	34	129	18	25	7.7
MIN	4.0	5.2	2.4	1.0	3.5	4.7	17	15	15	7.4	4.5	2.7
CFSM	.18	.20	.12	.09	.13	.88	1.43	.59	.84	.41	.24	.13
IN.	.21	.22	.14	.11	.13	1.01	1.60	.68	.94	.47	.28	.14
AC-FT	357	378	232	180	230	1720	2730	1160	1610	803	477	241

CAL YR 1974 TOTAL 6627.0 MEAN 18.2 MAX 694 MIN 2.4 CFSM .57 IN 7.70 AC-FT 13140
WTR YR 1975 TOTAL 5101.6 MEAN 14.0 MAX 514 MIN 1.0 CFSM .44 IN 5.93 AC-FT 10120

PEAK DISCHARGE (BASE, 500 FT³/S).--Apr. 28 (0300) 2,800 ft³/s (23.55 ft); June 18 (0800) 520 ft³/s (20.25 ft).

MISSOURI RIVER MAIN STEM

06807000 MISSOURI RIVER AT NEBRASKA CITY, NEBR.
(National stream-quality accounting network station)

LOCATION.--Lat 40°40'55", long 95°50'48", in NW1/4 NE1/4 sec.9, T.8 N., R.14 E., Otoe County, on right bank 0.7 mi (1.1 km) upstream from Waubesa Highway Bridge at Nebraska City, and at mile 562.6 (905.2 km).

DRAINAGE AREA.--414,400 mi² (1,073,296 km²), approximately.

PERIOD OF RECORD.--August 1929 to current year. Gage-height records collected in this vicinity from August 1878 to December 1899 are contained in reports of Missouri River Commission.

GAGE.--Water-stage recorder. Datum of gage is 905.36 ft (275.95 m) above mean sea level, datum of 1929, supplementary adjustment of 1954. See WSP 1918 or 1919 for history of changes prior to Apr. 1, 1963.

AVERAGE DISCHARGE.--46 years, 34,960 ft³/s (990 m³/s), 25,330,000 acre-ft/yr (31,200 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 73,600 ft³/s (2,080 m³/s) June 24, gage height, 15.45 ft (4.709 m); maximum gage height, 15.57 ft (4.746 m) Aug. 19; minimum daily discharge, 11,200 ft³/s (317 m³/s) Jan. 14; minimum gage height, 1.80 ft (0.549 m) Jan. 14.
Period of record: Maximum discharge, 414,000 ft³/s (11,700 m³/s) Apr. 19, 1952; maximum gage height, 27.66 ft (8.431 m) Apr. 18, 1952; minimum discharge, 1,600 ft³/s (45.3 m³/s) Dec. 31, 1946 (discharge measurement); minimum gage height observed, -0.28 ft (-0.085 m) Dec. 24, 1960, result of freezeup.

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

REVISIONS.--WSP 761: Drainage area.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37100	38800	24300	21800	23200	24800	38200	53100	43600	58700	63400	67800
2	36800	38500	22300	21800	22700	25000	37600	49600	42400	58000	64600	67000
3	36400	37600	22300	22000	22500	25200	35100	48900	42400	55900	65800	66600
4	36800	37600	23200	22000	22500	25600	35800	48900	42100	54200	66200	67400
5	37600	37900	22700	21800	22300	26100	38500	47800	41500	53100	65400	68600
6	38800	37900	23200	21800	21800	26300	39400	45800	41500	54500	64600	67800
7	38800	37600	23800	21600	21000	26600	40300	52400	43300	55600	64600	67000
8	39700	37600	24500	21200	19400	26800	41200	44500	44200	55600	64600	66200
9	39100	38200	24100	21200	19000	26800	43000	46100	44200	55200	64600	65400
10	38200	38500	22500	21800	20400	26100	45100	44500	44200	54800	63800	65800
11	37400	38200	21800	20400	21400	26300	46100	43300	45800	55200	64200	66600
12	38200	38800	23000	18200	21000	26100	45100	42700	49200	54800	64600	66600
13	39400	38500	23200	15000	20800	25900	44200	43000	51700	54200	65400	67400
14	40000	38500	23800	11200	21000	25400	44800	42100	51400	53800	65400	67400
15	40600	37900	24500	11600	21200	25200	43900	42100	50300	53400	64200	65800
16	38200	37900	24300	17400	20800	25200	44200	41200	51000	52800	63000	65800
17	37100	36800	23600	21800	21600	27000	43900	41500	50600	52800	63000	66200
18	37100	36600	23000	21800	22700	29200	43900	41200	51700	52800	64600	66600
19	37400	37600	22000	21000	23000	32100	44200	41800	55600	53400	69400	66200
20	37400	37600	21800	20800	23000	38800	44500	40600	67000	54500	67400	67000
21	37600	37600	22500	21200	23000	37400	43600	40000	66200	56200	64600	68200
22	37400	37100	22700	21200	23000	37100	43300	40300	65000	57600	63800	67800
23	37900	37100	22700	21000	23000	36800	44800	40600	68600	58400	63800	66600
24	37900	37100	23000	21400	23200	37400	46100	41500	72600	59400	64600	65400
25	37900	36800	23000	22300	23200	40900	45100	42100	69000	60600	66000	65800
26	38200	36100	22500	23400	23600	38500	43900	43600	66600	63800	66200	65400
27	37900	33600	22300	23800	24100	35100	44800	43600	61400	64600	67000	65000
28	37600	30600	22700	23400	24500	39400	57600	44200	57600	64600	67800	64600
29	37600	28400	23200	23200	---	42400	71000	44200	56200	62600	69400	65400
30	38200	26600	22700	23400	---	42100	61000	45400	57600	62600	70600	65800
31	39700	---	22000	23200	---	38800	---	44500	---	62600	69000	---
TOTAL	1180000	1099600	713200	643700	618900	966400	1340200	1371100	1594500	1766300	2031600	1995200
MEAN	38060	36650	23010	20760	22100	31170	44670	44230	53150	56980	65540	66510
MAX	40600	38800	24500	23800	24500	42400	71000	53100	72600	64600	70600	68600
MIN	36400	26600	21800	11200	19000	24800	35100	40000	41500	52800	63000	64600
AC-FT	2341000	2181000	1415000	1277000	1228000	1917000	2658000	2720000	3163000	3503000	4030000	3957000
CAL YR 1974 TOTAL	13270100			MEAN 36360	MAX 75000	MIN 18500	AC-FT 26320000					
WTR YR 1975 TOTAL	15320700			MEAN 41970	MAX 72600	MIN 11200	AC-FT 30390000					

06807410 WEST NISHNABOTNA RIVER AT HANCOCK, IOWA

LOCATION.--Lat 41°23'24", long 95°22'17", in NE1/4 sec.18, T.76 N., R.39 W., Pottawattamie County, on downstream end of right pier of bridge on county highway G30, 0.6 mi (1.0 km) west of Hancock school, and 3.0 mi (4.8 km) downstream from Jim Creek.

DRAINAGE AREA.--609 mi² (1,577 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 1,085.94 ft (330.99 m) above mean sea level.

AVERAGE DISCHARGE.--16 years, 282 ft³/s (7.99 m³/s), 5.29 in/yr (160 mm/yr), 204,300 acre-ft/yr (252 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 10,700 ft³/s (303 m³/s) Apr. 28, gage height, 14.13 ft (4.307 m); minimum daily, 38 ft³/s (1.08 m³/s) Jan. 15, 16.
Period of record: Maximum discharge, 26,400 ft³/s (748 m³/s) Sept. 13, 1972, gage height, 22.12 ft (6.742 m); minimum daily, 2.2 ft³/s (62 dm³/s) Feb. 8, 9, 1971.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	106	232	100	70	76	100	674	886	377	522	210	223
2	108	171	100	68	76	98	508	810	364	476	210	195
3	110	145	100	66	80	96	508	796	370	459	204	179
4	114	139	115	64	84	96	550	700	383	442	197	171
5	112	134	136	62	84	96	642	642	380	428	192	313
6	200	130	120	60	84	96	700	610	335	409	182	226
7	171	128	130	58	84	96	674	900	329	386	176	192
8	132	126	120	56	86	96	646	810	326	377	170	174
9	128	132	125	55	86	96	1010	658	335	367	164	171
10	120	164	140	54	86	98	692	594	351	354	166	161
11	124	151	150	50	86	101	610	574	364	329	169	164
12	129	134	155	46	86	101	582	570	456	329	166	164
13	157	132	150	42	86	98	558	529	370	329	203	153
14	134	128	140	40	86	96	554	512	345	326	226	146
15	124	128	130	38	86	100	508	487	621	313	174	136
16	122	130	115	38	86	120	484	466	566	297	166	136
17	122	136	100	40	88	150	470	445	512	284	164	136
18	116	132	95	44	88	200	452	442	1810	275	161	136
19	112	130	92	48	90	600	522	425	1070	276	169	132
20	112	122	90	52	94	1780	462	428	574	266	157	124
21	110	124	88	56	94	2220	456	393	515	260	145	120
22	112	124	88	58	94	1430	518	386	666	254	136	118
23	112	128	85	60	94	1420	658	396	1260	267	128	116
24	110	124	82	64	96	1500	666	383	2170	316	218	112
25	110	116	78	68	96	805	526	374	3130	260	542	112
26	106	115	77	72	98	674	490	364	1460	243	197	112
27	108	117	76	76	100	774	901	354	818	243	166	110
28	110	114	75	76	100	1510	5840	412	697	234	361	112
29	122	106	74	76	---	1140	1440	459	640	229	2040	118
30	134	100	73	76	---	850	1020	422	582	223	370	118
31	248	---	72	76	---	738	---	399	---	221	280	---
TOTAL	3935	3991	3271	1809	2473	17375	24321	16626	22176	9984	8209	4579
MEAN	127	133	106	58.4	88.3	560	811	536	739	322	265	153
MAX	248	232	155	76	100	2220	5840	900	3130	522	2040	313
MIN	106	100	72	38	76	96	452	354	326	221	128	110
CFSM	.21	.22	.17	.10	.15	.92	1.33	.88	1.21	.53	.44	.25
IN.	.24	.24	.20	.11	.15	1.06	1.49	1.02	1.35	.61	.50	.28
AC-FT	7810	7920	6490	3590	4910	34460	48240	32980	43990	19800	16280	9080
CAL YR 1974 TOTAL	140490	MEAN 385	MAX 5580	MIN 72	CFSM .63	IN 8.58	AC-FT 278700					
WTR YR 1975 TOTAL	118749	MEAN 325	MAX 5840	MIN 38	CFSM .53	IN 7.25	AC-FT 235500					

PEAK DISCHARGE (BASE, 4,000 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
4-28	0530	14.13	10,700	6-25	0530	10.85	6,580
6-23	2330	10.42	6,110	8-29	0400	10.47	6,170

NISHNABOTNA RIVER BASIN

06808500 WEST NISHNABOTNA RIVER AT RANDOLPH, IOWA

LOCATION.--Lat 40°52'23", long 95°34'48", in NE1/4 NE1/4 sec.17, T.70 N., R.41 W., Fremont County, on right bank on downstream side of bridge on State Highway 184, 0.3 mi (0.5 km) downstream from Deer Creek, 0.5 mi (0.8 km) west of Randolph, and 16.2 mi (26.1 km) upstream from confluence with East Nishnabotna River.

DRAINAGE AREA.--1,325 mi² (3,434 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 932.99 ft (284.38 m) above mean sea level, unadjusted. Prior to Aug. 26, 1955, nonrecording gage and June 30, 1949, to Aug. 25, 1955, supplementary water-stage recorder, operating above gage height 8.4 ft (2.6 m) at same site and datum.

AVERAGE DISCHARGE.--27 years, 550 ft³/s (15.6 m³/s), 5.63 in/yr (143 mm/yr), 398,500 acre-ft/yr (491 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 12,000 ft³/s (340 m³/s) Apr. 28, gage height, 18.00 ft (5.486 m); minimum daily, 190 ft³/s (5.38 m³/s) Oct. 2.

Period of record: Maximum discharge, 35,500 ft³/s (1,010 m³/s) June 21, 1967, gage height, 22.60 ft (6.888 m) maximum gage height, 24.8 ft (7.56 m) Mar. 5, 1949, from graph based on gage readings, backwater from ice; minimum daily discharge, 10 ft³/s (0.28 m³/s) Dec. 17-21, 1955.

Flood in June 1947 reached a stage of about 24 ft (7 m), discharge not determined, from information by local residents.

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

REVISIONS.--WSP 1440: Drainage area. WRD Iowa 1974: 1973 (M).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	193	543	260	240	230	260	1220	1510	855	935	362	421
2	190	443	250	240	230	250	1120	1350	803	891	358	388
3	199	363	250	240	230	240	990	1280	844	850	336	354
4	204	334	260	240	230	240	1070	1230	874	825	340	425
5	211	308	270	240	230	250	1180	1140	802	805	336	730
6	233	296	300	240	225	250	1340	1090	760	770	322	548
7	336	287	320	240	225	250	1360	1140	713	735	319	421
8	297	286	280	240	225	250	1250	1160	695	697	308	369
9	252	308	280	240	225	250	1330	1340	700	669	299	347
10	239	383	300	240	225	250	1580	1040	730	650	299	336
11	232	368	280	230	225	250	1270	987	798	655	292	464
12	238	335	260	230	225	240	1140	977	819	620	299	351
13	280	316	250	230	225	230	1130	942	829	611	302	322
14	284	305	240	230	225	230	1140	893	735	597	352	319
15	252	296	240	230	225	240	1130	866	701	587	319	299
16	242	296	230	230	225	300	1100	827	951	561	282	299
17	242	305	220	230	225	800	1070	799	879	537	257	302
18	236	308	210	230	225	1520	1070	778	3700	513	267	292
19	230	303	210	230	225	1700	1080	757	3320	496	330	286
20	230	296	220	230	225	2420	1120	744	1430	492	267	273
21	229	282	220	230	225	3340	1010	731	1150	480	257	273
22	229	286	230	230	230	2450	1020	715	1220	512	257	267
23	231	277	230	230	230	1830	1130	735	1500	487	248	254
24	238	270	225	230	230	1920	1210	730	3750	468	231	251
25	245	266	220	230	230	1460	1190	698	5910	484	2830	254
26	247	265	230	230	235	1100	1140	707	2160	447	585	245
27	250	264	240	230	240	1430	1160	688	1740	425	369	245
28	252	269	260	230	250	2390	7970	850	1220	411	342	251
29	271	261	250	230	---	2100	3470	1080	1120	399	3550	260
30	464	260	240	230	---	1470	1880	1200	974	388	1320	257
31	922	---	240	230	---	1320	---	1000	---	369	514	---
TOTAL	8398	9379	7715	7230	6395	31230	44870	29985	42692	18366	16849	10103
MEAN	271	313	249	233	228	1007	1496	967	1423	592	544	337
MAX	922	543	320	240	250	3340	7970	1510	5910	935	3550	730
MIN	190	260	210	230	225	230	990	688	695	369	231	245
CFSM	.20	.24	.19	.18	.17	.76	1.13	.73	1.07	.45	.41	.25
IN.	.24	.26	.22	.20	.18	.88	1.26	.84	1.20	.52	.47	.28
AC-FT	16660	18600	15300	14340	12680	61940	89000	59480	84680	36430	33420	20040

CAL YR 1974	TOTAL	271075	MEAN	743	MAX	6780	MIN	190	CFSM	.56	IN	7.60	AC-FT	537700
WTR YR 1975	TOTAL	233212	MEAN	639	MAX	7970	MIN	190	CFSM	.48	IN	6.54	AC-FT	462600

PEAK DISCHARGE (BASE, 6,500 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
4-28	1200	18.00	12,000	6-25	1430	16.10	8,180
6-18	1800	16.44	8,790	8-29	1545	16.63	7,780

06809210 EAST NISHNABOTNA RIVER NEAR ATLANTIC, IOWA

LOCATION.--Lat 41°20'47", long 95°04'31", in NW1/4 NW1/4 sec.35, T.76 N., R.37 W., Cass County, on left bank at downstream side of bridge on county highway, 1.9 mi (3.1 km) upstream from Turkey Creek, and 5.4 mi (8.7 km) southwest of junction of U.S. Highway 6 and State Highway 83 in Atlantic.

DRAINAGE AREA.--436 mi² (1,129 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 1,105.83 ft (337.05 m) above mean sea level. Prior to Oct. 1, 1970, at site 2.0 mi (3.2 km) upstream at datum 5.00 ft (1.52 m) higher.

AVERAGE DISCHARGE.--15 years, 222 ft³/s (6.29 m³/s), 6.91 in/yr (176 mm/yr), 160,800 acre-ft/yr (198 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 6,480 ft³/s (184 m³/s) Apr. 28, gage height, 12.20 ft (3.719 m); minimum daily, 40 ft³/s (1.13 m³/s) Oct. 1.
Period of record: Maximum discharge, 26,700 ft³/s (756 m³/s) Sept. 12, 1972, gage height, 22.81 ft (6.952 m); minimum daily, 7.0 ft³/s (198 dm³/s) Dec. 17-23, 1963, Jan. 5-11, 1971.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40	296	80	70	65	68	697	574	238	320	103	94
2	41	162	63	70	65	66	528	528	232	286	103	80
3	44	130	58	70	65	62	494	561	384	265	100	74
4	46	120	70	70	65	62	578	532	275	252	98	89
5	48	115	80	70	65	66	762	502	252	235	98	209
6	80	110	80	70	62	67	930	544	209	222	94	140
7	100	103	80	70	62	67	671	620	194	206	94	98
8	71	98	75	70	62	67	603	507	185	191	91	85
9	63	108	85	70	62	67	1,340	470	194	203	87	78
10	60	130	84	70	62	67	795	422	216	200	87	71
11	67	112	82	68	62	67	641	418	422	191	87	69
12	71	103	80	65	62	67	607	414	474	191	89	91
13	69	100	78	65	62	68	578	380	333	185	117	83
14	69	92	76	65	62	68	591	369	299	179	117	72
15	65	90	74	65	62	68	565	347	426	185	94	71
16	63	94	72	65	62	70	528	330	472	179	87	69
17	63	96	65	65	62	100	507	313	478	176	85	69
18	60	91	70	65	62	400	482	306	1,690	168	83	67
19	58	91	75	65	62	1,200	498	282	1,630	156	85	65
20	55	85	75	65	63	3,760	418	265	762	140	83	60
21	55	83	75	65	64	3,380	450	275	645	132	76	60
22	55	83	75	65	64	1,460	466	265	628	127	72	56
23	55	83	75	65	64	1,430	565	262	586	130	67	55
24	56	78	72	65	64	1,210	563	265	1,630	138	65	53
25	56	67	70	65	65	595	462	252	1,810	127	122	53
26	55	71	70	65	66	578	462	258	800	120	117	53
27	55	74	70	65	66	900	567	245	600	115	80	53
28	60	71	70	65	67	2,000	3,530	272	462	112	270	69
29	67	71	70	65	-----	800	1,000	340	391	112	580	103
30	195	80	70	65	-----	720	675	303	344	108	200	85
31	832	-----	70	65	-----	715	-----	272	-----	105	117	-----
TOTAL	2,775	3,087	2,289	2,069	1,776	20,315	21,533	11,693	17,061	5,456	3,648	2,374
MEAN	89.5	103	73.8	66.7	63.4	655	718	377	569	176	118	79.1
MAX	832	296	85	70	67	3,760	3,530	620	1,810	320	580	209
MIN	40	67	58	65	62	62	418	245	185	105	65	53
CFSM	.21	.24	.17	.15	.15	1.50	1.65	.86	1.31	.40	.27	.18
IN.	.24	.26	.20	.18	.15	1.73	1.84	1.00	1.46	.47	.31	.20
AC-FT	5,500	6,120	4,540	4,100	3,520	40,290	42,710	23,190	33,840	10,820	7,240	4,710

CAL YR 1974 TOTAL 92,211 MEAN 253 MAX 1,810 MIN 40 CFSM .58 IN 7.87 AC-FT 182,900
WTR YR 1975 TOTAL 94,076 MEAN 258 MAX 3,760 MIN 40 CFSM .59 IN 8.03 AC-FT 186,600

PEAK DISCHARGE (BASE, 3,000 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-21	0200	11.07	5,720	6-18	1730	9.85	3,790
4-28	0500	12.20	6,480	6-25	0100	11.78	5,890

NISHNABOTNA RIVER BASIN

06809500 EAST NISHNABOTNA RIVER AT RED OAK, IOWA

LOCATION.--Lat 41°00'41", long 95°14'07", in NW1/4 SE1/4 sec.29, T.72 N., R.38 W., Montgomery County, on left bank on downstream side of Coolbaugh Street bridge in Red Oak, and 0.2 mi (0.3 km) upstream from Red Oak Creek.

DRAINAGE AREA.--894 mi² (2,315 km²).

PERIOD OF RECORD.--May 1918 to July 1925, May 1936 to current year. Monthly discharge only for some periods, published in WSP 1310.

GAGE.--Water-stage recorder. Datum of gage is 1,005.45 ft (306.46 m) above mean sea level, unadjusted. Prior to July 5, 1925, nonrecording gage at present site at datum 4.60 ft (1.40 m) higher. May 29, 1936, to Nov. 13, 1952, nonrecording gage with supplementary water-stage recorder in operation above 3.2 ft (1.0 m) gage height. July 30, 1939 to Nov. 13, 1952, and Nov. 14, 1952 to June 13, 1966, water-stage recorder, all at site 0.5 mi (0.8 km) upstream at datum 5.00 ft (1.52 m) higher. June 14, 1966 to Sept. 30, 1969, at present site at datum 5.00 ft (1.52 m) higher.

AVERAGE DISCHARGE.--45 years (1918-24, 1936-75), 374 ft³/s (10.6 m³/s), 5.68 in/yr (144 mm/yr), 271,000 acre-ft/yr (334 hm³/yr); median of yearly mean discharges, 360 ft³/s (10.2 m³/s), 5.5 in/yr (140 mm/yr), 261,000 acre-ft/yr (322 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 8,610 ft³/s (244 m³/s) Apr. 28, gage height, 15.84 ft (4.828 m); minimum daily, 85 ft³/s (2.41 m³/s) Aug. 23.

Period of record: Maximum discharge, 38,000 ft³/s (1,080 m³/s) Sept. 13, 1972, gage height, 27.43 ft (8.361 m); maximum gage height, 28.23 ft (8.605 m) June 13, 1947, present datum; minimum daily discharge, 6 ft³/s (0.17 m³/s) Aug. 18, 1936.

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

REVISIONS (WATER YEARS).--WSP 1240: 1921, 1922-23 (M), 1924, 1942 (M), 1944 (M), 1946. WSP 1440: Drainage area. WSP 1710: 1957.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	107	875	180	200	160	165	1110	1140	486	649	189	233
2	107	487	150	200	160	160	905	975	449	608	180	170
3	107	351	100	190	160	150	754	934	437	566	174	155
4	107	310	120	150	160	150	812	905	596	534	170	226
5	109	290	190	180	155	160	1000	799	486	507	158	290
6	120	261	240	210	155	180	1060	741	433	481	149	365
7	244	242	175	190	155	200	1210	997	395	448	146	231
8	212	239	110	170	155	190	1000	918	369	420	140	188
9	169	229	115	170	155	190	1740	742	358	398	125	158
10	149	265	230	170	155	190	1710	666	391	384	125	158
11	141	290	239	165	155	190	1210	649	430	363	131	161
12	137	249	219	160	150	190	1010	634	853	346	125	146
13	143	236	220	155	150	190	910	588	628	344	149	143
14	146	229	210	150	150	190	850	572	504	329	182	143
15	146	220	226	145	150	190	855	556	462	315	149	137
16	143	213	226	135	150	200	776	531	601	298	134	137
17	138	213	120	140	150	400	732	516	889	288	122	140
18	137	213	110	145	150	1810	704	498	1180	275	137	140
19	137	207	100	150	150	3390	696	488	2980	267	113	134
20	134	197	150	150	150	5210	666	477	1170	262	110	134
21	131	185	207	150	150	5420	580	461	863	256	101	128
22	131	188	204	150	150	3020	662	444	903	261	93	122
23	131	191	204	150	150	2620	666	450	868	262	85	119
24	131	185	179	150	150	2680	870	442	1180	260	96	113
25	131	179	150	155	150	1470	703	418	4550	261	161	110
26	131	173	160	160	150	995	627	414	2120	239	245	104
27	131	182	180	160	155	1110	610	405	1220	228	210	106
28	131	191	195	160	160	3670	4820	410	1040	216	149	127
29	134	188	197	160	---	2200	2240	701	870	206	1140	162
30	211	182	197	160	---	1490	1420	611	748	206	548	208
31	1130	---	200	160	---	1180	---	571	---	197	379	---
TOTAL	5356	7660	5503	5040	4290	39550	32908	19653	28459	10674	6115	4888
MEAN	173	255	178	163	153	1276	1097	634	949	344	197	163
MAX	1130	875	240	210	160	5420	4820	1140	4550	649	1140	365
MIN	107	173	100	135	150	150	580	405	358	197	85	104
CFSM	.19	.29	.20	.18	.17	1.43	1.23	.71	1.06	.38	.22	.18
IN.	.22	.32	.23	.21	.18	1.65	1.37	.82	1.18	.44	.25	.20
AC-FT	10620	15190	10920	10000	8510	78450	65270	38980	56450	21170	12130	9700

CAL YR 1974	TOTAL	187651	MEAN	514	MAX	3670	MIN	100	CFSM	.57	IN	7.81	AC-FT	372200
WTR YR 1975	TOTAL	170096	MEAN	466	MAX	5420	MIN	85	CFSM	.52	IN	7.08	AC-FT	337400

PEAK DISCHARGE (BASE, 4,500 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-21	0500	15.00	7,600	6-19	0145	12.72	5,050
3-28	0800	12.40	4,730	6-25	0600	14.19	6,630
4-28	0930	15.84	8,610				

06810000 NISHNABOTNA RIVER ABOVE HAMBURG, IOWA

LOCATION.--Lat 40°37'57", long 95°37'32", in SW1/4 SE1/4 sec.11, T.67 N., R.42 W., Fremont County, on left bank 1.6 mi (2.6 km) downstream from confluence of East Nishnabotna and West Nishnabotna Rivers and 2 mi (3.2 km) northeast of Hamburg, and at mile 13.2 (21.2 km), revised.

DRAINAGE AREA.--2,806 mi² (7,268 km²).

PERIOD OF RECORD.--March 1922 to September 1923, October 1928 to current year. Monthly discharge only for some periods published in WSP 1310.

GAGE.--Water-stage recorder. Datum of gage is 894.17 ft (272.54 m) above mean sea level. See WSP 1730 for history of changes prior to Nov. 16, 1950.

AVERAGE DISCHARGE.--48 years, 1,022 ft³/s (28.9 m³/s), 4.95 in/yr (126 mm/yr), 740,400 acre-ft/yr (913 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 13,300 ft³/s (377 m³/s) Apr. 28, gage height, 21.63 ft (6.593 m); minimum daily, 320 ft³/s (9.06 m³/s) Dec. 18-20.

Period of record: Maximum discharge, 55,500 ft³/s (1,570 m³/s) June 24, 1947, gage height, 26.03 ft (7.934 m), present site and datum, from floodmark; maximum gage height, 27.42 ft (8.358 m) Sept. 15, 1972; minimum daily discharge, 4.5 ft³/s (127 dm³/s) Aug. 30, 1934.

REMARKS.--Records good except those for winter period, which are poor. Diversion upstream from East and West Nishnabotna Rivers for wildlife preserve near Riverton.

REVISIONS (WATER YEARS).--WSP 1240: 1923, 1929-37, 1938-40 (M), 1943 (M). WSP 1440: Drainage area. WRD Iowa. 1974: 1973.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	344	1830	380	460	400	460	2700	3130	1740	1810	686	1030
2	342	1310	370	460	400	460	2520	2750	1540	1710	679	837
3	338	946	350	450	400	440	2150	2540	1450	1620	672	735
4	340	806	360	430	400	430	2100	2460	1430	1540	658	727
5	349	744	450	420	400	430	2200	2330	1490	1490	647	1110
6	356	691	700	420	400	430	2470	2160	1450	1450	629	1150
7	373	659	600	420	400	430	2740	2550	1400	1390	604	999
8	401	631	496	420	400	420	2520	2390	1330	1330	567	796
9	427	647	450	420	400	420	2420	2350	1260	1280	530	664
10	433	763	500	420	400	410	3230	2170	1220	1240	491	613
11	433	766	480	400	400	400	2880	1940	1240	1210	495	871
12	436	726	460	370	400	400	2260	1880	1280	1190	504	827
13	444	658	450	350	400	380	2080	1830	1600	1140	502	623
14	466	626	450	350	400	360	2070	1730	1540	1130	560	589
15	476	604	430	350	400	350	2050	1650	1400	1100	657	555
16	458	584	380	350	400	450	2060	1580	1420	1060	648	530
17	445	593	340	350	400	1000	1980	1520	1550	1020	576	515
18	443	587	320	370	400	2500	1970	1470	2710	974	540	497
19	443	563	320	390	400	6170	1970	1420	7390	945	529	492
20	421	546	320	410	400	9690	1990	1390	3740	936	535	455
21	411	532	330	420	410	11000	1980	1360	2340	908	500	426
22	407	506	350	420	410	8200	1860	1360	2090	952	399	399
23	404	503	360	420	410	6130	2050	1330	2360	956	390	407
24	418	503	370	420	410	5590	2170	1350	4830	881	357	388
25	415	497	370	420	410	5050	2450	1410	8080	874	2450	391
26	417	481	380	410	410	3090	2280	1280	6630	856	1680	361
27	415	475	390	410	420	2610	2090	1260	3770	807	829	351
28	413	480	400	400	440	4660	7520	1280	2480	777	693	391
29	450	458	420	400	---	5010	6380	1610	2170	753	3030	433
30	628	390	440	400	---	3890	4000	1970	1950	739	4170	449
31	1930	---	460	400	---	3020	---	1960	---	712	1420	---
TOTAL	14476	20105	12876	12530	11320	84280	79140	57410	74880	34780	27627	18611
MEAN	467	670	415	404	404	2719	2638	1852	2496	1122	891	520
MAX	1930	1830	700	460	440	11000	7520	3130	8080	1810	4170	1150
MIN	338	390	320	350	400	350	1860	1260	1220	712	357	351
CFSM	.17	.24	.15	.14	.14	.97	.94	.66	.89	.40	.32	.22
IN.	.19	.27	.17	.17	.15	1.12	1.05	.76	.99	.46	.37	.25
AC-FT	28710	39880	25540	24850	22450	167200	157000	113900	148500	68990	54800	36910

CAL YR 1974	TOTAL	546973	MEAN	1499	MAX	7540	MIN	320	CFSM	.53	IN	7.25	AC-FT	1085000
WTR YR 1975	TOTAL	448035	MEAN	1227	MAX	11000	MIN	320	CFSM	.44	IN	5.94	AC-FT	888700

PEAK DISCHARGE (BASE, 9,000 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-21	1415	18.99	12,600	6-25	1900	20.75	11,600
4-28	1745	21.63	13,300				

TARKIO RIVER BASIN

06811840 TARKIO RIVER AT STANTON, IOWA

LOCATION.--Lat 40°58'52", long 95°06'32", in NW1/4 SW1/4 sec.4, T.71 N., R.37 W., Montgomery County, on right bank 10 ft (3 m) downstream from bridge on county highway H42, 0.1 mi (0.2 km) downstream from Little Tarkio Creek, and 0.5 mi (0.8 km) west of Stanton.

DRAINAGE AREA.--49.3 mi² (128 km²).

PERIOD OF RECORD.--October 1957 to current year. Annual maximum, water years 1952-57.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,104.67 ft (336.70 m) above mean sea level.

AVERAGE DISCHARGE.--18 years, 25.8 ft³/s (0.73 m³/s), 7.11 in/yr (181 mm/yr), 18,690 acre-ft/yr (23.0 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,600 ft³/s (45.3 m³/s) June 25, gage height, 12.84 ft (3.914 m); maximum gage height, 13.56 ft (4.133 m) Mar. 17, backwater from ice; minimum daily discharge, 0.10 ft³/s (0.003 m³/s) Aug. 24.

Period of record: Maximum discharge, 22,500 ft³/s (637 m³/s) June 9, 1967, gage height, 28.56 ft (8.705 m), from rating curve extended above 1,600 ft³/s (45.3 m³/s) on basis of slope-area measurement of peak flows; no flow at times most years.

REMARKS.--Records good except those below 2.0 cfs, which are fair, and those for winter period, which are poor.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.82	3.2	1.1	1.2	3.5	8.3	26	15	6.5	14	.90	1.7
2	1.0	1.7	1.0	.92	2.5	8.6	52	15	6.1	12	.90	1.2
3	1.2	1.9	1.0	1.4	2.4	8.5	32	14	6.1	11	.80	2.0
4	1.1	1.8	1.3	1.4	3.2	8.0	31	13	6.2	10	.70	23
5	.84	1.4	2.2	1.4	6.1	4.8	32	12	5.6	9.6	.60	16
6	1.3	1.3	4.3	1.4	9.1	7.4	28	12	4.7	9.3	.50	5.5
7	1.0	1.2	5.4	1.2	5.4	6.4	25	12	4.8	8.4	.30	3.4
8	1.2	1.2	1.6	1.3	6.8	6.6	30	11	4.8	7.9	.20	2.5
9	.95	3.0	1.9	1.4	8.3	6.4	40	10	5.7	7.5	.20	1.7
10	.85	3.9	2.1	2.3	6.8	6.0	32	9.8	5.8	7.2	.30	1.7
11	1.2	2.1	2.5	2.0	2.7	6.0	31	10	13	6.8	.30	3.1
12	1.3	1.6	2.8	2.3	2.0	5.6	30	9.3	7.4	6.5	.30	2.3
13	2.0	1.4	2.8	2.3	5.5	5.6	29	8.5	5.5	6.8	.30	1.7
14	1.8	1.7	2.6	2.3	4.2	5.6	32	8.3	5.2	6.8	.70	1.8
15	1.0	1.6	2.5	2.0	3.2	5.4	25	7.3	5.1	6.4	1.4	1.4
16	.99	2.2	2.2	2.0	2.7	100	26	7.2	5.6	5.1	.80	1.7
17	1.1	2.0	1.7	2.1	2.6	400	26	7.0	4.5	4.2	.60	1.9
18	.97	1.7	1.8	2.2	2.7	300	24	6.5	27	3.7	.60	2.0
19	.90	1.2	1.8	2.4	2.5	200	25	6.3	19	3.2	.80	1.8
20	1.0	1.1	2.1	6.6	2.4	88	22	5.8	12	3.7	.60	1.4
21	.95	1.4	2.3	3.0	2.4	54	21	6.9	11	3.2	.40	.90
22	.92	1.7	2.4	5.6	2.3	45	21	5.3	12	6.3	.30	.71
23	.66	1.5	2.4	2.8	3.2	39	30	5.9	15	4.5	.20	.62
24	.85	1.7	1.7	2.0	3.7	23	18	4.9	13	3.3	.10	.76
25	1.2	1.2	.96	2.4	2.5	26	17	5.2	427	3.1	10	.85
26	.84	1.3	.83	2.6	2.9	26	15	5.4	36	2.5	1.2	.85
27	.25	1.4	1.0	2.3	4.4	134	22	4.5	25	2.2	.80	1.2
28	1.0	1.5	1.2	2.4	5.7	85	38	8.9	20	2.1	1.0	4.0
29	2.5	1.1	1.3	2.0	-----	47	20	6.9	18	2.2	123	1.9
30	16	1.1	1.3	2.0	-----	40	17	9.8	15	1.5	7.6	1.1
31	20	-----	1.3	2.2	-----	35	-----	7.4	-----	1.0	2.7	-----
TOTAL	67.69	51.1	61.39	69.42	111.7	1,741.2	817	271.1	752.6	182.0	159.10	90.69
MEAN	2.18	1.70	1.98	2.24	3.99	56.2	27.2	8.75	25.1	5.87	5.13	3.02
MAX	20	3.9	5.4	6.6	9.1	400	52	15	427	14	123	23
MIN	.25	1.1	.83	.92	2.0	4.8	15	4.5	4.5	1.0	.10	.62
CFSM	.04	.03	.04	.05	.08	1.14	.55	.18	.51	.12	.10	.06
IN	.05	.04	.05	.05	.08	1.31	.62	.20	.57	.14	.12	.07
AC-FT	134	101	122	138	222	3,450	1,620	538	1,490	361	316	180

CAL YR 1974 TOTAL 8,443.21 MEAN 23.1 MAX 177 MIN .23 CFSM .47 IN 6.37 AC-FT 16,750
WTR YR 1975 TOTAL 4,374.99 MEAN 12.0 MAX 427 MIN .10 CFSM .24 IN 3.30 AC-FT 8,680

PEAK DISCHARGE (BASE, 1,500 FT³/S).--Mar. 17 (time unknown) about 1,500 ft³/s; June 25 (0215) 1,600 ft³/s (12.84 ft).

06813500 MISSOURI RIVER AT RULO, NEBR.

LOCATION.--Lat 40°03'14", long 95°25'12", in NW1/4 NW1/4 sec.17, T.1 N., R.18 E., Richardson County, on downstream end of middle pier of bridge on U.S. Highway 159 at Rulo, 3.2 mi (5.1 km) upstream from Nemaha River, and at 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.--26 years, 38,870 ft³/s (1,101 m³/s), 28,160,000 acre-ft/yr (34,700 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 86,600 ft³/s (2,450 m³/s) Sept. 4, gage height, 16.69 ft (5.087 m), minimum daily, 13,000 ft³/s (368 m³/s) Jan. 15; minimum gage height, not determined, occurred during period of no gage-height record Jan. 15, 16.

Period of record: Maximum discharge, 358,000 ft³/s (10,100 m³/s) Apr. 22, 1952, gage height, 25.60 ft (7.803 m); minimum daily, 4,420 ft³/s (125 m³/s) Jan. 13, 1957; minimum gage height, 0.65 ft (0.198 m) Jan. 7, 1971, result of freezeup.

Flood in 1881 reached a stage of 22.9 ft (6.98 m), from floodmark (discharge not determined).

REMARKS.--Records good except those for winter period, which are poor. Flow partly regulated by upstream main-stem reservoirs.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37900	42800	27300	23300	23500	27100	41900	60000	47500	62500	64500	71500
2	37600	41300	24900	23100	23500	26700	42500	54000	45600	62500	65500	70500
3	37400	40700	23500	23300	23700	26300	40200	52600	46000	60000	66500	69000
4	37400	40400	23700	23500	23700	26300	39200	53600	46000	58000	67000	79000
5	38200	40200	23700	23700	23700	26500	41300	51800	44900	56700	66500	76800
6	38600	39900	23700	23700	23500	27300	43200	48300	44200	56700	65000	73500
7	39600	39200	24500	23700	22900	27700	44200	52600	45200	57600	65000	72000
8	39900	38900	24500	23500	22000	27500	45300	50400	46000	58500	65000	70500
9	40400	38900	24700	23300	22500	27700	48300	46700	46000	58500	65000	69000
10	39600	39900	24100	23700	22000	26900	50400	48700	45200	58500	64000	68000
11	39200	39400	23500	23500	20000	26700	53600	47100	48700	58000	64500	70000
12	39600	40200	23300	22000	21000	26900	51800	46300	51300	57600	67000	70000
13	40700	40200	23900	20000	21500	26500	49500	45200	52200	56700	68000	69500
14	41600	39900	24100	17000	21900	26100	49100	44900	52200	55800	69000	70500
15	41900	39600	24900	13000	21900	26300	48700	44600	50800	54900	68000	69500
16	41900	38900	24900	13800	22100	26900	47900	43500	51300	54000	66000	69000
17	39600	38400	24300	19700	21900	30700	48300	43500	51300	53600	65000	69500
18	38900	37600	23700	23500	22300	35000	49100	43500	56900	53100	65000	69000
19	38900	37900	23100	23100	22700	38200	50000	44200	68500	54000	69500	69000
20	38400	37900	22500	22500	22900	44600	50800	44200	68500	55400	70000	69000
21	38200	38400	22700	22500	23100	44600	49500	43200	68000	56700	67000	70000
22	38400	38400	23100	22500	23500	40700	47900	42200	68000	58500	65000	70500
23	38600	38200	23500	22100	23500	38200	47100	42500	68500	59000	65000	69000
24	39400	37900	23500	22300	23500	37400	52600	43200	76200	61000	66500	66500
25	39900	37600	23300	22900	23500	40200	54400	44600	76800	62000	70000	66500
26	39900	37400	23300	23500	23500	41300	51800	46700	77900	64500	73500	67000
27	39400	35600	23300	24100	24300	37900	48300	46700	70500	67000	70000	67000
28	38900	33400	23700	23900	25300	42500	55000	46300	66500	68000	72000	66500
29	39200	30500	24100	23500	---	47500	81800	49100	62000	66500	72500	67000
30	39400	28900	24100	23500	---	46000	69500	54000	62000	65500	79600	68500
31	43500	---	23500	23700	---	43500	---	53600	---	65000	74600	---
TOTAL	1222100	1148500	740900	687400	639400	1037700	1494200	1477800	1704700	1836300	2101700	2093300
MEAN	39420	38280	23900	22170	22840	33470	49810	47670	56820	59240	67800	69780
MAX	43500	42800	27300	24100	25300	47500	81800	60000	77900	68000	79600	79000
MIN	37400	28900	22500	13000	20000	26100	39200	42200	44200	53100	64000	66500
AC-FT	2424000	2278000	1470000	1363000	1268000	2058000	2964000	2931000	3381000	3642000	4169000	4152000

CAL YR 1974 TOTAL 14481800 MEAN 39680 MAX 87800 MIN 21000 AC-FT 28720000
WTR YR 1975 TOTAL 16184000 MEAN 44340 MAX 81800 MIN 13000 AC-FT 32100000

NODAWAY RIVER BASIN

06817000 NODAWAY RIVER AT CLARINDA, IOWA

LOCATION.--Lat 40°44'19", long 95°00'47", in SW1/4 NE1/4 sec.32, T.69 N., R.36 W., Page County, on downstream side of center bridge pier on State Highway 2, 0.5 mi (0.8 km) downstream from North Branch, 1.2 mi (1.9 km) east of city square of Clarinda, and 7.5 mi (12.1 km) upstream from East Nodaway River.

DRAINAGE AREA.--762 mi² (1,973 km²).

PERIOD OF RECORD.--May 1918 to July 1925, May 1936 to current year. Monthly discharge only for some periods, published in WSP 1310.

GAGE.--Water-stage recorder. Datum of gage is 960.36 ft (292.72 m) above mean sea level. Prior to July 5, 1925, and May 28, 1936, to Mar. 26, 1957, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--45 years (1918-24, 1936-75), 321 ft³/s (9.09 m³/s), 5.72 in/yr (145 mm/yr), 232,600 acre-ft/yr (287 hm³/yr); median of yearly mean discharges, 250 ft³/s (7.08 m³/s), 4.5 in/yr (114 mm/yr), 181,000 acre-ft/yr (223 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 11,400 ft³/s (323 m³/s) June 25, gage height, 12.68 ft (3.865 m); minimum daily, 31 ft³/s (0.88 m³/s) Sept. 27.

Period of record: Maximum discharge, 31,100 ft³/s (881 m³/s) June 13, 1947, gage height, 25.3 ft (7.71 m), from floodmark, from rating curve extended above 15,000 ft³/s (425 m³/s) on basis of an overflow profile and extended channel rating; minimum daily, 1 ft³/s (0.028 m³/s) Sept. 5, 9, 12, 14, 1918, Dec. 9, 27-31, 1923. Flood in August 1903 reached a stage of 25.4 ft (7.74 m), from floodmarks, discharge not determined.

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

REVISIONS (WATER YEARS).--WSP 1240: 1918-20 (M), 1921, 1922-25 (M), 1936-38, 1942, 1943-45 (M), 1948. WSP 1440: Drainage area. WSP 1710: 1958, 1959 (P).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34	422	40	64	74	62	476	366	233	490	50	78
2	34	216	45	64	74	62	354	331	171	428	52	45
3	38	142	40	62	74	62	360	319	148	379	50	50
4	39	104	35	60	72	62	440	316	142	339	47	108
5	34	85	38	62	70	64	431	286	129	309	44	229
6	39	81	40	66	68	64	431	271	112	290	32	122
7	41	79	45	70	66	64	409	353	96	262	34	96
8	39	74	42	75	66	64	358	379	81	236	38	67
9	39	81	40	80	66	64	680	326	106	200	37	52
10	36	115	40	85	64	64	848	266	137	191	37	38
11	41	100	40	80	64	64	543	242	797	188	44	94
12	48	88	40	75	64	64	440	231	1510	194	40	97
13	52	79	40	70	62	64	391	222	624	197	37	60
14	56	72	39	70	62	64	387	201	448	157	45	44
15	48	70	38	70	62	64	404	189	358	151	45	40
16	45	70	37	70	60	70	362	172	327	148	40	40
17	41	70	36	70	60	1000	327	159	280	145	39	39
18	38	68	35	70	58	3950	308	150	1270	120	38	41
19	36	68	36	72	58	3230	298	144	1520	92	37	41
20	36	56	37	74	58	3970	283	135	773	92	35	41
21	34	56	38	74	58	2350	245	147	546	79	35	39
22	36	56	40	74	58	1300	232	142	468	92	35	34
23	39	56	42	74	58	800	259	113	1850	89	35	36
24	39	54	44	74	58	500	435	90	1090	85	35	38
25	39	48	46	76	58	300	358	94	7250	76	85	32
26	36	52	50	78	58	190	305	111	3610	67	63	32
27	36	46	55	78	59	900	276	99	1400	69	51	31
28	39	50	60	78	60	3180	653	139	942	64	57	55
29	52	34	62	76	---	1370	814	236	694	58	696	47
30	74	36	64	76	---	710	466	320	576	56	441	47
31	339	---	64	76	---	597	---	292	---	55	150	---
TOTAL	1577	2628	1349	2243	1769	25369	12573	6841	27688	5398	2504	1813
MEAN	50.9	87.6	43.5	72.4	63.2	818	419	221	923	174	80.8	60.4
MAX	339	422	64	85	74	3970	848	379	7250	490	696	229
MIN	34	34	35	60	58	62	232	90	81	55	32	31
CFSM	.07	.12	.06	.10	.08	1.07	.55	.29	1.21	.23	.11	.08
IN.	.08	.13	.07	.11	.09	1.24	.61	.33	1.35	.26	.12	.09
AC-FT	3130	5210	2680	4450	3510	50320	24940	13570	54920	10710	4970	3600

CAL YR 1974	TOTAL	178078	MEAN	488	MAX	7320	MIN	32	CFSM	.64	IN	8.69	AC-FT	353200
WTR YR 1975	TOTAL	91752	MEAN	251	MAX	7250	MIN	31	CFSM	.33	IN	4.48	AC-FT	182000

PEAK DISCHARGE (BASE, 5,000 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-18	0330	8.66	5,380	6-25	0715	12.68	11,400
3-20	0400	8.72	5,450				

06818750 PLATTE RIVER NEAR DIAGONAL, IOWA

LOCATION.--Lat 40°46'02", long 94°24'46", in NE1/4 NW1/4 sec.22, T.69 N., R.31 W., Ringgold County, on left bank at downstream side of bridge on county highway, 2.2 mi (3.5 km) upstream from Turkey Creek, 4.6 mi (7.4 km) southwest of Diagonal, and 4.9 mi (7.9 km) downstream from Gard Creek.

DRAINAGE AREA.--217 mi² (562 km²).

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

GAGE.--Water stage recorder. Datum of gage is 1,095.27 ft (333.84 m) above mean sea level.

AVERAGE DISCHARGE.--7 years, 130 ft³/s (3.682 m³/s), 8.14 in/yr (207 mm/yr), 94,180 acre-ft/yr (116 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 3,040 ft³/s (86.1 m³/s) Mar. 18, gage height, 16.52 ft (5.035 m); minimum daily, 0.90 ft³/s (0.025 m³/s) Aug. 6-8, 10.
Period of record: Maximum discharge, 6,420 ft³/s (182 m³/s) Oct. 12, 1973, gage height, 23.24 ft (7.084 m); minimum daily, 0.21 ft³/s (5.9 dm³/s) Jan. 14, 15, 1969.
Flood of June 1967 reached a stage of 23.16 ft (7.059 m), from flood ark by local resident, discharge, 6,360 ft³/s (180 m³/s).

REVISIONS.--The figures of peak discharge for water year 1969 have been revised as shown in the following paragraph. They supersede figures published in WRD Iowa 1969 and WSP 2119, 1966-70.

REVISED PEAK DISCHARGE.--Apr. 27 (0130) 4,120 ft³/s (19.13 ft); May 8 (0200) 4,210 ft³/s (19.32 ft); July 9 (1530) 4,920 ft³/s; July 18 (0830) 6,110 ft³/s (22.76 ft).

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.9	33	27	6.4	24	35	89	27	93	70	1.7	8.5
2	4.9	16	29	8.0	22	60	61	25	57	54	1.6	7.1
3	4.9	14	31	9.0	21	35	61	25	40	46	1.5	6.5
4	4.9	12	33	8.2	24	26	71	24	30	38	1.2	17
5	4.0	13	35	7.7	35	24	127	22	25	32	1.0	98
6	3.0	12	44	7.1	20	29	127	32	18	28	.90	35
7	2.7	15	57	6.6	17	37	98	171	14	23	.90	16
8	2.2	14	26	6.0	16	50	96	358	13	19	.90	10
9	1.5	13	26	5.7	15	70	267	100	20	16	1.0	8.0
10	2.6	11	16	25	16	40	145	53	57	13	.90	6.6
11	2.6	9.9	11	90	17	30	100	42	2,110	12	1.9	459
12	2.6	4.4	11	70	18	26	74	37	777	11	1.9	127
13	2.6	5.5	8.3	40	15	24	61	30	208	11	4.3	33
14	2.9	5.8	8.1	30	13	22	71	23	130	9.8	9.4	18
15	3.4	6.2	10	20	12	27	89	20	99	8.3	8.2	13
16	4.3	8.1	14	17	13	200	71	18	96	7.1	9.8	11
17	2.2	9.5	20	16	14	1,500	60	16	149	6.3	12	10
18	3.1	11	11	15	15	2,350	57	15	1,700	5.4	16	10
19	2.9	13	8.5	15	16	775	84	14	1,550	4.3	16	9.0
20	2.3	14	6.7	14	17	585	66	15	246	3.7	14	8.5
21	1.8	16	6.0	14	18	267	46	15	180	3.6	12	7.7
22	2.2	17	7.6	13	19	380	39	14	174	3.3	12	6.3
23	2.4	20	7.4	13	20	186	72	13	943	3.2	15	6.3
24	2.6	21	9.0	15	18	122	96	13	1,120	2.9	16	5.2
25	3.0	22	11	25	19	62	59	15	196	2.7	28	3.9
26	3.2	22	8.0	40	20	67	47	17	133	2.4	26	5.8
27	3.4	22	6.5	60	22	510	43	16	167	2.2	20	9.2
28	4.4	23	5.8	50	26	1,040	49	21	103	1.9	16	20
29	4.0	24	5.4	40	-----	232	47	270	93	1.7	58	24
30	5.1	25	6.0	31	-----	124	33	416	83	1.8	38	19
31	41	-----	7.0	27	-----	106	-----	239	-----	1.5	13	-----
TOTAL	138.6	452.4	512.3	744.7	522	9,041	2,406	2,116	10,624	445.1	359.10	1,018.6
MEAN	4.47	15.1	16.5	24.0	18.6	292	80.2	68.3	354	14.4	11.6	34.0
MAX	41	33	57	90	35	2,350	267	416	2,110	70	58	459
MIN	1.5	4.4	5.4	5.7	12	22	33	13	13	1.5	.90	3.9
CFSM	.02	.07	.08	.11	.09	1.35	.37	.31	1.63	.07	.05	.16
IN-	.02	.08	.09	.13	.09	1.55	.41	.36	1.82	.08	.06	.17
AC-FT	275	897	1,020	1,480	1,040	17,930	4,770	4,200	21,070	883	712	2,020

CAL YR 1974 TOTAL 42,888.60 MEAN 118 MAX 6,180 MIN 1.5 CFSM .54 IN 7.35 AC-FT 85,070
WTR YR 1975 TOTAL 28,379.80 MEAN 77.8 MAX 2,350 MIN .90 CFSM .36 IN 4.87 AC-FT 56,290

PEAK DISCHARGE (BASE, 1,200 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-18	1045	16.52	3,040	6-19	0030	15.57	2,680
3-28	0200	12.80	1,740	6-23	2100	13.75	2,020
6-11	1715	15.37	2,600				

PLATTE RIVER BASIN

06819190 EAST FORK ONE HUNDRED AND TWO RIVER NEAR BEDFORD, IOWA

LOCATION.--Lat 40°38'01", long 94°44'41", in NE1/4 NE1/4 sec.9, T.67 N., R.34 W., Taylor County, on left bank at downstream side of bridge of county highway J55, 0.4 mi (0.6 km) upstream from Daugherty Creek, and 2.8 mi (4.5 km) southwest of junction of U.S. Highways 2 and 148 in Bedford.

DRAINAGE AREA.--92.1 mi² (239 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 1,057.51 ft (322.33 m) above mean sea level (levels by Corps of Engineers). Prior to Oct. 1, 1968, at datum 5.00 ft (1.52 m) higher.

AVERAGE DISCHARGE.--16 years, 50.4 ft³/s (1.43 m³/s), 7.43 in/yr (189 mm/yr), 36,510 acre-ft/yr (45.0 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 5,030 ft³/s (142 m³/s) June 11, gage height, 14.04 ft (4.279 m); minimum daily, 0.01 ft³/s (0.0003 m³/s) Aug. 6-13.

Period of record: Maximum discharge, 9,980 ft³/s (283 m³/s) Oct. 11, 1973, gage height, 20.72 ft (6.315 m); maximum gage height, 20.95 ft (6.386 m) Jan. 12, 1960, present datum; no flow at times in 1966-68, 1972.

REMARKS.--Records fair except those for winter period, which are poor. Slight regulation at low flow by low dam used for water supply in Bedford.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.25	21	.20	.75	8.0	100	21	7.9	21	20	.05	1.0
2	.25	6.0	.25	.72	7.0	80	11	9.9	11	16	.04	.82
3	.34	4.5	.20	.59	5.5	50	12	11	7.0	14	.03	1.7
4	.50	3.2	.25	.52	7.0	30	18	8.2	5.3	12	.03	7.1
5	.81	2.3	.30	.52	7.0	20	45	6.6	3.3	10	.02	36
6	.42	1.9	.70	.52	6.0	30	34	46	2.0	11	.01	16
7	.16	1.4	2.0	.52	5.0	50	19	154	1.4	9.5	.01	5.1
8	.16	1.4	4.3	.53	4.0	60	27	55	.93	8.0	.01	2.6
9	.25	2.5	1.3	.76	1.5	50	76	23	6.2	7.0	.01	2.1
10	.16	4.2	1.2	15	1.5	35	35	14	239	6.0	.01	1.6
11	.52	3.8	1.1	50	1.5	15	25	12	2360	5.4	.01	13
12	1.3	2.6	.93	20	1.5	12	20	12	332	4.8	.01	46
13	2.0	1.8	1.0	8.0	1.5	10	19	9.0	67	4.4	.01	6.0
14	.86	.50	1.3	5.0	1.5	8.0	29	7.5	38	4.0	.02	4.1
15	.75	1.2	1.9	5.0	1.5	9.0	33	6.2	31	3.6	.02	2.1
16	.54	2.0	1.8	5.0	1.6	200	23	5.3	36	3.2	.02	1.6
17	.53	1.7	1.6	5.0	1.8	400	19	4.5	33	2.8	.02	.82
18	.44	1.2	1.3	5.2	2.0	290	22	3.7	795	2.4	.02	.30
19	.42	.90	1.3	5.8	2.0	86	26	3.6	323	2.0	.02	.10
20	.43	.52	1.0	6.0	2.0	66	17	2.9	67	1.7	.02	.06
21	.35	.34	.80	6.0	5.0	50	13	4.6	42	1.5	.02	.02
22	.46	.16	.82	4.0	5.5	116	12	3.6	36	1.3	.02	.02
23	.50	.52	.43	3.0	5.5	49	42	2.9	735	1.1	.94	.02
24	.68	.47	.86	4.0	5.6	30	56	2.8	992	.90	.86	.02
25	.49	.25	.66	20	6.2	18	28	21	92	.70	2.3	.02
26	.40	.16	.43	50	7.0	12	20	17	234	.50	.98	.02
27	.43	.25	.36	25	8.0	345	18	4.0	72	.30	.55	.12
28	.69	.25	.52	20	20	390	27	28	35	.20	.53	6.6
29	1.9	.08	.52	15	---	51	18	34	25	.12	10	3.0
30	26	.15	.52	10	---	25	11	616	20	.09	7.2	2.1
31	68	---	.61	9.0	---	26	---	86	---	.06	3.3	---
TOTAL	110	67	30	301	132	2713	776	1222	6662	154	27	160
MEAN	3.58	2.24	.98	9.72	4.72	87.5	25.9	39.4	222	4.99	.87	5.33
MAX	68	21	4.3	50	20	400	76	616	2360	20	10	46
MIN	.16	.08	.20	.52	1.5	8.0	11	2.8	.93	.06	.01	.02
CFSM	.04	.02	.01	.11	.05	.95	.28	.43	2.41	.05	.009	.06
IN.	.04	.03	.01	.12	.05	1.10	.31	.49	2.69	.06	.01	.06
AC-FT	220	133	60	598	262	5380	1540	2420	13210	307	54	317

CAL YR 1974 TOTAL 20955.97 MEAN 57.4 MAX 4930 MIN .08 CFSM .62 IN 8.46 AC-FT 41570
WTR YR 1975 TOTAL 12357.26 MEAN 33.9 MAX 2360 MIN .01 CFSM .37 IN 4.99 AC-FT 24510

PEAK DISCHARGE (BASE, 2,000 FT³/S).--June 11 (0300) 5,030 ft³/s (14.04 ft); June 23 (2200) 2,760 ft³/s (10.33 ft).

GRAND RIVER BASIN

153

06897950 ELK CREEK NEAR DECATUR CITY, IOWA
(Hydrologic bench-mark station)

LOCATION.--Lat 40°43'18", long 93°56'12", near the southeast corner sec.34, T.69 N., R.27 W., Decatur County, at right downstream corner of bridge on county highway, 1,000 ft (305 m) downstream from West Elk Creek, 5.2 mi (8.4 km) upstream from mouth, and 5.7 mi (9.2 km) southwest of Decatur City.

DRAINAGE AREA.--52.5 mi² (136 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 924.70 ft (281.85 m) above mean sea level. Oct. 1, 1967, to Sept. 30, 1974, at datum 10.00 ft (3.05 m) higher.

AVERAGE DISCHARGE.--8 years, 32.4 ft³/s (0.92 m³/s), 8.41 in/yr (214 mm/yr), 23,550 acre-ft/yr (29.0 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,010 ft³/s (28.6 m³/s) May 7, gage height, 16.39 ft (4.996 m); no flow for many days in October, July and August.

Period of record: Maximum discharge, 8,130 ft³/s (230 m³/s) Sept. 12, 1972, gage height, 15.41 ft (4.697 m), datum then in use, from rating curve extended above 5,300 ft³/s (150 m³/s) on basis of step-backward computation; no flow at times most years.

Flood of June 14, 1967, reached a stage of 18.35 ft (5.593 m), datum in use prior to Oct. 1, 1974, discharge, 15,000 ft³/s (425 m³/s), estimated from rating curve extended above 5,300 ft³/s (150 m³/s) on basis of step-backward computation.

Flood of Aug. 6, 1959, reached a stage between 20.5 and 22.5 ft (6.25 and 6.86 m), datum in use prior to Oct. 1, 1974, 300 ft (91 m) downstream from information by assistant county engineer, discharge not determined.

REMARKS.--Records good except those for winter period, which are poor. Records of chemical, biological and periodic suspended-sediment analyses for the current year are published in Part 2 of this report.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	55	10	12	24	23	28	18	18	4.6	0	.10
2	0	24	9.0	11	23	18	23	18	12	4.4	0	.03
3	0	21	8.0	10	24	12	29	18	9.5	3.8	0	.71
4	0	20	7.0	11	25	8.6	37	15	7.7	3.4	0	54
5	0	17	6.6	11	21	7.6	47	14	6.6	2.8	0	92
6	.10	16	11	11	17	8.0	32	18	5.4	2.9	0	10
7	.10	14	40	11	15	9.5	24	75	4.8	1.7	0	3.7
8	.10	14	22	10	14	11	59	123	4.2	1.3	0	9.9
9	.10	14	15	15	13	10	120	33	22	.86	0	2.1
10	.18	18	10	140	13	10	46	22	9.9	.52	0	.71
11	.33	27	5.0	100	12	9.5	34	20	115	.42	0	219
12	.64	20	4.1	70	12	9.0	25	18	39	.34	0	35
13	1.0	17	3.8	40	11	8.5	21	14	17	.30	.03	13
14	.79	16	5.0	30	11	8.7	46	12	12	.24	.42	7.5
15	.71	14	20	25	11	45	33	9.9	11	.21	.27	5.8
16	.71	14	15	20	11	220	26	8.0	11	.15	.04	5.4
17	.86	15	12	19	12	313	20	7.0	12	.21	.01	4.6
18	1.0	15	11	22	14	137	62	6.2	156	.09	0	4.3
19	1.0	15	10	26	16	105	46	5.2	62	.02	0	4.2
20	1.2	14	9.5	50	18	78	28	4.6	39	.09	0	2.9
21	.80	13	10	30	30	62	22	4.3	35	.05	0	1.9
22	.60	13	11	25	110	75	20	4.3	31	.02	.01	1.5
23	.40	13	13	22	100	45	123	4.3	110	.21	.01	1.2
24	.25	13	10	50	120	33	70	4.3	40	.02	.02	.86
25	.01	12	8.0	85	170	36	38	4.2	56	0	.37	.64
26	.01	12	7.3	59	70	36	31	6.2	18	0	.16	.51
27	.02	12	7.0	45	40	252	31	6.2	50	0	.01	.47
28	.10	12	7.6	37	30	122	40	12	16	0	.07	3.5
29	.18	12	8.5	30	-----	51	24	53	6.8	0	22	3.9
30	15	12	10	27	-----	39	20	170	5.6	0	2.2	1.9
31	187	-----	9.0	25	-----	34	-----	39	-----	0	.27	-----
TOTAL	213.19	504	335.4	1,079	987	1,836.4	1,206	766.7	942.5	28.65	25.89	491.33
MEAN	6.88	16.8	10.8	34.8	35.3	59.2	40.2	24.7	31.4	.92	.84	16.4
MAX	187	55	40	140	170	313	123	170	156	4.6	22	219
MIN	0	12	3.8	10	11	7.6	20	4.2	4.2	0	0	.03
CFSM	.13	.32	.21	.66	.67	1.13	.77	.47	.60	.02	.02	.31
IN.	.15	.36	.24	.76	.70	1.30	.85	.54	.67	.02	.02	.35
AC-FT	423	1,000	665	2,140	1,960	3,640	2,390	1,520	1,870	57	51	975

CAL YR 1974 TOTAL 10,712.63 MEAN 29.3 MAX 1,700 MIN 0 CFSM .56 IN 7.59 AC-FT 21,250
WTR YR 1975 TOTAL 8,416.06 MEAN 23.1 MAX 313 MIN 0 CFSM .44 IN 6.96 AC-FT 16,690

PEAK DISCHARGE (BASE, 500 FT³/S)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-31	0100	15.14	675	5-7	2330	16.39	1,010
3-16	--	--	* 800	6-23	1900	14.98	635
3-17	1830	15.77	832	9-11	1145	14.87	608
3-27	1615	14.76	582				

* About.

GRAND RIVER BASIN

06898000 THOMPSON RIVER AT DAVIS CITY, IOWA

LOCATION.--Lat 40°38'25", long 93°48'29", in SE1/4 SE1/4 sec.35, T.68 N., R.26 W., Decatur County, on right bank 15 ft (5 m) downstream from bridge on U.S. Highway 69 at Davis City, 2.6 mi (4.2 km) upstream from Dickersons Branch, and 5.2 mi (8.4 km) upstream from Iowa-Missouri State line.

DRAINAGE AREA.--701 mi² (1,816 km²).

PERIOD OF RECORD.--May 1918 to July 1925, July 1941 to current year. Monthly discharge only for some periods, published in WSP 1310. Prior to October 1918, published as "Grand River".

GAGE.--Water-stage recorder. Datum of gage is 874.04 ft (266.41 m) above mean sea level. May 14, 1918, to July 2, 1925, July 14, 1941, to Feb. 24, 1942, nonrecording gage, and Feb. 25, 1942, to Feb. 8, 1967, water-stage recorder at same site at datum 2.00 ft (0.61 m) higher.

AVERAGE DISCHARGE.--40 years (1918-24, 1941-75), 369 ft³/s (10.5 m³/s), 7.15 in/yr (182 mm/yr), 267,300 acre-ft/yr (330 hm³/yr); median of yearly mean discharges, 300 ft³/s (8.50 m³/s) 5.8 in/yr (147 mm/yr) 217,000 acre-ft/yr (268 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 4,420 ft³/s (125 m³/s) Mar. 18, gage height, 7.38 ft (2.249 m); minimum daily, 6.2 ft³/s (0.176 m³/s) Oct. 5.

Period of record: Maximum discharge, 24,300 ft³/s (688 m³/s) June 10, 1974, gage height, 19.43 ft (5.922 m), from rating curve extended above 17,000 ft³/s (481 m³/s) on basis of velocity-area study; minimum daily, 0.1 ft³/s (2.8 dm³/s) June 25, 1956.

Flood of Aug. 8, 1885, reached a stage of 22.8 ft (6.95 m), datum in use prior to Feb. 9, 1967, from floodmark, discharge, 30,000 ft³/s (850 m³/s), from rating curve extended as explained above.

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

REVISIONS (WATER YEARS).--WSP 1240: 1918, 1920-21 (M), 1922-24, 1925 (M), 1946-47 (M). WSP 1440: Drainage area. WSP 1710: 1957.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.5	1,070	23	23	60	170	428	223	609	294	26	54
2	6.3	400	16	20	57	200	347	171	304	263	24	47
3	6.4	214	14	19	54	130	255	158	211	225	23	38
4	6.7	122	16	20	52	110	245	149	170	193	21	70
5	6.2	78	18	21	54	100	373	138	153	166	20	494
6	7.5	56	20	22	58	120	399	130	129	155	19	220
7	7.6	43	100	23	50	150	351	180	111	139	18	97
8	6.5	36	115	24	45	180	309	2,310	94	125	17	61
9	6.5	31	80	27	45	160	1,230	2,780	92	111	15	56
10	6.5	32	75	300	42	140	1,280	718	126	98	16	42
11	7.0	47	60	700	40	120	696	418	552	89	16	578
12	8.8	60	49	300	40	110	430	323	2,000	82	15	1,020
13	11	49	45	160	41	120	327	262	1,540	75	25	167
14	13	44	43	150	42	110	327	225	523	70	34	84
15	15	39	70	140	42	100	354	195	328	67	37	53
16	13	36	150	110	42	500	345	170	273	65	51	40
17	13	32	160	85	42	2,100	303	153	240	63	44	34
18	12	30	100	75	42	4,210	381	141	1,120	59	32	31
19	11	29	70	70	44	3,550	458	129	2,620	55	26	29
20	11	28	55	65	50	3,550	376	120	2,400	52	23	26
21	8.2	26	45	60	60	3,050	274	109	757	48	21	23
22	6.5	24	41	56	190	2,470	221	103	403	44	19	21
23	7.6	26	43	53	210	1,660	685	92	342	42	19	20
24	8.8	24	45	50	180	938	1,260	84	1,040	40	18	19
25	8.8	23	46	80	160	591	569	78	684	38	19	20
26	8.2	22	35	100	140	415	387	79	2,520	36	24	20
27	7.6	21	34	120	130	1,030	296	78	2,850	35	26	19
28	6.5	19	33	110	140	3,820	312	82	1,590	34	24	21
29	7.0	19	33	100	-----	2,250	329	127	672	31	29	23
30	15	20	29	80	-----	957	272	1,110	374	29	84	43
31	1,740	-----	30	70	-----	537	-----	1,180	-----	28	69	-----
TOTAL	2,005.7	2,700	1,693	3,233	2,152	33,648	13,819	12,215	24,827	2,851	855	3,470
MEAN	64.7	90.0	54.6	104	76.9	1,085	461	394	828	92.0	27.6	116
MAX	1,740	1,070	160	700	210	4,210	1,280	2,780	2,850	294	84	1,020
MIN	6.2	19	14	19	40	100	221	78	92	28	15	19
CFSM	.09	.13	.08	.15	.11	1.55	.66	.56	1.18	.13	.04	.17
IN.	.11	.14	.09	.17	.11	1.79	.73	.65	1.32	.15	.05	.18
AC-FT	3,980	5,360	3,360	6,410	4,270	66,740	27,410	24,230	49,240	5,650	1,700	6,880

CAL YR 1974 TOTAL 173,301.8 MEAN 475 MAX 17,700 MIN 6.2 CFSM .68 IN 9.20 AC-FT 343,700
WTR YR 1975 TOTAL 103,468.7 MEAN 283 MAX 4,210 MIN 6.2 CFSM .40 IN 5.49 AC-FT 205,200

PEAK DISCHARGE (BASE, 4,500 FT³/S).--No peak above base.

06898400 WELDON RIVER NEAR LEON, IOWA

LOCATION.--Lat 40°41'45", long 93°38'07", in NE1/4 NE1/4 sec.17, T.68 N., R.24 W., Decatur County, on left bank 10 ft (3 m) downstream from bridge on county highway A, 200 ft (61 m) upstream from unnamed creek, 1.3 mi (2.1 km) downstream from Brush Creek, and 6.5 mi (10.5 km) southeast of post office at Leon.

DRAINAGE AREA.--104 mi² (269 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 906.26 ft (276.23 m) above mean sea level.

AVERAGE DISCHARGE.--17 years, 73.0 ft³/s (2.07 m³/s), 9.53 in/yr (242 mm/yr), 52,890 acre-ft/yr (65.2 hm³/yr); median of yearly mean discharges, 51 ft³/s (1.44 m³/s), 6.7 in/yr (170 mm/yr), 36,900 acre-ft/yr (45.5 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 2,660 ft³/s (75.3 m³/s) Apr. 23, gage height, 12.52 ft (3.816 m); no flow for several days in July, August, and September.

Period of record: Maximum discharge, 48,600 ft³/s (1,376 m³/s) Aug. 6, 1959, gage height, 25.27 ft (7.702 m), from rating curve extended above 5,600 ft³/s (159 m³/s) on basis of contracted-opening and flow-over-embankment measurement at gage height 25.27 ft (7.702 m); no flow for several days in 1968 and 1975.

Stage and discharge of the flood of Aug. 6, 1959, are the greatest since at least 1919.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.10	150	12	12	20	20	53	20	23	7.8	0	0
2	.12	41	9.4	15	19	19	34	18	8.8	5.1	0	0
3	.16	23	8.5	17	19	18	34	17	43	3.8	0	1.2
4	.20	20	8.8	16	18	16	52	15	13	1.8	0	23
5	.83	16	10	15	18	14	108	13	3.4	1.3	0	67
6	.58	15	19	14	16	15	110	17	1.1	1.7	0	19
7	.30	13	121	14	14	17	51	24	.50	.88	0	7.6
8	.25	12	80	14	13	18	44	45	.24	.37	0	18
9	.21	11	42	14	14	16	229	23	12	.16	0	7.8
10	.23	15	18	200	15	15	87	15	18	.15	0	5.9
11	.61	39	9.3	100	16	14	51	13	134	.10	0	30
12	1.1	28	8.8	60	17	13	37	11	55	.08	0	38
13	6.8	19	11	33	16	12	31	9.7	16	0	.66	10
14	2.8	17	20	19	14	11	39	8.8	7.9	0	1.3	3.7
15	1.1	15	40	11	13	10	40	7.7	5.2	0	1.5	1.9
16	.88	14	34	7.0	14	300	37	6.6	4.9	0	.49	1.4
17	.68	15	29	6.8	15	700	32	5.7	4.3	0	.21	.83
18	.76	16	25	7.5	16	621	117	4.9	49	0	0	.69
19	.80	17	22	8.0	17	311	102	4.4	58	0	0	.69
20	1.9	13	19	8.2	20	237	50	3.9	12	.51	0	.58
21	1.2	10	18	7.9	40	156	35	4.3	3.8	.07	0	.55
22	.81	9.4	19	7.5	90	498	28	3.3	8.8	.02	0	.42
23	1.2	9.1	20	7.2	60	197	682	2.2	117	.03	0	.54
24	1.2	8.3	18	15	35	160	177	1.9	70	0	0	.45
25	.65	8.2	16	50	22	58	78	2.1	108	0	.98	.64
26	.40	8.6	14	45	16	51	56	2.3	27	0	0	.69
27	2.2	8.5	13	40	14	651	46	1.6	366	0	0	.82
28	1.4	9.4	12	35	13	568	43	5.1	108	0	0	2.1
29	.78	9.9	12	32	---	112	32	7.3	24	0	3.0	1.2
30	7.8	11	12	28	---	62	24	68	13	0	.75	1.1
31	651	---	12	24	---	56	---	41	---	0	0	---
TOTAL	689	601	712	883	614	4966	2539	421	1314	23	8.8	245
MEAN	22.2	20.0	23.0	28.5	21.9	160	84.6	13.6	43.8	.77	.29	8.19
MAX	651	150	121	200	90	700	682	68	366	7.8	3.0	67
MIN	.10	8.2	8.5	6.8	13	10	24	1.6	.24	0	0	0
CFSM	.21	.19	.22	.27	.21	1.54	.81	.13	.42	.007	.003	.08
IN.	.25	.22	.25	.32	.22	1.78	.91	.15	.47	.008	.003	.09
AC-FT	1370	1190	1410	1750	1220	9850	5040	837	2610	47	18	488

CAL YR 1974 TOTAL 24613.55 MEAN 67.4 MAX 2860 MIN .10 CFSM .65 IN 8.80 AC-FT 48820
WTR YR 1975 TOTAL 13020.65 MEAN 35.7 MAX 700 MIN 0 CFSM .34 IN 4.66 AC-FT 25830

PEAK DISCHARGE (BASE, 4,500 FT³/S).--No peak above base.

06903400 CHARITON RIVER NEAR CHARITON, IOWA

LOCATION.--Lat 40°57'12", long 93°15'37", in SW1/4 NE1/4 sec.15, T.71 N., R.21 W., Lucas County, on right bank 15 ft (5 m) downstream from bridge on county highway S43, 0.4 mi (0.6 km) downstream from Wolf Creek, and 5.0 mi (8.0 km) southeast of Chariton.

DRAINAGE AREA.--182 mi² (471 km²).

PERIOD OF RECORD.--October 1965 to current year. Occasional low-flow measurements, water years 1958-60, 1962, 1964.

GAGE.--Water-stage recorder. Datum of gage is 917.96 ft (279.79 m) above mean sea level (levels by U.S. Weather Bureau from a Corps of Engineers bench mark).

AVERAGE DISCHARGE.--10 years, 103 ft³/s (2.92 m³/s), 7.69 in/yr (195 mm/yr), 74,620 acre-ft/yr (92.0 hm³/yr); median of yearly mean discharges, 82 ft³/s (2.32 m³/s), 6.1 in/yr (155 mm/yr), 59,400 acre-ft/yr (73.2 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,670 ft³/s (47.3 m³/s) June 28, gage height, 16.82 ft (5.127 m); minimum daily, 0.24 ft³/s (0.007 m³/s) Oct. 4, 5.

Period of record: Maximum discharge, 6,320 ft³/s (179 m³/s) Aug. 8, 1970, gage height, 20.15 ft (6.142 m); maximum gage height, 20.20 ft (6.157 m) Oct. 12, 1973; minimum daily discharge, 0.1 ft³/s (2.8 dm³/s) Sept. 28, Oct. 2-6, Nov. 5-7, 1966.

Flood in March 1960 reached a stage of about 23 ft (7.0 m), discharge, about 15,000 ft³/s (425 m³/s) and flood of June 5, 1947 reached a stage of 21.65 ft (6.599 m), from floodmark, discharge, 11,000 ft³/s (312 m³/s). A discharge of 0.08 ft³/s (2.3 dm³/s) was measured on Oct. 30, 1963.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.39	329	.80	3.3	18	70	119	36	250	354	1.3	1.5
2	.36	334	.87	3.3	16	80	79	26	110	117	1.3	1.1
3	.30	169	.96	3.5	14	55	53	23	78	43	1.8	2.9
4	.24	45	.88	4.0	14	48	48	21	53	24	2.1	14
5	.24	13	.85	3.7	12	40	121	18	82	17	2.6	112
6	.31	7.7	1.0	3.5	10	45	224	16	34	12	2.8	105
7	.27	5.0	.85	3.6	8.0	50	223	21	16	10	3.3	20
8	.38	4.1	100	3.8	7.0	47	161	248	11	8.3	3.4	21
9	.41	3.2	45	4.0	6.0	44	336	138	12	7.1	3.9	20
10	.38	3.8	50	50	5.5	41	310	73	21	5.2	4.2	11
11	.32	15	12	250	5.0	38	252	49	171	4.2	3.6	191
12	.44	18	9.0	240	4.6	35	132	29	294	3.0	1.8	240
13	.85	10	8.0	170	4.3	32	70	21	188	2.0	1.8	72
14	1.6	7.5	8.5	70	4.0	30	58	15	138	1.7	3.1	25
15	1.1	10	100	35	4.3	35	74	13	39	1.6	2.5	18
16	.89	7.4	180	24	4.7	280	57	11	23	1.4	2.0	10
17	.76	5.3	130	21	6.0	1,100	48	9.2	22	1.3	3.9	6.6
18	.62	4.1	90	19	7.6	1,240	134	7.8	16	1.1	3.4	4.1
19	.42	3.5	40	18	7.0	1,060	224	6.8	25	1.2	2.4	2.9
20	.41	2.7	15	18	6.5	1,270	173	5.8	101	1.4	1.6	3.3
21	.37	2.1	9.0	17	40	839	130	6.1	148	1.3	1.2	2.2
22	.28	1.6	7.0	16	300	495	70	6.7	43	1.0	.83	2.1
23	.25	1.6	6.0	17	150	445	240	5.5	23	1.0	.55	1.4
24	.27	1.4	4.5	18	90	346	560	4.6	19	1.0	.51	2.1
25	.30	1.3	3.7	30	75	265	357	4.4	292	.96	4.5	1.3
26	.27	1.0	3.3	50	67	127	175	4.4	186	1.0	5.7	.56
27	.27	.88	3.0	42	62	250	112	5.3	718	1.0	3.3	.35
28	.28	.88	3.1	40	58	977	102	5.2	1,330	.88	2.1	1.8
29	.31	.77	3.1	32	-----	579	90	12	770	.95	2.2	2.4
30	1.8	.76	3.2	25	-----	512	53	160	1,130	1.1	3.7	2.6
31	364	-----	3.2	21	-----	178	-----	325	-----	1.2	2.7	-----
TOTAL	379.09	1,009.59	926.96	1,255.7	1,006.5	10,653	4,785	1,326.8	6,343	627.89	80.09	898.21
MEAN	12.2	33.7	29.9	40.5	35.9	344	160	42.8	211	20.3	2.58	29.9
MAX	364	334	180	250	300	1,270	560	325	1,330	354	5.7	240
MIN	.24	.76	.80	3.3	4.0	30	48	4.4	11	.88	.51	.35
CFSM	.07	.19	.16	.22	.20	1.89	.88	.24	1.16	.11	.01	.16
IN.	.08	.21	.19	.26	.21	2.18	.98	.27	1.30	.13	.02	.18
AC-FT	752	2,000	1,840	2,490	2,000	21,130	9,490	2,630	12,580	1,250	159	1,780

CAL YR 1974 TOTAL 46,367.35 MEAN 127 MAX 1,750 MIN .19 CFSM .70 IN 9.48 AC-FT 91,970
WTR YR 1975 TOTAL 29,291.83 MEAN 80.3 MAX 1,330 MIN .24 CFSM .44 IN 5.99 AC-FT 58,100

PEAK DISCHARGE (BASE, 1,200 FT³/S).--Mar. 18 (0630) 1,360 ft³/s (16.27 ft); June 28 (0345) 1,670 ft³/s (16.82 ft).

06903700 SOUTH FORK CHARITON RIVER NEAR PROMISE CITY, IOWA

LOCATION.--Lat 40°49'02", long 93°11'32", in SW1/4 SW1/4 sec.5, T.69 N., R.20 W., Wayne County, on right bank 20 ft (6 m) downstream from bridge on county highway S50, 1.3 mi (2.1 km) downstream from Jordan Creek and 4.3 mi (6.9 km) northwest of Promise City.

DRAINAGE AREA.--168 mi² (435 km²).

PERIOD OF RECORD.--October 1967 to current year. Occasional low-flow measurements, water years 1968-66, published as "near Bethlehem". Monthly discharge measurements for March 1965 to September 1967 available in files of Iowa City district office.

GAGE.--Water-stage recorder. Datum of gage is 913.70 ft (278.50 m) above mean sea level (Corps of Engineers bench mark).

AVERAGE DISCHARGE.--8 years, 102 ft³/s (2.89 m³/s), 8.24 in/yr (209 mm/yr) 73,900 acre-ft/yr (91.1 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 6,580 ft³/s (186 m³/s) June 28, gage height, 20.85 ft (6.355 m); minimum daily, 0.30 ft³/s (0.008 m³/s) Aug. 9.

Period of record: Maximum discharge, 7,660 ft³/s (217 m³/s) Aug. 8, 1970, gage height, 21.32 ft (6.498 m); minimum daily, 0.09 ft³/s (2.5 dm³/s) July 29, 30, 1970.

Flood of Sept. 21, 1966, reached a stage of 25.5 ft (7.77 m), from floodmarks, discharge not determined.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.57	351	4.9	7.0	10	100	64	31	45	84	.56	1.4
2	.47	53	5.2	8.0	9.0	150	46	27	23	37	.65	1.3
3	.48	25	5.5	7.5	8.5	60	42	24	65	21	.59	1.3
4	.69	16	4.4	7.0	8.0	40	53	23	39	13	.52	2.0
5	.74	13	3.7	6.4	7.7	25	122	21	16	9.6	.46	11
6	.91	12	5.3	6.6	7.4	35	154	18	9.7	7.4	.46	8.3
7	.91	10	55	7.2	7.0	50	74	87	6.5	5.3	.46	3.3
8	1.1	9.8	44	7.8	6.8	70	52	554	5.6	4.4	.40	3.6
9	1.0	7.1	35	8.6	6.6	45	361	125	10	3.6	.30	2.3
10	1.0	9.4	29	30	6.4	33	163	54	15	3.0	.46	1.7
11	1.0	38	17	85	6.2	25	81	37	658	2.5	.87	7.2
12	1.5	32	13	92	6.1	20	55	27	260	2.2	1.1	6.9
13	3.5	16	11	50	6.0	24	43	21	52	2.0	1.3	3.6
14	9.2	11	12	26	5.8	30	44	16	23	1.7	1.5	1.7
15	3.7	9.0	60	14	5.7	80	51	15	17	1.5	1.8	1.3
16	2.2	7.8	45	15	6.5	800	44	12	14	1.3	2.0	1.2
17	1.1	7.4	35	14	7.5	947	40	11	14	1.2	3.6	1.2
18	.99	7.4	25	15	9.0	510	314	9.8	12	1.1	2.3	1.0
19	.87	7.1	20	16	11	229	250	8.6	13	.94	1.6	1.0
20	1.0	6.8	15	17	13	178	88	7.4	11	.91	1.4	.89
21	1.0	6.4	12	14	250	132	49	7.4	7.9	.91	1.3	.82
22	.82	5.8	10	13	700	331	37	7.2	7.2	.91	1.2	.74
23	.82	5.8	8.0	12	250	152	582	6.8	16	1.2	1.1	.76
24	.94	5.5	7.0	13	130	120	1,420	5.9	350	1.0	1.1	.73
25	.81	6.2	6.0	45	85	65	196	5.5	1,320	.82	2.8	.69
26	.94	4.6	5.4	60	74	54	95	6.8	316	.69	1.5	.74
27	1.0	4.6	5.2	35	65	750	73	5.9	4,210	.66	1.5	.74
28	1.0	4.6	5.3	22	60	1,180	78	6.7	3,040	.66	1.4	.74
29	1.1	4.4	5.6	16	-----	200	60	28	420	.66	1.7	.74
30	2.0	4.7	6.0	13	-----	86	39	348	699	.66	2.0	.74
31	752	-----	6.5	11	-----	71	-----	147	-----	.66	1.8	-----
TOTAL	795.36	700.4	522.0	694.0	1,768.2	5,592	4,770	1,714.0	11,694.9	212.38	39.83	69.63
MEAN	25.7	23.3	16.8	22.4	53.2	213	159	55.3	390	6.85	1.28	2.32
MAX	752	351	60	92	700	1,180	1,420	564	4,210	84	3.6	11
MIN	.47	4.4	3.7	6.4	5.7	20	37	5.5	5.6	.66	.30	.69
CFSM	.15	.14	.10	.13	.38	1.27	.95	.33	2.32	.04	.008	.01
IN.	.18	.16	.12	.15	.39	1.46	1.06	.38	2.59	.05	.008	.02
AC-FT	1,580	1,390	1,040	1,380	3,510	13,080	9,460	3,400	23,200	421	79	138

CAL YR 1974 TOTAL 40,355.85 MEAN 111 MAX 4,040 MIN .25 CFSM .66 IN 8.94 AC-FT 80,050

WTR YR 1975 TOTAL 29,672.70 MEAN 81.0 MAX 4,210 MIN .30 CFSM .48 IN 6.55 AC-FT 58,660

PEAK DISCHARGE (BASE, 2,000 FT³/S).--Apr. 24 (0915) 2,170 ft³/s (13.06 ft); June 28 (0200) 6,580 ft³/s (20.85 ft).

CHARITON RIVER BASIN

06903880 RATHBUN LAKE NEAR RATHBUN, IOWA

LOCATION.--Lat 40°49'30", long 92°53'33", in NW1/4 NE1/4 sec.35, T.70 N., R.18 W., Appanoose County, at control tower of Rathbun Dam, 1.8 mi (2.9 km) north of Rathbun and 3.9 mi (6.3 km) upstream from Walnut Creek and at mile 142.3 (229.0 km).

DRAINAGE AREA.--549 mi² (1,421 km²).

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

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

EXTREMES.--Current year: Maximum daily contents, 231,000 acre-ft (285 hm³) Mar. 30, 31; maximum elevation, 906.26 ft (276.228 m) Mar. 30; minimum daily contents, 184,000 acre-ft (227 hm³) Dec. 20, 22, Dec. 25 to Jan. 10; minimum elevation, 901.99 ft (274.927 m) Dec. 22.

Period of record: Maximum daily contents, 402,000 acre-ft (496 hm³) May 8-10, 1973; maximum elevation, 918.15 ft (279.852 m) May 9, 1973; minimum daily contents, 100 acre-ft (0.123 hm³) Oct. 1-15, Nov. 17-21, 1969; minimum elevation, 855.40 ft (260.726 m) Oct. 6-10, 1969.

REMARKS.--Reservoir is formed by earthfill dam completed in 1969. Storage began in November 1969. Release is controlled by two hydraulically controlled slide gates, 6 ft (2 m) wide and 12 ft (4 m) high, into forechamber of an 11-ft (3 m) diameter horseshoe conduit through the dam. No dead storage. Maximum design discharge through gates is 5,000 ft³/s (142 m³/s). Uncontrolled notch spillway is concrete overflow section 500 ft (152 m) in length, located about 3,000 ft (914 m) west of the right abutment of the dam and provides emergency discharge into the adjacent drainage area of Little Walnut Creek. Uncontrolled notch spillway is at elevation 926 ft (282 m) above mean sea level, contents 552,000 acre-ft (681 hm³). Conservation pool level is at elevation 904.0 ft (275.54 m), contents 205,000 acre-ft (253 hm³). Reservoir is used for flood control, low-flow augmentation, conservation and recreation.

COOPERATION.--Records furnished by Corps of Engineers.

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

860	400	885	55,730
862	850	890	84,530
865	2,390	895	120,600
870	7,950	900	164,300
875	18,100	905	216,600
880	33,800	910	278,500
		915	351,000

CONTENTS, IN ACRE-FEET, AT 0800, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	200,000	203,000	206,000	184,000	188,000	197,000	230,000	216,000	207,000	230,000	202,000	198,000
2	200,000	205,000	206,000	184,000	188,000	197,000	228,000	214,000	207,000	230,000	202,000	198,000
3	199,000	205,000	205,000	184,000	188,000	197,000	226,000	213,000	207,000	229,000	201,000	198,000
4	199,000	206,000	203,000	184,000	188,000	198,000	224,000	212,000	207,000	227,000	201,000	198,000
5	199,000	205,000	201,000	184,000	188,000	198,000	222,000	210,000	207,000	226,000	201,000	200,000
6	200,000	205,000	200,000	184,000	188,000	198,000	220,000	209,000	207,000	224,000	201,000	200,000
7	199,000	206,000	199,000	184,000	188,000	199,000	219,000	208,000	207,000	222,000	200,000	199,000
8	199,000	205,000	199,000	184,000	188,000	199,000	217,000	208,000	206,000	221,000	200,000	199,000
9	199,000	205,000	197,000	184,000	188,000	199,000	217,000	210,000	206,000	219,000	200,000	199,000
10	199,000	205,000	195,000	184,000	188,000	200,000	218,000	209,000	206,000	217,000	199,000	199,000
11	199,000	206,000	194,000	185,000	188,000	200,000	218,000	208,000	207,000	215,000	199,000	201,000
12	199,000	207,000	193,000	185,000	188,000	200,000	216,000	207,000	208,000	213,000	199,000	201,000
13	199,000	206,000	192,000	185,000	189,000	201,000	214,000	205,000	209,000	211,000	199,000	201,000
14	200,000	206,000	190,000	186,000	188,000	201,000	212,000	205,000	209,000	210,000	199,000	201,000
15	200,000	206,000	189,000	186,000	189,000	201,000	210,000	205,000	210,000	209,000	199,000	201,000
16	200,000	206,000	189,000	186,000	189,000	202,000	208,000	205,000	208,000	208,000	199,000	201,000
17	200,000	206,000	187,000	186,000	189,000	205,000	206,000	204,000	209,000	206,000	200,000	201,000
18	199,000	206,000	186,000	186,000	189,000	210,000	208,000	204,000	209,000	206,000	199,000	200,000
19	199,000	206,000	185,000	187,000	189,000	214,000	209,000	204,000	209,000	205,000	199,000	201,000
20	199,000	206,000	184,000	186,000	189,000	217,000	210,000	204,000	209,000	205,000	199,000	201,000
21	199,000	206,000	185,000	186,000	190,000	219,000	209,000	204,000	208,000	204,000	199,000	200,000
22	199,000	206,000	184,000	186,000	192,000	221,000	210,000	204,000	208,000	204,000	199,000	200,000
23	199,000	206,000	185,000	186,000	194,000	222,000	210,000	204,000	208,000	204,000	198,000	200,000
24	199,000	206,000	185,000	187,000	196,000	223,000	213,000	204,000	208,000	204,000	198,000	200,000
25	199,000	206,000	184,000	187,000	196,000	224,000	216,000	204,000	210,000	204,000	199,000	200,000
26	199,000	205,000	184,000	187,000	196,000	223,000	217,000	204,000	212,000	203,000	199,000	199,000
27	198,000	206,000	184,000	187,000	196,000	221,000	218,000	204,000	213,000	203,000	199,000	199,000
28	198,000	205,000	184,000	187,000	196,000	226,000	219,000	204,000	218,000	203,000	199,000	199,000
29	198,000	205,000	184,000	188,000	-----	230,000	218,000	204,000	226,000	202,000	199,000	199,000
30	198,000	206,000	184,000	188,000	-----	231,000	217,000	205,000	228,000	202,000	199,000	199,000
31	201,000	-----	184,000	188,000	-----	231,000	-----	206,000	-----	202,000	199,000	-----
MAX	201,000	207,000	206,000	188,000	196,000	231,000	230,000	216,000	228,000	230,000	202,000	201,000
MIN	198,000	203,000	184,000	184,000	188,000	197,000	206,000	204,000	206,000	202,000	198,000	198,000
CAL YR 1974	MAX 277,000	MIN 184,000										
WTR YR 1975	MAX 231,000	MIN 184,000										
+	903.57	904.03	902.03	902.35	903.17	906.22	905.07	904.04	906.02	903.72	903.39	903.40
*	+1,000	+5,000	-22,000	+4,000	+8,000	+35,000	-14,000	-11,000	+22,000	-26,000	-3,000	0

CAL YR 1974.....*-38,000

WTR YR 1975.....*-1,000

+ Elevation, in feet, at end of month

* Change in contents, in acre-feet

06903900 CHARITON RIVER NEAR RATHBUN, IOWA

LOCATION.--Lat 40°49'22", long 92°53'22", in SE1/4 NE1/4 sec.35, T.70 N., R.18 W., Appanoose County, on left bank 600 ft (183 m) downstream from outlet of Rathbun Dam, 1.8 mi (2.9 km) north of Rathbun and 3.7 mi (6.0 km) upstream from Walnut Creek and at mile 142.1 (228.6 km).

DRAINAGE AREA.--549 mi² (1,421 km²).

PERIOD OF RECORD.--October 1956 to current year. Monthly discharge only for some periods, published in WSP 1730.

GAGE.--Water-stage recorder. Datum of gage is 847.92 ft (258.45 m) above mean sea level. Prior to Nov. 16, 1960, nonrecording gage and Nov. 17, 1960, to Sept. 30, 1969, recording gage, at site 3.1 mi (5.0 km) downstream at datum 4.65 ft (1.42 m) lower.

AVERAGE DISCHARGE.--19 years, 309 ft³/s (8.75 m³/s) 7.64 in/yr (194 mm/yr), 223,900 acre-ft/yr (276 hm³/yr); median of yearly mean discharges, 230 ft³/s (6.51 m³/s) 5.7 in/yr (145 mm/yr), 167,000 acre-ft/yr (205 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 1,190 ft³/s (33.7 m³/s) Apr. 1, gage height, 12.14 ft (3.700 m); minimum daily, 7.0 ft³/s (0.198 m³/s) Mar. 4.

Period of record: Maximum discharge, 21,800 ft³/s (617 m³/s) Mar. 31, 1960, gage height, 25.3 ft (7.71 m), from floodmark, site and datum then in use; minimum daily, 0.1 ft³/s (2.8 dm³/s) Oct. 12-14, 17-24, 1957, Oct. 11, 1966.

REMARKS.--Records good. Flow regulated by Rathbun Reservoir since Nov. 21, 1969 (see sta. 06903880). Records of discharge include diversion of 13 ft³/s (0.37 m³/s) July 21-30 and 12 ft³/s (0.34 m³/s) July 31 to Sept. 30 from reservoir through fish ponds on left bank downstream from dam. Diverted flow returns to stream 0.1 mi (0.2 km) downstream from gage.

REVISIONS.--WSP 1560: Drainage area.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	11	11	52	8.2	11	1190	720	57	825	21	22
2	11	10	270	52	8.2	11	1180	719	58	824	21	22
3	11	10	771	52	8.2	9.2	1180	716	58	823	20	22
4	12	9.8	763	52	8.3	7.0	1180	715	80	821	20	23
5	13	9.8	759	52	7.9	7.4	1180	714	103	705	20	23
6	12	9.8	757	52	7.7	7.4	1180	709	103	813	20	22
7	11	9.8	763	52	8.0	7.5	1180	708	103	812	20	22
8	11	9.7	759	52	8.0	7.5	1170	366	103	816	20	23
9	11	9.8	751	52	8.1	7.8	793	385	104	822	21	23
10	11	9.9	750	52	8.3	7.8	638	740	104	817	21	23
11	11	9.4	746	52	8.4	8.1	1060	738	104	812	21	23
12	13	9.5	744	52	8.4	8.8	1160	736	103	810	21	23
13	14	10	743	52	8.4	8.7	1160	474	128	809	21	23
14	13	9.8	741	52	8.4	9.3	1160	60	195	621	21	23
15	12	10	743	36	8.4	9.7	1150	60	196	392	21	23
16	12	10	742	21	8.4	10	1150	60	196	393	22	23
17	13	10	738	17	8.6	10	673	60	196	392	22	24
18	12	10	736	13	8.6	9.4	205	60	198	286	22	23
19	11	9.8	544	13	8.7	9.5	202	60	196	48	22	23
20	12	9.3	53	13	9.6	293	201	60	194	61	22	23
21	11	10	52	11	9.5	467	202	60	194	60	22	23
22	11	10	52	8.7	9.5	468	202	60	194	60	22	23
23	11	9.0	52	8.8	9.5	469	208	60	192	41	22	22
24	11	9.3	52	8.8	9.2	466	209	60	192	24	22	21
25	10	9.3	52	7.8	8.8	466	209	60	199	24	23	21
26	10	10	52	8.0	9.2	467	206	59	261	23	22	21
27	10	11	52	8.4	9.7	480	206	59	425	23	22	21
28	11	11	52	8.4	10	502	290	59	437	23	22	21
29	11	11	52	7.8	---	477	630	59	427	23	23	21
30	11	11	52	7.8	---	471	721	59	663	22	22	21
31	12	---	52	7.9	---	735	---	58	---	21	22	---
TOTAL	356	299.0	13456	934.4	242.2	5928.1	22075	9513	5763	13046	663	671
MEAN	11.5	9.97	434	30.1	8.65	191	736	307	192	421	21.4	22.4
MAX	14	11	771	52	10	735	1190	740	663	825	23	24
MIN	10	9.0	11	7.8	7.7	7.0	201	58	57	21	20	21
AC-FT	706	593	26690	1850	480	11760	43790	18870	11430	25880	1320	1330

CAL YR 1974 TOTAL 146606.3 MEAN 402 MAX 1500 MIN 1.3 CFSM .73 IN 9.93 AC-FT 290800
WTR YR 1975 TOTAL 72946.7 MEAN 200 MAX 1190 MIN 7.0 CFSM .36 IN 4.94 AC-FT 144700

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

As the number of streams on which streamflow information is likely to be desired far exceeds the number of stream-gaging stations feasible to operate at one time, the Geological Survey collects limited streamflow data at sites other than stream-gaging stations. When limited streamflow data are collected on a systematic basis over a period of years for use in hydrologic analyses, the site at which the data are collected is called a partial-record station. Data collected at these partial-record stations are usable in low-flow or floodflow analyses, depending on the type of data collected. In addition, discharge measurements are made at other sites not included in the partial-record program. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called either measurements at miscellaneous sites or supplemental low-flow measurements.

Records collected at partial-record stations are presented in two tables. The first is a table of discharge measurements at low-flow partial-record stations, and the second is a table of annual maximum stage and discharge at crest-stage stations. Discharge measurements made at miscellaneous sites for low flow and high flow are given in a third or fourth table.

Low-flow partial-record stations

Measurements of streamflow in the area covered by this report made at low-flow partial-record stations are given in the following table. Most of these measurements were made during periods of base flow when streamflow is primarily from ground-water storage. These measurements, when correlated with the simultaneous discharge of a nearby stream where continuous records are available, will give a picture of the low-flow potentiality of a stream. The column headed "Period of record" shows the period in which measurements were made for most water years at the same, or practically the same, site.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

DISCHARGE MEASUREMENTS MADE AT LOW-FLOW PARTIAL-RECORD STATIONS DURING WATER YEAR 1975

STATION NO.	STATION NAME	LOCATION	DRAINAGE AREA (SQ MI)	PERIOD OF RECORD	MEASUREMENTS DATE	DISCHARGE (CFS)
MINNESOTA RIVER BASIN						
05317650	BLUE EARTH R NR LAKOTA, IOWA.	LAT 4330XX, LONG 9409XX, NEAR SE CORNER OF SEC.31, T.100 N., R.27 W., KOSKUTH COUNTY, AT BRIDGE, 4 MILES NE OF LAKOTA.	64.6	1957-	08-13-75	1.4
05317700	UNION SLOUGH OUTLET NR LAKOTA, IOWA.	LAT 4324XX, LONG 9407XX, NEAR S 1/4 CORNER OF SEC.11, T.99 N., R.28 W., KOSKUTH COUNTY, AT BRIDGE, 2 MILES NW OF LAKOTA.	86.4	1957-	08-13-75	0
05317810	WF BLUE EARTH R BL MINN.-IOWA STATE LINE.	LAT 4326XX, LONG 9404XX, NEAR W 1/4 CORNER OF SEC.36, T.101 N., R.28 W., FARIBAULT COUNTY, AT BRIDGE, 9 MILES NW OF LAKOTA.	154	1957-	08-13-75	2.5
UPPER IOWA RIVER BASIN						
05387300	UPPER IOWA R AT CHESTER, IOWA.	LAT 4330XX, LONG 9222XX, IN SE 1/4 SEC. 10, T.100 N., R.13 W., HOWARD COUNTY, AT BRIDGE AT NORTH CITY LIMITS OF CHESTER.	141	1957-	10-01-74	20
05387400	UPPER IOWA R NR KENDALVILLE, IOWA.	LAT 4328XX, LONG 9202XX, NEAR CENTER OF SEC.21, T.100 N., R.10 W., WINNESHIEK COUNTY, AT BRIDGE, 1 MILE NORTH OF KENDALVILLE.	273	1957-	10-01-74	62
05388100	CANOE CR NR DECORAH, IOWA	LAT 4321XX, LONG 9141XX, IN NE 1/4 SEC. 33, T.99 N., R.7 W., WINNESHIEK COUNTY, AT BRIDGE, 7 MILES NORTHEAST OF DECORAH.	58.9	1957-	10-01-74	23
05388300	BEAR CR NR HIGHLANDVILLE, IOWA.	LAT 4327XX, LONG 9137XX, IN SE 1/4 SEC. 25, T.100 N., R.7 W., WINNESHIEK COUNTY, AT BRIDGE, 3 MILES EAST OF HIGHLANDVILLE.	53.4	1957-	10-01-74	39
VILLAGE CREEK BASIN						
05388350	VILLAGE CR AT VILLAGE CREEK, IOWA.	LAT 4319XX, LONG 9114XX, IN NW 1/4 SEC. 18, T.98 N., R.3 W., ALLAMAKEE COUNTY, AT BRIDGE IN VILLAGE CREEK.	58.5	1957-	10-02-74	35
YELLOW RIVER BASIN						
05388800	YELLOW R AT MYRON, IOWA.	LAT 4310XX, LONG 9132XX, IN NE 1/4 SEC. 3, T.96 N., R.6 W., ALLAMAKEE COUNTY, AT BRIDGE, 0.5 MILE SOUTH OF MYRON.	59.5	1957-	10-02-74	12
05382000	YELLOW R AT ION, IOWA.	LAT 4307XX, LONG 9116XX, IN SW 1/4 SEC. 24, T.96 N., R.4 W., ALLAMAKEE COUNTY, AT BRIDGE, 7.5 MILES NORTH-WEST OF MCGREGOR.	221	*1934-51. 1957-	10-03-74	71

DISCHARGE MEASUREMENTS MADE AT LOW-FLOW PARTIAL-RECORD STATIONS DURING WATER YEAR 1975--CONTINUED

STATION NO.	STATION NAME	LOCATION	DRAINAGE AREA (SQ MI)	PERIOD OF RECORD	MEASUREMENTS DATE	DISCHARGE (CFS)
TURKEY RIVER BASIN						
05411550	N8 TURKEY R NR VERNON SPRINGS, IOWA.	LAT 4321XX, LONG 9211XX, IN SW 1/4 SEC. 31, T.99 N., R.11 W., HOWARD COUNTY, AT BRIDGE, 3 MILES WEST OF VERNON SPRINGS.	40.1	1957-	10-01-74	3.4
05411560	TURKEY R NR VERNON SPRINGS, IOWA	LAT 4320XX, LONG 9207XX, IN NW 1/4 SEC. 2, T.98 N., R.11 W., HOWARD COUNTY, AT BRIDGE, 2.5 MILES SOUTH OF VERNON SPRINGS.	87.0	1957-	10-01-74	7.3
MAQUOKETA RIVER BASIN						
05417540	PLUM CR NR EARLVILLE, IOWA.	LAT 422604, LONG 911358, IN NE 1/4 SEC. 18, T.88 N., R.3 W., DELAWARE COUNTY, AT BRIDGE, 4 MILES SOUTHEAST OF EARLVILLE.	65.7	1957-	10-01-74	28
05417560	MAQUOKETA R NR HOPKINTON, IOWA.	LAT 4222XX, LONG 9116XX, IN NE 1/4 SEC. 11, T.87 N., R.4 W., DELAWARE COUNTY, AT BRIDGE, 2 MILES NORTHWEST OF HOPKINTON.	454	1957-	10-01-74	137
05417580	BUCK CR NR HOPKINTON, IOWA.	LAT 4221XX, LONG 9117XX, IN SE 1/4 SEC. 10, T.87 N., R.4 W., DELAWARE COUNTY, AT BRIDGE, 2.5 MILES NORTHWEST OF HOPKINTON.	50.7	1957-	10-01-74	13
05418200	WHITEWATER CR AT FILLMORE, IOWA.	LAT 421907, LONG 905526, IN NE 1/4 SEC. 26, T.87 N., R.1 W., DUBUQUE COUNTY, AT BRIDGE ON U.S. HIGHWAY 151, 0.5 MILE WEST OF FILLMORE.	91.9	1957-	10-01-74	36
05418300	LYTLE CR NR BERNARD, IOWA.	LAT 421757, LONG 904656, IN SE 1/4 SEC. 36, T.87 N., R.1 E., DUBUQUE COUNTY, AT BRIDGE, 2.5 MILES SOUTHEAST OF BERNARD.	62.7	1957-	10-01-74	35
05418350	LYTLE CR NR FULTON, IOWA.	LAT 4212XX, LONG 9045XX, NEAR CENTER OF SEC.5, T.85 N., R.2 E., JACKSON COUNTY, AT BRIDGE, 5 MILES NORTHWEST OF FULTON.	114	1957-	10-01-74	73
05418400	NF MAQUOKETA R NR FULTON, IOWA.	LAT 4211XX, LONG 9044XX, IN SE 1/4 SEC. 9, T.85 N., R.2 E., JACKSON COUNTY, AT BRIDGE, 3 MILES NORTHWEST OF FULTON.	499	1957-	10-01-74	254
05418650	DEEP CR NR CHARLOTTE, IOWA.	LAT 4200XX, LONG 9024XX, NEAR CENTER OF SEC.17, T.83 N., R.5 E., CLINTON COUNTY, AT BRIDGE, 4 MILES NORTHEAST OF CHARLOTTE.	67.7	1957-	10-01-74	11
05418700	DEEP CR NR PRESTON, IOWA.	LAT 4203XX, LONG 9026XX, NEAR N 1/4 CORNER OF SEC.31, T.84 N., R.5 E., JACKSON COUNTY, AT BRIDGE, 2 MILES WEST OF PRESTON.	91.9	1957-	10-01-74	19
ELK RIVER BASIN						
05420300	ELK R NR ALMONT, IOWA.	LAT 420039, LONG 901205, NEAR CENTER OF SEC.12, T.83 N., R.6 E., CLINTON COUNTY, AT BRIDGE, 2.5 MILES NORTH OF ALMONT.	55.9	1957-	10-01-74	26
WAPSIPINICON RIVER BASIN						
05420540	WAPSIPINICON R NR RICEVILLE, IOWA.	LAT 4320XX, LONG 9234XX, IN NE 1/4 SEC. 12, T.98 N., R.15 W., MITCHELL COUNTY, AT BRIDGE, 2.5 MILES SOUTH OF RICEVILLE.	72.3	1957-	10-01-74	10
05420680	WAPSIPINICON R NR TRIPOLI, IOWA.	LAT 4250XX, LONG 9215XX, IN SW 1/4 SEC. 27, T.93 N., R.12 W., BREMER COUNTY, AT BRIDGE ON STATE HIGHWAY 93, 2 MILES NORTH OF TRIPOLI.	343	1957-	10-01-74	34
05420720	EF WAPSIPINICON R NR TRIPOLI, IOWA.	LAT 4251XX, LONG 9214XX, IN NW 1/4 SEC. 26, T.93 N., R.12 W., BREMER COUNTY, AT BRIDGE ON STATE HIGHWAY 93, 3 MILES NORTH OF TRIPOLI.	144	1957-	10-01-74	15
05420740	WAPSIPINICON R AT TRIPOLI, IOWA.	LAT 4248XX, LONG 9214XX, IN SW 1/4 SEC. 2, T.92 N., R.12 W., BREMER COUNTY, AT BRIDGE, 1.5 MILES EAST OF TRIPOLI.	498	1957-	10-01-74	35

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

DISCHARGE MEASUREMENTS MADE AT LOW-FLOW PARTIAL-RECORD STATIONS DURING WATER YEAR 1975--CONTINUED

STATION NO.	STATION NAME	LOCATION	DRAINAGE AREA (SQ MI)	PERIOD OF RECORD	MEASUREMENTS DATE	DISCHARGE (CFS)
WAPSIPINICON RIVER BASIN--CONTINUED						
05420800	CRANE CR NR DENVER, IOWA.	LAT 423832, LONG 921521, IN NW 1/4 SEC. 3, T.90 N., R.12 W., BLACK HAWK COUNTY, AT BRIDGE, 5 MILES SOUTHEAST OF DENVER.	63.6	1957-	10-01-74	.56
05421800	YANKEE RUN AT WHEATLAND, IOWA.	LAT 414934, LONG 905025, IN NE 1/4 SEC. 16, T.81 N., R.1 E., CLINTON COUNTY, AT BRIDGE, NEAR SOUTH CITY LIMITS OF WHEATLAND.	52.2	1957-	10-02-74	4.9
05421850	MUD CR NR PLAINVIEW, IOWA.	LAT 414202, LONG 904526, IN SW 1/4 SEC. 29, T.80 N., R.2 E., SCOTT COUNTY, AT BRIDGE, 2.5 MILES NORTHEAST OF PLAINVIEW.	109	1957	10-02-74	9.4
05421900	SILVER CR NR DE WITT, IOWA.	LAT 414709, LONG 903313, IN SE 1/4 SEC. 25, T.81 N., R.3 E., CLINTON COUNTY, AT BRIDGE, 2.5 MILES SOUTH OF DE WITT.	60.8	1957-	10-02-74	15
05422100	BROPHYS CR NR LOW MOOR, IOWA.	LAT 414856, LONG 902414, NEAR N 1/4 CORNER SEC.20, T.81 N., R.5 E., CLINTON COUNTY, AT BRIDGE, ON U. S. HIGHWAY 30, 3 MILES NW OF LOW MOOR.	72.8	1957-	10-01-74	18
IOWA RIVER BASIN						
05448300	WF IOWA R NR BRITT, IOWA.	LAT 4306XX, LONG 9345XX, NEAR CENTER OF SEC.25, T.96 N., R.25 W., HANCOCK COUNTY, AT BRIDGE ON U. S. HIGHWAY 18, 3 MILES EAST OF BRITT.	61.5	1957-	08-04-75	2.9
05448400	*WESTMAIN DRAINAGE DITCH 1 & 2 NR BRITT, IOWA.	LAT 4306XX, LONG 9347XX, IN SW 1/4 SEC. 27, T.96 N., R.25 W., HANCOCK COUNTY, AT BRIDGE ON U. S. HIGHWAY 18 NEAR EAST CITY LIMITS OF BRITT.	21.2	1958-	08-04-75	2.4
05451100	SF IOWA R NR ALDEN, IOWA.	LAT 4228XX, LONG 9327XX, NEAR NW CORNER OF SEC.5, T.88 N., R.22 W., HARDIN COUNTY, AT BRIDGE, 5 MILES SOUTHWEST OF ALDEN.	79.5	1957-	08-06-75	2.0
05451150	TIPTON CR NR NEW PROVIDENCE, IOWA.	LAT 4220XX, LONG 9312XX, IN SW 1/4 SEC. 21, T.87 N., R.20 W., HARDIN COUNTY, AT BRIDGE, 3 MILES NORTHWEST OF NEW PROVIDENCE.	81.4	1957-	08-06-75	5.8
05451200	SF IOWA R NR NEW PROVIDENCE, IOWA.	LAT 4219XX, LONG 9310XX, NEAR N 1/4 CORNER SEC.27, T.87 N., R.20 W., HARDIN COUNTY, AT BRIDGE, 3 MILES NORTH OF NEW PROVIDENCE.	223	1957-	08-06-75	12
05451250	BEAVER CR NR ELDORA, IOWA.	LAT 4221XX, LONG 9308XX, NEAR CENTER OF SEC.13, T.87 N., R.20 W., HARDIN COUNTY, AT BRIDGE, 2 MILES SOUTHWEST OF ELDORA.	69.4	1957-	08-06-75	2.6
05451300	HONEY CR NR NEW PROVIDENCE, IOWA.	LAT 4216XX, LONG 9311XX, AT E 1/4 CORNER SEC.16, T.86 N., R.20 W., HARDIN COUNTY, AT BRIDGE, 1.5 MILES SOUTH OF NEW PROVIDENCE.	66.5	1957-	08-06-75	4.1
05451350	HONEY CR AT BANGOR, IOWA.	LAT 4210XX, LONG 9305XX, NEAR W 1/4 CORNER SEC.16, T.85 N., R.19 W., MARSHALL COUNTY, AT BRIDGE, 1 MILE EAST OF BANGOR.	95.6	1950-	08-06-75	11
05451400	MINERVA CR AT CLEMONS, IOWA.	LAT 4208XX, LONG 9309XX, NEAR CENTER OF SEC.35, T.85 N., R.20 W., MARSHALL COUNTY, AT BRIDGE, 1 MILE NORTHEAST OF CLEMONS.	69.6	1957-	08-06-75	4.7
05451450	MINERVA CR NR CLEMONS, IOWA.	LAT 4207XX, LONG 9305XX, NEAR CENTER OF SEC.5, T.84 N., R.19 W., MARSHALL COUNTY, AT BRIDGE, 3.5 MILES EAST OF CLEMONS.	148	1950-	08-06-75	17
05451600	LINN CR AT MARSHALLTOWN, IOWA.	LAT 420222, LONG 925440, IN SW 1/4 SEC. 35, T.84 N., R.18 W., MARSHALL COUNTY, AT BRIDGE ON STATE HIGHWAY 14 IN MARSHALLTOWN.	60.5	1957-	08-05-75	16

DISCHARGE MEASUREMENTS MADE AT LOW-FLOW PARTIAL-RECORD STATIONS DURING WATER YEAR 1975--CONTINUED

STATION NO.	STATION NAME	LOCATION	DRAINAGE AREA (SQ MI)	PERIOD OF RECORD	MEASUREMENTS DATE	DISCHARGE (CFS)
IOWA RIVER BASIN--CONTINUED						
05451650	S TIMBER CR NR LE GRAND, IOWA.	LAT 4159XX, LONG 9250XX, IN SW 1/4 SEC. 21, T.83 N., R.17 W., MARSHALL COUNTY, AT BRIDGE, 4 MILES SOUTHWEST OF LE GRAND.	62.0	1957-	08-05-75	11
05451800	DEER CR AT TOLEDO, IOWA.	LAT 4159XX, LONG 9235XX, NEAR W 1/4 CORNER SEC.15, T.83 N., R.15 W., TAMA COUNTY, AT BRIDGE NEAR NORTHWEST CITY LIMITS OF TOLEDO.	76.4	1957-	08-05-75	12
05451930	SALT CR NR CLUTIER, IOWA.	LAT 4203XX, LONG 9222XX, NEAR E 1/4 CORNER SEC.33, T.84 N., R.13 W., TAMA COUNTY, AT BRIDGE, 3.5 MILES SOUTH-EAST OF CLUTIER.	85.2	1957-	08-05-75	11
05451960	EB SALT CR NR ELBERON, IOWA.	LAT 4204XX, LONG 9220XX, NEAR E 1/4 CORNER SEC.27, T.84 N., R.13 W., TAMA COUNTY, AT BRIDGE, 4 MILES NORTHWEST OF ELBERON.	71.3	1957-	08-05-75	8.8
05452700	BEAR CR AT BROOKLYN, IOWA.	LAT 4145XX, LONG 9226XX, NEAR NE CORNER OF SEC.14, T.80 N., R.14 W., POWESHIEK COUNTY, AT BRIDGE, 1 MILE NORTH OF BROOKLYN.	77.9	1957-	08-06-75	9.0
05454200	CLEAR CR NR OXFORD, IOWA.	LAT 4143XX, LONG 9147XX, IN NE 1/4 SEC. 28, T.80 N., R.8 W., JOHNSON COUNTY, AT BRIDGE, 1 MILE SOUTHEAST OF OXFORD.	55.0	1957-	08-07-75	.43
05455050	OLD MANS CR NR PARNELL, IOWA.	LAT 4136XX, LONG 9157XX, NEAR SW CORNER OF SEC.31, T.79 N., R.9 W., IOWA COUNTY, AT BRIDGE, 3 MILES NORTHEAST OF PARNELL.	81.2	1957-	08-07-75	.21
05455100*	OLD MANS CR NR IOWA CITY, IOWA.	LAT 413623, LONG 913656, IN NW 1/4 SEC. 36, T.79 N., R.7 W., JOHNSON COUNTY, AT BRIDGE, 3 MILES SOUTHWEST OF IOWA CITY.	201	1957-	06-23-75 08-07-75	69 4.7
05455200*	N ENGLISH R NR GUERNSEY, IOWA.	LAT 4138XX, LONG 9224XX, NEAR SW CORNER SEC. 17, T.79 N., R.13 W., POWESHIEK COUNTY, AT BRIDGE, 2.5 MILES WEST OF GUERNSEY.	68.7	1957-	08-07-75	2.7
05455250	N ENGLISH R NR NORTH ENGLISH, IOWA.	LAT 4133XX, LONG 9203XX, NEAR SW CORNER SEC.17, T.78 N., R.10 W., IOWA COUNTY, AT BRIDGE, 3.2 MILES NORTH-EAST OF NORTH ENGLISH.	221	1957-	08-07-75	7.4
05455260	M ENGLISH R NR NORTH ENGLISH, IOWA.	LAT 4132XX, LONG 9204XX, NEAR NE CORNER SEC.25, T.78 N., R.11 W., IOWA COUNTY, AT BRIDGE, 2 MILES NORTHEAST OF NORTH ENGLISH.	66.7	1957-	08-07-75	.23
05455400	S ENGLISH R NR KESWICK, IOWA.	LAT 412813, LONG 921531, IN SW 1/4 SEC. 16, T.77 N., R.12 W., KEOKUK COUNTY, AT BRIDGE, 1.5 MILES NORTHWEST OF KESWICK.	66.2	1957-	08-07-75	.03
05455450	S ENGLISH R NR KINROSS, IOWA.	LAT 4130XX, LONG 9157XX, IN NW 1/4 SEC. 7, T.77 N., R.9 W., WASHINGTON COUNTY, AT BRIDGE, 3 MILES NORTHEAST OF KINROSS.	125	1957-	08-07-75	.74
05457300	OTTER CR NR OTRANTO, IOWA.	LAT 4328XX, LONG 9258XX, IN NW 1/4 SEC. 22, T.100 N., R.18 W., MITCHELL COUNTY, AT BRIDGE, 1.5 MILES NORTH-EAST OF OTRANTO.	60.3	1957-	08-04-75	10
05457350	CEDAR R AT OTRANTO, IOWA.	LAT 4327XX, LONG 9259XX, IN NW 1/4 SEC. 28, T.100 N., R.18 W., MITCHELL COUNTY, AT BRIDGE NEAR EAST CITY LIMITS OF OTRANTO.	656	1957-	08-04-75	102
05457400	DEER CR NR MELTONVILLE, IOWA.	LAT 4326XX, LONG 9305XX, IN SW 1/4 SEC. 27, T.100 N., R.19 W., WORTH COUNTY, AT BRIDGE, 2.5 MILES WEST OF MELTONVILLE.	67.5	1957-	08-04-75	5.9

DISCHARGE MEASUREMENTS MADE AT LOW-FLOW PARTIAL-RECORD STATIONS DURING WATER YEAR 1975--CONTINUED

STATION NO.	STATION NAME	LOCATION	DRAINAGE AREA (SQ MI)	PERIOD OF RECORD	MEASUREMENTS DATE	DISCHARGE (CFS)
IOWA RIVER BASIN--CONTINUED						
05457450	DEER CR AT ST. ANSGAR, IOWA.	LAT 4323XX, LONG 9258XX, IN SW 1/4 SEC. 15, T.99 N., R.18 W., MITCHELL COUNTY, AT BRIDGE, 2.5 MILES NORTH-WEST OF ST. ANSGAR.	97.5	1957-	08-04-75	10
05457600	ROCK CR NR FLOYD, IOWA.	LAT 4313XX, LONG 9249XX, IN NW 1/4 SEC. 24, T.97 N., R.17 W., FLOYD COUNTY, AT BRIDGE, 6 MILES NORTHWEST OF FLOYD.	69.7	1957-	08-05-75	11
05457800	L CEDAR R NR STACEYVILLE, IOWA.	LAT 4328XX, LONG 9247XX, IN NE 1/4 SEC. 19, T.100 N., R.16 W., MITCHELL COUNTY, AT BRIDGE, 2 MILES NORTH OF STACEYVILLE.	77.3	1957-	08-04-75	7.8
05458400	QUARTER SECTION RUN NR DENVER, IOWA.	LAT 423951, LONG 922346, IN NE 1/4 SEC. 29, T.91 N., R.13 W., BREMER COUNTY, AT BRIDGE, 3 MILES SOUTHWEST OF DENVER.	83.5	1957-	08-05-75	0
05458550	BEAVERDAM CR NR ROCKWELL, IOWA.	LAT 4258XX, LONG 9315XX, NEAR EAST 1/4 CORNER SEC.18, T.94 N., R.20 W., CERRO GORDO COUNTY, AT BRIDGE, 3 MILES SOUTHWEST OF ROCKWELL.	72.4	1957-	08-05-75	6.1
05458600	BAILEY CR NR SHEFFIELD, IOWA.	LAT 4254XX, LONG 9316XX, IN NW 1/4 SEC. 1, T.93 N., R.21 W., FRANKLIN COUNTY, AT BRIDGE, 4 MILES NORTHWEST OF SHEFFIELD.	75.2	1957-	08-05-75	6.7
05458750	OTTER CR NR HANSELL, IOWA.	LAT 4246XX, LONG 9307XX, IN NW 1/4 SEC. 29, T.92 N., R.19 W., FRANKLIN COUNTY, AT BRIDGE, 1 MILE WEST OF HANSELL.	92.0	1957-	08-04-75	15
05458770	SQUAW CR NR HANSELL, IOWA.	LAT 4244XX, LONG 9307XX, NEAR CENTER OF SEC.32, T.92 N., R.19 W., FRANKLIN COUNTY, AT BRIDGE, 1.5 MILES SOUTH-WEST OF HANSELL.	24.2	1957-	08-04-75	4.8
05458780	HARTGRAVE CR NR HANSELL, IOWA.	LAT 4244XX, LONG 9305XX, IN NW 1/4 SEC. 34, T.92 N., R.19 W., FRANKLIN COUNTY, AT BRIDGE, 1.5 MILES SOUTH-EAST OF HANSELL.	161	1957-	08-04-75	30
05458790	BOYLAN CR NR BRISTOW, IOWA.	LAT 4246XX, LONG 9256XX, IN NE 1/4 SEC. 23, T.92 N., R.18 W., BUTLER COUNTY, AT BRIDGE, 1 MILE WEST OF BRISTOW.	55.7	1957-	08-05-75	0
05458800	MAYNES CR NR HAMPTON, IOWA.	LAT 4241XX, LONG 9312XX, IN NW 1/4 SEC. 22, T.91 N., R.20 W., FRANKLIN COUNTY, AT BRIDGE ON U. S. HIGHWAY 65, 4 MILES SOUTH OF HAMPTON.	71.0	1957-	08-04-75	5.9
05458850	MAYNES CR NR DUMONT, IOWA.	LAT 4242XX, LONG 9258XX, IN SW 1/4 SEC. 15, T.91 N., R.18 W., BUTLER COUNTY, AT BRIDGE, 4 MILES SOUTH OF DUMONT.	121	1957-	08-05-75	14
05459050	LIME CR NR SCARVILLE, IOWA.	LAT 4327XX, LONG 9335XX, IN SW 1/4 SEC. 28, T.100 N., R.23 W., WINNEBAGO COUNTY, AT BRIDGE, 3.5 MILES SOUTH-EAST OF SCARVILLE.	113	1957-	08-04-75	16
05459200	WINNEBAGO R NR FOREST CITY, IOWA	LAT 4318XX, LONG 9339XX, IN NW 1/4 SEC. 23, T.98 N., R.24 W., WINNEBAGO COUNTY, AT BRIDGE, 2.5 MILES NORTH OF FOREST CITY.	205	1957-	08-04-75	26
05459300	WINNEBAGO R NR FERTILE, IOWA.	LAT 4315XX, LONG 9326XX, NEAR WEST 1/4 CORNER SEC.3, T.97 N., R.22 W., CERRO GORDO COUNTY, AT BRIDGE, 1.5 MILES SOUTHWEST OF FERTILE.	303	1957-	08-05-75	46
05459400	BEAVER CR NR FERTILE, IOWA.	LAT 4316XX, LONG 9327XX, IN SW 1/4 SEC. 28, T.98 N., R.22 W., WORTH COUNTY, AT BRIDGE, 2 MILES NORTHWEST OF FERTILE.	54.9	1957-	08-05-75	6.6

DISCHARGE MEASUREMENTS MADE AT LOW-FLOW PARTIAL-RECORD STATIONS DURING WATER YEAR 1975--CONTINUED

STATION NO.	STATION NAME	LOCATION	DRAINAGE AREA (SQ MI)	PERIOD OF RECORD	MEASUREMENTS DATE	DISCHARGE (CFS)
IOWA RIVER BASIN--CONTINUED						
05460200	WILLOW CR AT MASON CITY, IOWA.	LAT 430946, LONG 931420, NEAR WEST 1/4 CORNER SEC.6, T.96 N., R.20 W., CERRO GORDO COUNTY, AT BRIDGE NEAR WEST CITY LIMITS OF MASON CITY.	86.0	1957-	08-05-75	9.8
05461100	COLD WATER CR NR GREENE, IOWA.	LAT 4253XX, LONG 9251XX, IN SW 1/4 SEC. 10, T.93 N., R.17 W., BUTLER COUNTY, AT BRIDGE, 2.5 MILES SOUTHWEST OF GREENE.	56.8	1957-	08-05-75	0
05461300	FLOOD CR NR ROCKFORD, IOWA.	LAT 4303XX, LONG 9251XX, IN NW 1/4 SEC. 15, T.95 N., R.17 W., FLOYD COUNTY, AT BRIDGE, 5 MILES EAST OF ROCKFORD.	59.3	1957-	08-05-75	0
05461400	FLOOD CR NR PACKARD, IOWA.	LAT 4253XX, LONG 9242XX, IN NE 1/4 SEC. 23, T.93 N., R.16 W., BUTLER COUNTY, AT BRIDGE, 2 MILES NORTHEAST OF PACKARD.	145	1957-	08-05-75	0
05462700	BEAVER CR NR ACKLEY, IOWA.	LAT 4234XX, LONG 9302XX, IN SW 1/4 SEC. 36, T.90 N., R.19 W., FRANKLIN COUNTY, AT BRIDGE NEAR EAST CITY LIMITS OF ACKLEY.	55.5	1957-	08-04-75	3.4
05462800	S BEAVER CR NR PARKERSBURG, IOWA.	LAT 4234XX, LONG 9249XX, IN SE 1/4 SEC. 35, T.90 N., R.17 W., BUTLER COUNTY, AT CULVERT, 2 MILES SOUTHWEST OF PARKERSBURG.	114	1957-	08-05-75	13
05463100	BLACK HAWK CR NR GRUNDY CENTER, IOWA.	LAT 4222XX, LONG 9244XX, NEAR E 1/4 CORNER SEC.8, T.87 N., R.16 W., GRUNDY COUNTY, AT BRIDGE, 2 MILES EAST OF GRUNDY CENTER.	71.0	1957-	08-05-75	8.1
05463200	MOSQUITO CR AT REINBECK, IOWA.	LAT 4220XX, LONG 9237XX, IN SE 1/4 SEC. 20, T.87 N., R.15 W., GRUNDY COUNTY, AT BRIDGE, 1 MILE WEST OF REINBECK.	24.0	1957-	08-05-75	5.8
05463300	BLACK HAWK CR AT REINBECK, IOWA.	LAT 4220XX, LONG 9236XX, NEAR E 1/4 CORNER SEC.21, T.87 N., R.15 W., GRUNDY COUNTY, AT BRIDGE, 1 MILE NORTH OF REINBECK.	135	1957-	08-05-75	20
05463400	N BLACK HAWK CR AT DIKE, IOWA.	LAT 4227XX, LONG 9237XX, NEAR N 1/4 CORNER SEC.8, T.88 N., R.15 W., GRUNDY COUNTY, AT BRIDGE NEAR SOUTH-EAST CITY LIMITS OF DIKE.	76.3	1957-	08-05-75	3.5
05464050	MILLERS CR NR LA PORTE CITY, IOWA.	LAT 4223XX, LONG 9215XX, IN SE 1/4 SEC. 33, T.88 N., R.12 W., BLACK HAWK COUNTY, AT BRIDGE ON U. S. HIGHWAY 218, 6 MILES NW OF LA PORTE CITY.	54.8	1957-	10-21-74 08-04-75 09-24-75	12.1 5.18 4.14
05464100	WOLF CR NR BEAMAN, IOWA.	LAT 421247, LONG 924712, IN SW 1/4 SEC. 36, T.86 N., R.17 W., GRUNDY COUNTY, AT BRIDGE, 2 MILES SOUTHEAST OF BEAMAN.	63.2	1957-	10-21-74 08-05-75 09-26-75	13.1 7.39 3.66
05464150	TWELVE MILE CR NR BUCKINGHAM, IOWA.	LAT 4214XX, LONG 9226XX, IN SW 1/4 SEC. 24, T.86 N., R.14 W., TAMA COUNTY, AT BRIDGE, 1.5 MILES SOUTH OF BUCKINGHAM.	76.8	1957-	10-21-74 08-05-75 09-24-75	21.1 10.8 5.11
05464200	WOLF CR NR BUCKINGHAM, IOWA.	LAT 421533, LONG 922142, IN NE 1/4 SEC. 21, T.86 N., R.13 W., TAMA COUNTY, AT BRIDGE, 4.5 MILES SOUTHEAST OF BUCKINGHAM.	287	1957-	10-21-74 08-05-75 09-24-75	89.0 45.2 21.7
05464250	WOLF CR AT LA PORTE CITY, IOWA.	LAT 4219XX, LONG 9212XX, IN SW 1/4 SEC. 25, T.87 N., R.12 W., BLACK HAWK COUNTY, AT BRIDGE ON U.S. HIGHWAY 218 IN LA PORTE CITY.	327	1957-	10-21-74 06-24-75 08-04-75 09-24-75	93.8 986 61.7 37.3
05464300	SPRING CR NR LA PORTE CITY, IOWA.	LAT 4220XX, LONG 9206XX, IN NW 1/4 SEC. 23, T.87 N., R.11 W., BLACK HAWK COUNTY, AT BRIDGE, 5 MILES NORTHEAST OF LA PORTE CITY.	57.5	1957-	10-21-74 08-04-75 09-24-75	12.4 13.3 6.84
05464320	E BLUE CR NR CENTER POINT, IOWA.	LAT 421141, LONG 914828, IN NW 1/4 SEC. 8, T.85 N., R.8 W., LINN COUNTY, AT BRIDGE, 1 MILE WEST OF CENTER POINT.	27.1	1957-	10-21-74 08-04-75 09-24-75	5.63 3.32 1.62

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

DISCHARGE MEASUREMENTS MADE AT LOW-FLOW PARTIAL-RECORD STATIONS DURING WATER YEAR 1975--CONTINUED

STATION NO.	STATION NAME	LOCATION	DRAINAGE AREA (SQ MI)	PERIOD OF RECORD	MEASUREMENTS DATE	DISCHARGE (CFS)
IOWA RIVER BASIN--CONTINUED						
05464350	BEAR CR AT SHELLSBURG, IOWA.	LAT 420539, LONG 915334, IN NW 1/4 SEC. 15, T.84 N., R.9 W., BENTON COUNTY, AT BRIDGE, 1 MILE WEST OF SHELLSBURG.	55.8	1957-	10-21-74 08-05-75 09-24-75	10.6 2.92 1.80
05464400	BEAR CR NR PALO, IOWA.	LAT 420455, LONG 914740, IN SE 1/4 SEC. 17, T.84 N., R.8 W., LINN COUNTY, AT BRIDGE, 1 MILE NORTH OF PALO.	95.9	1957-	10-21-74 08-05-75 09-24-75	16.4 6.41 4.01
05464460	OTTER CR NR CEDAR RAPIDS, IOWA.	LAT 420357, LONG 914427, IN SE 1/4 SEC. 24, T.84 N., R.8 W., LINN COUNTY, AT BRIDGE, 7 MILES NORTHWEST OF CEDAR RAPIDS.	65.1	1957-	10-21-74 06-24-75 08-04-75 09-24-75	11 119 6.98 3.98
05464550	PRAIRIE CR NR BLAIRSTOWN, IOWA.	LAT 415606, LONG 920751, NEAR NORTH 1/4 CORNER SEC.9, T.82 N., R.11 W., BENTON COUNTY, AT BRIDGE, 3 MILES NORTHWEST OF BLAIRSTOWN.	64.2	1957-	08-06-75	3.8
05464600	PRAIRIE CR AT NORWAY, IOWA.	LAT 415335, LONG 915543, NEAR SW CORNER SEC.19, T.82 N., R.9 W., BENTON COUNTY, AT BRIDGE, 1 MILE SOUTHWEST OF NORWAY.	126	1957-	08-06-75	9.4
05464650	PRAIRIE CR AT CEDAR RAPIDS, IOWA.	LAT 415549, LONG 914034, IN NW 1/4 SEC. 9, T.82 N., R.7 W., LINN COUNTY, AT BRIDGE, 3 MILES SOUTH OF CEDAR RAPIDS.	208	1957-	08-04-75	25
05464700	INDIAN CR AT CEDAR RAPIDS, IOWA.	LAT 415942, LONG 913703, IN SW 1/4 SEC. 13, T.83 N., R.7 W., LINN COUNTY, AT BRIDGE, NEAR NORTHEAST CITY LIMITS OF CEDAR RAPIDS.	72.0	1957-	08-04-75	6.3
05464750	BIG CR AT BERTRAM, IOWA.	LAT 415723, LONG 913135, NEAR EAST 1/4 CORNER SEC.34, T.83 N., R.6 W., LINN COUNTY, AT BRIDGE NEAR EAST CITY LIMITS OF BERTRAM.	81.2	1957-	08-04-75	15
05464800	ROCK CR AT ROCHESTER, IOWA.	LAT 414040, LONG 910952, IN NW 1/4 SEC. 2, T.79 N., R.3 W., CEDAR COUNTY, AT BRIDGE, 0.5 MILE NORTHWEST OF ROCHESTER.	63.4	1957-	08-06-75	4.8
05464850	SUGAR CR NR BENNETT, IOWA.	LAT 414156, LONG 910243, NEAR S 1/4 CORNER OF SEC.26, T.80 N., R.2 W., CEDAR COUNTY, AT BRIDGE, 4.5 MILES SOUTHWEST OF BENNETT.	80.7	1957-	08-06-75	2.5
05464900	MUD CR NR WILTON, IOWA.	LAT 413445, LONG 910217, IN NW 1/4 SEC. 12, T.78 N., R.2 W., MUSCATINE COUNTY, AT BRIDGE, 1 MILE SOUTHWEST OF WILTON.	102	1957-	08-06-75	6.9
05464920	SUGAR CR NR MOSCOW, IOWA.	LAT 413400, LONG 910409, NEAR N 1/4 CORNER OF SEC.15, T.78 N., R.2 W., MUSCATINE COUNTY, AT BRIDGE, 1 MILE SOUTHEAST OF MOSCOW.	218	1957-	06-23-75 08-06-75	55 14
05464940	WAPSINONOC CR AT WEST LIBERTY, IOWA.	LAT 413326, LONG 911519, IN SE 1/4 SEC. 13, T.78 N., R.4 W., MUSCATINE COUNTY, AT BRIDGE ON STATE HIGHWAY 76, 0.5 MILE SE OF WEST LIBERTY.	51.7	1957-	08-06-75	2.1
05464950	WB WAPSINONOC CR AT WEST LIBERTY, IOWA.	LAT 413348, LONG 911613, NEAR E 1/4 CORNER OF SEC.14, T.78 N., R.4 W., MUSCATINE COUNTY, AT BRIDGE, 1 MILE SOUTH OF WEST LIBERTY.	52.5	1957-	08-06-75	.32
05465200	LONG CR NR AINSWORTH, IOWA.	LAT 4116XX, LONG 9130XX, IN SE 1/4 SEC. 26, T.75 N., R.6 W., WASHINGTON COUNTY, AT BRIDGE, 2.5 MILES SOUTHEAST OF AINSWORTH.	68.4	1957-	08-06-75	.39
05465300	LONG CR NR WAPELLO, IOWA.	LAT 4112XX, LONG 9117XX, NEAR SOUTH 1/4 CORNER SEC.23, T.74 N., R.4 W., LOUISA COUNTY, AT BRIDGE, 5 MILES NORTHWEST OF WAPELLO.	146	1957-	08-06-75	1.1
05465600	OTTER CR NR WAPELLO, IOWA.	LAT 410720, LONG 910900, NEAR CENTER OF SEC.13, T.73 N., R.3 W., LOUISA COUNTY, AT BRIDGE, 4 MILES SOUTHEAST OF WAPELLO.	64.7	1957-	08-06-75	5.2

DISCHARGE MEASUREMENTS MADE AT LOW-FLOW PARTIAL-RECORD STATIONS DURING WATER YEAR 1975--CONTINUED

STATION NO.	STATION NAME	LOCATION	DRAINAGE AREA (SQ MI)	PERIOD OF RECORD	MEASUREMENTS DATE	DISCHARGE (CFS)
FLINT RIVER BASIN						
05469700	FLINT R NR BURLINGTON, IOWA.	LAT 405200, LONG 911203, IN NE 1/4 SEC. 16, T.70 N., R.3 W., DES MOINES COUNTY, AT BRIDGE, 6 MILES NW OF BURLINGTON.	107	1958-	09-29-75	7.4
SKUNK RIVER BASIN						
05469800	S SKUNK R NR ELLSWORTH, IOWA.	LAT 4219XX, LONG 9335XX, NEAR N 1/4 CORNER OF SEC.36, T.87 N., R.24 W., HAMILTON COUNTY, AT BRIDGE ON STATE HIGHWAY 175, NEAR WEST CITY LIMITS OF ELLSWORTH.	54.9	1957-	09-29-75	.87
05469850	MUD LAKE DRAINAGE DITCH 71 AT JEWELL, IOWA.	LAT 4219XX, LONG 9338XX, IN NW 1/4 SEC. 28, T.87 N., R.24 W., HAMILTON COUNTY, AT BRIDGE, 1 MILE NORTH OF JEWELL.	64.1	1957-	09-29-75	.62
05469950	S SKUNK R AT RANDALL, IOWA.	LAT 4214XX, LONG 9335XX, IN NE 1/4 SEC. 25, T.86 N., R.24 W., HAMILTON COUNTY, AT BRIDGE, 1 MILE EAST OF RANDALL.	160	1957-	09-29-75	3.3
05470200	SQUAW CR NR STANHOPE, IOWA.	LAT 421234, LONG 934707, NEAR N 1/4 CORNER OF SEC.5, T.85 N., R.25 W., BOONE COUNTY, AT BRIDGE, 5 MILES SOUTH OF STANHOPE.	62.6	1957-	09-29-75	.78
05471050	S SKUNK R AT COLFAX, IOWA.	LAT 414055, LONG 931447, IN NW 1/4 SEC. 1, T.79 N., R.21 W., JASPER COUNTY, AT BRIDGE ON STATE HIGHWAY 117, AT NORTH CITY LIMITS OF COLFAX.	803	1957-	09-29-75	70
05471100	EB INDIAN CR NR NEVADA, IOWA.	LAT 4102XX, LONG 9322XX, NEAR N 1/4 CORNER OF SEC.2, T.83 N., R.22 W., STORY COUNTY, AT BRIDGE, 4 MILES NE OF NEVADA.	65.7	1957-	09-29-75	1.6
05471150	WB INDIAN CR NR IOWA CENTER, IOWA.	LAT 4156XX, LONG 9326XX, IN NW 1/4 SEC. 8, T.82 N., R.22 W., STORY COUNTY, AT BRIDGE, 2 MILES NW OF IOWA CENTER.	65.9	1957-	09-29-75	2.4
05471180	INDIAN CR NR IOWA CENTER, IOWA.	LAT 4155XX, LONG 9325XX, NEAR CENTER OF SEC.18, T.82 N., R.22 W., STORY COUNTY, AT BRIDGE, 1 MILE SW OF IOWA CENTER.	203	1957-	09-29-75	8.8
05471350	CLEAR CR NR MINGO, IOWA.	LAT 4147XX, LONG 9316XX, IN SW 1/4 SEC. 35, T.81 N., R.21 W., JASPER COUNTY, AT BRIDGE, 1 MILE NE OF MINGO.	84.1	1957-	09-29-75	6.4
05471400	ELK CR NR TAINTOR, IOWA.	LAT 4129XX, LONG 9251XX, IN NE 1/4 SEC. 7, T.77 N., R.17 W., MAHASKA COUNTY, AT BRIDGE, 6 MILES SW OF TAINTOR.	69.9	1957-	09-30-75	4.6
05472100	N SKUNK R NR NEWTON, IOWA.	LAT 4147XX, LONG 9302XX, IN NW 1/4 SEC. 35, T.81 N., R.19 W., JASPER COUNTY, AT BRIDGE, 6 MILES NORTH OF NEWTON.	101	1957-	09-29-75	16
05472300	N SKUNK R NR SEARSBORO, IOWA.	LAT 4132XX, LONG 9242XX, NEAR CENTER OF SEC.27, T.78 N., R.16 W., POWESHIEK COUNTY, AT BRIDGE, 3.5 MILES SOUTH OF SEARSBORO.	358	1957-	09-30-75	34
05472400	MIDDLE CR NR ROSE HILL, IOWA.	LAT 412042, LONG 922825, IN NE 1/4 SEC. 33, T.76 N., R.14 W., MAHASKA COUNTY, AT BRIDGE, 2 MILES NW OF ROSE HILL.	58.5	1957-	09-30-75	4.0
05472450	CEDAR CR NR SIGOURNEY, IOWA.	LAT 411842, LONG 921333, IN SE 1/4 SEC. 10, T.75 N., R.12 W., KEOKUK COUNTY, AT BRIDGE, 2 MILES SW OF SIGOURNEY.	92.5	1957-	09-30-75	12
05473000	SKUNK R AT COPPOCK, IOWA.	LAT 4110XX, LONG 9143XX, IN NE 1/4 SEC. 1, T.73 N., R.8 W., JEFFERSON COUNTY, AT BRIDGE ON STATE HIGHWAY 78, 0.5 MILE WEST OF COPPOCK.	2916	*1913-44. 1957-	09-30-75	304

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

DISCHARGE MEASUREMENTS MADE AT LOW-FLOW PARTIAL-RECORD STATIONS DURING WATER YEAR 1975--CONTINUED

STATION NO.	STATION NAME	LOCATION	DRAINAGE AREA (SQ MI)	PERIOD OF RECORD	MEASUREMENTS DATE	DISCHARGE (CFS)
SKUNK RIVER BASIN--CONTINUED						
05473020	EF CROOKED CR NR WINFIELD, IOWA.	LAT 4109XX, LONG 9126XX, IN NE 1/4 SEC. 9, T.73 N., R.5 W., HENRY COUNTY, AT BRIDGE, 2 MILES NORTH OF WINFIELD.	65.3	1958-	09-29-75	3.5
05473050	CROOKED CR NR COPPOCK, IOWA.	LAT 4112XX, LONG 9142XX, IN NE 1/4 SEC. 30, T.74 N., R.7 W., WASHINGTON COUNTY, AT BRIDGE, 2 MILES NE OF COPPOCK.	259	1957-	09-30-75	4.9
05473100	WALNUT CR AT GERMANVILLE, IOWA.	LAT 4106XX, LONG 9146XX, IN SW 1/4 SEC. 27, T.73 N., R.8 W., WASHINGTON COUNTY, AT BRIDGE, 1 MILE WEST OF GERMANVILLE.	66.3	1957-	09-29-75	1.2
05473200	CEDAR CR NR HIGHLAND CENTER, IOWA.	LAT 410630, LONG 922158, IN SW 1/4 SEC. 21, T.73 N., R.13 W., WAPELLO COUNTY, AT BRIDGE, 1 MILE SW OF HIGHLAND CENTER.	73.6	1957-	09-30-75	5.0
05473250	COMPETINE CR BELOW FORKS NR BATAVIA IOWA.	LAT 4102XX, LONG 9207XX, IN NE 1/4 SEC. 21, T.72 N., R.11 W., JEFFERSON COUNTY, AT BRIDGE, 3 MILES NE OF BATAVIA.	68.8	1957-	09-30-75	4.2
05473300*	CEDAR CR NR BATAVIA, IOWA.	LAT 4101XX, LONG 9207XX, IN NW 1/4 SEC. 27, T.72 N., R.11 W., JEFFERSON COUNTY, AT BRIDGE ON U.S. HIGHWAY 30, 2.5 MILES NE OF BATAVIA.	252	1957-	09-30-75	4.9
05473350	L CEDAR CR NR SALEM, IOWA.	LAT 4051XX, LONG 9141XX, IN SW 1/4 SEC. 17, T.70 N., R.7 W., HENRY COUNTY, AT BRIDGE, 4 MILES WEST OF SALEM.	55.0	1968-	09-29-75	.10
05473400	CEDAR CR NR OAKLAND MILLS, IOWA.	LAT 4055XX, LONG 9140XX, IN NW 1/4 SEC. 28, T.71 N., R.7 W., HENRY COUNTY, AT BRIDGE, 3 MILES WEST OF OAKLAND MILLS.	522	1958-	09-29-75	11
05473450	BIG CR AT MT. PLEASANT, IOWA.	LAT 4100XX, LONG 9132XX, IN NW 1/4 SEC. 34, T.72 N., R.6 W., HENRY COUNTY, AT BRIDGE, 3 MILES NE OF MT. PLEASANT.	58.0	1958-	09-29-75	2.7
DEVILS CREEK BASIN						
05474190	DEVILS CR NR VIELE, IOWA.	LAT 403703, LONG 912534, IN SW 1/4 SEC. 10, T.67 N., R.5 W., LEE COUNTY, AT BRIDGE, 1 MILE NE OF VIELE.	20.0	1958-	09-30-75	0
05474200	SUGAR CR NR FRANKLIN, IOWA.	LAT 403954, LONG 912839, IN NE 1/4 SEC. 30, T.68 N., R.5 W., LEE COUNTY, AT BRIDGE, 2 MILES EAST OF FRANKLIN.	75.6	1958-	09-30-75	.76
05474300	SUGAR CR NR VIELE, IOWA.	LAT 403639, LONG 912624, IN SE 1/4 SEC. 9, T.67 N., R.5 W., LEE COUNTY, AT BRIDGE, 0.5 MILE WEST OF VIELE.	109	1958-	09-30-75	2.4
DES MOINES RIVER BASIN						
05476550	JACK CR NR RINGSTED, IOWA.	LAT 4316XX, LONG 9438XX, NEAR S 1/4 CORNER OF SEC.28, T.98 N., R.32 W., EMMET COUNTY, AT BRIDGE, 6 MILES SW OF RINGSTED.	74.8	1957-	08-12-75	0
05476600	SILVER CR NR EMMETTSBURG, IOWA.	LAT 4306XX, LONG 9443XX, NEAR N 1/4 CORNER SEC.34, T.96 N., R.33 W., PALO ALTO COUNTY, AT BRIDGE, 3 MILES SW OF EMMETTSBURG.	61.8	1957-	08-12-75	1.1
05476650	CYLINDER CR NR RODMAN, IOWA.	LAT 4302XX, LONG 9434XX, NEAR S 1/4 CORNER SEC.13, T.95 N., R.32 W., PALO ALTO COUNTY, AT BRIDGE, 2.5 MILES NW OF RODMAN.	88.6	1957-	08-12-75	2.3
05476700	PRAIRIE CR NR WEST BEND, IOWA.	LAT 4255XX, LONG 9427XX, NEAR N 1/4 CORNER SEC.36, T.94 N., R.31 W., PALO ALTO COUNTY, AT BRIDGE, 2.5 MILES SW OF WEST BEND.	61.1	1957-	08-12-75	0

DISCHARGE MEASUREMENTS MADE AT LOW-FLOW PARTIAL-RECORD STATIONS DURING WATER YEAR 1975--CONTINUED

STATION NO.	STATION NAME	LOCATION	DRAINAGE AREA (SQ MI)	PERIOD OF RECORD	MEASUREMENTS DATE	DISCHARGE (CFS)
DES MOINES RIVER BASIN--CONTINUED						
05477600	EF DES MOINES R NR DOLLIVER, IOWA.	LAT 4328XX, LONG 9435XX, IN SW 1/4 SEC. 13, T.100 N., R.32 W., EMMET COUNTY, AT BRIDGE, 2 MILES NE OF DOLLIVER.	196	1957-	08-12-75	0
05477700	EF DES MOINES R NR SWEA CITY, IOWA.	LAT 4319XX, LONG 9425XX, NEAR CENTER OF SEC.8, T.98 N., R.30 W., KOSSUTH COUNTY, AT BRIDGE, 7 MILES SW OF SWEA CITY.	314	1957-	08-12-75	.88
05477800	MUD CR AT BANCROFT, IOWA.	LAT 4318XX, LONG 9412XX, NEAR CENTER OF SEC.19, T.98 N., R.28 W., KOSSUTH COUNTY, AT BRIDGE, 1 MILE EAST OF BANCROFT.	68.1	1957-	08-13-75	0
05478000	EF DES MOINES R NR BURT, IOWA.	LAT 431236, LONG 941035, IN NE 1/4 NE 1/4 SEC.20, T.97 N., R.27 W., KOSSUTH COUNTY, AT BRIDGE, 2.2 MILES NE OF BURT.	462	*1951-74. 1975-	08-13-75	5.7
05478050	BUFFALO CR NR TITONKA, IOWA.	LAT 4314XX, LONG 9359XX, IN NW 1/4 SEC. 12, T.97 N., R.27 W., KOSSUTH COUNTY, AT BRIDGE, 3 MILES EAST OF TITONKA.	47.9	1957-	08-13-75	0
05478100	N BUFFALO CR NR BUFFALO CENTER, IOWA.	LAT 4319XX, LONG 9358XX, IN NW 1/4 SEC. 18, T.98 N., R.26 W., WINNEBAGO COUNTY, AT BRIDGE, 5 MILES SOUTH BUFFALO CENTER.	62.6	1957-	08-13-75	.89
05478150	BLACK CAT CR NR LONE ROCK, IOWA.	LAT 4312XX, LONG 9420XX, NEAR S 1/4 CORNER SEC.24, T.97 N., R.30 W., KOSSUTH COUNTY, AT BRIDGE, 2 MILES SW OF LONE ROCK.	58.2	1957-	08-12-75	.75
05478200	BLACK CAT CR NR ALGONA, IOWA.	LAT 4308XX, LONG 9414XX, NEAR S 1/4 CORNER SEC.11, T.95 N., R.29 W., KOSSUTH COUNTY, AT BRIDGE ON U. S. HIGHWAY 169, 5 MILES NORTH OF ALGONA.	112	1957-	08-13-75	.45
05478350	LOTTS CR NR WEST BEND, IOWA.	LAT 4358XX, LONG 9423XX, NEAR S 1/4 CORNER SEC.9, T.94 N., R.30 W., KOSSUTH COUNTY, AT BRIDGE, 3 MILES EAST OF WEST BEND.	66.2	1957-	08-12-75	2.8
05478400	LOTTS CR AT LIVERMORE, IOWA.	LAT 4252XX, LONG 9411XX, IN NE 1/4 SEC. 18, T.93 N., R.28 W., HUMBOLDT COUNTY, AT BRIDGE NEAR NW CITY LIMITS OF LIVERMORE.	165	1957-	08-13-75	4.4
05480660	BOONE R NR KANAWHA, IOWA.	LAT 4255XX, LONG 9353XX, NEAR NORTH 1/4 CORNER SEC.35, T.94 N., R.26 W., HANCOCK COUNTY, AT BRIDGE, 4 MILES SW OF KANAWHA.	71.4	1957-	08-14-75	1.6
05480700	BOONE R NR RENWICK, IOWA.	LAT 4253XX, LONG 9355XX, IN SW 1/4 SEC. 3, T.93 N., R.26 W., WRIGHT COUNTY, AT BRIDGE, 6 MILES NE OF RENWICK.	134	1957-	08-14-75	2.5
05480720	PRAIRIE CR NR LUVERNE, IOWA.	LAT 4257XX, LONG 9405XX, IN SW 1/4 SEC. 18, T.94 N., R.27 W., KOSSUTH COUNTY, AT BRIDGE, 3 MILES NORTH OF LUVERNE.	68.6	1957-	08-14-75	2.3
05480760	PRAIRIE CR NR RENWICK, IOWA.	LAT 4252XX, LONG 9359XX, IN NE 1/4 SEC. 23, T.93 N., R.27 W., HUMBOLDT COUNTY, AT BRIDGE, 3 MILES NW OF RENWICK.	118	1957-	08-14-75	2.5
05480800	OTTER CR NR GOLDFIELD, IOWA.	LAT 4247XX, LONG 9353XX, IN NE 1/4 SEC. 15, T.92 N., R.26 W., WRIGHT COUNTY, AT BRIDGE, 4 MILES NE OF GOLDFIELD.	75.5	1957-	08-14-75	.74
05480820	BOONE R NR GOLDFIELD, IOWA.	LAT 4243XX, LONG 9357XX, NEAR CENTER OF SEC.5, T.91 N., R.26 W., WRIGHT COUNTY, AT BRIDGE, 1.5 MILES SW OF GOLDFIELD.	419	1957-	08-14-75	9.4

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

DISCHARGE MEASUREMENTS MADE AT LOW-FLOW PARTIAL-RECORD STATIONS DURING WATER YEAR 1975--CONTINUED

STATION NO.	STATION NAME	LOCATION	DRAINAGE AREA (SQ MI)	PERIOD OF RECORD	MEASUREMENTS DATE	DISCHARGE (CFS)
DES MOINES RIVER BASIN--CONTINUED						
05480850	EAGLE CR NR EAGLE GROVE, IOWA.	LAT 4242XX, LONG 9349XX, IN SE 1/4 SEC. 8, T.91 N., R.25 W., WRIGHT COUNTY, AT BRIDGE, 5 MILES NE OF EAGLE GROVE.	62.8	1957-	08-14-75	.93
05481700	BEAVER CR NR BEAVER, IOWA.	LAT 4202XX, LONG 9409XX, NEAR S 1/4 CORNER SEC.6, T.83 N., R.28 W., BOONE COUNTY, AT BRIDGE, 1 MILE SW OF BEAVER.	84.5	1957-	09-30-75	.61
05481800	BEAVER CR NR BERKLEY, IOWA.	LAT 4155XX, LONG 9406XX, IN NW 1/4 SEC. 15, T.82 N., R.28 W., BOONE COUNTY, AT BRIDGE, 2 MILES SOUTH OF BERKLEY.	175	1957-	09-30-75	2.0
05481900	BEAVER CR AT GRANGER, IOWA.	LAT 414539, LONG 935101, IN SW 1/4 SEC. 2, T.80 N., R.26 W., DALLAS COUNTY, AT BRIDGE, 1.5 MILES WEST OF GRANGER.	314	1957-	09-30-75	2.1
05485600	FOURMILE CR NR ANKENY, IOWA	LAT 414354, LONG 933421, NEAR S 1/4 CORNER SEC.18, T.80 N., R.23 W., POLK COUNTY, AT BRIDGE, 1.5 MILES EAST OF ANKENY.	59.3	1957-	09-29-75	.17
05485850	NB NORTH R NR WINTERSET, IOWA.	LAT 4126XX, LONG 9356XX, IN NE 1/4 SEC. 34, T.77 N., R.27 W., MADISON COUNTY, AT BRIDGE, 7 MILES NE OF WINTERSET.	74.7	1957-	08-12-75	2.6
05485900	NORTH R NR WINTERSET, IOWA.	LAT 4126XX, LONG 9355XX, IN NW 1/4 SEC. 36, T.77 N., R.27 W., MADISON COUNTY, AT BRIDGE, 8 MILES NE OF WINTERSET.	203	1957-	08-12-75	7.0
05486100	MIDDLE R NR CASEY, IOWA.	LAT 4130XX, LONG 9429XX, IN SW 1/4 SEC. 36, T.78 N., R.32 W., GUTHRIE COUNTY, AT BRIDGE, 1.5 MILES EAST OF CASEY.	72.8	1957-	08-12-75	4.7
05486150	MIDDLE R AT MIDDLE RIVER, IOWA.	LAT 4120XX, LONG 9414XX, NEAR CENTER OF SEC.6, T.75 N., R.29 W., MADISON COUNTY, AT BRIDGE NEAR SOUTH CITY LIMITS OF MIDDLE RIVER.	164	1957-	08-12-75	12
05486300	CLANTON CR AT EAST PERU, IOWA.	LAT 4114XX, LONG 9355XX, IN NE 1/4 SEC. 11, T.74 N., R.27 W., MADISON COUNTY, AT BRIDGE, NEAR EAST CITY LIMITS OF EAST PERU.	84.5	1957-	08-12-75	.46
05486350	CLANTON CR NR MARTENSDALE, IOWA.	LAT 4121XX, LONG 9345XX, IN NE 1/4 SEC. 32, T.75 N., R.25 W., WARREN COUNTY, AT BRIDGE, 2 MILES SW OF MARTENSDALE.	159	1957-	08-13-75	2.9
05486400	MIDDLE R AT MARTENSDALE, IOWA.	LAT 4122XX, LONG 9344XX, IN SE 1/4 SEC. 21, T.75 N., R.25 W., WARREN COUNTY, AT BRIDGE ON STATE HIGHWAY 92, 0.5 MILE SE OF MARTENSDALE.	451	1957-	08-13-75	23
05486700	SOUTH R NR NEW VIRGINIA, IOWA.	LAT 4113XX, LONG 9344XX, IN NE 1/4 SEC. 16, T.74 N., R.25 W., WARREN COUNTY, AT BRIDGE, 2.5 MILES NORTH OF NEW VIRGINIA.	65.4	1957-	08-13-75	.06
05486900	SQUAW CR NR JAMISON, IOWA.	LAT 4108XX, LONG 9344XX, IN NE 1/4 SEC. 16, T.73 N., R.25 W., CLARKE COUNTY, AT BRIDGE, 0.5 MILE NW OF JAMISON.	60.8	1957-	08-13-75	.12
05487100	SQUAW CR NR INDIANOLA, IOWA.	LAT 4118XX, LONG 9336XX, IN NE 1/4 SEC. 15, T.75 N., R.24 W., WARREN COUNTY, AT BRIDGE, 4 MILES SW OF INDIANOLA.	134	1957-	08-13-75	2.1
05487200	SOUTH R NR INDIANOLA, IOWA.	LAT 4120XX, LONG 9335XX, IN NE 1/4 SEC. 2, T.75 N., R.24 W., WARREN COUNTY, AT BRIDGE, 2 MILES SW OF INDIANOLA.	278	1957-	08-13-75	5.6

DISCHARGE MEASUREMENTS MADE AT LOW-FLOW PARTIAL-RECORD STATIONS DURING WATER YEAR 1975--CONTINUED

STATION NO.	STATION NAME	LOCATION	DRAINAGE AREA (SQ MI)	PERIOD OF RECORD	MEASUREMENTS DATE	DISCHARGE (CFS)
DES MOINES RIVER BASIN--CONTINUED						
05487400	OTTER CR NR NORWOOD, IOWA.	LAT 4109XX, LONG 9332XX, IN SW 1/4 SEC. 5, T.73 N., R.23 W., LUCAS COUNTY, AT BRIDGE, 3 MILES NW OF NORWOOD.	102	1957-	08-13-75	.007
05487450	OTTER CR NR MILO, IOWA.	LAT 411702, LONG 932909, IN NE 1/4 SEC. 22, T.75 N., R.23 W., WARREN COUNTY, AT BRIDGE ON STATE HIGHWAY 205, 2 MILES WEST OF MILO.	155	1957-	08-13-75	1.4
05487700	WHITE BREAST CR NR WOODBURN, IOWA.	LAT 405836, LONG 933514, IN SE 1/4 SEC. 2, T.71 N., R.24 W., CLARKE COUNTY, AT BRIDGE, 2 MILES SOUTH OF WOODBURN.	82.9	1957-	08-12-75	1.3
05487800*	WHITE BREAST CR AT LUCAS, IOWA.	LAT 4101XX, LONG 9320XX, IN NE 1/4 SEC. 23, T.72 N., R.23 W., LUCAS COUNTY, AT BRIDGE ON U.S. HIGHWAY 65, NEAR SOUTH CITY LIMITS OF LUCAS.	128	1957-	08-12-75	0.13
05487900	WHITE BREAST CR NR NEWBERN, IOWA.	LAT 4110XX, LONG 9321XX, IN SE 1/4 SEC. 35, T.74 N., R.22 W., WARREN COUNTY, AT BRIDGE, 2 MILES WEST OF NEWBERN.	243	1957-	08-13-75	.47
05488200	ENGLISH CR NR KNOXVILLE, IOWA.	LAT 411615, LONG 930526, NEAR CENTER OF SEC.30, T.75 N., R.19 W., MARION COUNTY, AT BRIDGE, 3 MILES SOUTH OF KNOXVILLE.	73.0	1957-	08-12-75	.40
05488300	ENGLISH CR NR HARVEY, IOWA.	LAT 4120XX, LONG 9257XX, NEAR E 1/4 CORNER SEC.5, T.75 N., R.18 W., MARION COUNTY, AT BRIDGE, 1.5 MILES NW OF HARVEY.	108	1957-	08-12-75	2.5
05488550	CEDAR CR AT MELROSE, IOWA.	LAT 4058XX, LONG 9303XX, IN SW 1/4 SEC. 4, T.71 N., R.19 W., MONROE COUNTY, AT BRIDGE NEAR SOUTH CITY LIMITS OF MELROSE.	23.9	1957-	08-12-75	.004
05488600	CEDAR CR NR ALBIA, IOWA.	LAT 4101XX, LONG 9253XX, IN NE 1/4 SEC. 26, T.72 N., R.18 W., MONROE COUNTY, AT BRIDGE ON U.S. HIGHWAY 34, 4 MILES WEST OF ALBIA.	102	1958-	08-12-75	.25
05488700	CEDAR CR NR LOVILIA, IOWA.	LAT 4107XX, LONG 9256XX, NEAR S 1/4 CORNER SEC.16, T.73 N., R.18 W., MONROE COUNTY, AT BRIDGE, 2 MILES SW OF LOVILIA.	211	1957-	08-12-75	1.1
05488800	N CEDAR CR NR LOVILIA, IOWA.	LAT 4109XX, LONG 9303XX, IN NE 1/4 SEC. 4, T.73 N., R.19 W., MONROE COUNTY, AT BRIDGE, 7.5 MILES NW OF LOVILIA.	61.3	1957-	08-12-75	.04
05488900	N CEDAR CR NR MARYSVILLE, IOWA.	LAT 4111XX, LONG 9301XX, IN SE 1/4 SEC. 26, T.74 N., R.19 W., MARION COUNTY, AT BRIDGE, 3 MILES WEST OF MARYSVILLE.	111	1958-	08-12-75	.82
05489300	N AVERY CR NR CHILLICOTHE, IOWA.	LAT 4106XX, LONG 9233XX, IN SE 1/4 SEC. 26, T.73 N., R.15 W., WAPELLO COUNTY, AT BRIDGE, 1 MILE NW OF CHILLICOTHE.	60.1	1957-	09-30-75	2.7
05489400	S AVERY CR AT CHILLICOTHE, IOWA.	LAT 4105XX, LONG 9232XX, AT E 1/4 CORNER SEC.36, T.73 N., R.15 W., WAPELLO COUNTY, AT BRIDGE, NEAR SOUTH CITY LIMITS OF CHILLICOTHE.	51.6	1957-	09-30-75	4.3
05489900	SOAP CR NR ASH GROVE, IOWA.	LAT 4051XX, LONG 9236XX, IN SW 1/4 SEC. 21, T.70 N., R.15 W., DAVIS COUNTY, AT BRIDGE, 3 MILES SW OF ASH GROVE.	97.3	1958-	10-01-75	.59
05490100	SOAP CR NR FLORIS, IOWA.	LAT 405337, LONG 921553, NEAR CENTER OF SEC.5, T.70 N., R.12 W., DAVIS COUNTY, AT BRIDGE, 4 MILES NE OF FLORIS.	243	1958-	09-29-75	3.2

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

DISCHARGE MEASUREMENTS MADE AT LOW-FLOW PARTIAL-RECORD STATIONS DURING WATER YEAR 1975--CONTINUED

STATION NO.	STATION NAME	LOCATION	DRAINAGE AREA (SQ MI)	PERIOD OF RECORD	MEASUREMENTS DATE	DISCHARGE (CFS)
DES MOINES RIVER BASIN--CONTINUED						
05490200	LICK CR AT KILBOURN, IOWA.	LAT 4048XX, LONG 9158XX, IN SW 1/4 SEC. 1, T.69 N., R.10 W., VAN BUREN COUNTY, AT BRIDGE NEAR EAST CITY LIMITS OF KILBOURN.	82.7	1958-	09-29-75	.74
05490300	CHEQUEST CR NR TROY, IOWA.	LAT 404717, LONG 921101, IN SE 1/4 SEC. 12, T.69 N., R.12 W., DAVIS COUNTY, AT BRIDGE, 3 MILES NE OF TROY.	85.0	1958-	09-29-75	.52
05490400	CHEQUEST CR NR PITTSBURG, IOWA.	LAT 404541, LONG 920057, NEAR CENTER OF SEC.21, T.69 N., R.10 W., DAVIS COUNTY, AT BRIDGE, 1.5 MILES NW OF PITTSBURG.	123	1958-	09-29-75	1.2
05490700	SUGAR CR NR CHARLESTON, IOWA.	LAT 4034XX, LONG 9134XX, IN NW 1/4 SEC. 33, T.67 N., R.6 W., LEE COUNTY, AT BRIDGE, 2 MILES SW OF CHARLESTON.	62.3	1958-	09-30-75	.06
05491000	SUGAR CREEK NR KEOKUK, IOWA.	LAT 402613, LONG 912824, IN NW 1/4 SE 1/4 SEC.7, T.65 N., R.5 W., LEE COUNTY, AT BRIDGE, 6.0 MILES NW OF KEOKUK.	105	*1922-31. 1958-73. 1975-	09-30-75	.25
FOX RIVER BASIN						
05494500	FOX R AT CANTRIL, IOWA.	LAT 4039XX, LONG 9203XX, IN SW 1/4 SEC. 30, T.68 N., R.10 W., VAN BUREN COUNTY, AT BRIDGE ON STATE HIGHWAY 2, 1 MILE NE OF CANTRIL.	161	*1941-51. 1958-	09-29-75	4.6
MONONA-HARRISON DITCH BASIN						
06601500	BIG WHISKEY SLOUGH NR KINGSLEY, IOWA.	LAT 4240XX, LONG 9552XX, NEAR S 1/4 CORNER SEC.25, T.91 N., R.43 W., PLYMOUTH COUNTY, AT BRIDGE, 7 MILES NORTHEAST OF KINGSLEY.	55.3	1957-	10-02-74	2.3
06601600	WF L SIOUX R NR FIELDING, IOWA.	LAT 4239XX, LONG 9552XX, IN NW 1/4 SEC. 1, T.90 N., R.43 W., PLYMOUTH COUNTY, AT BRIDGE, 4 MILES SOUTHWEST OF FIELDING.	135	1957-	10-02-74	6.2
06601700	WF L SIOUX R NR KINGSLEY, IOWA.	LAT 4235XX, LONG 9600XX, IN NW 1/4 SEC. 25, T.90 N., R.44 W., PLYMOUTH COUNTY, AT BRIDGE, 1 MILE WEST OF KINGSLEY.	219	1957-	10-02-74	11
06601800	MUD CR AT MOVILLE, IOWA.	LAT 422928, LONG 960524, IN SW 1/4 SEC. 30, T.89 N., R.44 W., WOODBURY COUNTY, AT BRIDGE, 1 MILE WEST OF MOVILLE.	68.7	1957-	10-02-74	.65
06601900	WF L SIOUX R AT MOVILLE, IOWA.	LAT 422830, LONG 960439, IN SE 1/4 SEC. 31, T.89 N., R.44 W., WOODBURY COUNTY, AT BRIDGE ON U. S. HIGHWAY 20, 0.5 MILE SOUTHWEST OF MOVILLE.	344	1957-	10-02-74	14
06602200	ELLIOT CR NR BRONSON, IOWA.	LAT 422353, LONG 961405, IN NE 1/4 SEC. 31, T.88 N., R.46 W., WOODBURY COUNTY, AT BRIDGE, 1.5 MILES SOUTHWEST OF BRONSON.	58.6	1957-	10-02-74	.62
06602250	BIG WHISKEY CR NR BRONSON, IOWA.	LAT 422404, LONG 961429, IN NE 1/4 SEC. 31, T.88 N., R.46 W., WOODBURY COUNTY, AT BRIDGE, 1.5 MILES SOUTHWEST OF BRONSON.	62.4	1957-	10-02-74	.96
06602300	WOLF CR NR HOLLY SPRINGS, IOWA.	LAT 421806, LONG 960110, IN SW 1/4 SEC. 31, T.87 N., R.44 W., WOODBURY COUNTY, AT BRIDGE, 4 MILES NORTHEAST OF HOLLY SPRINGS.	99.2	1957-	10-02-74	6.0
LITTLE SIOUX RIVER BASIN						
06603600	L SIOUX R NR MONTGOMERY, IOWA.	LAT 4326XX, LONG 9515XX, IN NE 1/4 SEC. 6, T.99 N., R.37 W., DICKINSON COUNTY, AT BRIDGE ON STATE HIGHWAY 9, 2.5 MILES SW OF MONTGOMERY.	118	1958-	10-01-74	.26
06603700	WF L SIOUX R NR LAKE PARK, IOWA.	LAT 4329XX, LONG 9517XX, NEAR N 1/4 CORNER SEC.13, T.100 N., R.38 W., DICKINSON COUNTY, AT BRIDGE, 3 MILES NE OF LAKE PARK.	116	1958-	10-01-74	0

DISCHARGE MEASUREMENTS MADE AT LOW-FLOW PARTIAL-RECORD STATIONS DURING WATER YEAR 1975--CONTINUED

STATION NO.	STATION NAME	LOCATION	DRAINAGE AREA (SQ MI)	PERIOD OF RECORD	MEASUREMENTS DATE	DISCHARGE (CFS)
LITTLE SIOUX RIVER BASIN--CONTINUED						
06603800	WF L SIOUX R NR MONTGOMERY, IOWA.	LAT 4325XX, LONG 9516XX, IN SW 1/4 SEC. 6, T.99 N., R.37 W., DICKINSON COUNTY, AT BRIDGE, 4 MILES SW OF MONTGOMERY.	173	1958-	10-01-74	.39
06603900	L SIOUX R NR MILFORD, IOWA.	LAT 4319XX, LONG 9511XX, NEAR CENTER OF SEC.11, T.98 N., R.37 W., DICKINSON COUNTY, AT BRIDGE, 1.5 MILES SW OF MILFORD.	333	1958-	10-02-74	.90
06604300	MILFORD C (REVISED) AT ARNOLDS PARK, IOWA.	LAT 4322XX, LONG 9508XX, IN NE 1/4 SEC. 29, T.99 N., R.36 W., DICKINSON COUNTY, AT BRIDGE IN ARNOLDS PARK.	125	1958-	10-02-74	0
06604500	OCHEYEDAN R NR BIGELOW, MINN.	LAT 4327XX, LONG 9537XX, IN SE 1/4 SEC. 24, T.100 N., R.41 W., OSCEOLA COUNTY, AT BRIDGE IN IOWA, 4.5 MILES SE OF BIGELOW.	68.7	1958-	10-01-74	.04
06604600	L OCHEYEDAN R NR MAY CITY, IOWA.	LAT 4317XX, LONG 9528XX, IN NE 1/4 SEC. 29, T.98 N., R.39 W., OSCEOLA COUNTY, AT BRIDGE, 3 MILES SOUTH OF MAY CITY.	54.2	1958-	10-01-74	1.5
06604700	OCHEYEDAN R NR MAY CITY, IOWA.	LAT 4316XX, LONG 9527XX, NEAR N 1/4 CORNER SEC.34, T.98 N., R.39 W., OSCEOLA COUNTY, AT BRIDGE, 4 MILES SE OF MAY CITY.	226	1958-	10-01-74	8.6
06604800	STONE CR NR FOSTORIA, IOWA.	LAT 4314XX, LONG 9520XX, IN NW 1/4 SEC. 10, T.97 N., R.38 W., CLAY COUNTY, AT BRIDGE, 9 MILES WEST OF FOSTORIA.	65.4	1958-	10-02-74	1.5
06604900	STONE CR NR EVERLY, IOWA.	LAT 430922, LONG 951458, IN NE 1/4 SEC. 7, T.96 N., R.37 W., CLAY COUNTY, AT BRIDGE, 4 MILES SE OF EVERLY.	81.6	1958-	10-02-74	2.1
06605000	OCHEYEDAN R NR SPENCER, IOWA.	LAT 430744, LONG 951237, IN SW 1/4 SEC. 15, T.96 N., R.37 W., CLAY COUNTY, AT BRIDGE, 3 MILES SW OF SPENCER.	426	1958-	10-02-74	12
06605100	L SIOUX R AT SPENCER, IOWA.	LAT 430813, LONG 950839, IN N 1/2 SEC. 18, T.96 N., R.36 W., CLAY COUNTY, AT BRIDGE ON U.S. HIGHWAY 18 AND 71, IN SPENCER.	990	*1936-42. 1957-	10-02-74	24
06605200	BIG MUDDY CR NR LANGDON, IOWA.	LAT 431149, LONG 950411, IN NW 1/4 SEC. 26, T.97 N., R.36 W., CLAY COUNTY, AT BRIDGE, 1.5 MILES SE OF LANGDON.	59.7	1957-	10-02-74	1.1
06605300	BIG MUDDY CR NR SPENCER, IOWA.	LAT 430828, LONG 950514, IN NW 1/4 SEC. 15, T.96 N., R.36 W., CLAY COUNTY, AT BRIDGE, 3 MILES EAST OF SPENCER.	102	1957-	10-02-74	2.4
06605400	PICKEREL RUN NR SPENCER, IOWA.	LAT 4312XX, LONG 9458XX, IN NW 1/4 SEC. 27, T.97 N., R.35 W., CLAY COUNTY, AT BRIDGE, 9 MILES NE OF SPENCER.	75.7	1957-	10-02-74	0
06605500	LOST ISLAND OUTLET NR DICKENS, IOWA.	LAT 430707, LONG 950158, AT W 1/4 CORNER SEC.19, T.96 N., R.35 W., CLAY COUNTY, AT BRIDGE, 1 MILE SOUTH OF DICKENS.	151	1957-	10-02-74	2.7
06605700	WILLOW CR NR ROSSI, IOWA.	LAT 4259XX, LONG 9510XX, IN SE 1/4 SEC. 4, T.94 N., R.37 W., CLAY COUNTY, AT BRIDGE, 2 MILES SE OF ROSSI.	62.6	1957-	10-02-74	0
06605800	WILLOW CR NR GREENVILLE, IOWA.	LAT 4259XX, LONG 9509XX, NEAR CENTER OF SEC.7, T.94 N., R.36 W., CLAY COUNTY, AT BRIDGE, 3 MILES SOUTH OF GREENVILLE.	90.3	1957-	10-02-74	1.0

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

DISCHARGE MEASUREMENTS MADE AT LOW-FLOW PARTIAL-RECORD STATIONS DURING WATER YEAR 1975--CONTINUED

STATION NO.	STATION NAME	LOCATION	DRAINAGE AREA (SQ MI)	PERIOD OF RECORD	MEASUREMENTS DATE	DISCHARGE (CFS)
LITTLE SIOUX RIVER BASIN--CONTINUED						
06605900	WATERMAN CR NR HARTLEY, IOWA.	LAT 4305XX, LONG 9527XX, IN NE 1/4 SEC. 4, T.95 N., R.39 W., O'BRIEN COUNTY, AT BRIDGE, 6.5 MILES SE OF HARTLEY.	58.4	1958-	10-03-74	.91
06606000	WATERMAN CR NR SUTHERLAND, IOWA.	LAT 4257XX, LONG 9525XX, NEAR CENTER OF SEC.23, T.94 N., R.39 W., O'BRIEN COUNTY, 4.5 MILES SE OF SUTHERLAND.	139	1958-	10-03-74	4.4
06606100	L SIOUX R NR SUTHERLAND, IOWA.	LAT 4256XX, LONG 9525XX, IN NW 1/4 SEC. 26, T.94 N., R.39 W., O'BRIEN COUNTY, AT BRIDGE, 5 MILES SE OF SUTHERLAND.	1803	1958-	10-03-74	44
06606200	MILL CR NR PAULINA, IOWA.	LAT 430134, LONG 954237, NEAR N 1/4 CORNER SEC.29, T.95 N., R.41 W., O'BRIEN COUNTY, AT BRIDGE, 3 MILES NW OF PAULINA.	61.6	1958-	10-03-74	0
06606300	MILL CR NR CHEROKEE, IOWA.	LAT 4247XX, LONG 9533XX, NEAR CENTER OF SEC.15, T.92 N., R.40 W., CHEROKEE COUNTY, AT BRIDGE, ON U.S. HIGHWAY 59, 2 MILES NORTH OF CHEROKEE.	292	1958-	10-03-74	.32
06606400	L SIOUX R AT CHEROKEE, IOWA.	LAT 4245XX, LONG 9532XX, IN E 1/2 SEC. 26, T.92 N., T.40 W., CHEROKEE COUNTY, AT BRIDGE NEAR EAST CITY LIMITS OF CHEROKEE.	2173	1958-	10-03-74	75
06606500	PIERSON CR NR CORRECTIONVILLE, IOWA.	LAT 4229XX, LONG 9548XX, IN NE 1/4 SEC. 33, T.89 N., R.42 W., WOODBURY COUNTY, AT BRIDGE, 1 MILE NW OF CORRECTIONVILLE.	55.1	1957-	10-02-74	3.5
06606800	MAPLE R NR AURELIA, IOWA.	LAT 4243XX, LONG 9529XX, IN NW 1/4 SEC. 8, T.91 N., R.39 W., CHEROKEE COUNTY, AT BRIDGE, 2 MILES NW OF AURELIA.	85.2	1958-	10-03-74	1.4
06606900	MAPLE R NR IDA GROVE, IOWA.	LAT 422155, LONG 952727, IN NW 1/4 SEC. 12, T.87 N., R.40 W., IDA COUNTY, AT BRIDGE, 1 MILE NE OF IDA GROVE.	364	1957-	10-01-74	30
06607100	ODEBOLT CR AT IDA GROVE, IOWA.	LAT 422049, LONG 952803, NEAR CENTER OF SEC.14, T.87 N., R.40 W., IDA COUNTY, AT BRIDGE IN IDA GROVE.	61.1	1957-	10-01-74	7.6
06607400	MAPLE R NR TURIN, IOWA.	LAT 4201XX, LONG 9558XX, IN SW 1/4 SEC. 10, T.83 N., R.44 W., MONONA COUNTY, AT BRIDGE, 1 MILE SE OF TURIN.	741	1957-	10-01-74	90
SOLDIER RIVER BASIN						
06608300	SOLDIER R NR RICKETTS, IOWA.	LAT 4212XX, LONG 9535XX, IN SW 1/4 SEC. 1, T.85 N., R.41 W., CRAWFORD COUNTY, AT BRIDGE, 5 MILES NORTH OF RICKETTS.	90.5	1959-	10-01-74	15
06608350	SOLDIER R NR UTE, IOWA.	LAT 4203XX, LONG 9543XX, IN SE 1/4 SEC. 34, T.84 N., R.42 W., MONONA COUNTY, AT BRIDGE ON STATE HIGHWAY 183, 1 MILE SW OF UTE.	155	1957-	10-01-74	25
06608400	E SOLDIER R NR UTE IOWA.	LAT 4203XX, LONG 9542XX, IN SW 1/4 SEC. 35, T.84 N., R.42 W., MONROE COUNTY, AT BRIDGE NEAR SW CITY LIMITS OF UTE.	97.8	1957-	10-01-74	12
ALLEN DITCH BASIN						
06609220	ALLEN DITCH NR LOVELAND, IOWA.	LAT 4129XX, LONG 9555XX, IN NE 1/4 SEC. 17, T.77 N., R.44 W., POTTAWATAMIE COUNTY, AT BRIDGE, 2 MILES SW OF LOVELAND.	92.1	1957-	10-03-74	2.5

DISCHARGE MEASUREMENTS MADE AT LOW-FLOW PARTIAL-RECORD STATIONS DURING WATER YEAR 1975--CONTINUED

STATION NO.	STATION NAME	LOCATION	DRAINAGE AREA (SQ MI)	PERIOD OF RECORD	MEASUREMENTS DATE	DISCHARGE (CFS)
BOYER RIVER BASIN						
06609260	BOYER R NR EARLY, IOWA.	LAT 4228XX, LONG 9511XX, IN NE 1/4 SEC. 6, T.88 N., R.37 W., SAC COUNTY, AT BRIDGE ON U.S. HIGHWAY 20, 2 MILES NW OF EARLY.	67.5	1957-	10-01-74	4.2
06609300	E BOYER R AT VAIL, IOWA.	LAT 4204XX, LONG 9512XX, IN E 1/2 SEC. 30, T.84 N., R.37 W., CRAWFORD COUNTY, AT BRIDGE NEAR EAST CITY LIMITS OF VAIL.	65.4	1957-	10-01-74	11
06609350	E BOYER R AT DENISON, IOWA.	LAT 4201XX, LONG 9522XX, IN SE 1/4 SEC. 10, T.83 N., R.39 W., CRAWFORD COUNTY, AT BRIDGE ON U.S. HIGHWAY 30, NEAR WEST CITY LIMITS OF DENISON.	130	1957-	10-01-74	24
06609400	BOYER R NR DENISON, IOWA.	LAT 4200XX, LONG 9523XX, IN NE 1/4 SEC. 16, T.83 N., R.39 W., CRAWFORD COUNTY, AT BRIDGE, 2 MILES SW OF DENISON.	517	1957-	10-01-74	66
06609550	BOYER R NR MISSOURI VALLEY, IOWA.	LAT 4131XX, LONG 9554XX, IN SE 1/4 SEC. 28, T.78 N., R.44 W., HARRISON COUNTY, AT BRIDGE, 2 MILES SOUTH OF MISSOURI VALLEY.	1081	1957-	10-03-74	123
06609580	WILLOW CR NR WOODBINE, IOWA.	LAT 4148XX, LONG 9545XX, IN NE 1/4 SEC. 29, T.81 N., R.42 W., HARRISON COUNTY, AT BRIDGE, 5.5 MILES NW OF WOODBINE.	67.0	1957-	10-02-74	7.5
06609670	BOYER R NR LOVELAND, IOWA.	LAT 412758, LONG 955437, IN CENTER OF SEC.4, T.77 N., R.44 W., POTTAWATTAMIE COUNTY, AT BRIDGE, 1 MILE WEST OF LOVELAND.	1084	1957-	10-03-74	131
KEG CREEK BASIN						
06805700	KEG CR AT MINDEN, IOWA.	LAT 412757, LONG 953215, IN SE 1/4 SEC. 15, T.77 N., R.41 W., POTTAWATTAMIE COUNTY, AT BRIDGE, AT EAST CITY LIMITS OF MINDEN.	59.6	1957-	09-26-75	9.7
06805800	KEG CR NR DUMFRIES, IOWA.	LAT 411120, LONG 954059, IN NW 1/4 SEC. 28, T.74 N., R.42 W., POTTAWATTAMIE COUNTY, AT BRIDGE, 3 MILES NE OF DUMFRIES.	131	1957-	09-26-75	21
06805900	KEG CR NR GLENWOOD, IOWA.	LAT 410056, LONG 954559, IN NE 1/4 SEC. 27, T.72 N., R.43 W., MILLS COUNTY, AT BRIDGE, 2 MILES SW OF GLENWOOD.	190	1957-	09-26-75	34
NISHNABOTNA RIVER BASIN						
06807260	W NISHNABOTNA R NR MANNING, IOWA.	LAT 4153XX, LONG 9505XX, IN NW 1/4 SEC. 31, T.82 N., R.26 W., CARROLL COUNTY, AT BRIDGE, 3 MILES SW OF MANNING.	58.6	1957-	09-24-75	5.7
06807280	WF W NISHNABOTNA R NR MANILLA, IOWA.	LAT 4152XX, LONG 9515XX, NEAR W 1/4 CORNER SEC.35, T.82 N., R.38 W., CRAWFORD COUNTY, AT BRIDGE, 1 MILE SOUTH OF MANILLA.	64.2	1960-	09-24-75	10
06807300	WF W NISHNABOTNA R AT HARLAN, IOWA.	LAT 4140XX, LONG 9518XX, IN NE 1/4 SEC. 7, T.79 N., R.38 W., SHELBY COUNTY, AT BRIDGE NEAR NE CITY LIMITS OF HARLAN.	146	1957-	09-24-75	23
06807320	W NISHNABOTNA R AT HARLAN, IOWA.	LAT 4138XX, LONG 9518XX, IN NE 1/4 SEC. 19, T.79 N., R.38 W., SHELBY COUNTY, AT BRIDGE ON STATE HIGHWAY 64, NEAR EAST CITY LIMITS OF HARLAN.	316	1957-	09-24-75	49
06807340	W NISHNABOTNA R AT AVOCA, IOWA.	LAT 412810, LONG 952114, IN NE 1/4 SEC. 17, T.77 N., R.39 W., POTTAWATTAMIE COUNTY, AT BRIDGE ON STATE HIGHWAY 83, NEAR WEST CITY LIMITS OF AVOCA.	357	1957-	09-26-75	65
06807360	EB W NISHNABOTNA R NR RED LINE, IOWA.	LAT 4144XX, LONG 9506XX, IN NE 1/4 SEC. 13, T.80 N., R.37 W., SHELBY COUNTY, AT BRIDGE ON STATE HIGHWAY 64, 3 NE OF RED LINE.	70.3	1957-	09-24-75	9.7

DISCHARGE MEASUREMENTS MADE AT LOW-FLOW PARTIAL-RECORD STATIONS DURING WATER YEAR 1975--CONTINUED

STATION NO.	STATION NAME	LOCATION	DRAINAGE AREA (SQ MI)	PERIOD OF RECORD	MEASUREMENTS DATE	DISCHARGE (CFS)
NISHNABOTNA RIVER BASIN--CONTINUED						
06807380	EB W NISHNABOTNA R NR JACKSONVILLE, IOWA.	LAT 4139XX, LONG 9514XX, IN NE 1/4 SEC. 23, T.79 N., R.38 W., SHELBY COUNTY, AT BRIDGE, 4 MILES WEST OF JACKSONVILLE.	151	1957-	09-24-75	22
06807400	EB W NISHNABOTNA R AT AVOCA, IOWA.	LAT 412835, LONG 951947, IN NE 1/4 SEC. 16, T.77 N., R.39 W., POTTAWATAMIE COUNTY, AT BRIDGE ON STATE HIGHWAY 83 IN AVOCA.	223	1957-	09-26-75	41
06807420	GRAYBILL CR NR MACEDONIA, IOWA.	LAT 4111XX, LONG 9523XX, IN SE 1/4 SEC. 25, T.74 N., R.40 W., POTTAWATAMIE COUNTY, AT BRIDGE, 2 MILES SE OF MACEDONIA.	52.1	1957-	09-26-75	6.7
06807440	FARM CR NR MACEDONIA, IOWA.	LAT 4110XX, LONG 9523XX, IN SE 1/4 SEC. 36, T.74 N., R.40 W., POTTAWATAMIE COUNTY, AT BRIDGE, 3 MILES SE OF MACEDONIA.	104	1957-	09-26-75	16
06807480	INDIAN CR NR HASTINGS, IOWA.	LAT 410151, LONG 953004, IN SE 1/4 SEC. 13, T.72 N., R.41 W., MILLS COUNTY, AT BRIDGE, 0.5 MILE NORTH OF HASTINGS.	67.9	1957-	09-25-75	7.6
06807500	W NISHNABOTNA R AT WHITE CLOUD, IOWA.	LAT 405914, LONG 953140, IN NW 1/4 SEC. 2, T.71 N., R.41 W., MILLS COUNTY, AT BRIDGE, 0.5 MILE NW OF WHITE CLOUD.	967	1918-24 1957-	09-26-75	204
06807600	SILVER CR NR AVOCA, IOWA.	LAT 412507, LONG 952653, IN NE 1/4 SEC. 4, T.76 N., R.40 W., POTTAWATAMIE COUNTY, AT BRIDGE, 7 MILES SW OF AVOCA.	59.2	1957-	09-26-75	12
06807650	SILVER CR NR TREYNOR, IOWA.	LAT 411042, LONG 953434, IN SW 1/4 SEC. 28, T.74 N., R.41 W., POTTAWATAMIE COUNTY, AT BRIDGE, 4 MILES SE OF TREYNOR.	115	1957-	09-26-75	28
06807800	M SILVER CR NR TREYNOR, IOWA.	LAT 411041, LONG 953600, IN SE 1/4 SEC. 30, T.74 N., R.41 W., POTTAWATAMIE COUNTY, AT BRIDGE, 4 MILES SOUTH OF TREYNOR.	74.3	1957-	09-26-75	17
06807900	SILVER CR NR MALVERN, IOWA.	LAT 405656, LONG 953420, IN SW 1/4 SEC. 16, T.71 N., R.41 W., MILLS COUNTY, AT BRIDGE, 4 MILES SOUTH OF MALVERN.	282	1957-	09-26-75	61
06808600	WALNUT CR NR GRISWOLD, IOWA.	LAT 4117XX, LONG 9513XX, IN NW 1/4 SEC. 22, T.74 N., R.38 W., POTTAWATAMIE COUNTY, AT BRIDGE, 5 MILES NW OF GRISWOLD.	61.3	1957-	09-26-75	7.6
06808700	WALNUT CR NR HAWTHORNE, IOWA.	LAT 4058XX, LONG 9522XX, IN NW 1/4 SEC. 17, T.71 N., R.39 W., MONTGOMERY COUNTY, AT BRIDGE, 3 MILES SW OF HAWTHORNE.	140	1957-	09-25-75	15
06808800	WALNUT CR NR RANDOLPH, IOWA.	LAT 404739, LONG 953325, NEAR E 1/4 CORNER SEC.9, T.69 N., R.41 W., FREMONT COUNTY, AT BRIDGE, 5.5 MILES MILES SOUTH OF RANDOLPH.	222	1957-	09-25-75	18
06808850	E NISHNABOTNA R NR AUDUBON, IOWA.	LAT 4147XX, LONG 9451XX, IN NW 1/4 SEC. 6, T.80 N., R.34 W., AUDUBON COUNTY, AT BRIDGE, 5 MILES NE OF AUDUBON.	66.7	1957-	09-24-75	6.4
06808900	E NISHNABOTNA R AT EXIRA, IOWA.	LAT 4135XX, LONG 9454XX, IN NW 1/4 SEC. 4, T.78 N., R.35 W., AUDUBON COUNTY, AT BRIDGE AT WEST CITY LIMITS OF EXIRA.	195	1957-	09-24-75	22
06809050	DAVIDS CR AT EXIRA, IOWA.	LAT 4135XX, LONG 9453XX, IN NE 1/4 SEC. 4, T.78 N., R.35 W., AUDUBON COUNTY, AT BRIDGE NEAR EAST CITY LIMITS OF EXIRA.	56.7	1957-	09-24-75	10

DISCHARGE MEASUREMENTS MADE AT LOW-FLOW PARTIAL-RECORD STATIONS DURING WATER YEAR 1975--CONTINUED

STATION NO.	STATION NAME	LOCATION	DRAINAGE AREA (SQ MI)	PERIOD OF RECORD	MEASUREMENTS DATE	DISCHARGE (CFS)
NISHNABOTNA RIVER BASIN--CONTINUED						
06809100	TROUBLESOME CR NR WIOTA, IOWA.	LAT 4130XX, LONG 9451XX, IN NW 1/4 SEC. 2, T.77 N., R.35 W., CASS COUNTY, AT BRIDGE, 7.5 MILES NE OF WIOTA.	68.4	1957-	09-25-75	5.1
06809150	TROUBLESOME CR NR ATLANTIC, IOWA.	LAT 4125XX, LONG 9458XX, IN NE 1/4 SEC. 3, T.76 N., R.36 W., CASS COUNTY, AT BRIDGE, 2 MILES NE OF ATLANTIC.	128	1957-	09-25-75	12
06809200	E NISHNABOTNA R AT ATLANTIC, IOWA.	LAT 4124XX, LONG 9502XX, IN SE 1/4 SEC. 5, T.76 N., R.36 W., CASS COUNTY, AT BRIDGE ON STATE HIGHWAY 83, NEAR WEST CITY LIMITS OF ATLANTIC.	382	1957-	09-25-75	56
06809250	TURKEY CR EAST OF ATLANTIC, IOWA.	LAT 4123XX, LONG 9455XX, IN SE 1/4 SEC. 7, T.76 N., R.35 W., CASS COUNTY, AT BRIDGE, 5 MILES SE OF ATLANTIC.	69.5	1957-	09-25-75	2.0
06808300	TURKEY CR NR ATLANTIC, IOWA.	LAT 4119XX, LONG 9404XX, NEAR CENTER OF SEC. 2, T.75 N., R.37 W., CASS COUNTY, AT BRIDGE, 6 MILES SW OF ATLANTIC.	133	1957-	09-25-75	5.0
06809330	E NISHNABOTNA R NR LEWIS, IOWA.	LAT 4119XX, LONG 9505XX, IN NE 1/4 SEC. 10, T.75 N., R.37 W., CASS COUNTY, AT BRIDGE ON U.S. HIGHWAY 6, 1 MILE NORTH OF LEWIS.	574	1957-	09-25-75	63
06809350	INDIAN CR NR ELKHORN, IOWA.	LAT 4133XX, LONG 9508XX, IN N 1/2 SEC. 20, T.78 N., R.37 W., SHELBY COUNTY, AT BRIDGE, 5 MILES SW OF ELKHORN.	67.4	1957-	09-24-75	9.7
06809400	INDIAN CR NR LEWIS, IOWA.	LAT 4118XX, LONG 9508XX, IN SW 1/4 SEC. 8, T.75 N., R.37 W., CASS COUNTY, AT BRIDGE, 2 MILES WEST OF LEWIS.	183	1957-	09-25-75	24
06809450	E NISHNABOTNA R NR GRISWOLD, IOWA.	LAT 4117XX, LONG 9508XX, IN SE 1/4 SEC. 18, T.75 N., R.37 W., CASS COUNTY, AT BRIDGE ON STATE HIGHWAY 48, 4 MILES NORTH OF GRISWOLD.	778	1957-	09-25-75	84
06809800	E NISHNABOTNA R NR FARRAGUT, IOWA.	LAT 4045XX, LONG 9529XX, IN SE 1/4 SEC. 30, T.69 N., R.40 W., FREMONT COUNTY, AT BRIDGE ON STATE HIGHWAY 174, 1.5 MILES NORTH OF FARRAGUT.	1082	1957-	09-25-75	123
TARKIO RIVER BASIN						
06811860	TARKIO R NR COBURG, IOWA.	LAT 4054XX, LONG 9508XX, IN NW 1/4 SEC. 5, T.70 N., R.37 W., PAGE COUNTY, AT BRIDGE, 6 MILES SE OF COBURG.	66.6	1957-	09-24-74	1.1
06811880	E TARKIO CR NR YORKTOWN, IOWA.	LAT 4043XX, LONG 9512XX, IN SW 1/4 SEC. 10, T.68 N., R.38 W., PAGE COUNTY, AT BRIDGE, 2.5 MILES SW OF YORKTOWN.	58.0	1957-	09-24-75	.40
06811900	TARKIO R NR YORKTOWN, IOWA.	LAT 4043XX, LONG 9513XX, IN N 1/2 SEC. 16, T.68 N., R.38 W., PAGE COUNTY, AT BRIDGE, 3 MILES SW OF YORKTOWN.	155	1957-	09-24-75	2.4
06812000	TARKIO R AT BLANCHARD, IOWA.	LAT 4035XX, LONG 9514XX, IN NE 1/4 SEC. 29, T.67 N., R.38 W., PAGE COUNTY, AT BRIDGE, 1 MILE NORTH OF BLANCHARD.	200	* 1934-40. 1957-	09-24-75	4.3
06812300	W TARKIO CR NR COIN, IOWA.	LAT 4041XX, LONG 9518XX, NEAR S 1/2 CORNER SEC. 22, T.58 N., R.39 W., PAGE COUNTY, AT BRIDGE, 4 MILES NW OF COIN.	66.9	1957-	09-24-75	.75
06812400	W TARKIO CR NR NORTHBORO, IOWA.	LAT 4035XX, LONG 9521XX, IN SW 1/4 SEC. 29, T.67 N., R.39 W., PAGE COUNTY, AT BRIDGE, 3.5 MILES SW OF NORTHBORO.	87.7	1957-	09-24-75	2.3

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

DISCHARGE MEASUREMENTS MADE AT LOW-FLOW PARTIAL-RECORD STATIONS DURING WATER YEAR 1975--CONTINUED

STATION NO.	STATION NAME	LOCATION	DRAINAGE AREA (SQ MI)	PERIOD OF RECORD	MEASUREMENTS DATE	DISCHARGE (CFS)
NODAWAY RIVER BASIN						
06816300	W NODAWAY R NR CUMBERLAND, IOWA.	LAT 4112XX, LONG 9452XX, IN SW 1/4 SEC. 15, T.74 N., R.35 W., CASS COUNTY, AT BRIDGE, 4 MILES SOUTH OF CUMBERLAND.	65.1	1957-	09-23-75	.38
06816350	SEVENMILE CR NR LYMAN, IOWA.	LAT 4115XX, LONG 9459XX, IN SE 1/4 SEC. 33, T.75 N., R.36 W., CASS COUNTY, AT BRIDGE ON U.S. HIGHWAY 71, 1.5 MILES NORTH OF LYMAN.	60.8	1957-	09-23-75	3.0
06816400	SEVENMILE CR NR MORTON HILL, IOWA.	LAT 4106XX, LONG 9500XX, IN NW 1/4 SEC. 33, T.73 N., R.36 W., MONTGOMERY COUNTY, AT BRIDGE, 1 MILE NW OF MORTON HILL.	124	1957-	09-24-75	18.5
06816550	W NODAWAY R NR VILLISCA, IOWA.	LAT 4055XX, LONG 9500XX, NEAR CENTER OF SEC.28, T.71 N., R.36 W., MONTGOMERY COUNTY, AT BRIDGE NEAR WEST CITY LIMITS OF VILLISCA.	344	1957-	09-24-75	22
06816600	M NODAWAY R NR BRIDGEWATER, IOWA.	LAT 4110XX, LONG 9439XX, IN NE 1/4 SEC. 33, T.74 N., R.33 W., ADAIR COUNTY, AT BRIDGE, 5 MILES SE OF BRIDGEWATER.	89.3	1957-	09-23-75	1.2
06816700	WF M NODAWAY R NR FONTANELLE, IOWA.	LAT 4119XX, LONG 9439XX, NEAR CENTER OF SEC.4, T.75 N., R.33 W., ADAIR COUNTY, AT BRIDGE, 5 MILES NW OF FONTANELLE.	67.9	1957-	09-23-75	1.2
06816800	WF M NODAWAY R NR BRIDGEWATER, IOWA.	LAT 4111XX, LONG 9439XX, NEAR CENTER OF SEC.28, T.74 N., R.33 W., ADAIR COUNTY, AT BRIDGE, 4.5 MILES SOUTH OF BRIDGEWATER.	128	1957-	09-23-75	4.4
06816900	M NODAWAY R NR VILLISCA, IOWA.	LAT 4055XX, LONG 9459XX, IN NW 1/4 SEC. 34, T.71 N., R.36 W., MONTGOMERY COUNTY, AT BRIDGE ON U.S. HIGHWAY 71, 1 MILE SOUTH OF VILLISCA.	341	1957-	09-24-75	9.3
06817050	E NODAWAY R NR WILLIAMSON, IOWA.	LAT 4106XX, LONG 9433XX, IN NW 1/4 SEC. 28, T.73 N., R.32 W., ADAMS COUNTY, AT BRIDGE, 3 MILES SE OF WILLIAMSON.	54.2	1957-	09-23-75	.04
06817100	E NODAWAY R NR SHAMBAUGH, IOWA.	LAT 4038XX, LONG 9501XX, IN NE 1/4 SEC. 6, T.67 N., R.36 W., PAGE COUNTY, AT BRIDGE, 2 MILES SE OF SHAMBAUGH.	333	1957-	09-24-75	8.0
06817200	NODAWAY R NR BRADDYVILLE, IOWA.	LAT 4037XX, LONG 9501XX, NEAR CENTER OF SEC.18, T.67 N., R.36 W., PAGE COUNTY, AT BRIDGE, 3 MILES NORTH OF BRADDYVILLE.	1135	1957-	09-24-75	46
PLATTE RIVER BASIN						
06818600	PLATTE R NR KENT, IOWA.	LAT 4057XX, LONG 9429XX, IN SW 1/4 SEC. 13, T.71 N., R.32 W., AT BRIDGE, 2 MILES WEST OF KENT.	77.9	1957-	09-23-75	.57
06818650	E PLATTE R NR KNOWLTON, IOWA.	LAT 4054XX, LONG 9426XX, IN NW 1/4 SEC. 4, T.70 N., R.31 W., RINGGOLD COUNTY, AT BRIDGE, 7 MILES NW OF KNOWLTON.	66.8	1957-	09-23-75	.04
06818700	PLATTE R NR KNOWLTON, IOWA.	LAT 4052XX, LONG 9426XX, IN NW 1/4 SEC. 16, T.70 N., R.31 W., RINGGOLD COUNTY, AT BRIDGE, 6 MILES NW OF KNOWLTON.	179	1959-	09-23-75	2.2
06819100	WB 102 R NR GRAVITY, IOWA.	LAT 4049XX, LONG 9449XX, IN SE 1/4 SEC. 31, T.70 N., R.34 W., TAYLOR COUNTY, AT BRIDGE, 5 MILES NW OF GRAVITY.	52.2	1957-	09-23-75	.59

DISCHARGE MEASUREMENTS MADE AT LOW-FLOW PARTIAL-RECORD STATIONS DURING WATER YEAR 1975--CONTINUED

STATION NO.	STATION NAME	LOCATION	DRAINAGE AREA (SQ MI)	PERIOD OF RECORD	MEASUREMENTS DATE	DISCHARGE (CFS)
PLATTE RIVER BASIN--CONTINUED						
06819120	WB 102 R BELOW MB NR GRAVITY, IOWA.	LAT 4048XX, LONG 9449XX, IN NW 1/4 SEC. 7, T.69 N., R.34 W., TAYLOR COUNTY, AT BRIDGE, 4.5 MILES NW OF GRAVITY.	106	1957-	09-23-74	1.2
06819140	WB 102 R NR NEW MARKET, IOWA.	LAT 4044XX, LONG 9451XX, IN SW 1/4 SEC. 35, T.69 N., R.35 W., TAYLOR COUNTY, AT BRIDGE, 2.75 MILES EAST OF NEW MARKET.	123	1957-	09-23-75	1.2
06819150	WF 102 R NR NEW MARKET, IOWA.	LAT 4043XX, LONG 9451XX, IN NW 1/4 SEC. 10, T.68 N., R.35 W., TAYLOR COUNTY, AT BRIDGE, 3 MILES SE OF NEW MARKET.	183	1957-	09-23-75	3.1
06819180	EF 102 R NR BEDFORD, IOWA.	LAT 4044XX, LONG 9439XX, IN NE 1/4 SEC. 4, T.68 N., R.33 W., TAYLOR COUNTY, AT BRIDGE, 3 MILES NE OF BEDFORD.	60.4	1957-	09-23-75	.0008
06819195	MF 102 R NR BEDFORD, IOWA.	LAT 4035XX, LONG 9449XX, IN NE 1/4 SEC. 26, T.67 N., R.35 W., TAYLOR COUNTY, AT BRIDGE, 7 MILES SW OF BEDFORD.	59.8	1957-	09-23-75	.04
GRAND RIVER BASIN						
06896100	GRAND R AT KNOWLTON, IOWA.	LAT 4050XX, LONG 9420XX, IN SE 1/4 SEC. 29, T.70 N., R.30 W., RINGGOLD COUNTY, AT BRIDGE NEAR EAST CITY LIMITS OF KNOWLTON.	67.5	1957-	08-13-75	.23
06896150	GRAND R NR BLOCKTON, IOWA.	LAT 4037XX, LONG 9425XX, IN SW 1/4 SEC. 10, T.67 N., R.31 W., RINGGOLD COUNTY, AT BRIDGE, 3.5 MILES EAST OF BLOCKTON.	207	1957-	08-13-75	5.9
06896200	EF GRAND R NR MT. AYR, IOWA.	LAT 4043XX, LONG 9410XX, IN SE 1/4 SEC. 3, T.68 N., R.29 W., RINGGOLD COUNTY, AT BRIDGE ON STATE HIGHWAY 2, 3 MILES EAST OF MT. AYR.	64.7	1957-	08-13-75	.31
06896250	EF GRAND R SOUTH OF MT. AYR, IOWA.	LAT 4035XX, LONG 9414XX, IN SW 1/4 SEC. 19, T.67 N., R.29 W., RINGGOLD COUNTY, AT BRIDGE, 9 MILES SOUTH OF MT. AYR.	95.9	1957-	08-13-75	.94
06897770	THOMPSON R NR HEBRON, IOWA.	LAT 4114XX, LONG 9416XX, IN SW 1/4 SEC. 1, T.74 N., R.30 W., ADAIR COUNTY, AT BRIDGE, 2 MILES SE OF HEBRON.	80.0	1957-	08-12-75	2.6
06897800	THREEMILE CR NR AFTON, IOWA.	LAT 4102XX, LONG 9408XX, NEAR CENTER OF SEC.13, T.72 N., R.29 W., ADAIR COUNTY, AT BRIDGE 3 MILES EAST OF AFTON.	54.8	1957-	08-12-75	.40
06897820	THOMPSON R NR AFTON, IOWA.	LAT 4102XX, LONG 9406XX, IN SW 1/4 SEC. 17, T.72 N., R.28 W., UNION COUNTY, AT BRIDGE ON U.S. HIGHWAY 34 AND 169, 5 MILES EAST OF AFTON.	231	1957-	08-12-75	4.4
06897880	TWELVEMILE CR NR ARISPE, IOWA.	LAT 4056XX, LONG 9406XX, IN SE 1/4 SEC. 17, T.71 N., R.28 W., UNION COUNTY, AT BRIDGE, 6 MILES EAST OF ARISPE.	68.0	1957-	08-12-75	.08
06897900	THOMPSON R NR GRAND RIVER, IOWA.	LAT 4052XX, LONG 9358XX, IN NE 1/4 SEC. 16, T.70 N., R.27 W., DECATUR COUNTY, AT BRIDGE, 3.5 MILES NORTH OF GRAND RIVER.	401	1957-	08-12-75	11
06897940	LONG CR NR VAN WERT, IOWA.	LAT 4049XX, LONG 9352XX, IN NE 1/4 SEC. 32, T.70 N., R.26 W., DECATUR COUNTY, AT BRIDGE, 5 MILES SE OF VAN WERT.	117	1957-	08-12-75	.06

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

DISCHARGE MEASUREMENTS MADE AT LOW-FLOW PARTIAL-RECORD STATIONS DURING WATER YEAR 1975--CONTINUED

STATION NO.	STATION NAME	LOCATION	DRAINAGE AREA (SQ MI)	PERIOD OF RECORD	MEASUREMENTS DATE	DISCHARGE (CFS)
GRAND RIVER BASIN--CONTINUED						
06898300	WELDON R EAST OF LEON, IOWA.	LAT 404518, LONG 933805, IN SE 1/4 SEC. 20, T.69 N., R.24 W., DECATUR COUNTY, AT BRIDGE ON STATE HIGHWAY 2, 6 MILES EAST OF LEON.	72.4	1957-	08-12-75	.06
06898450	WELDON R NR PLEASANTON, IOWA.	LAT 403540, LONG 933620, IN NW 1/4 SEC. 22, T.67 N., R.24 W., DECATUR COUNTY, AT BRIDGE, 7 MILES EAST OF PLEASANTON.	228	1957-	08-13-75	8.5
06898470	LITTLE R NR LEON, IOWA.	LAT 403936, LONG 934459, IN SE 1/4 SEC. 29, T.68 N., R.25 W., DECATUR COUNTY, AT BRIDGE, 6 MILES SOUTH OF LEON.	69.2	1957-	08-12-75	.03
CHARITON RIVER BASIN						
06903300	CHARITON R NR DERBY, IOWA.	LAT 4057XX, LONG 9328XX, IN NW 1/4 SEC. 13, T.71 N., R.23 W., LUCAS COUNTY, AT BRIDGE, 1.5 MILES NORTH OF DERBY.	71.0	1957-	08-12-75	0
06903350	WOLF CR NR CHARITON, IOWA.	LAT 4056XX, LONG 9316XX, IN SE 1/4 SEC. 16, T.71 N., R.21 W., LUCAS COUNTY, AT BRIDGE, 5 MILES SE OF CHARITON.	65.0	1957-	08-12-75	.09
06903600	SF CHARITON R NR CAMBRIA, IOWA.	LAT 4049XX, LONG 9323XX, IN NW 1/4 SEC. 3, T.69 N., R.22 W., WAYNE COUNTY, AT BRIDGE, 2 MILES SOUTH OF CAMBRIA.	58.0	1957-	08-12-75	.28
06903650	SF CHARITON R NR CORYDON, IOWA.	LAT 4049XX, LONG 9319XX, IN NW 1/4 SEC. 6, T.69 N., R.21 W., AT BRIDGE ON STATE HIGHWAY 14, 4 MILES NORTH OF CORYDON.	68.1	1957-	08-12-75	.43
06904150	SHOAL CR NR CINCINNATI, IOWA.	LAT 4037XX, LONG 9252XX, IN SW 1/4 SEC. 6, T.67 N., R.17 W., APPANOOSE COUNTY, AT BRIDGE, 3 MILES EAST OF CINCINNATI.	56.6	1958-	08-12-75	.02

* Operated as a continuous-record gaging station

* Also a crest-stage partial-record station

Crest-stage partial-record stations

The following table contains annual maximum discharge for crest-stage stations. A crest-stage 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, and discharge measurements may have been made for purposes of establishing the stage-discharge relation, but these are not published herein. The years given in the period of record represent water years up to the current year for which the annual maximum has been determined.

ANNUAL MAXIMUM DISCHARGE AT CREST-STAGE PARTIAL-RECORD STATIONS DURING WATER YEAR 1975

STATION NO.	STATION NAME	LOCATION	DRAINAGE AREA (SQ MI)	PERIOD OF RECORD	DATE	ANNUAL MAXIMUM	
						GAGE HEIGHT (FEET)	DISCHARGE (CFS)
UPPER IOWA RIVER BASIN							
05388310	WATERLOO CR NR DORCHESTER, IOWA.	LAT 4327XX, LONG 9130XX, IN NW 1/4 SEC. 25, T.100 N., R.6 W., ALLAMAKEE COUNTY, ON STATE HIGHWAY 76, 1.4 MILES SOUTH OF DORCHESTER.	43.6	1966-	1975	A	(+)
WEXFORD CREEK BASIN							
05388400	WEXFORD CR NR HARPERS FERRY, IOWA.	LAT 4316XX, LONG 9108XX, IN SE 1/4 SEC. 25, T.98 N., R.3 W., ALLAMAKEE COUNTY, AT BRIDGE, 5 MILES NORTH OF HARPERS FERRY.	11.9	1953-	1975	A	(+)
PAINT CREEK BASIN							
05388600	PAINT CR NR WATERVILLE, IOWA.	LAT 4311XX, LONG 9116XX, NEAR CENTER SEC.36, T.97 N., R.4 W., ALLAMAKEE COUNTY, AT BRIDGE, 3 MILES SOUTH-EAST OF WATERVILLE.	56.0	1953-	03-21-75	9.15	1,500
05388700	LITTLE PAINT CR TR NR WATERVILLE, IOWA.	LAT 4314XX, LONG 9115XX, IN SE 1/4 SEC. 1, T.97 N., R.4 W., ALLAMAKEE COUNTY, AT CULVERT, 3.5 MILES NORTHEAST OF WATERVILLE.	1.09	1953-	03-21-75	4.66	360
TURKEY RIVER BASIN							
05411530	NB TURKEY R NR CRESCO, IOWA.	LAT 4322XX, LONG 9213XX, IN NW 1/4 SEC. 25, T.99 N., R.12 W., HOWARD COUNTY, AT BRIDGE ON STATE HIGHWAY 9, ABOUT 5 MILES WEST OF CRESCO.	19.5	1966-	04-28-75	87.73	92
05411650	CRANE CR TR NR SARATOGA, IOWA.	LAT 4322XX, LONG 9223XX, NEAR SOUTHEAST CORNER OF SEC.21, T.99 N., R.13 W., HOWARD COUNTY, AT BRIDGE ON STATE HWY 9, 1 MILE EAST OF SARATOGA.	4.06	1953-	04-28-75	4.29	238
05411700	CRANE CR NR LOURDES, IOWA.	LAT 4315XX, LONG 9219XX, IN NW 1/4 SEC. 6, T.97 N., R.12 W., HOWARD COUNTY, AT BRIDGE ON STATE HIGHWAY 272, 1 MILE SW OF LOURDES.	75.8	1951-	1975	A	(+)
LITTLE MAQUOKETA RIVER BASIN							
05414350	LITTLE MAQUOKETA R NEAR GRAF, IOWA.	LAT 423009, LONG 905150, IN SE 1/4 SEC. 20, T.89 N., R.1 E., DUBUQUE COUNTY, AT BRIDGE, 300 FEET DOWNSTREAM FROM ILLINOIS CENTRAL RR BRIDGE, 0.5 MILE NE OF GRAF.	39.6	1951-	03-21-75	8.85	1,800
05414400	MF LITTLE MAQUOKETA R NEAR RICKARDSVILLE, IOWA.	LAT 423338, LONG 905135, IN SE 1/4 SEC. 32, T.90 N., R.1 E., DUBUQUE COUNTY, AT BRIDGE, 2 MILES SOUTHEAST OF RICKARDSVILLE.	30.2	1951-	1975	B	--
05414450*MF	LITTLE MAQUOKETA NEAR RICKARDSVILLE, IOWA.	LAT 423509, LONG 905120, NEAR NW CORNER SEC. 28, T.90 N., R.1 E., DUBUQUE COUNTY, AT BRIDGE, 1 MILE NE OF RICKARDSVILLE.	21.6	1951-	03-21-75	6.79	950
05414600	LITTLE MAQUOKETA R TR AT DUBUQUE, IOWA.	LAT 423233, LONG 904138, NEAR NW CORNER SEC.11, T.89 N., R.2 E., DUBUQUE COUNTY, AT BRIDGE ON STATE HIGHWAY 386 NR NORTH CITY LIMITS OF DUBUQUE.	1.54	1951-	1975	A	(+)

ANNUAL MAXIMUM DISCHARGE AT CREST-STAGE PARTIAL-RECORD STATIONS DURING WATER YEAR 1975--CONTINUED

STATION NO.	STATION NAME	LOCATION	DRAINAGE AREA (SQ MI)	PERIOD OF RECORD	DATE	ANNUAL MAXIMUM GAGE HEIGHT (FEET)	DIS-CHARGE (CFS)
MAQUOKETA RIVER BASIN							
05417530	PLUM CR AT EARLVILLE, IOWA.	LAT 422813, LONG 911453, IN NE 1/4 SEC. 1, T.88 N., R.4 W., DELAWARE COUNTY, AT BRIDGE ON U.S. HIGHWAY 20, 1.5 MILES SOUTHEAST OF EARLVILLE.	41.1	1966-	03-21-75	87.18	2,400
05417590	KITTY CR NR LANGWORTHY, IOWA.	LAT 4212XX, LONG 9112XX, IN NW 1/4 SEC. 4, T.85 N., R.3 W., JONES COUNTY, AT BRIDGE ON U.S. HIGHWAY 151, ABOUT 1 MILE NE OF LANGWORTHY.	14.4	1966-	03-21-75	85.65	520
WAPSIPINICON RIVER BASIN							
05420600	LITTLE WAPSIPINICON TR NR RICEVILLE, IOWA.	LAT 4321XX, LONG 9229XX, NEAR S 1/4 CORNER SEC. 27, T.99 N., R.14 W., HOWARD COUNTY, AT CULVERT, 3.5 MILES EAST OF RICEVILLE.	0.90	1953-	04-28-75	4.28	172
05420620	LITTLE WAPSIPINICON R NR ACME, IOWA.	LAT 4320XX, LONG 9229XX, AT N 1/4 CORNER SEC. 10, T.98 N., R.14 W., HOWARD COUNTY, AT BRIDGE ON CO. ROAD D, 1 MILE NORTH OF ACME.	7.76	1953-	04-28-75	5.80	460
05420640*	LITTLE WAPSIPINICON R AT ELMA, IOWA.	LAT 4314XX, LONG 9227XX, IN NW 1/4 SEC. 12, T.97 N., R.14 W., HOWARD COUNTY, AT BRIDGE ON COUNTY ROAD A, NEAR WEST CITY LIMITS OF ELMA.	37.3	1953-	04-28-75	9.65	1,350
05420650	LITTLE WAPSIPINICON R NR NEW HAMPTON, IOWA.	LAT 4304XX, LONG 9224XX, IN NW 1/4 SEC. 9, T.95 N., R.13 W., CHICKASAW COUNTY, AT BRIDGE ON U.S. HIGHWAY 18, 4 MILES WEST OF NEW HAMPTON.	95.0	1966-	04-28-75	87.12	2,280
05420690	EF WAPSIPINICON R NR NEW HAMPTON, IOWA.	LAT 4305XX, LONG 9218XX, IN SE 1/4 SEC. 31, T.96 N., R.12 W., CHICKASAW CO. AT BRIDGE ON U.S. HIGHWAY 63, 2 MILES NORTH OF NEW HAMPTON.	30.3	1966-	04-28-75	84.79	2,020
05420850	LITTLE WAPSIPINICON R NR ORAN, IOWA.	LAT 4243XX, LONG 9202XX, IN NE 1/4 SEC. 8, T.91 N., R.10 W., FAYETTE COUNTY, AT BRIDGE ON STATE HIGHWAY 3, 2 MILES NE OF ORAN.	94.1	1966-	03-21-75	88.10	1,800
05420855	BUCK CR NR ORAN, IOWA.	LAT 424253, LONG 920733, IN NE 1/4 SEC. 10, T.91 N., R.11 W., BREMER COUNTY, AT BRIDGE ON STATE HIGHWAY 3, 2.5 MILES NW OF ORAN.	37.9	1966-	03-21-75	87.89	510
05421100	PINE CR TR NR WINTHROP, IOWA.	LAT 4229XX, LONG 9147XX, IN SW 1/4 SEC. 27, T.89 N., R.8 W., BUCHANAN COUNTY, AT CULVERT, 1.4 MILES NORTH OF U.S. HIGHWAY 20 AND 2.5 MILES NW OF WINTHROP.	0.334	1953-	03-21-75	4.33	47
05421200	PINE CR NR WINTHROP, IOWA.	LAT 4228XX, LONG 9147XX, IN SW 1/4 SEC. 34, T.89 N., R.8 W., BUCHANAN COUNTY, AT RR BRIDGE, 500 FT UPSTREAM FROM U.S. HIGHWAY 20 AND 2.5 MILES NW OF WINTHROP.	28.3	1950-	03-21-75	14.32	1,600
05421300	PINE CR TR NO. 2 AT WINTHROP, IOWA.	LAT 4228XX, LONG 9144XX, AT N 1/4 CORNER SEC. 2, T.88 N., R.8 W., BUCHANAN COUNTY, AT CULVERT ON U.S. HIGHWAY 20 NEAR WEST CITY LIMITS OF WINTHROP.	0.704	1953-	03-21-75	5.55	16
05421550*	BUFFALO CR ABOVE WINTHROP, IOWA.	LAT 4230XX, LONG 9144XX, NEAR NE CORNER SEC. 25, T.89 N., R. 8 W., BUCHANAN COUNTY, AT BRIDGE, 1.5 MILES NE OF WINTHROP.	68.2	1957-	03-21-75	17.52	1,700
05421600	BUFFALO CR NR WINTHROP, IOWA.	LAT 4228XX, LONG 9143XX, IN NE 1/4 SEC. 1, T.88 N., R.8 W., BUCHANAN COUNTY, AT BRIDGE ON U.S. HIGHWAY 20, 1 MILE EAST OF WINTHROP.	71.4	1953-	03-21-75	88.86	2,600
05421890	SILVER CR AT WELTON, IOWA.	LAT 4155XX, LONG 9036XX, IN NW 1/4 SEC. 15, T.82 N., R.3 E., CLINTON COUNTY, AT BRIDGE ON U.S. HIGHWAY 61 AT NORTH EDGE OF WELTON.	9.03	1966-	06-15-75	85.96	(+)

ANNUAL MAXIMUM DISCHARGE AT CREST-STAGE PARTIAL-RECORD STATIONS DURING WATER YEAR 1975--CONTINUED

STATION NO.	STATION NAME	LOCATION	DRAINAGE AREA (SQ MI)	PERIOD OF RECORD	DATE	ANNUAL MAXIMUM GAGE HEIGHT (FEET)	DISCHARGE (CFS)
IOWA RIVER BASIN							
05448400*	WESTMAIN DRAINAGE DITCH 1 & 2 NR BRITT, IOWA.	LAT 4305XX, LONG 9347XX, IN SW 1/4 SEC. 27, T.96 N., R.25 W., HANCOCK COUNTY, AT BRIDGE ON U.S. HIGHWAY 18 NEAR EAST CITY LIMITS OF BRITT.	21.2	1966-	03-10-73 1974 04-28-75	81.71 A 83.59	204 <60 372
05448600	EB IOWA R ABOVE HAYFIELD, IOWA.	LAT 4309XX, LONG 9341XX, NEAR S 1/4 CORNER SEC. 4, T.96 N., R.24 W., HANCOCK COUNTY, AT BRIDGE, 1.5 MILES SE OF HAYFIELD.	2.23	1953-	04-28-75	2.84	20
05448700	EB IOWA R NR HAYFIELD, IOWA.	LAT 4311XX, LONG 9339XX, IN NW 1/4 SEC. 35, T.97 N., R.24 W., HANCOCK COUNTY, AT BRIDGE, 2 MILES EAST OF HAYFIELD.	7.94	1952-	04-28-75	10.00	240
05448800	EB IOWA R NR GARNER, IOWA.	LAT 4306XX, LONG 9337XX, NEAR CENTER SEC. 25, T.96 N., R.24 W., HANCOCK COUNTY, AT BRIDGE ON U.S. HIGHWAY 18, 1.2 MILES WEST OF GARNER.	45.1	1952-	04-28-75	10.12	550
05448900	EB IOWA R TR NR GARNER, IOWA.	LAT 4306XX, LONG 9340XX, NEAR CENTER SEC. 27, T.96 N., R.24 W., HANCOCK COUNTY, AT CULVERT ON U.S. HWY 18, 2.1 MILES WEST OF GARNER.	5.98	1952-	1975	A	(+)
05451955	STEIN CR NR CLUTIER, IOWA.	LAT 420446, LONG 921800, IN NE 1/4 SEC. 24, T.84 N., R.13 W., TAMA COUNTY, AT BRIDGE ON STATE HIGHWAY 318, 5 MILES EAST OF CLUTIER.	23.4	1971-	06-18-75	71.19	520
05453200	PRICE CR AT AMANA, IOWA.	LAT 4148XX, LONG 9153XX, IN SE 1/4 SEC. 22, T.81 N., R.9 W., IOWA COUNTY, AT BRIDGE ON STATE HIGHWAY 149, NEAR NORTH EDGE OF AMANA.	29.1	1966-	03-19-75	84.43	2,500
05453600	RAPID CR BELOW MORSE, IOWA.	LAT 414345, LONG 912538, NEAR NE CORNER SEC. 21, T.80 N., R.5 W., JOHNSON COUNTY, AT BRIDGE, 1.5 MILES SE OF MORSE.	8.12	1951-	03-19-75	22.12	1,300
05453700	RAPID CR TR NO. 4 NR OASIS, IOWA.	LAT 414253, LONG 912452, NEAR S 1/4 CORNER SEC. 22, T.80 N., R.5 W., JOHNSON COUNTY, AT CULVERT, 2 MILES NW OF OASIS.	1.95	1951-	1975	A	(+)
05453750	RAPID CR SW OF MORSE, IOWA.	LAT 414323, LONG 912616, IN W 1/2 SEC. 21, T.80 N., R.5 W., JOHNSON COUNTY, AT BRIDGE, 2 MILES SOUTHWEST OF MORSE.	15.2	1951-	03-19-75	23.90	970
05453850	RAPID CR TR NO. 3 NR OASIS, IOWA.	LAT 414233, LONG 912714, NEAR CENTER OF SEC. 29, T.80 N., R.5 W., JOHNSON COUNTY, AT BRIDGE, 3.5 MILES WEST OF OASIS.	1.62	1951-	1975	A	(+)
05453900	RAPID CR TR NR OASIS, IOWA.	LAT 414114, LONG 912637, NEAR SW CORNER SEC. 33, T.80 N., R.5 W., JOHNSON COUNTY, AT BRIDGE, 3 MILES SW OF OASIS.	.97	1951-	1975	A	(+)
05453950	RAPID CR TR NR IOWA CITY, IOWA.	LAT 414156, LONG 912839, IN NW 1/4 SEC. 31, T.80 N., R.5 W., JOHNSON COUNTY, AT BRIDGE, 4 MILES NE OF IOWA CITY.	3.43	1951-	1975	A	(+)
05455100*	OLD MANS CR NR IOWA CITY, IOWA.	LAT 413623, LONG 913656, IN NW 1/4 SEC. 36, T.79 N., R.7 W., JOHNSON COUNTY, AT BRIDGE, 3 MILES SOUTHWEST OF IOWA CITY.	201	1950-64. 1965-	03-20-75	10.94 C	2,230
05455140	N ENGLISH R NR MONTEZUMA, IOWA.	LAT 413845, LONG 923420, IN SW 1/4 SEC. 14, T.79 N., R.15 W., POWESHIEK CO., AT BRIDGE, 5.0 MILES NORTHWEST OF MONTEZUMA.	31.0	1972-	05-26-73 05-28-74 03-18-75	22.51 D 26.97 22.45	940 4,000 920

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

ANNUAL MAXIMUM DISCHARGE AT CREST-STAGE PARTIAL-RECORD STATIONS DURING WATER YEAR 1975--CONTINUED

STATION NO.	STATION NAME	LOCATION	DRAINAGE AREA (SQ MI)	PERIOD OF RECORD	ANNUAL MAXIMUM		DISCHARGE (CFS)
					DATE	GAGE HEIGHT (FEET)	
IOWA RIVER BASIN--CONTINUED							
05455200	N ENGLISH R NR GUERNSEY, IOWA.	LAT 4138XX, LONG 9224XX, NEAR SW CORNER SEC. 17, T.79 N., R.13 W., POWESHIEK COUNTY, AT BRIDGE, 2.2 MILES WEST OF GUERNSEY.	68.7	1953-	08-18-75	9.15	2,200
05455210	N ENGLISH R AT GUERNSEY, IOWA.	LAT 4138XX, LONG 9221XX, IN NW 1/4 SEC. 22, T.79 N., R.13 W., POWESHIEK CO., AT BRIDGE ON STATE HIGHWAY 21, 1 MILE SW OF GUERNSEY.	81.5	1960, 1966-	03-18-75	83.39	2,800
05455230	DEEP R AT DEEP RIVER, IOWA.	LAT 4135XX, LONG 9221XX, IN SW 1/4 SEC. 3, T.78 N., R.13 W., POWESHIEK CO., AT BRIDGE ON STATE HIGHWAY 21, 1 MILE NE OF DEEP RIVER.	30.5	1960, 1966-	03-18-75	80.83	1,250
05455280	S ENGLISH R TR NR BARNES CITY, IOWA.	LAT 4133XX, LONG 9228XX, NEAR NE CORNER SEC. 21, T.78 N., R.14 W., POWESHIEK COUNTY, AT BRIDGE, 3 MILES NORTH OF BARNES CITY.	2.51	1953-	03-18-75	5.18	125
05455300	S ENGLISH R NR BARNES CITY, IOWA.	LAT 4131XX, LONG 9228XX, NEAR NW CORNER SEC. 34, T.78 N., R.14 W., POWESHIEK COUNTY, AT BRIDGE, 1 MILE NORTH OF BARNES CITY.	11.5	1953-	03-18-75	10.46	360
05455350	S ENGLISH R TR NO.2 NR MONTEZUMA, IOWA.	LAT 4134XX, LONG 9227XX, NEAR SW CORNER SEC. 11, T.78 N., R.14 W., POWESHIEK COUNTY, AT BOX CULVERT, 4 MILES SE OF MONTEZUMA.	0.523	1953-	06-18-75	8.23	22
05455550	BULGERS RUN NR RIVERSIDE, IOWA.	LAT 4129XX, LONG 9138XX, IN SE 1/4 SEC. 11, T.77 N., R.7 W., WASHINGTON CO., AT BRIDGE ON STATE HIGHWAY 22, 2.5 MILES WEST OF RIVERSIDE.	6.31	1965-	03-19-75	85.65	950
05457440	DEER CR NR CARPENTER, IOWA.	LAT 4325XX, LONG 9259XX, IN NE 1/4 SEC. 8, T.99 N., R.18 W., MITCHELL COUNTY, AT BRIDGE ON STATE HIGHWAY 105, 1.5 MILES EAST OF CARPENTER.	91.6	1966- 1974	05-27-73 04-28-75	81.30 A 81.31	2,100 <1,200 2,100
05458560	BEAVERDAM CR NR SHEFFIELD, IOWA.	LAT 4255XX, LONG 9312XX, IN NW 1/4 SEC. 27, T.94 N., R.20 W., CERRO GORDO CO. AT BRIDGE ON U.S. HIGHWAY 65, 3 MILES NORTH OF SHEFFIELD.	123	1966-	04-28-75	57.02	2,840
05459010	ELK CR AT KENSETT, IOWA.	LAT 4322XX, LONG 9313XX, IN NE 1/4 SEC. 28, T.99 N., R.20 W., WORTH COUNTY, AT BRIDGE ON U.S. HIGHWAY 65, 1 MILE NORTH OF KENSETT.	58.1	1966-	04-28-75	90.40	454
05459490	SPRING CR NR MASON CITY, IOWA.	LAT 431248, LONG 931238, IN SE 1/4 SEC. 16, T.97 N., R.20 W., CERRO GORDO CO. AT BRIDGE ON U.S. HIGHWAY 65, 4 MILES NORTH OF MASON CITY.	29.3	1966-	04-28-75	88.19	2,820
05460100	WILLOW CR NR MASON CITY, IOWA.	LAT 4309XX, LONG 9316XX, IN NE 1/4 SEC. 12, T.96 N., R.21 W., CERRO GORDO CO. AT BRIDGE ON U.S. HIGHWAY 18, 3.5 MILES WEST OF MASON CITY.	78.6	1966-	04-28-75	90.23	770
05462750	BEAVER CR TR NR APLINGTON, IOWA.	LAT 4235XX, LONG 9251XX, IN NW 1/4 SEC. 27, T.90 N., R.17 W., BUTLER COUNTY, AT BRIDGE ON U.S. HIGHWAY 20, 2 MILES EAST OF APLINGTON.	11.6	1966-	04-28-75	93.89	820
05463090	BLACK HAWK CR AT GRUNDY CENTER, IOWA.	LAT 4222XX, LONG 9246XX, IN NW 1/4 SEC. 7, T.87 N., R.16 W., GRUNDY COUNTY, AT BRIDGE ON STATE HIGHWAY 14, AT NORTH EDGE OF GRUNDY CENTER.	56.9	1966-	04-28-75	85.82	1,150
05464145	TWELVE MILE CR NR TRAER, IOWA.	LAT 421350, LONG 922756, IN SE 1/4 SEC. 27, T.86 N., R.15 W., TAMA COUNTY, AT BRIDGE ON U.S. HIGHWAY 63, 2.5 MILES NORTH OF TRAER.	43.8	1966-	03-19-75	86.03	(+)
05464310	PRATT CR NR GARRISON, IOWA.	LAT 421053, LONG 921110, IN SE 1/4 SEC. 12, T.85 N., R.12 W., BENTON COUNTY, AT BRIDGE ON U.S. HIGHWAY 218, 3.5 MILES NW OF GARRISON.	23.4	1966-	03-19-75	90.08	(+)

ANNUAL MAXIMUM DISCHARGE AT CREST-STAGE PARTIAL-RECORD STATIONS DURING WATER YEAR 1975--CONTINUED

STATION NO.	STATION NAME	LOCATION	DRAINAGE AREA (SQ MI)	PERIOD OF RECORD	DATE	ANNUAL MAXIMUM GAGE HEIGHT (FEET)	DISCHARGE (CFS)
IOWA RIVER BASIN--CONTINUED							
05464318	E BLUE CR AT CENTER POINT, IOWA.	LAT 421244, LONG 914721, IN SW 1/4 SEC. 33, T.86 N., R.8 W., LINN COUNTY, AT BRIDGE ON STATE HIGHWAY 150, 1.5 MILES NORTH OF CENTER POINT.	17.6	1966-	1975	A	(+)
05464560	PRAIRIE CR AT BLAIRSTOWN, IOWA.	LAT 415442, LONG 920503, IN SW 1/4 SEC. 13, T.82 N., R.11 W., BENTON COUNTY, AT BRIDGE ON STATE HIGHWAY 82, AT NORTH EDGE OF BLAIRSTOWN.	87.0	1966-	1975	A	(+)
05464880	OTTER CR AT WILTON, IOWA.	LAT 413617, LONG 910208, IN NE 1/4 SEC. 35, T.79 N., R.2 W., CEDAR COUNTY, AT BRIDGE ON STATE HIGHWAY 38, 1.5 MILES NW OF WILTON.	10.7	1966-	03-21-75	84.55	520
05465150	NF LONG CR AT AINSWORTH, IOWA.	LAT 4117XX, LONG 9132XX, IN SW 1/4 SEC. 22, T.75 N., R.6 W., WASHINGTON CO., AT BRIDGE ON U.S. HIGHWAY 218, 1 MILE SE OF AINSWORTH.	30.2	1951, 1965-	03-19-75	87.70	490
SKUNK RIVER BASIN							
05469860	MUD LAKE DRAINAGE DITCH 71 IN JEWELL, IOWA.	LAT 4219XX, LONG 9338XX, IN SW 1/4 SEC. 27, T.87 N., R.24 W., HAMILTON CO., AT BRIDGE ON U.S. HIGHWAY 69 IN JEWELL.	68.4	1966-	06-27-75	90.04	2,300
05469990	KEIGLEY BR NR STORY CITY, IOWA.	LAT 4209XX, LONG 9337XX, IN NW 1/4 SEC. 26, T.85 N., R.24 W., STORY COUNTY, AT BRIDGE ON U.S. HIGHWAY 69, 3 MILES SOUTH OF STORY CITY.	31.0	1966-	06-27-75	91.38	(+)
05472090	N SKUNK R NR BAXTER, IOWA.	LAT 4149XX, LONG 9304XX, IN NE 1/4 SEC. 21, T.81 N., R.19 W., JASPER COUNTY, AT BRIDGE ON STATE HIGHWAY 223, 4.5 MILES EAST OF BAXTER.	52.2	1966-	07-11-75	81.93	(+)
05472290	SUGAR CR NR SEARSBORO, IOWA.	LAT 4134XX, LONG 9244XX, IN SE 1/4 SEC. 7, T.78 N., R.16 W., POWESHIEK CO., AT BRIDGE ON STATE HIGHWAY 225, 1.8 MILES WEST OF SEARSBORO.	52.7	1966-	06-18-75	89.91	940
05472390	MIDDLE CR NR LACEY, IOWA.	LAT 4125XX, LONG 9239XX, IN NE 1/4 SEC. 1, T.76 N., R.16 W., MAHASKA COUNTY, AT BRIDGE ON U.S. HIGHWAY 63, 1.5 MILES NW OF LACEY.	23.0	1966-	1975	A	(+)
05472445	ROCK CR AT SIGOURNEY, IOWA.	LAT 412012, LONG 921320, IN NE 1/4 SEC. 3, T.75 N., R.12 W., KEOKUK COUNTY, AT BRIDGE ON STATE HIGHWAY 92, NEAR WEST EDGE OF SIGOURNEY.	26.3	1966-	04-28-75	88.13	500
05473300	CEDAR CR NR BATAVIA, IOWA.	LAT 4101XX, LONG 9207XX, IN SW 1/4 SEC. 27, T.72 N., R.11 W., JEFFERSON CO., AT BRIDGE ON U.S. HIGHWAY 34, 2.5 MILES NE OF BATAVIA.	252	1966-	03-28-75	77.14	2,400
DES MOINES RIVER BASIN							
05480930	WHITE FOX CR AT CLARION, IOWA.	LAT 4244XX, LONG 9342XX, IN NW 1/4 SEC. 5, T.91 N., R.24 W., WRIGHT COUNTY, AT BRIDGE ON STATE HIGHWAY 3, 1.5 MILES EAST OF CLARION.	13.3	1966-	1975	A	(+)
05481510	BLUFF CR AT PILOT MOUND, IOWA.	LAT 4210XX, LONG 9401XX, IN NW 1/4 SEC. 20, T.85 N., R.27 W., BOONE COUNTY, AT BRIDGE ON STATE HIGHWAY 329, AT NW EDGE OF PILOT MOUND.	23.5	1966-	04-08-75	84.25	(+)
05481680	BEAVER CR AT BEAVER, IOWA.	LAT 4202XX, LONG 9409XX, IN NE 1/4 SEC. 6, T.83 N., R.28 W., BOONE COUNTY, AT BRIDGE ON U.S. HIGHWAY 30, AT SW EDGE OF BEAVER.	38.5	1966-	1975	A	(+)
05481690	W BEAVER CR AT GRAND JUNCTION, IOWA.	LAT 4202XX, LONG 9413XX, IN NE 1/4 SEC. 3, T.83 N., R.29 W., GREENE COUNTY, AT BRIDGE ON U.S. HIGHWAY 30, NEAR EAST EDGE OF GRAND JUNCTION.	12.6	1966-	1975	A	(+)

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

ANNUAL MAXIMUM DISCHARGE AT CREST-STAGE PARTIAL-RECORD STATIONS DURING WATER YEAR 1975--CONTINUED

STATION NO.	STATION NAME	LOCATION	DRAINAGE AREA (SQ MI)	PERIOD OF RECORD	DATE	ANNUAL MAXIMUM GAGE HEIGHT (FEET)	DISCHARGE (CFS)
DES MOINES RIVER BASIN--CONTINUED							
05482600	HARDIN CR AT FARNHAMVILLE, IOWA.	LAT 421601, LONG 942510, NEAR NE CORNER SEC. 14, T.86 N., R.31 W., CALHOUN CO., AT BRIDGE ON STATE HIGHWAY 175, NEAR WEST CITY LIMITS OF FARNHAMVILLE.	43.7	1952-	06-22-74 04-26-75	8.82 D 9.56	570 1,000
05482800	HAPPY RUN AT CHURDAN, IOWA.	LAT 4210XX, LONG 9430XX, NEAR SW CORNER SEC. 17, T.85 N., R.31 W., GREENE CO. AT BRIDGE NEAR WEST CITY LIMITS OF CHURDAN.	7.58	1952-	1975	A	(+)
05482900	HARDIN CR NR FARLIN, IOWA.	LAT 4206XX, LONG 9426XX, NEAR N 1/4 CORNER SEC. 14, T.84 N., R.31 W., GREENE COUNTY, AT BRIDGE, 1.5 MILES NE OF FARLIN.	101	1951-	1975	A	(+)
05483318	BRUSHY FORK CR NR TEMPLETON, IOWA.	LAT 4157XX, LONG 9453XX, IN NW 1/4 SEC. 1, T.82 N., R.35 W., CARROLL COUNTY, AT BRIDGE ON U.S. HIGHWAY 71, 4 MILES NE OF TEMPLETON.	45.0	1966-	06-23-74 04-27-75	90.96 D 85.72	(+) (+)
05483349	M RACCOON R TR AT CARROLL, IOWA.	LAT 4203XX, LONG 9453XX, IN NW 1/4 SEC. 36, T.84 N., R.35 W., CARROLL COUNTY, AT BRIDGE ON U.S. HIGHWAY 71, 1.5 MILES SOUTH OF CARROLL.	6.58	1966-	04-27-75	90.34	(+)
05487300	S OTTER CR BELOW HIGHWAY 34 NR WOODBURN, IOWA.	LAT 4102XX, LONG 9339XX, NEAR SE CORNER SEC. 18, T.72 N., R.24 W., CLARKE CO. AT BRIDGE DOWNSTREAM FROM U.S. HWY 34, 3 MILES NW OF WOODBURN.	2.26	1953-	1975	A	(+)
05487350	S OTTER CR TR NR WOODBURN, IOWA.	LAT 4103XX, LONG 9336XX, NEAR SW CORNER SEC. 11, T.72 N., R.24 W., CLARKE CO. AT BRIDGE, 2 MILES NORTH OF WOODBURN.	0.71	1955-	1975	A	(+)
05487600	S WHITE BREAST CR NR OSCEOLA, IOWA.	LAT 405735, LONG 934128, NEAR SW CORNER SEC. 12, T.71 N., R.25 W., CLARKE COUNTY, AT BRIDGE, 6 MILES SE OF OSCEOLA.	28.0	1953-	1975	A	(+)
05487800*	WHITE BREAST CR AT LUCAS, IOWA.	LAT 4101XX, LONG 9328XX, IN NE 1/4 SEC. 23, T.72 N., R.23 W., LUCAS COUNTY, AT BRIDGE ON U.S. HIGHWAY 65, NEAR SOUTH CITY LIMITS OF LUCAS.	128	1953-	1975	A	(+)
05488620	COAL CR NR ALBIA, IOWA.	LAT 4101XX, LONG 9251XX, IN SW 1/4 SEC. 20, T.72 N., R.17 W., MONROE COUNTY, AT BRIDGE ON U.S. HIGHWAY 34, 2 MILES SW OF ALBIA.	13.5	1966-	1975	A	(+)
05489150	L MUCHAKINOCK CR AT OSKALOOSA, IOWA.	LAT 4116XX, LONG 9238XX, IN SE 1/4 SEC. 25, T.75 N., R.16 W., MAHASKA COUNTY, AT BRIDGE ON STATE HIGHWAY 137, AT SOUTH EDGE OF OSKALOOSA.	9.12	1966-	1975	A	(+)
05489350	S AVERY CR NR BLAKESBURG, IOWA.	LAT 4101XX, LONG 9237XX, IN SE 1/4 SEC. 19, T.72 N., R.15 W., WAPELLO COUNTY, AT BRIDGE ON U.S. HIGHWAY 34, 3.5 MILES NORTH OF BLAKESBURG.	33.1	1965-	1975	A	(+)
05489490	BEAR CR AT OTTUMWA, IOWA.	LAT 410043, LONG 922754, IN NW 1/4 SEC. 27, T.72 N., R.14 W., WAPELLO COUNTY, AT BRIDGE ON U.S. HIGHWAY 34, NEAR WEST EDGE OF OTTUMWA.	22.9	1965-	1975	A	(+)
FOX RIVER BASIN							
05494100	S FOX CR TR NR WEST GROVE, IOWA.	LAT 4044XX, LONG 9238XX, NEAR S 1/4 CORNER SEC. 31, T.69 N., R.15 W., DAVIS CO., AT CULVERT ON STATE HIGHWAY 2, 3.5 MILES WEST OF WEST GROVE.	0.55	1953-	1975	A	(+)
05494110	S FOX CR NR WEST GROVE, IOWA.	LAT 4044XX, LONG 9236XX, IN SE 1/4 SEC. 32, T.69 N., R.15 W., DAVIS COUNTY, AT BRIDGE ON STATE HIGHWAY 2, 2.4 MILES WEST OF WEST GROVE.	12.2	1965-	1975	A	(+)

ANNUAL MAXIMUM DISCHARGE AT CREST-STAGE PARTIAL-RECORD STATIONS DURING WATER YEAR 1975--CONTINUED

STATION NO.	STATION NAME	LOCATION	DRAINAGE AREA (SQ MI)	PERIOD OF RECORD	DATE	ANNUAL MAXIMUM GAGE HEIGHT (FEET)	DISCHARGE (CFS)
WYACONDA RIVER BASIN							
05495600	S WYACONDA R NR WEST GROVE, IOWA.	LAT 4043XX, LONG 9230XX, NEAR NW CORNER SEC. 5, T.68 N., R.14 W., DAVIS CO., AT BRIDGE, 2.5 MILES EAST OF WEST GROVE.	4.69	1953-	1975	A	(+)
BIG SIOUX RIVER BASIN							
06483410	OTTER CR NORTH OF SIBLEY, IOWA.	LAT 4328XX, LONG 9544XX, AT NE CORNER SEC. 25, T.100 N., R.42 W., OSCEOLA CO., AT BRIDGE ON COUNTY ROAD H, 4 MILES NORTH OF SIBLEY.	11.9	1952-	08-22-75	6.33	1,730
06483420	SCHUTTE CR NR SIBLEY, IOWA.	LAT 4328XX, LONG 9547XX, NEAR NW CORNER SEC. 23, T.100 N., R.42 W., OSCEOLA COUNTY, AT CULVERT, 6 MILES NW OF SIBLEY.	1.43	1952-	04-08-75	9.88 E	(+)
06483430	OTTER CR AT SIBLEY, IOWA.	LAT 4324XX, LONG 9546XX, NEAR N 1/4 CORNER SEC. 14, T.99 N., R.42 W., OSCEOLA CO., AT BRIDGE, 1 MILE NW OF SIBLEY.	29.9	1952-	08-22-75	5.61	94
06483440	DAWSON CR NR SIBLEY, IOWA.	LAT 4323XX, LONG 9543XX, NEAR NW CORNER SEC. 20, T.99 N., R.41 W., OSCEOLA CO., AT CULVERT ON COUNTY ROAD D, 2 MILES SE OF SIBLEY.	4.35	1952-	08-22-75	5.77	1,350
06483450	WAGNER CR NR ASHTON, IOWA.	LAT 4321XX, LONG 9546XX, ON SOUTH LINE SEC. 35, T.99 N., R.42 W., OSCEOLA COUNTY, AT BRIDGE, 3 MILES NE OF ASHTON.	7.09	1952-	08-22-75	14.89	(+)
06483460	OTTER CR NR ASHTON, IOWA.	LAT 4320XX, LONG 9546XX, IN SE 1/4 SEC. 2, T.98 N., R.42 W., OSCEOLA COUNTY, AT BRIDGE, 2 MILES NORTHEAST OF ASHTON.	88.0	1952-	08-22-75	9.55	1,800
06483495	BURR OAK CR NR PERKINS, IOWA.	LAT 431443, LONG 961038, IN SE 1/4 SEC. 5, T.97 N., R.45 W., SIOUX CO., AT BRIDGE ON U.S. HIGHWAY 75, 4 MILES NORTH OF PERKINS.	30.9	1966-	06-04-75	85.55	700
PERRY CREEK BASIN							
06599800	PERRY CR NR MERRILL, IOWA.	LAT 424316, LONG 962033, IN NW 1/4 SEC. 12, T.91 N., R.47 W., PLYMOUTH CO., AT BRIDGE ON COUNTY ROAD M, 5 MILES WEST OF MERRILL.	8.17	1953-	06-18-75	5.24	(+)
06599950	PERRY CR NR HINTON, IOWA.	LAT 423757, LONG 962213, IN NE 1/4 SEC. 15, T.90 N., R.47 W., PLYMOUTH CO., AT BRIDGE, 4 MILES WEST OF HINTON (REVISED).	30.8	1953-	06-18-75	26.77	(+)
FLOYD RIVER BASIN							
06600030	L FLOYD R NR SANBORN, IOWA.	LAT 431110, LONG 954330, IN NE 1/4 SEC. 31, T.97 N., R.41 W., O BRIEN CO., AT BRIDGE ON U.S. HIGHWAY 18, 3.5 MILES WEST OF SANBORN.	8.44	1966-	06-04-75	88.00	(+)
06600080	WILLOW CR AT HOSPERS, IOWA.	LAT 430438, LONG 955416, IN NE 1/4 SEC. 3, T.95 N., R.43 W., SIOUX CO., AT BRIDGE ON STATE HIGHWAY 60, AT NORTH EDGE OF HOSPERS.	37.9	1966-	06-04-75	86.71	(+)
MONONA-HARRISON DITCH BASIN							
06601480	BIG WHISKEY SLOUGH NR REMSEN, IOWA.	LAT 4248XX, LONG 9553XX, IN NW 1/4 SEC. 11, T.92 N., R.43 W., PLYMOUTH CO., AT BRIDGE ON STATE HIGHWAY 3, 4.2 MILES EAST OF REMSEN.	12.9	1966-	03-19-75	91.52 E	(+)
06502190	ELLIOTT CR AT LAWTON, IOWA.	LAT 422830, LONG 961122, IN NW 1/4 SEC. 3, T.88 N., R.46 W., WOODBURY CO., AT BRIDGE ON U.S. HIGHWAY 20, AT WEST EDGE OF LAWTON.	34.8	1966-	06-18-75	80.21	1,500
06602240	BIG WHISKEY CR NR LAWTON, IOWA.	LAT 422830, LONG 961501, IN NW 1/4 SEC. 5, T.88 N., R.46 W., WOODBURY CO., AT BRIDGE ON U.S. HIGHWAY 20, 3.5 MILES WEST OF LAWTON.	51.3	1966-	1975	A	(+)

ANNUAL MAXIMUM DISCHARGE AT CREST-STAGE PARTIAL-RECORD STATIONS DURING WATER YEAR 1975--CONTINUED

STATION NO.	STATION NAME	LOCATION	DRAINAGE AREA (SQ MI)	PERIOD OF RECORD	DATE	ANNUAL MAXIMUM		DISCHARGE (CFS)
						GAGE HEIGHT (FEET)		
LITTLE SIOUX RIVER BASIN								
06604510	OCHEYEDAN R NR OCHEYEDAN, IOWA.	LAT 4326XX, LONG 9537XX, IN NE 1/4 SEC. 6, T.99 N., R.40 W., OSCEOLA CO., AT BRIDGE ON STATE HIGHWAY 9, 4 MILES NW OF OCHEYEDAN.	73.5	1966-	1975	A		(+)
06605340	PRAIRIE CR NR SPENCER, IOWA.	LAT 430516, LONG 950940, IN SE 1/4 SEC. 36, T.96 N., R.37 W., CLAY COUNTY, AT BRIDGE ON U.S. HIGHWAY 71, 4 MILES SOUTH OF SPENCER.	22.3	1966-	04-28-75	88.89		430
06605750	WILLOW CR NR CORNELL, IOWA.	LAT 4243XX, LONG 9510XX, IN SE 1/4 SEC. 12, T.94 N., R.37 W., CLAY COUNTY, AT BRIDGE ON U.S. HIGHWAY 71, 2 MILES NW OF CORNELL.	78.6	1966-	04-28-75	89.45		1,650
06605890	WATERMAN CR AT HARTLEY, IOWA.	LAT 431106, LONG 953043, IN NE 1/4 SEC. 36, T.97 N., R.40 W., O BRIEN CO., AT BRIDGE ON U.S. HIGHWAY 18, 1.8 MILES WEST OF HARTLEY.	28.7	1966-	03-02-67 04-06-69 06-05-71 05-01-72 06-18-73 06-22-74 06-04-75	85.75 87.83 86.95 86.03 84.33 84.21 87.88		390 2,000 970 480 100 91 2,100
06606790	MAPLE CR NR ALTA, IOWA.	LAT 4245XX, LONG 9522XX, IN NE 1/4 SEC. 31, T.92 N., R.38 W., BUENA VISTA CO. AT BRIDGE ON STATE HIGHWAY 3, 6 MILES NW OF ALTA.	15.5	1966-	06-22-74 06-25-75	86.02 88.47	D	144 1,440
06607197	WILSEY CR AT MAPLETON, IOWA.	LAT 4210XX, LONG 9545XX, IN SE 1/4 SEC. 14, T.85 N., R.43 W., MONONA CO., AT BRIDGE ON STATE HIGHWAY 141, 1.2 MILES NW OF MAPLETON.	18.4	1966-	04-27-75	81.16		(+)
SOLDIER RIVER BASIN								
06608450	JORDAN CR AT MOORHEAD, IOWA.	LAT 4155XX, LONG 9552XX, IN NW 1/4 SEC. 15, T.82 N., R.43 W., MONONA CO., AT BRIDGE ON STATE HIGHWAY 183, AT SW CORNER OF MOORHEAD.	30.1	1966-	1975	A		(+)
BOYER RIVER BASIN								
06609560	WILLOW CR NR SOLDIER, IOWA.	LAT 4155XX, LONG 9542XX, IN NW 1/4 SEC. 14, T.82 N., R.42 W., MONONA CO., AT BRIDGE ON STATE HIGHWAY 37, 6 MILES SE OF SOLDIER.	29.1	1966-	1975	A		(+)
MOSQUITO CREEK BASIN								
06610510	MOSER CR NR EARLING, IOWA.	LAT 4147XX, LONG 9527XX, IN NE 1/4 SEC. 1, T.80 N., R.40 W., SHELBY CO., AT BRIDGE ON STATE HIGHWAY 37, 1.5 MILES WEST OF EARLING.	21.6	1966-	1975	A		(+)
06610600	MOSQUITO CR AT NEOLA, IOWA.	LAT 412709, LONG 953637, IN NE 1/4 SEC. 19, T.77 N., R.42 W., POTTAWATTAMIE CO., AT BRIDGE ON COUNTY ROAD S, 0.5 MILE SOUTH OF NEOLA.	131	1966-	08-29-75	16.58		8,600
NISHNABOTNA RIVER BASIN								
06807418	GRAYBILL CR NR CARSON, IOWA.	LAT 4114XX, LONG 9523XX, IN NW 1/4 SEC. 7, T.74 N., R.39 W., POTTAWATTAMIE CO., AT BRIDGE ON STATE HIGHWAY 92, 2 MILES EAST OF CARSON.	45.9	1966-	1975	A		(+)
08807470	INDIAN CR NR EMERSON, IOWA.	LAT 4102XX, LONG 9523XX, IN NW 1/4 SEC. 19, T.72 N., R.39 W., MONTGOMERY CO., AT BRIDGE ON U.S. HIGHWAY 34, 1 MILE EAST OF EMERSON.	37.3	1966-	08-25-75	87.36		660
06807720	M SILVER CR NR AVOCA, IOWA.	LAT 412833, LONG 952806, NEAR N 1/4 CORNER SEC. 17, T.77 N., R.40 W., POTTAWATTAMIE CO., AT BRIDGE ON STATE HIGHWAY 83, 7 MILES SOUTH OF AVOCA.	3.21	1955-	08-29-75	9.13		730
06807760	M SILVER CR NR OAKLAND, IOWA.	LAT 411928, LONG 953319, NEAR E 1/4 CORNER SEC. 4, T.75 N., R.41 W., POTTAWATTAMIE CO., AT BRIDGE, 8.5 MILES NW OF OAKLAND.	25.7	1953-	08-25-75	13.38		1,780

ANNUAL MAXIMUM DISCHARGE AT CREST-STAGE PARTIAL-RECORD STATIONS DURING WATER YEAR 1975--CONTINUED

STATION NO.	STATION NAME	LOCATION	DRAINAGE AREA (SQ MI)	PERIOD OF RECORD	ANNUAL MAXIMUM GAGE HEIGHT (FEET)	DISCHARGE (CFS)
NISHNABOTNA RIVER BASIN--CONTINUED						
06807780 M	SILVER CR AT TREYNOR, IOWA.	LAT 411437, LONG 953653, NEAR NE CORNER SEC. 1, T.74 N., R.42 W., POTTAWATTAMIE CO., AT BRIDGE ON COUNTY ROAD F, 1 MILE NORTH OF TREYNOR.	42.7	1953-	08-25-75 8.36	1,620
06808880	BLUEGRASS CR AT AUDUBON, IOWA.	LAT 4143XX, LONG 9456XX, IN NW 1/4 SEC. 28, T.80 N., R.35 W., AUDUBON CO., AT BRIDGE ON U.S. HIGHWAY 71, NEAR SOUTH EDGE OF AUDUBON.	15.4	1966-	04-28-75 84.62	800
TARKIO RIVER BASIN						
06811760	TARKIO R NR ELLIOT, IOWA.	LAT 4106XX, LONG 9506XX, NEAR NE CORNER SEC. 28, T.73 N., R.37 W., MONTGOMERY COUNTY, AT BRIDGE, 4.5 MILES SE OF ELLIOT.	10.7	1952-	03-19-75 6.66 D	(+)
06811800 E	TARKIO CR NR STANTON, IOWA.	LAT 4105XX, LONG 9506XX, IN W 1/2 SEC. 34, T.73 N., R.37 W., MONTGOMERY CO., AT BRIDGE, 7 MILES NORTH OF STANTON.	4.66	1952-	06-25-75 10.60	1,080
06811820	TARKIO R TR NR STANTON, IOWA.	LAT 4103XX, LONG 9506XX, NEAR NE CORNER SEC. 16, T.72 N., R.37 W., MONTGOMERY COUNTY, AT BOX CULVERT, 4 MILES NORTH OF STANTON.	0.67	1952-	03-14-75 2.50 D	(+)
06811875	SNAKE CR NR YORKTOWN, IOWA.	LAT 4045XX, LONG 9508XX, IN NW 1/4 SEC. 32, T.69 N., R.37 W., PAGE COUNTY, AT BRIDGE ON STATE HIGHWAY 2, 1.5 MILES NE OF YORKTOWN.	9.10	1966-	05-15-66 93.87 06-21-67 91.38 07-17-69 91.03 02-01-73 93.70 06-09-74 94.00 06-18-75 92.32	1,400 750 670 1,350 1,450 970
NODAWAY RIVER BASIN						
06816290 W	NODAWAY R AT MASSENA, IOWA.	LAT 4115XX, LONG 9445XX, IN SE 1/4 SEC. 33, T.75 N., R.34 W., CASS COUNTY, AT BRIDGE ON STATE HIGHWAY 148, AT SE CORNER OF MASSENA.	23.4	1966-	1975 A	(+)
PLATTE RIVER BASIN						
06818598	PLATTE R NR STRINGTOWN, IOWA.	LAT 4059XX, LONG 9430XX, IN SE 1/4 SEC. 2, T.71 N., R.32 W., ADAMS COUNTY, AT BRIDGE ON U.S. HIGHWAY 34, 3.8 MILES EAST OF STRINGTOWN.	51.7	1966-	06-24-75 90.61	1,330
06819110 MB	102 R NR GRAVITY, IOWA.	LAT 4050XX, LONG 9444XX, IN SE 1/4 SEC. 27, T.70 N., R.34 W., TAYLOR COUNTY, AT BRIDGE ON STATE HIGHWAY 148, 4.8 MILES NORTH OF GRAVITY.	33.5	1966-	1975 A	(+)
CHARITON RIVER BASIN						
06903980	CHARITON R NR UDELL, IOWA.	LAT 404653, LONG 925012, IN NE 1/4 SEC. 17, T.69 N., R.17 W., APPANOOSE CO., AT BRIDGE, 5.0 MILES WEST OF UDELL.	631	1972-	1975 A	(+)
06903990	COOPER CR AT CENTERVILLE, IOWA.	LAT 404502, LONG 925136, IN NW 1/4 SEC. 30, T.69 N., R.17 W., APPANOOSE CO., AT BRIDGE ON STATE HIGHWAY 5, AT NORTH EDGE OF CENTERVILLE.	47.8	1966-	07-01-75 69.98	970
06904040	CHARITON R AT COAL CITY, IOWA.	LAT 403535, LONG 924240, IN NE 1/4 SEC. 20, T.67 N., R.16 W., APPANOOSE CO., AT BRIDGE IN COAL CITY.	816	1972-	1975 A	(+)

* ALSO A LOW-FLOW PARTIAL-RECORD STATION.

+ DISCHARGE NOT DETERMINED.

A PEAK STAGE DID NOT REACH BOTTOM OF GAGE.

B GAGE REMOVED DURING BRIDGE CONSTRUCTION.

C MAXIMUM OBSERVED.

D REVISED.

E ICE AFFECTED.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Measurements at miscellaneous sites

Measurements of streamflow at points other than gaging stations or partial-record stations are given in the following table.

Discharge measurements made at miscellaneous sites during water year 1975

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Date	Discharge (cfs)
Upper Iowa River basin						
Upper Iowa River	Mississippi River	NW1/4 sec.1, T.99 N., R.6 W., Allamakee County, at bridge on State Highway 76, 0.2 mile (0.3 km) above Bear Creek, and 3.6 mi (5.6 km) south of Dorchester, Iowa.	700	1937-74	10-03-74 11-14-74 04-22-75 06-05-75 07-15-75 08-19-75	243 253 1,300 586 352 218
Bear Creek	Upper Iowa River	NE1/4 sec.2, T.99 N., R.6 W., Allamakee County, at bridge on State Highway 76, 3.0 mi (4.8 km) south of Dorchester, Iowa.	118	1941-74	10-03-74 11-14-74 04-22-75 06-05-75 07-15-75 08-19-75	84.9 84.3 92.3 101 86.4 73.5
Floyd River basin						
Floyd River	Missouri River	NE1/4 SE1/4 sec.34, T.96 N., R.43 W., Sioux County, 200 ft (61 m) upstream from unnamed slough, near gravel pit, and 1.1 mi (1.8 km) north of Hospers, Iowa.	173		07-28-75	15.7

SEEPAGE INVESTIGATIONS

Discharge measurements were made during the 1975 water year on streams in the area of Project IA 72-021C, Carbonate Terrane Hydrology. The reach on the Cedar River extends from Waterloo to Cedar Rapids. The measurements were made during periods of constant base flow of the stream and may be compared with streamflow data for the same date as published for regular gaging stations and low-flow partial-record stations in the same area.

Iowa River basin

Elk Run	Cedar River	North line sec.34, T.89 N., R.12 W.	31.4		10-21-74 09-24-75	5.21 4.33
Poyner Creek	Cedar River	W1/2 sec.10, T.88 N., R.12 W.	17		10-21-74 09-24-75	1.44 0
Cedar River	Iowa River	SW1/4 SW1/4 sec.23, T.88 N., R.12 W.	5,234		10-21-74 09-24-75	1,050 839
Indian Creek	Cedar River	North line sec.25, T.88 N., R.12 W.	23		10-21-74 09-24-75	3.26 1.46
Cedar River	Iowa River	S1/2 sec.19, T.87 N., R.11 W.	5,360		10-21-74 09-24-75	1,220 916
Rock Creek	Cedar River	North line sec.5, T.86 N., R.11 W.	32.2		10-21-74 09-24-75	11.1 3.09
Lime Creek	Cedar River	East line sec.33, T.87 N., R.10 W.	41		10-21-74 09-24-75	6.20 1.25
Bear Creek	Cedar River	Center sec.21, T.86 N., R.10 W.	61		10-21-74 09-24-75	8.90 3.51
Pratt Creek	Cedar River	East line sec.36, T.86 N., R.11 W.	49		10-21-74 09-24-75	14.7 3.91
Hinkle Creek	Cedar River	SE1/4 sec.17, T.85 N., R.10 W.	30		10-21-74 09-24-75	5.45 1.15
Cedar River	Iowa River	SW1/4 sec.16, T.85 N., R.10 W.	6,040		10-21-74 09-24-75	1,640 981
Prairie Creek	Cedar River	SW1/4 sec.10, T.85 N., R.10 W.	20		10-21-74 09-24-75	3.96 .18
Mud Creek	Cedar River	SW1/4 SW1/4 sec.22, T.85 N., R.10 W.	45		10-21-74 09-24-75	9.51 3.33
Cedar River	Iowa River	SW1/4 sec.11, T.85 N., R.9 W.	6,135		09-25-75	976
Blue Creek	Cedar River	NE1/4 SE1/4 sec.7, T.85 N., R.8 W.	63		10-21-74 09-24-75	13.6 5.37
Cedar River	Iowa River	E1/2 sec.20, T.85 N., R.8 W.	6,210		10-21-74 09-25-75	1,410 1,080
Dry Creek	Cedar River	NW1/4 NE1/4 sec.21, T.84 N., R.8 W.	27		10-21-74 09-24-75	3.38 .80
Cedar River	Iowa River	NE1/4 NE1/4 sec.33, T.84 N., R.8 W.	6,380		10-21-74 09-25-75	1,430 998
Morgan Creek	Cedar River	Center sec.14, T.83 N., R.8 W.	27		10-21-74 09-24-75	3.83 .96

DISCONTINUED GAGING STATIONS

The following stream-gaging stations have been discontinued in Iowa. Continuous daily streamflow records were collected and published for the period of record shown for each station.

Discontinued gaging stations

Station name	Station number	Drainage area (sq mi)	Period of record
Upper Iowa River near Decorah, Iowa.	05388000	568	1913-14; 1919-27; 1933-51.
Paint Creek at Waterville, Iowa.	05388500	42.8	1952-73.
Yellow River at Ion, Iowa.	05389000	221	1934-51.
Mississippi River at Clayton, Iowa.	05411500	79,200	1930-36.
Turkey River at Spillville, Iowa.	05411600	177	1956-73.
Turkey River at Elkader, Iowa.	05412000	891	1932-42.
Maquoketa River near Manchester, Iowa.	05417000	305	1933-73.
Maquoketa River near Delhi, Iowa.	05417500	347	1933-40.
Maquoketa River above North Fork Maquoketa River near Maquoketa, Iowa.	05418000	938	1913-14.
Wapsipinicon River at Stone City, Iowa.	05421500	1,324	1903-14.
West Branch (West Fork) Iowa River near Klemme, Iowa.	05448500	112	1948-58.
Iowa River near Iowa Falls, Iowa.	05450000	665	1911-14.
Upper Pine Lake at Eldora, Iowa.	05450500	14.9	1936-70.
Lower Pine Lake at Eldora, Iowa.	05451000	15.9	1936-70.
Iowa River near Belle Plaine, Iowa.	05452500	2,465	1939-69.
Lake Macbride near Solon, Iowa.	05453500	27.0	1936-71.
Old Mans Creek near Iowa City, Iowa.	05455100	201	1950-64.
Cedar River at Mitchell, Iowa.	05457500	825	1933-42.
Shell Rock River at Marble Rock (Greene), Iowa.	05460500	1,318	1933-53.
Shell Rock River at Greene, Iowa.	05461000	1,357	1933-42.
Shell Rock River near Clarksville, Iowa.	05461500	1,626	1916-27; 1932-34.
Fourmile Creek near Lincoln, Iowa.	05464130	13.78	1963-67; 1969-74.
Half Mile Creek near Gladbrook, Iowa.	05464133	1.33	1962-67; 1969-74.
Fourmile Creek near Traer, Iowa.	05464137	19.51	1962-74.
Indian Creek near Mingo, Iowa.	05471200	276	1958-75.
Lake Keomah near Oskaloosa, Iowa.	05472000	3.06	1936-71.
Skunk River at Coppock, Iowa.	05473000	2,916	1913-44.
East Fork Des Moines River near Burt, Iowa.	05478000	146	1971-74.
East Fork Des Moines River near Hardy, Iowa.	05478500	1,268	1940-54.
Des Moines River near Fort Dodge, Iowa.	05479500	3,753	1911-13.
Des Moines River near Boone, Iowa.	05481500	5,511	1920-68.
Des Moines River at Des Moines, Iowa.	05482000	6,245	1905-06; 1916-61.
Storm Lake at Storm Lake, Iowa.	05482140	28.3	1970-75.
Blackhawk Lake at Lake View, Iowa.	05482315	23.3	1970-75.
Springbrook Lake near Guthrie Center, Iowa.	05483500	5.18	1936-71.
Raccoon River at Des Moines, Iowa.	05485000	3,590	1902-03.
Lake Ahquabi near Indianola, Iowa.	05487000	4.93	1936-71.
White Breast Creek near Knoxville, Iowa.	05488000	380	1945-62.
Lake Wapello near Drakesville, Iowa.	05490000	7.75	1936-71.
Sugar Creek near Keokuk, Iowa.	05491000	105	1922-31; 1958-73.
Fox River at Bloomfield, Iowa.	05494300	87.7	1967-73.
Fox River at Cantril, Iowa.	05494500	161	1940-51.
Rock River at Rock Rapids, Iowa.	05483270	788	1959-74.
Dry Creek at Hawarden, Iowa.	06484000	48.4	1948-69.
Perry Creek at 38th Street, Sioux City, Iowa.	06600000	65.1	1945-69.
West Fork ditch at Holly Springs, Iowa.	06602000	399	1939-69.
Loon Creek near Orleans, Iowa.	06603920	31	1971-74.
Spirit Lake outlet at Orleans, Iowa.	06604100	75.6	1971-74.
Milford Creek at Milford, Iowa.	06604400	146	1971-74.
Little Sioux River at Spencer, Iowa.	06605100	990	1936-42.
Little Sioux River at Gillett Grove, Iowa.	06605600	1,334	1958-73.
Little Sioux River near Kennebeck, Iowa.	06606700	2,738	1939-69.
Maple River at Turin, Iowa.	06607300	725	1939-41.
Little Sioux River near Blencoe (Turin), Iowa.	06607510	4,470	1939-42.
Steer Creek near Magnolia, Iowa.	06609200	9.26	1963-69.
Thompson Creek near Woodbine, Iowa.	06609590	6.97	1963-69.
Willow Creek near Logan, Iowa.	06609600	129	1972-75.
Waubesaie Creek near Bartlett, Iowa.	06806000	30.4	1945-69.
West Nishnabotna River at (near) White Cloud, Iowa.	06807500	967	1918-24.
Mule Creek near Malvern, Iowa.	06808000	10.6	1954-69.
Davids Creek near Hamlin, Iowa.	06809000	25.0	1952-73.
Tarkio River (East Tarkio Creek) at Blanchard, Iowa.	06812000	200	1934-40.
West Nodaway River at Villisca, Iowa.	06816500	342	1918-25.
Honey Creek near Russell, Iowa.	06903500	13.2	1952-62.
Chariton River near Centerville, Iowa.	06904000	708	1938-59.

SECTION 2. WATER QUALITY RECORDS

05387500 UPPER IOWA RIVER AT DECORAH, IOWA

LOCATION.--Lat 43°18'19", long 91°47'48", in NE1/4 SW1/4 sec.16, T.98 N., R.8 W., Winneshiek County, at gaging station on right bank 1,200 ft (366 m) upstream from bridge on U.S. Highway 52, 1,500 ft (457 m) downstream from Dry Run cutoff, and 3.0 mi (4.8 km) upstream from Trout Run.

DRAINAGE AREA.--511 mi² (1,323 km²).

PERIOD OF RECORD.--Water temperatures: October 1962 to September 1964, October 1965 to current year.
Sediment records: October 1962 to December 1967.

EXTREMES.--Current year: Water temperatures: Maximum, 29.5°C July 31, Aug. 1; minimum, freezing point on many days during winter months.

Period of record: Water temperatures: Maximum, 32.0°C Aug. 23, 1968; minimum, freezing point on many days during winter months each year.

REMARKS.--Temperature recorder installed on Apr. 12, 1967.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1974 to SEPTEMBER 1975

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	12.0	10.0	15.0	13.5	1.0	0.5	0.0	0.0	---	---	---	---
2	11.5	8.0	14.0	11.5	0.5	0.0	0.0	0.0	---	---	---	---
3	10.5	8.0	11.5	9.0	0.5	0.0	0.0	0.0	---	---	---	---
4	14.0	9.0	9.5	8.0	1.0	0.5	0.0	0.0	---	---	---	---
5	14.5	13.0	9.0	7.0	0.5	0.0	0.0	0.0	---	---	---	---
6	13.5	10.5	8.0	5.5	1.0	0.5	0.0	0.0	---	---	---	---
7	13.0	9.5	8.0	5.0	1.0	1.0	0.0	0.0	---	---	---	---
8	13.5	9.5	9.0	5.5	0.5	0.0	0.0	0.0	---	---	---	---
9	14.5	11.0	8.0	6.0	1.5	0.0	0.5	0.0	---	---	---	---
10	15.0	10.5	8.5	8.0	0.5	0.0	0.5	0.0	---	---	0.5	0.0
11	14.0	13.0	9.5	8.0	1.0	0.5	0.5	0.0	---	---	0.5	0.0
12	13.5	13.0	8.0	5.5	1.0	0.5	0.0	0.0	---	---	0.0	0.0
13	13.0	11.5	5.5	4.0	1.0	0.5	0.0	0.0	---	---	0.5	0.0
14	11.5	10.0	4.0	3.0	1.0	0.5	0.0	0.0	---	---	0.5	0.0
15	11.0	8.0	4.0	1.5	1.0	0.5	0.0	0.0	---	---	0.0	0.0
16	12.0	8.5	4.5	2.0	1.0	0.0	0.0	0.0	---	---	0.5	0.0
17	13.0	9.5	5.0	3.0	0.5	0.0	0.0	0.0	---	---	0.5	0.0
18	13.0	10.5	5.0	4.0	0.0	0.0	0.0	0.0	---	---	0.0	0.0
19	11.0	9.5	6.5	5.0	0.0	0.0	0.0	0.0	---	---	0.5	0.0
20	10.5	6.5	5.5	4.0	0.0	0.0	0.5	0.0	---	---	1.0	0.0
21	10.0	6.5	4.5	3.0	0.0	0.0	0.0	0.0	---	---	0.0	0.0
22	11.0	8.0	5.5	3.0	1.0	0.0	0.0	0.0	---	---	1.0	0.0
23	13.0	10.0	5.5	4.5	0.5	0.0	0.0	0.0	---	---	1.5	1.0
24	14.0	10.0	5.5	3.5	0.0	0.0	0.0	0.0	---	---	1.0	0.5
25	13.5	10.5	3.5	1.5	0.0	0.0	0.0	0.0	---	---	1.0	0.5
26	11.5	8.5	1.5	0.5	0.0	0.0	0.0	0.0	---	---	1.0	0.5
27	12.0	8.5	1.0	0.0	0.0	0.0	0.0	0.0	---	---	1.0	0.0
28	14.0	11.0	0.5	0.0	0.0	0.0	---	---	---	---	2.0	0.0
29	14.0	13.0	1.0	0.5	0.0	0.0	---	---	---	---	3.0	1.5
30	15.0	13.5	1.0	0.5	0.0	0.0	---	---	---	---	3.0	0.5
31	15.5	14.5	---	---	0.0	0.0	---	---	---	---	4.5	1.5
MONTH	15.5	6.5	15.0	0.0	1.5	0.0	0.5	0.0	---	---	---	---

UPPER IOWA RIVER BASIN

05387500 UPPER IOWA RIVER AT DECORAH, IOWA--CONTINUED

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	3.0	1.5	10.5	8.0	---	---	27.0	23.0	29.5	23.0	21.5	17.0
2	2.0	1.0	12.0	9.5	---	---	26.0	23.0	27.0	21.5	21.0	18.5
3	3.5	0.5	12.0	10.5	---	---	28.0	23.0	---	---	22.0	18.0
4	4.0	1.0	12.0	10.0	---	---	28.5	24.5	---	---	19.5	16.5
5	5.5	3.0	15.5	11.0	---	---	28.0	23.0	---	---	19.0	15.5
6	7.0	4.0	15.5	13.0	20.5	18.0	26.0	18.0	---	---	19.0	13.5
7	6.0	3.5	15.0	12.0	20.5	16.0	25.5	20.5	---	---	19.0	14.0
8	5.0	3.0	11.5	10.5	18.0	16.0	24.5	21.5	---	---	17.0	13.0
9	3.0	2.0	14.5	10.0	16.5	14.5	23.5	19.0	---	---	14.5	11.5
10	4.5	2.0	16.0	12.0	15.5	14.0	21.5	18.0	---	---	18.5	10.5
11	7.0	3.5	16.0	13.5	15.5	15.0	21.0	17.0	---	---	16.5	13.5
12	6.5	4.5	15.0	11.5	16.5	13.5	19.5	16.5	---	---	13.5	9.5
13	6.0	4.0	15.5	12.0	19.0	14.5	20.5	15.0	---	---	14.5	8.0
14	6.0	5.0	16.0	14.5	18.0	16.0	22.0	16.0	---	---	16.0	8.5
15	8.0	5.5	15.0	13.5	16.5	15.5	25.0	18.5	---	---	13.5	11.5
16	8.5	7.0	16.5	11.5	15.0	14.5	26.5	20.5	---	---	14.5	11.5
17	9.5	8.0	19.0	14.0	20.0	14.5	28.0	21.5	---	---	16.5	13.0
18	9.5	8.0	19.0	15.5	18.5	16.5	28.0	23.0	---	---	17.0	14.5
19	8.0	6.5	21.0	16.5	23.5	16.5	29.0	23.5	20.5	18.0	15.0	11.0
20	6.5	5.5	22.0	19.0	23.5	21.0	28.0	22.0	24.0	18.0	12.0	11.0
21	6.5	5.5	20.5	19.5	26.0	21.5	28.0	20.5	25.5	20.0	11.0	9.5
22	8.0	5.5	21.0	18.0	24.5	22.0	26.0	22.0	24.0	21.5	14.5	8.0
23	11.5	8.0	21.5	19.0	25.5	21.0	24.0	22.0	25.0	19.5	13.5	8.5
24	11.5	11.0	---	---	25.5	22.0	25.5	20.0	23.5	19.5	15.0	8.0
25	13.5	10.0	---	---	26.0	22.0	26.0	19.0	21.5	19.0	15.5	8.0
26	13.0	10.0	---	---	26.0	22.0	26.0	19.0	19.0	16.5	16.0	8.5
27	10.0	8.5	---	---	25.5	22.0	27.0	20.5	19.0	15.5	16.5	9.0
28	8.5	6.5	---	---	26.0	22.0	29.0	20.0	22.0	17.0	13.5	11.0
29	10.0	6.5	---	---	26.5	23.5	29.0	21.0	20.5	19.0	15.5	12.0
30	10.0	9.0	---	---	26.5	23.5	29.0	21.0	19.0	17.0	14.0	11.0
31	---	---	---	---	---	---	29.5	22.0	21.5	16.0	---	---
MONTH	13.5	0.5	---	---	26.5	13.5	29.5	15.0	---	---	22.0	8.0
YEAR	29.5	0.0										

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)
05387500 - UPPER IOWA RIVER AT DECORAH, IOWA (LAT 43 18 19 LONG 091 47 48)					
OCT., 1974					
03...	1630	119	10.0	410	7.7
NOV.					
14...	1615	136	3.5	480	7.9
DEC.					
16...	1445	117	1.0	--	--
JAN., 1975					
27...	1400	99	.0	650	7.6
MAR.					
10...	1420	98	.0	380	8.5
APR.					
21...	1400	868	6.0	550	8.4
JUNE					
06...	0820	447	17.0	470	8.4
JULY					
14...	1725	196	21.0	470	8.4
AUG.					
18...	1340	110	22.0	370	8.5

05420500 MISSISSIPPI RIVER AT CLINTON, IOWA
(National stream-quality accounting network station)

LOCATION.--Lat. 41°46'53", long 90°15'04", in NW1/4 sec.34, T.81 N., R.6 E., Clinton County, on right bank at foot of Seventh Avenue in Camanche, 5.0 mi (8.0 km) upstream from Wapsipinicon River, 6.4 mi (10.3 km) downstream from Clinton, 10.6 mi (17.1 km) downstream from dam 13, and at mile 511.8 (823.5 km) upstream from Ohio River. Prior to June 6, 1969, at site 400 ft (122 m) downstream.

DRAINAGE AREA.--85,600 mi² (221,700 km²), approximately.

PERIOD OF RECORD.--Chemical analysis: November 1974 to current year.

Water temperatures: July 1974 to current year.

Biological analysis: November 1974 to current year.

REMARKS.--Recorded water temperature data for station 05420400 at Dam 13 available since June 1969 in reports of Water Resources Data for Illinois. Samples collected at Fulton-Lyons bridge, State Highway 136 in Clinton.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C) , WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975 (ONCE-DAILY)												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	320	330	310
2	---	---	---	---	---	---	---	---	---	320	330	300
3	---	---	---	---	---	---	---	---	---	330	330	290
4	---	---	---	---	---	---	---	---	---	330	330	290
5	---	---	---	---	---	---	---	---	---	330	330	290
6	---	---	---	---	---	---	---	---	---	340	330	290
7	---	---	---	---	---	---	---	---	---	350	330	280
8	---	---	---	---	---	---	---	---	---	360	340	290
9	---	---	---	---	---	---	---	---	---	360	340	270
10	---	---	---	---	---	---	---	---	---	380	330	300
11	---	---	---	---	---	---	---	---	---	380	330	300
12	---	---	---	---	---	---	---	---	---	380	340	290
13	---	---	---	---	---	---	---	---	---	380	340	290
14	---	---	---	---	---	---	---	---	---	380	340	290
15	---	---	---	---	---	---	---	---	---	380	340	290
16	---	---	---	---	---	---	---	---	---	370	340	290
17	---	---	---	---	---	---	---	---	---	360	340	280
18	---	---	---	---	---	---	---	---	---	360	340	320
19	---	---	---	---	---	---	---	---	---	360	340	300
20	---	---	---	---	---	---	---	---	---	350	340	300
21	---	---	---	---	---	---	---	---	---	330	340	300
22	---	---	---	---	---	---	---	---	---	340	340	300
23	---	---	---	---	---	---	---	---	---	330	340	300
24	---	---	---	---	---	---	---	---	---	330	340	300
25	---	---	---	---	---	---	---	---	---	330	330	300
26	---	---	---	---	---	---	---	---	---	320	320	290
27	---	---	---	---	---	---	---	---	---	340	320	300
28	---	---	---	---	---	---	---	---	---	330	320	280
29	---	---	---	---	---	---	---	---	---	330	320	290
30	---	---	---	---	---	---	---	---	---	320	320	290
31	---	---	---	---	---	---	---	---	---	330	320	---
MONTH YEAR	MAX	380	MIN	270	MEAN	325	---	---	---	347	333	294

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975 (ONCE-DAILY)												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	27.0	29.0	23.0
2	---	---	---	---	---	---	---	---	---	26.0	29.0	22.0
3	---	---	---	---	---	---	---	---	---	28.0	25.0	22.0
4	---	---	---	---	---	---	---	---	---	29.0	28.0	22.0
5	---	---	---	---	---	---	---	---	---	26.0	27.0	21.0
6	---	---	---	---	---	---	---	---	---	28.0	25.0	21.0
7	---	---	---	---	---	---	---	---	---	29.0	25.0	22.0
8	---	---	---	---	---	---	---	---	---	28.0	25.0	22.0
9	---	---	---	---	---	---	---	---	---	28.0	25.0	21.0
10	---	---	---	---	---	---	---	---	---	26.0	26.0	19.0
11	---	---	---	---	---	---	---	---	---	25.0	25.0	19.0
12	---	---	---	---	---	---	---	---	---	24.0	26.0	18.0
13	---	---	---	---	---	---	---	---	---	26.0	26.0	20.0
14	---	---	---	---	---	---	---	---	---	26.0	25.0	26.0
15	---	---	---	---	---	---	---	---	---	26.0	27.0	19.0
16	---	---	---	---	---	---	---	---	---	26.0	26.0	18.0
17	---	---	---	---	---	---	---	---	---	26.0	25.0	19.0
18	---	---	---	---	---	---	---	---	---	26.0	28.0	18.0
19	---	---	---	---	---	---	---	---	---	27.0	28.0	19.0
20	---	---	---	---	---	---	---	---	---	28.0	27.0	16.0
21	---	---	---	---	---	---	---	---	---	29.0	27.0	15.0
22	---	---	---	---	---	---	---	---	---	28.0	27.0	18.0
23	---	---	---	---	---	---	---	---	---	26.0	27.0	17.0
24	---	---	---	---	---	---	---	---	---	27.0	26.0	15.0
25	---	---	---	---	---	---	---	---	---	27.0	26.0	15.0
26	---	---	---	---	---	---	---	---	---	28.0	25.0	16.0
27	---	---	---	---	---	---	---	---	---	28.0	25.0	17.0
28	---	---	---	---	---	---	---	---	---	29.0	25.0	18.0
29	---	---	---	---	---	---	---	---	---	29.0	24.0	17.0
30	---	---	---	---	---	---	---	---	---	30.0	24.0	16.0
31	---	---	---	---	---	---	---	---	---	30.0	23.0	---
MONTH YEAR	MAX	30.0	MIN	15.0	MEAN	24.0	---	---	---	27.5	26.0	19.0

MISSISSIPPI RIVER MAIN STEM

05420500 MISSISSIPPI RIVER AT CLINTON, IOWA--CONTINUED
(National stream-quality accounting network station)

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	DIS- SOLVED SILICA (SIO2) (MG/L) (00955)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00916)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	ALKA- LINITY AS CACO3 (MG/L) (00410)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)
NOV., 1974												
12...	1200	44000	.2	40	15	8.4	2.1	183	4	157	19	11
DEC.												
10...	1130	21000	4.3	41	17	7.8	1.7	186	--	153	20	9.8
JAN., 1975												
14...	1100	22300	7.8	48	18	9.2	2.0	210	--	172	20	10
FEB.												
11...	1100	21000	11	45	18	10	1.9	193	--	158	21	12
MAR.												
25...	1100	102000	7.9	26	11	6.8	5.0	124	--	102	12	9.7
APR.												
23...	1030	83200	9.4	37	13	7.6	2.6	150	0	123	19	10
MAY												
26...	1100	83200	4.5	45	16	7.3	2.7	163	0	134	37	9.7
JUNE												
25...	1100	79300	8.4	43	16	6.5	2.6	168	0	138	26	8.6
JULY												
21...	1100	69900	12	42	16	6.0	2.3	165	0	135	25	8.4
AUG.												
28...	1100	60600	3.4	39	17	8.9	2.2	171	0	140	20	9.2
SEP.												
23...	1100	31900	5.7	36	15	15	2.8	146	0	120	18	8.7

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	TOTAL NITRITE PLUS NITRATE (N) (MG/L) (00630)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L) (00625)	TOTAL NITRO- GEN (N) (MG/L) (00600)	TOTAL NITRO- GEN (NO3) (MG/L) (71887)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)	DIS- SOLVED SOLIDS (TONS PER AC-FT) (70303)	DIS- SOLVED SOLIDS (TONS PER DAY) (70302)	HARD- NESS (CA, MG) (00900)
NOV., 1974											
12...	.2	.08	1.3	1.4	6.1	.26	236	190	.32	28000	160
DEC.											
10...	.3	.35	1.4	1.8	7.7	.02	168	194	.23	9530	170
JAN., 1975											
14...	.3	.83	1.1	1.9	8.5	.12	198	219	.27	11900	190
FEB.											
11...	.3	.75	1.2	2.0	8.6	.10	210	214	.29	11900	190
MAR.											
25...	.3	1.2	3.9	5.1	23	.76	143	140	.19	39400	110
APR.											
23...	.2	.13	2.4	2.5	11	.05	199	173	.27	44700	150
MAY											
26...	.3	1.1	1.2	2.3	10	.18	241	203	.33	54100	180
JUNE											
25...	.3	--	--	--	--	--	265	194	.36	56700	170
JULY											
21...	.9	.97	.70	1.7	7.4	.17	215	194	.29	40600	170
AUG.											
28...	.2	.16	--	--	--	.23	220	184	.30	36000	170
SEP.											
23...	.3	.35	1.0	1.4	6.0	.18	184	174	.25	15800	150

DATE	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	PERCENT SODIUM (00932)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	TUR- BID- ITY (JTU) (00070)	CARBON DIOXIDE (CO2) (MG/L) (00405)	TOTAL PHYTO- PLANK- TON (CELLS PER ML) (60050)	FECAL COLI- FORM (COL. PER 100 ML) (31616)	STREP- TOCOCCI (COL- ONIES PER 100 ML) (31679)
NOV., 1974											
12...	5	10	.3	360	8.2	4.0	10	1.9	21000	1400	350
DEC.											
10...	20	9	.3	340	8.6	1.0	8	.7	18000	240	180
JAN., 1975											
14...	22	9	.3	360	8.8	.7	9	.5	18000	--	--
FEB.											
11...	28	10	.3	390	8.2	.0	2	1.9	2800	1000	42
MAR.											
25...	9	11	.3	220	8.8	.0	4	.3	6500	1200	1700
APR.											
23...	23	10	.3	390	8.8	18.0	14	.4	20000	35	53
MAY											
26...	45	8	.2	340	8.5	23.0	35	.8	26000	200	100
JUNE											
25...	35	7	.2	330	8.0	29.0	42	2.7	5400	--	--
JULY											
21...	35	7	.2	340	8.7	29.0	7	.5	6800	20	26
AUG.											
28...	27	10	.3	320	7.8	29.0	30	4.3	4000	--	--
SEP.											
23...	32	17	.5	290	8.7	16.0	20	.5	34000	130	7

05420500 MISSISSIPPI RIVER AT CLINTON, IOWA--CONTINUED
(National stream-quality accounting network station)

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TOTAL IRON (FE) (UG/L) (01045)	DIS- SOLVED IRON (FE) (UG/L) (01046)	TOTAL MAN- GANESE (MN) (UG/L) (01055)	SUS- PENDE MAN- GANESE (MN) (UG/L) (01054)	DIS- SOLVED MAN- GANESE (MN) (UG/L) (01056)	UNCOR- RECTED PERI- PHYTON CHLORO- PHYLL B MG/SQ M (32226)	UNCOR- RECTED PERI- PHYTON CHLORO- PHYLL A MG/SQ M (32228)	PERI- PHYTON BIOMASS ASH WEIGHT G/SQ M (00572)	PERI- PHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M (00573)	TOTAL ORGANIC CARBON (C) (MG/L) (00580)
DEC. 10...	--	80	--	--	--	.1	.1	2.3	--	--
MAR. 25...	9700	190	1000	960	40	--	--	--	--	16
JULY 21...	--	--	--	--	--	1.1	39	61	66	--
AUG. 28...	--	70	--	--	10	--	--	--	--	--
SEP. 23...	1400	130	190	180	10	--	--	--	--	13

DATE	TOTAL ARSENIC (AS) (UG/L) (01002)	SUS- PENDE ARSENIC (AS) (UG/L) (01001)	DIS- SOLVED ARSENIC (AS) (UG/L) (01000)	TOTAL CAD- MIUM (CD) (UG/L) (01027)	SUS- PENDE CAD- MIUM (CD) (UG/L) (01026)	DIS- SOLVED CAD- MIUM (CD) (UG/L) (01025)	TOTAL CHRO- MIUM (CR) (UG/L) (01034)	SUS- PENDE CHRO- MIUM (CR) (UG/L) (01031)	DIS- SOLVED CHRO- MIUM (CR) (UG/L) (01030)
DEC. 10...	0	0	1	--	--	3	--	--	--
MAR. 25...	7	7	0	0	0	0	20	20	0
JULY 21...	--	--	--	--	--	--	--	--	--
AUG. 28...	--	--	--	--	--	3	--	--	--
SEP. 23...	2	0	2	0	0	0	<10	<10	0

DATE	TOTAL COBALT (CO) (UG/L) (01037)	SUS- PENDE COBALT (CO) (UG/L) (01036)	DIS- SOLVED COBALT (CO) (UG/L) (01035)	TOTAL COPPER (CU) (UG/L) (01042)	SUS- PENDE COPPER (CU) (UG/L) (01041)	DIS- SOLVED COPPER (CU) (UG/L) (01040)	TOTAL LEAD (PB) (UG/L) (01051)	SUS- PENDE LEAD (PB) (UG/L) (01050)	DIS- SOLVED LEAD (PB) (UG/L) (01049)
DEC. 10...	--	--	0	--	--	7	--	--	10
MAR. 25...	3	2	1	21	2	19	28	21	7
JULY 21...	--	--	--	--	--	--	--	--	--
AUG. 28...	--	--	0	--	--	7	--	--	0
SEP. 23...	0	0	0	7	3	4	12	12	0

DATE	TOTAL MERCURY (HG) (UG/L) (71900)	SUS- PENDE MERCURY (HG) (UG/L) (71895)	DIS- SOLVED MERCURY (HG) (UG/L) (71890)	TOTAL SELE- NIUM (SE) (UG/L) (01147)	SUS- PENDE SELE- NIUM (SE) (UG/L) (01146)	DIS- SOLVED SELE- NIUM (SE) (UG/L) (01145)	TOTAL ZINC (ZN) (UG/L) (01092)	SUS- PENDE ZINC (ZN) (UG/L) (01091)	DIS- SOLVED ZINC (ZN) (UG/L) (01090)
DEC. 10...	.2	--	--	0	--	--	--	--	--
MAR. 25...	.7	.0	.7	0	0	0	130	60	70
JULY 21...	--	--	--	--	--	--	--	--	--
AUG. 28...	--	--	--	--	--	--	--	--	30
SEP. 23...	.3	.0	.3	0	0	0	30	20	10

MISSISSIPPI RIVER MAIN STEM

05420500 MISSISSIPPI RIVER AT CLINTON, IOWA--CONTINUED
(National stream-quality accounting network station)

IDENTIFICATION OF PHYTOPLANKTON, IN PERCENT, OF TOTAL CELL COUNT

Date of sample	Nov 12 '74	Dec 10	Jan 14 '75	Feb 11	Mar 25	Apr 23	May 26	Jun 25	Jul 21	Aug 28	Sep 23 '75
GREEN ALGAE											
Ankistrodesmus	9		1						3		1
Chodatella	1										
Crucigenia	1										
Kirchneriella								3		2	
Microactinium	1								1		
Oocystis									5		
Pediastrum	2						14				
Scenedesmus	3						10	11	22	22	2
Selenastrum									1		
Sphaerocystis									10		
BLUE-GREEN ALGAE											
Anabaena	5										
Anacystis	3		21						3		
Aphanizomenon											20
Lyngbya											63
DIATOMS											
Asterionella	2	9	3	9		1					
Coscinodiscus		91									
Cyclotella	61		72	91	37	86	14	24	19	49	6
Cymatopleura					3						
Cymbella									1		
Fragilaria						1					
Gomphonema					10						
Gyrosigma										2	
Melosira	6		1		20	5	37	49	34	14	7
Navicula					7	1		5		3	
Nitzschia					17	6	25	5	3	5	1
Stephanodiscus	4				3	1		3			
Surirella					3						
Synedra	1		2							2	
FLAGELLATES											
Trachelomonas										2	
Total count (cells/ml)	21000	18000	18000	2800	6500	20000	26000	5400	5800	4000	34000
Diversity Index											
Class									1.135	.903	.767
Order									1.640	1.356	.801
Family									1.977	1.601	1.479
Genera									2.587	2.133	1.614
Periphyton analysis				yes					yes		
Days of exposure				28					26		
Biomass pigment ratio				8000					120		

Note.--Grab sample used for phytoplankton analysis by Sedgwick-Rafelson chamber, 200-x microscope.
Polyethylene strips used for periphyton. See previous table for chlorophyll and biomass data.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDE SEDIM- ENT (MG/L) (80154)	SUS- PENDE SEDIM- ENT DIS- CHARGE (T/DAY) (80155)
NOV.					
12...	1200	4.0	44000	38	4510
DEC.					
10...	1130	1.0	21000	10	567
JAN.					
14...	1100	.7	22300	8	482
FEB.					
11...	1100	.0	21000	9	510
APR.					
23...	1030	18.0	83200	162	36400
MAY					
26...	1730	23.0	83200	152	34100
JULY					
21...	1100	29.0	69900	46	8680
AUG.					
28...	1100	29.0	60600	69	11300
SEP.					
23...	1100	16.0	31900	37	3190

05454500 IOWA RIVER AT IOWA CITY, IOWA

LOCATION.--Lat 41°39'24", long 91°32'27", in SE1/4 SE1/4 sec.9, T.79 N., R.6 W., Johnson County, at Benton Street bridge at Iowa City, 0.5 mi (0.8 km) downstream from gaging station, 0.3 mi (0.5 km) upstream from Ralston Creek, 4.1 mi (6.6 km) downstream from Clear Creek and at mile 73.7 (118.6 km).

DRAINAGE AREA.--3,271 mi² (8,472 km²).

PERIOD OF RECORD.--Chemical analysis: September 1906 to September 1907, January 1944 to September 1954.

Water temperatures: January 1944 to current year.

Sediment records: October 1943 to current year.

EXTREMES.--Current year: Specific conductance: Maximum daily, 580 micromhos Aug. 5; minimum daily, 210 micromhos Mar. 31.

Water temperatures: Maximum, 28.0°C June 27; minimum, freezing point on many days during winter months.

Sediment concentrations: Maximum daily, 819 mg/l Mar. 20; minimum daily, 17 mg/l Oct. 29.

Sediment discharge: Maximum daily, 13,300 tons (12,100 tonnes) Mar. 30; minimum daily, 19 tons (17 tonnes) Sept. 17.

Period of record: Specific conductance: Maximum daily, 710 micromhos Oct. 16, 1972; minimum daily, 150 micromhos May 17, 1974.

Water temperatures: Maximum, 32.0°C July 19, 1957, Aug. 24, 25, 1959, June 27, 1971; minimum, freezing point on many days during winter months each year.

Sediment concentrations: Maximum daily, 7,800 mg/l June 13, 1953; minimum daily, 2 mg/l Dec. 16, 18, 20, 21, 27, 1963.

Sediment discharge: Maximum daily, 177,000 tons (161,000 tonnes) May 23, 1944; minimum daily, 0.9 ton (0.82 tonne) Dec. 16, 1963.

REMARKS.--Diurnal fluctuation at low stages caused by powerplant upstream. Flow regulated by Coralville Lake (sta. 05453510) 9.6 mi (15.4 km) upstream from Iowa City since Sept. 17, 1958.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25°C), WATER YEAR 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	450	490	---	---	---	---	225	510	---	420	560	---
2	450	---	440	480	---	---	235	450	540	405	---	440
3	450	---	440	---	415	450	240	---	530	395	---	420
4	450	490	450	---	430	420	250	---	530	---	560	410
5	---	470	450	---	400	430	---	500	550	---	580	---
6	---	450	440	480	410	440	---	490	530	---	550	---
7	450	470	---	490	400	440	315	470	---	450	480	---
8	---	460	---	460	---	---	---	500	---	460	---	400
9	460	---	420	460	---	---	340	500	---	470	---	400
10	450	---	---	510	410	440	365	---	---	470	---	440
11	460	460	---	---	415	450	380	---	510	480	460	390
12	---	480	430	---	450	460	---	500	510	---	470	400
13	---	510	480	510	420	430	---	520	510	---	480	---
14	---	530	---	490	430	520	405	520	---	525	480	---
15	480	480	---	480	---	---	400	520	---	520	490	400
16	470	---	---	490	---	---	395	520	490	520	---	400
17	470	---	500	---	460	520	400	---	500	560	---	410
18	470	---	430	---	460	370	420	---	505	540	490	420
19	---	470	430	---	415	---	---	540	530	---	490	420
20	---	440	440	500	420	330	---	530	525	---	500	---
21	470	440	---	500	420	250	470	530	---	540	480	---
22	480	445	---	420	---	---	480	---	---	530	480	430
23	480	---	450	430	---	---	470	510	440	505	---	430
24	---	---	480	435	430	215	450	---	450	510	---	430
25	480	460	---	---	420	250	460	---	450	520	---	370
26	---	470	480	---	410	245	---	---	440	---	---	430
27	---	440	---	420	---	255	---	500	450	---	440	---
28	---	---	---	450	---	---	480	500	---	560	440	---
29	480	430	470	420	---	---	470	520	---	540	440	420
30	480	---	---	410	---	---	470	520	455	560	---	420
31	490	---	510	470	---	210	---	---	---	550	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---
YEAR	MAX	580	MIN	210	MEAN	454						

IOWA RIVER BASIN

05454500 IOWA RIVER AT IOWA CITY, IOWA--CONTINUED

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975											
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	SEP
1	14.5	13.0	---	---	---	---	2.0	11.0	---	26.0	---
2	14.0	---	2.0	0.0	---	---	1.0	14.0	23.5	26.0	24.5
3	13.5	---	0.5	---	1.5	1.5	0.5	---	20.5	26.5	25.0
4	15.5	12.0	0.5	---	0.5	0.0	2.5	---	21.0	---	23.0
5	---	11.5	2.0	---	0.0	0.5	---	15.5	24.0	---	---
6	---	12.0	2.0	0.5	0.0	1.0	---	15.5	22.0	---	---
7	15.0	13.0	---	0.5	0.0	0.5	2.5	14.5	---	27.0	24.5
8	---	12.0	---	1.0	---	---	---	16.0	---	27.5	21.0
9	13.0	---	0.5	1.5	---	---	3.5	14.5	---	26.5	20.0
10	14.0	---	---	2.5	0.0	1.0	3.5	---	---	26.0	20.0
11	15.0	10.0	---	---	0.0	1.0	5.0	---	22.0	25.0	23.0
12	---	8.0	2.0	---	0.5	0.5	---	15.5	19.5	---	19.5
13	---	6.5	2.5	0.0	0.5	0.0	---	16.0	21.0	---	---
14	---	5.0	---	0.0	0.0	2.0	6.0	16.5	---	24.0	24.0
15	14.0	6.0	---	0.0	---	---	6.0	16.0	---	24.0	21.0
16	14.0	---	---	0.0	---	---	7.0	16.5	19.0	24.0	19.0
17	14.0	---	0.5	---	1.0	3.0	8.0	---	20.5	25.0	19.0
18	14.0	---	0.0	---	1.0	1.0	10.0	---	20.5	25.5	20.0
19	---	7.5	1.0	---	1.0	---	---	19.5	21.5	---	18.5
20	---	5.5	0.0	0.0	2.0	1.5	---	20.5	22.0	---	---
21	11.0	5.0	---	2.0	2.5	3.5	8.5	19.5	---	25.0	24.0
22	14.0	6.0	---	0.5	---	---	9.0	---	---	26.0	14.5
23	14.0	---	1.0	1.5	---	---	11.5	22.5	24.0	25.0	14.5
24	---	---	1.0	1.0	1.0	0.5	12.0	---	25.0	25.5	14.5
25	14.0	4.0	---	---	1.5	0.0	13.0	---	25.0	24.0	15.0
26	---	4.0	2.5	---	1.0	0.0	---	---	24.5	---	14.5
27	---	4.0	---	1.0	1.5	1.0	---	20.5	28.0	---	---
28	---	---	---	0.5	---	---	12.0	21.5	---	26.0	24.0
29	14.0	2.5	2.0	0.0	---	---	12.5	22.0	---	26.0	15.0
30	13.0	---	---	0.5	---	---	12.5	21.0	26.0	27.0	15.0
31	13.0	---	1.0	1.0	---	3.5	---	---	---	27.0	---
MONTH	---	---	---	---	---	---	---	---	---	---	---
YEAR	MAX	28.0	MIN	0.0	MEAN	12.0	---	---	---	---	---

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975									
	OCTOBER			NOVEMBER			DECEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	653	30	53	1630	50	220	1230	27	90
2	648	40	70	2280	78	480	1220	18	59
3	648	42	73	3210	98	849	1210	31	101
4	650	42	74	3570	84	832	1210	40	131
5	656	40	71	3680	62	616	1210	22	72
6	668	38	69	3670	55	545	1230	33	110
7	655	34	60	3310	45	402	1470	73	290
8	652	32	56	1980	34	182	1790	157	759
9	701	40	76	1950	29	153	1890	229	1170
10	783	36	76	1990	27	145	1660	163	731
11	820	35	77	2160	32	187	1540	95	395
12	989	53	142	2450	37	245	1870	45	227
13	914	42	104	2250	20	122	2530	64	437
14	806	33	72	1860	24	121	3060	139	1150
15	849	34	78	1850	36	180	3570	145	1400
16	928	38	95	1850	41	205	3560	82	788
17	926	36	90	1850	48	240	3460	36	336
18	928	37	93	1520	50	205	3410	37	341
19	926	37	93	1470	43	171	3360	44	399
20	925	38	95	1550	50	209	3430	45	417
21	924	37	92	1460	30	118	3440	50	464
22	847	35	80	1280	30	104	3140	48	407
23	724	33	65	1170	35	111	2690	34	247
24	722	34	66	1160	44	138	2500	18	122
25	721	33	64	1280	40	138	2470	25	167
26	722	30	58	1390	32	120	2210	44	263
27	723	27	53	1390	21	79	1790	55	266
28	725	22	43	1380	27	101	1660	58	260
29	736	17	34	1300	38	133	1650	50	223
30	737	37	74	1220	31	102	2010	64	347
31	919	52	129	--	--	--	2250	50	304
TOTAL	24225	--	2375	59210	--	7453	69720	--	12473

05454500 IOWA RIVER AT IOWA CITY, IOWA--CONTINUED

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	MEAN DISCHARGE (CFS)	JANUARY MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	FEBRUARY MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MARCH MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	2200	32	190	1260	29	99	757	47	96
2	1740	26	122	1210	43	140	795	47	101
3	1370	21	78	1060	54	155	819	42	93
4	1220	20	66	913	61	150	835	34	77
5	1200	22	71	993	70	188	847	50	114
6	1310	26	92	1080	64	187	791	69	147
7	1280	32	111	1110	57	171	770	37	77
8	1190	34	109	1010	66	180	809	27	59
9	1260	30	102	903	74	180	712	24	46
10	1920	60	311	994	70	188	621	22	37
11	2850	199	1530	759	64	131	717	70	136
12	2830	158	1210	680	54	99	806	39	85
13	1970	108	574	763	40	82	808	39	85
14	1170	84	265	820	48	106	746	30	60
15	1090	60	177	820	70	155	703	30	57
16	745	38	76	784	78	165	728	42	83
17	487	21	28	752	59	120	1150	118	366
18	572	29	45	797	52	112	2950	582	4640
19	1080	61	178	779	38	80	4570	719	8870
20	1310	30	106	754	37	75	5530	819	12200
21	1370	37	137	734	56	111	5760	646	10000
22	1460	58	229	757	62	127	8870	409	9800
23	1320	82	292	759	56	115	7920	270	5770
24	1250	65	219	829	56	125	5040	369	5020
25	1310	46	163	884	61	146	1400	513	1940
26	1360	44	162	764	43	89	1220	269	886
27	1370	44	163	767	21	43	1250	270	911
28	1530	70	289	760	33	68	2540	363	2490
29	1520	70	287	--	--	--	6160	763	12700
30	1270	45	154	--	--	--	8290	592	13300
31	1260	28	95	--	--	--	9810	479	12700
TOTAL	43814	--	7631	24495	--	3587	84724	--	102946

DAY	MEAN DISCHARGE (CFS)	APRIL MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MAY MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	JUNE MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	9680	308	8050	4260	149	1710	2460	100	664
2	9630	288	7490	3560	152	1460	2470	82	547
3	9670	220	5740	1770	82	392	2630	77	547
4	9650	208	5420	1400	53	200	3040	82	673
5	9800	200	5290	1450	67	262	3370	60	546
6	9950	172	4620	1200	67	217	3010	59	479
7	9890	169	4510	1220	72	237	2830	58	443
8	9960	170	4570	1240	67	224	2640	50	356
9	10200	163	4490	1230	66	219	2190	40	237
10	10200	99	2730	1170	66	208	2300	48	298
11	10000	140	3780	1200	68	220	2420	62	405
12	9980	160	4310	1430	51	197	2480	67	449
13	9830	128	3400	2400	59	382	2560	61	422
14	9870	99	2640	3450	49	456	2560	62	429
15	9990	135	3640	4060	38	417	2790	68	512
16	9830	118	3130	4110	43	477	3500	95	898
17	9540	121	3120	4180	52	587	3740	97	980
18	9310	105	2640	4180	49	553	3800	130	1330
19	9000	100	2430	4160	37	416	3900	319	3360
20	8620	118	2750	4180	48	542	3860	76	792
21	7500	142	2880	4230	47	537	3890	73	767
22	6360	114	1960	4150	42	471	3930	77	817
23	6040	112	1830	3750	62	628	4060	89	976
24	5390	134	1950	2850	77	593	4270	72	830
25	5090	113	1550	2260	71	433	4300	72	836
26	4560	138	1700	2000	71	383	4340	72	844
27	4460	111	1340	1710	76	351	4390	78	925
28	4390	164	1940	1700	79	363	4320	82	956
29	4300	156	1810	1790	89	430	4330	81	947
30	4260	159	1830	1890	89	454	4260	68	782
31	--	--	--	2220	102	611	--	--	--
TOTAL	246950	--	103540	80400	--	14630	100640	--	23047

IOWA RIVER BASIN

05454500 IOWA RIVER AT IOWA CITY, IOWA--CONTINUED

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	MEAN DISCHARGE (CFS)	JULY MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	AUGUST MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	SEPTEMBER MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	4280	64	740	470	56	71	491	47	62
2	4300	61	708	468	54	68	757	50	102
3	4310	58	675	466	50	63	861	48	112
4	4300	53	615	563	46	70	861	43	100
5	4290	52	602	704	50	95	864	45	105
6	4270	49	565	700	47	89	889	46	110
7	4240	47	538	696	62	117	693	43	80
8	4210	45	512	584	50	79	587	36	57
9	4180	48	542	478	37	48	536	37	54
10	4150	58	650	494	45	60	426	45	52
11	4120	58	645	539	73	106	323	46	40
12	4080	57	628	537	66	96	303	48	39
13	4050	56	612	549	57	84	269	46	33
14	4010	54	585	537	55	80	270	45	33
15	3960	56	599	510	44	61	246	49	33
16	3920	59	624	444	34	41	188	40	20
17	3860	57	594	443	34	41	180	40	19
18	3490	60	565	455	46	57	167	48	22
19	3120	50	421	537	43	62	166	48	22
20	2920	57	449	563	51	78	164	49	22
21	2310	84	524	635	68	117	162	50	22
22	1450	72	282	1590	83	356	162	50	22
23	947	93	238	1260	68	231	158	51	22
24	919	96	238	1090	63	185	158	54	23
25	911	45	111	738	45	90	159	51	22
26	912	36	89	630	45	77	159	51	22
27	907	45	110	621	43	72	162	51	22
28	904	64	156	438	40	47	172	52	24
29	900	67	163	417	54	61	165	59	26
30	759	58	119	462	47	59	160	55	24
31	598	65	105	425	39	45	--	--	--
TOTAL	91577	--	14004	19043	--	2806	10858	--	1346
TOTAL DISCHARGE FOR YEAR (CFS-DAYS)									855656
TOTAL SUSPENDED-SEDIMENT DISCHARGE FOR YEAR (TONS)									295838

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	NUMBER OF SAM- PLING POINTS (00063)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	BED MAT. FALL DIAM. % FINER THAN .125 MM (80159)	BED MAT. FALL DIAM. % FINER THAN .250 MM (80160)	BED MAT. FALL DIAM. % FINER THAN .500 MM (80161)	BED MAT. FALL DIAM. % FINER THAN 1.00 MM (80162)	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM (80169)	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM (80170)	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM (80171)	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM (80172)
JUNE 06...	1530	23.0	5	2910	0	9	58	71	72	77	86	100

05455000 RALSTON CREEK AT IOWA CITY, IOWA

LOCATION.--Lat 41°39'50", long 91°30'48", in SE1/4 NW1/4 sec.11, T.79 N., R.6 W., Johnson County, at gaging station at bridge on Rochester Avenue, Iowa City, and 2.2 mi (3.5 km) upstream from mouth.

DRAINAGE AREA.--3.01 mi² (7.80 km²).

PERIOD OF RECORD.--Specific conductance: April 1968 to current year.

Water temperatures: October 1960 to current year.

Sediment records: April 1952 to current year.

EXTREMES.--Current year: Specific conductance: Maximum daily, 6,000 micromhos Dec. 31; minimum daily, 240 micromhos Mar. 19.

Water temperatures: Maximum, 29.5°C July 15; minimum, freezing point on many days during winter months.

Sediment concentrations: Maximum daily, 9,300 mb/l Aug. 20; minimum daily, no flow for several days during July to August.

Sediment discharge: Maximum daily, 79 tons (72 tonnes) Mar. 19; minimum daily, 0 ton (0 tonne) on many days during July to September.

Period of record: Specific conductance: Maximum daily, 8,000 micromhos Dec. 24, 1973; minimum daily, 170 micromhos July 17, 1972.

Water temperatures: Maximum, 31.0°C July 21, 1968; minimum, freezing point on many days during winter months each year.

Sediment concentration: Maximum daily, 9,300 mg/l Aug. 20, 1975; minimum daily, no flow on many days in 1953-59, 1963-68, 1971, 1975.

Sediment discharge: Maximum daily, 4,300 tons (3,900 tonnes) May 23, 1966; minimum daily, 0 ton (0.00 tonne) on many days in 1953-59, 1963-68, 1971, 1972, 1975.

REMARKS.--Flow affected by ice Nov. 27 to Dec. 14, Dec. 18-25, Jan. 13-23, Jan. 27 to Feb. 25, Mar. 4-16.

REVISIONS (WATER YEARS).--WRD Iowa 1967: 1965-66.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25°C), WATER YEAR 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	490	490	560	1000	650	650	580	440	460	425	---	540
2	540	480	570	2030	820	780	1750	470	440	430	---	590
3	520	---	540	2060	840	420	2000	460	460	420	---	560
4	510	440	510	1010	840	720	950	440	445	510	---	580
5	510	450	500	720	990	570	860	440	450	440	---	570
6	590	440	480	570	975	560	640	450	475	480	---	570
7	580	440	600	560	690	810	600	440	490	435	---	570
8	530	430	620	540	540	850	600	440	495	410	---	580
9	---	440	500	570	550	700	540	430	450	420	---	570
10	460	430	630	400	600	850	520	450	495	410	---	530
11	435	550	480	520	610	620	530	500	460	415	---	400
12	450	600	450	580	620	590	530	500	480	410	---	550
13	---	650	480	570	540	900	540	460	450	420	380	560
14	460	620	490	800	580	890	510	480	450	425	---	420
15	480	470	500	850	2280	850	500	480	430	425	---	430
16	450	470	480	520	920	850	540	460	455	425	---	550
17	430	480	480	500	1080	850	560	460	460	420	---	510
18	430	480	480	670	980	440	630	500	430	420	---	500
19	430	450	510	680	960	240	540	500	420	415	370	600
20	430	440	590	680	850	410	560	520	415	425	490	560
21	420	440	620	550	800	380	530	520	450	440	570	540
22	420	440	540	650	790	420	430	520	445	440	600	500
23	420	440	530	580	860	620	440	530	440	460	590	490
24	420	450	510	550	830	720	450	530	445	510	600	540
25	450	460	460	550	1120	740	430	520	430	445	---	540
26	440	460	450	550	850	640	490	500	420	460	---	540
27	420	450	850	670	640	650	510	510	415	460	600	520
28	420	480	880	680	370	650	460	520	410	---	600	510
29	480	490	---	670	---	650	460	520	415	---	380	480
30	490	500	650	670	---	640	450	480	430	---	320	530
31	490	---	6000	650	---	620	---	---	---	---	610	---
MONTH	469	478	731	729	828	654	638	482	447	437	---	531
YEAR	MAX	6000	MIN	240	MEAN	582						

IOWA RIVER BASIN

05455000 RALSTON CREEK AT IOWA CITY, IOWA--CONTINUED

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12.0	17.0	2.5	2.5	1.5	1.0	4.0	18.0	21.0	20.0	---	19.0
2	9.0	12.0	1.5	2.5	1.5	2.0	4.0	16.0	21.5	20.0	---	25.0
3	8.0	---	1.5	2.0	2.0	1.0	5.0	13.0	24.0	26.0	---	23.0
4	12.5	11.0	2.0	2.5	2.5	2.0	2.0	13.0	23.0	23.0	---	20.0
5	13.5	7.0	2.5	3.0	1.5	2.0	2.0	10.0	24.0	23.0	---	17.0
6	14.0	11.5	3.0	3.5	1.5	2.0	3.0	19.0	24.0	26.0	---	20.0
7	13.0	4.5	3.0	3.5	0.0	2.0	3.0	16.0	21.0	25.0	---	18.0
8	14.0	4.5	2.0	3.5	0.0	2.0	5.0	16.0	20.0	26.0	---	15.0
9	---	10.0	1.5	4.0	0.0	1.5	4.0	17.0	16.0	24.0	---	20.0
10	15.0	10.0	3.5	6.0	0.5	1.5	6.0	12.0	22.5	27.0	---	18.0
11	14.5	10.0	3.0	3.5	0.5	0.5	5.0	18.0	18.0	21.0	---	17.0
12	14.0	9.0	3.5	1.5	0.0	1.5	11.0	20.0	23.0	18.5	---	15.0
13	14.5	5.0	4.0	2.0	0.5	2.0	4.0	20.0	25.0	20.0	23.0	13.0
14	13.0	5.0	4.0	1.5	2.0	1.5	7.0	20.0	19.0	22.0	---	13.0
15	13.0	5.0	3.5	2.0	1.5	1.5	9.5	22.0	12.0	29.5	---	15.0
16	13.0	5.0	4.0	2.0	2.0	2.0	10.0	10.0	19.5	24.0	---	17.0
17	13.5	8.5	3.5	2.0	1.0	1.5	18.0	10.0	18.0	24.0	---	17.0
18	8.5	7.0	3.0	1.5	2.0	4.0	8.0	24.0	18.0	25.0	21.0	19.0
19	9.0	7.0	2.0	1.5	2.5	1.5	14.0	25.0	24.0	26.0	23.0	16.0
20	10.0	7.5	2.5	1.5	3.0	6.0	12.0	22.0	24.0	25.0	21.0	14.0
21	10.5	6.0	1.5	2.0	3.0	6.0	10.0	23.0	26.0	24.0	28.0	12.0
22	10.0	7.5	2.5	1.5	2.0	3.0	16.0	24.0	27.0	23.0	26.0	13.0
23	14.0	8.0	2.5	2.0	2.0	4.0	16.0	24.0	24.0	21.0	28.0	14.0
24	14.0	5.5	3.0	2.0	2.0	3.0	16.0	23.0	24.0	25.0	---	11.0
25	10.5	5.0	2.5	1.5	3.0	3.0	10.0	20.0	20.0	26.0	22.0	10.0
26	9.0	3.0	2.5	1.5	2.0	3.0	10.0	18.0	28.0	26.0	23.0	13.0
27	9.5	3.0	3.5	1.5	2.0	2.5	10.5	19.0	26.0	27.0	20.0	13.0
28	13.0	3.5	5.5	1.5	3.0	2.5	15.0	18.0	25.0	---	22.0	10.0
29	13.5	3.5	3.5	2.0	---	1.5	15.0	18.0	27.0	---	24.0	12.0
30	13.0	3.0	3.0	2.0	---	4.0	16.0	17.0	20.0	---	20.0	11.0
31	15.0	---	3.0	2.0	---	10.0	---	---	---	---	21.0	---
MONTH	12.0	7.0	3.0	2.5	1.5	2.5	9.0	18.0	22.0	24.0	---	15.5
YEAR	MAX	29.5	MIN	0.0	MEAN	11.0						

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	MEAN DISCHARGE (CFS)	OCTOBER MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	NOVEMBER MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	DECEMBER MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	1.0	43	.12	1.2	76	.25	.73	69	.14
2	1.1	65	.19	1.0	64	.17	.74	41	.08
3	1.1	34	.10	1.1	71	.21	.76	55	.11
4	1.2	28	.09	.77	60	.12	.78	58	.12
5	1.3	40	.14	.73	52	.10	.80	96	.21
6	1.6	79	.34	.71	42	.08	1.0	98	.26
7	1.2	40	.13	.70	58	.11	2.2	60	.35
8	1.0	21	.06	.70	57	.11	1.5	59	.24
9	.82	28	.06	.70	72	.14	1.1	69	.21
10	.70	50	.09	1.7	70	.32	1.0	23	.06
11	.72	61	.12	1.8	60	.29	.96	33	.09
12	.96	58	.15	.98	68	.18	.97	73	.19
13	1.3	138	.48	.97	55	.14	1.1	68	.20
14	.98	61	.16	.85	54	.12	2.3	56	.35
15	.73	29	.06	.83	68	.15	6.8	99	1.8
16	.71	31	.06	.88	109	.26	3.3	94	.84
17	.71	34	.07	.86	75	.17	2.5	60	.41
18	.74	48	.10	.85	38	.09	1.7	53	.24
19	.66	51	.09	.88	80	.19	1.5	77	.31
20	.73	55	.11	.88	76	.18	1.4	67	.25
21	.82	37	.08	.96	73	.19	1.3	83	.29
22	.95	68	.17	1.0	87	.23	1.3	70	.25
23	1.0	32	.09	1.2	86	.28	1.2	75	.24
24	.97	42	.11	1.2	48	.16	1.1	58	.17
25	1.0	48	.13	1.0	45	.12	1.1	57	.17
26	.98	34	.09	.89	55	.13	1.1	54	.16
27	1.0	22	.06	.70	54	.10	1.2	32	.10
28	1.1	46	.14	.60	36	.06	1.3	24	.08
29	1.5	82	.33	.62	45	.08	1.3	20	.07
30	1.5	77	.31	.72	80	.16	1.2	30	.10
31	2.1	178	1.0	---	---	---	1.3	295	1.0
MONTH	32.18	---	5.23	27.98	---	4.89	46.54	---	9.10

05455000 RALSTON CREEK AT IOWA CITY, IOWA--CONTINUED

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	MEAN DISCHARGE (CFS)	JANUARY MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	FEBRUARY MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MARCH MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	1.1	43	.13	.77	32	.07	.93	43	.11
2	1.1	34	.10	.79	53	.11	.91	15	.04
3	1.2	25	.08	.80	45	.10	.87	29	.07
4	1.1	27	.08	.79	37	.08	.84	19	.04
5	1.0	22	.06	.77	43	.09	.80	43	.09
6	1.1	41	.12	.71	47	.09	.75	47	.10
7	1.1	33	.10	.67	48	.09	.80	46	.10
8	1.1	35	.10	.63	76	.13	.75	18	.04
9	1.2	81	.26	.60	61	.10	.80	32	.07
10	8.8	1080	26	.60	46	.07	.81	21	.05
11	3.4	100	.92	.60	24	.04	.82	21	.05
12	2.2	82	.49	.61	39	.06	.95	39	.10
13	1.9	72	.37	.62	62	.10	.85	35	.08
14	1.7	33	.15	.63	31	.05	.90	33	.08
15	1.5	38	.15	.64	54	.09	1.2	65	.21
16	1.4	27	.10	.66	45	.08	3.0	89	.72
17	1.2	18	.06	.66	118	.24	36	148	14
18	1.1	11	.03	.68	49	.09	76	240	49
19	1.0	11	.03	.66	34	.06	73	400	79
20	1.0	11	.03	.68	58	.11	15	470	19
21	.90	33	.08	1.1	71	.21	13	632	22
22	.90	23	.06	1.6	56	.24	15	530	21
23	1.1	69	.21	1.2	46	.15	5.6	101	1.5
24	1.4	78	.29	1.1	30	.09	4.9	47	.62
25	1.9	85	.44	1.1	103	.31	2.9	42	.33
26	1.4	75	.28	1.0	34	.09	2.4	97	.63
27	1.0	22	.06	.98	36	.10	3.0	102	.83
28	.85	7	.02	.97	52	.14	8.4	121	2.7
29	.83	8	.02	---	---	---	4.8	105	1.4
30	.80	7	.02	---	---	---	3.5	53	.50
31	.78	13	.03	---	---	---	3.7	76	.76
MONTH	47.06	---	30.87	22.72	---	3.18	283.18	---	215.22
DAY	MEAN DISCHARGE (CFS)	APRIL MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MAY MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	JUNE MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	3.2	48	.41	1.7	30	.14	.42	92	.10
2	2.5	107	.72	1.6	27	.12	.96	95	.25
3	2.8	99	.75	1.6	39	.17	1.6	105	.45
4	2.9	62	.49	1.7	33	.15	1.6	95	.41
5	4.2	69	.78	1.6	36	.15	.70	87	.16
6	4.8	92	1.2	1.5	52	.21	.49	62	.08
7	4.3	87	1.0	1.5	27	.11	.36	52	.05
8	4.0	74	.80	1.7	36	.17	.34	47	.04
9	7.5	86	1.7	1.6	60	.26	.52	95	.13
10	5.4	51	.74	1.4	76	.29	.40	82	.09
11	4.6	32	.40	2.0	270	1.5	.34	78	.07
12	4.2	33	.37	1.5	27	.11	.32	58	.05
13	3.7	48	.48	1.4	67	.25	.34	62	.06
14	3.7	46	.46	1.3	53	.19	.40	42	.05
15	3.5	20	.19	1.2	43	.14	.31	58	.05
16	3.3	47	.42	1.2	68	.22	.40	68	.07
17	2.9	40	.31	.92	52	.13	.40	65	.07
18	3.6	10	.10	.79	48	.10	.38	67	.07
19	3.0	20	.16	.79	43	.09	.29	87	.07
20	2.8	43	.33	.79	57	.12	.23	104	.06
21	2.8	37	.28	1.9	102	.52	.18	152	.07
22	2.7	51	.37	.73	89	.18	.14	170	.06
23	3.1	48	.40	.67	70	.13	.15	81	.03
24	2.2	48	.29	.64	56	.10	.16	85	.04
25	2.0	50	.27	.79	67	.14	.38	173	.18
26	1.9	32	.16	.64	52	.09	.27	90	.07
27	1.9	42	.22	.42	62	.07	.20	63	.03
28	2.1	48	.27	.44	60	.07	.17	48	.02
29	2.0	50	.27	.47	125	.16	.15	38	.02
30	1.9	36	.18	.52	208	.29	.16	67	.03
31	---	---	---	.47	150	.19	---	---	---
MONTH	99.5	---	14.52	35.38	---	6.56	12.76	---	2.93

IOWA RIVER BASIN

05455000 RALSTON CREEK AT IOWA CITY, IOWA--CONTINUED

SUSPENDED-SEDIMENT DISCHARGE. WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	MEAN DISCHARGE (CFS)	JULY MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	AUGUST MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	SEPTEMBER MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	.15	58	.02	.00	0	.00	.09	57	.01
2	.14	86	.03	.00	0	.00	.07	27	.01
3	.13	56	.02	.00	0	.00	.04	30	.00
4	.14	17	.01	.00	0	.00	.03	32	.00
5	.14	65	.02	.00	0	.00	3.2	262	2.3
6	.14	76	.03	.00	0	.00	.26	82	.06
7	.10	65	.02	.00	0	.00	.10	44	.01
8	.10	83	.02	.00	0	.00	.07	37	.01
9	.08	80	.02	.03	21	.00	.05	35	.00
10	.08	62	.01	.00	0	.00	.05	35	.00
11	.07	73	.01	.00	0	.00	.06	63	.01
12	.06	77	.01	.00	0	.00	.04	26	.00
13	.04	80	.01	.04	30	.00	.07	27	.01
14	.04	83	.01	.00	0	.00	.03	30	.00
15	.04	87	.01	.00	0	.00	.02	26	.00
16	.05	55	.01	.00	0	.00	.02	27	.00
17	.04	72	.01	.00	0	.00	.04	49	.01
18	.04	63	.01	.15	88	.04	.09	54	.01
19	.04	52	.01	.01	50	.00	.11	33	.01
20	.03	41	.00	2.6	9300	65	.04	34	.00
21	.02	45	.00	.17	90	.04	.02	70	.00
22	.01	54	.00	.03	41	.00	.02	62	.00
23	.29	190	.15	.01	41	.00	.02	78	.00
24	.15	94	.04	.00	0	.00	.01	102	.00
25	.03	47	.00	.76	68	.12	.01	49	.00
26	.01	39	.00	.07	20	.00	.01	62	.00
27	.01	40	.00	.02	37	.00	.01	69	.00
28	.00	0	.00	.01	35	.00	.09	107	.03
29	.00	0	.00	2.4	1180	7.6	.19	65	.03
30	.00	0	.00	.62	90	.16	.07	57	.01
31	.00	0	.00	.11	55	.02	---	---	---
MONTH	2.17	---	.48	7.03	---	72.97	4.93	---	2.52
YEAR	621.43	---	368.47						

05463050 CEDAR RIVER AT CEDAR FALLS, IOWA

LOCATION.--Lat 42°32'20", long 92°26'58", in NW1/4 NE1/4 sec.12, T.89 N., R.14 W., Black Hawk County, at bridge on U.S. Highway 20 at Cedar Falls, 1.1 mi (1.8 km) upstream from Dry Run, and at mile 195.0 (315.4 km) above mouth of Iowa River.

DRAINAGE AREA.--4,734 mi² (12,261 km²).

PERIOD OF RECORD.--Chemical analyses: February 1974 to current year.

Water temperatures: February 1974 to current year.

Biological analyses: February 1974 to current year.

REMARKS.--Water discharge estimated on basis of records at gaging station 8.1 mi (13.0 km) downstream at Waterloo. No significant inflow between gaging station and sampling site. Additional chemical and biological data analyzed by EPA laboratories for the period February 1974 to June 1975 are available through STORET computer storage upon approval from that agency.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS) (00061)	TOTAL CAL- CIUM (CA) (MG/L) (00916)	TOTAL MAG- NE- SIUM (MG) (MG/L) (00927)	TOTAL PO- TAS- SIUM (K) (MG/L) (00937)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	ALKA- LINITY AS CACO3 (MG/L) (00410)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)
OCT.										
02...	0820	1000	--	--	--	206	0	169	--	--
15...	1240	1250	--	--	--	240	0	197	--	--
29...	1230	1000	--	--	--	188	0	154	--	--
NOV.										
11...	1255	1450	--	--	--	257	0	211	--	--
25...	1305	1500	--	--	--	223	0	183	--	--
DEC.										
11...	1315	1280	--	--	--	240	0	197	--	--
23...	1330	1160	--	--	--	220	0	180	--	--
JAN.										
06...	1215	1080	--	--	--	222	0	182	--	--
20...	1305	1040	--	--	--	240	0	197	--	--
FEB.										
04...	1400	900	--	--	--	274	0	225	--	--
18...	1210	820	--	--	--	240	0	197	--	--
MAR.										
03...	1150	860	--	--	--	240	0	197	--	--
19...	1315	2200	--	--	--	240	0	197	--	--
APR.										
01...	1525	7800	--	--	--	110	0	90	--	--
14...	1210	9350	--	--	--	160	0	131	--	--
28...	1610	10500	--	--	--	140	0	115	--	--
MAY										
13...	1530	6300	--	--	--	150	0	123	--	--
27...	1220	3100	--	--	--	150	0	123	--	--
JUNE										
09...	1410	4200	--	--	--	130	0	107	--	--
24...	0900	9400	--	--	--	150	0	123	--	--
JULY										
22...	0750	1600	47	23	2.4	207	--	170	43	19
AUG.										
18...	1045	960	46	21	2.7	154	--	126	39	19
SEP.										
15...	1015	960	34	21	2.3	158	--	130	41	17

DATE	TOTAL NITRITE PLUS NITRATE (N) (MG/L) (00630)	AMMONIA NITRO- GEN (N) (MG/L) (00610)	TOTAL ORGANIC NITRO- GEN (N) (MG/L) (00605)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L) (00625)	TOTAL NITRO- GEN (N) (MG/L) (00600)	TOTAL NITRO- GEN (NO3) (MG/L) (71887)	TOTAL PHOS- PHORUS (P) (MG/L) (00655)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (TONS PER AC-FT) (70303)	DIS- SOLVED SOLIDS (TONS PER DAY) (70302)
JUNE										
09...	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--
JULY										
22...	2.2	.56	.74	13	3.5	16	.20	288	.39	1240
AUG.										
18...	.01	.01	2.4	2.4	2.4	11	.22	218	.30	555
SEP.										
15...	.39	.06	2.8	2.9	3.3	15	.18	251	.34	651

IOWA RIVER BASIN

05463050 CEDAR RIVER AT CEDAR FALLS, IOWA--CONTINUED

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TOTAL RESI- DUE (MG/L) (00500)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	TUR- BID- ITY (JTU) (00070)	DIS- SOLVED OXYGEN (MG/L) (00300)	PER- CENT SATUR- ATION (00301)	CHEM- ICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L) (00340)	CARBON DIOXIDE (CO2) (MG/L) (00405)	FECAL COLI- FORM (COL. PER 100 ML) (31616)
OCT.										
02...	--	440	8.0	11.5	10	12.1	109	--	3.3	580
15...	--	540	8.2	9.5	20	11.4	100	--	2.4	230
29...	--	420	8.2	16.0	10	10.1	101	--	1.9	1000
NOV.										
11...	--	550	8.2	9.0	10	11.5	99	--	2.6	520
25...	--	540	8.2	4.0	2	13.2	101	--	2.3	120
DEC.										
11...	--	560	8.2	.5	15	14.1	98	--	2.4	100
23...	--	580	8.0	.5	8	14.2	99	--	3.5	45
JAN.										
06...	--	630	8.0	.0	8	14.6	100	--	3.6	85
20...	--	490	7.9	.0	3	14.6	100	--	4.8	800
FEB.										
04...	--	750	9.3	.0	3	11.6	126	--	.2	310
18...	--	620	8.2	.0	2	15.3	105	--	2.4	470
MAR.										
03...	--	650	8.3	.0	2	14.7	100	--	1.9	470
18...	--	540	8.5	1.0	130	14.7	100	--	1.2	150
APR.										
01...	--	380	8.1	1.0	50	14.0	101	--	1.4	580
14...	--	340	8.2	7.0	40	11.8	97	--	1.6	400
28...	--	500	8.1	12.0	40	10.7	99	--	1.8	1300
MAY										
13...	--	570	8.4	17.0	30	9.5	98	--	1.0	310
27...	--	490	8.9	20.0	10	9.0	98	--	.3	120
JUNE										
09...	--	500	8.3	16.5	30	9.9	101	--	1.0	350
24...	--	460	8.0	23.5	60	8.3	97	--	2.4	1500
JULY										
22...	357	580	8.5	24.0	8	7.7	91	16	1.0	340
AUG.										
18...	281	360	8.3	24.0	20	8.6	101	28	1.2	170
SEP.										
15...	252	380	8.2	17.5	10	9.1	98	20	1.6	190

05464020 CEDAR RIVER NEAR GILBERTVILLE, IOWA

LOCATION.--Lat 42°24'54", long 92°13'00", in SW1/4 SW1/4 sec.23, T.88 N., R.12 W., Black Hawk County, at bridge on county highway D38 at Gilbertville, 1.4 mi (2.2 km) upstream from Indian Creek, and at mile 176.5 (284.0 km) above mouth of Iowa River.

DRAINAGE AREA.--5,234 mi² (13,556 km²).

PERIOD OF RECORD.--Chemical analyses: October 1970; February 1974 to current year.

Water temperatures: February 1974 to current year.

Biological analyses: February 1974 to current year.

REMARKS.--Water discharge estimated on basis of records at gaging station 11.4 mi (18.3 km) upstream at Waterloo. No significant inflow between gaging station and sampling site. Additional chemical and biological data analyzed by EPA laboratories for the period February 1974 to June 1975 are available through STORET computer storage upon approval from that agency.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	TOTAL CAL- CIUM (CA) (MG/L) (00916)	TOTAL MAG- NE- SIUM (MG) (MG/L) (00927)	TOTAL PO- TAS- SIUM (K) (MG/L) (00937)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	ALKA- LINITY AS CAC03 (MG/L) (00410)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	
OCT.											
02...	0920	1000	--	--	--	205	0	169	--	--	
15...	1135	1250	--	--	--	240	0	197	--	--	
29...	1105	1000	--	--	--	205	0	168	--	--	
NOV.											
11...	1130	1450	--	--	--	240	0	197	--	--	
25...	1205	1500	--	--	--	240	0	197	--	--	
DEC.											
11...	1220	1280	--	--	--	254	0	208	--	--	
23...	1230	1160	--	--	--	240	0	197	--	--	
JAN.											
06...	1110	1080	--	--	--	240	0	197	--	--	
20...	1215	1040	--	--	--	240	0	197	--	--	
FEB.											
04...	1200	900	--	--	--	274	0	225	--	--	
18...	1120	820	--	--	--	270	0	221	--	--	
MAR.											
03...	1445	860	--	--	--	260	0	213	--	--	
18...	1430	2200	--	--	--	260	0	213	--	--	
APR.											
01...	1615	7800	--	--	--	100	0	82	--	--	
14...	1510	9350	--	--	--	120	0	98	--	--	
28...	1700	10500	--	--	--	150	0	123	--	--	
MAY											
13...	1620	6300	--	--	--	150	0	123	--	--	
27...	1345	3100	--	--	--	140	0	115	--	--	
JUNE											
09...	1500	4200	--	--	--	160	0	131	--	--	
24...	0955	9400	--	--	--	140	0	115	--	--	
JULY											
22...	0920	1600	49	23	2.6	218	--	179	44	23	
AUG.											
18...	1215	960	56	22	2.8	182	--	149	42	24	
SEP.											
15...	1105	960	38	21	2.6	163	--	134	47	24	
DATE		TOTAL NITRITE PLUS NITRATE (N) (MG/L) (00630)	AMMONIA NITRO- GEN (N) (MG/L) (00610)	TOTAL ORGANIC NITRO- GEN (N) (MG/L) (00605)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L) (00625)	TOTAL NITRO- GEN (N) (MG/L) (00600)	TOTAL NITRO- GEN (NO3) (MG/L) (71887)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (TONS PER AC-FT) (70303)	DIS- SOLVED SOLIDS (TONS PER DAY) (70302)
JUNE											
09...	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--
JULY											
22...	2.6	.18	.82	1.0	3.6	16	.30	307	.42	1330	
AUG.											
18...	.59	.00	2.8	2.8	3.4	15	.32	268	.36	695	
SEP.											
15...	.48	.00	2.5	2.5	3.0	13	.33	232	.32	601	

IOWA RIVER BASIN

05464020 CEDAR RIVER NEAR GILBERTVILLE, IOWA--CONTINUED

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TOTAL RESI- DUE (MG/L) (00500)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	TUR- BID- ITY (JTU) (00070)	DIS- SOLVED OXYGEN (MG/L) (00300)	PER- CENT SATUR- ATION (00301)	CHEM- ICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L) (00340)	CARBON DIOXIDE (CO2) (MG/L) (00405)	FECAL COLI- FORM (COL. PER 100 ML) (31616)
OCT.										
02...	--	520	8.1	10.5	10	11.2	100	--	2.6	6200
15...	--	520	8.3	9.5	15	11.6	102	--	1.9	7100
29...	--	510	8.3	15.5	10	10.3	103	--	1.6	5200
NOV.										
11...	--	550	8.0	8.5	10	11.5	98	--	3.8	640
25...	--	560	8.3	4.0	3	13.4	102	--	1.9	400
DEC.										
11...	--	550	8.0	1.0	10	13.9	98	--	4.1	2200
23...	--	580	8.1	.5	9	14.2	99	--	3.1	160
JAN.										
06...	--	510	7.9	.0	8	14.7	101	--	4.8	380
20...	--	590	8.0	.0	4	14.5	99	--	3.8	440
FEB.										
04...	--	840	7.9	2.0	2	12.1	132	--	5.5	8700
18...	--	710	8.1	.0	4	14.8	101	--	3.4	200
MAR.										
03...	--	700	8.4	.0	2	14.5	99	--	1.7	27
18...	--	530	8.4	1.0	110	14.7	100	--	1.7	1950
APR.										
01...	--	400	8.2	1.0	100	13.9	101	--	1.0	1600
14...	--	400	8.2	7.0	50	11.7	96	--	1.2	750
28...	--	510	8.1	12.0	60	10.9	100	--	1.9	2700
MAY										
13...	--	500	8.3	17.0	20	9.6	99	--	1.2	300
27...	--	480	8.9	22.0	10	8.5	97	--	.3	60
JUNE										
09...	--	410	8.2	18.0	30	9.4	99	--	1.6	380
24...	--	440	8.2	24.5	80	8.4	99	--	1.4	3500
JULY										
22...	397	580	8.4	24.5	8	7.3	86	12	1.4	150
AUG.										
18...	312	410	8.5	23.5	20	9.0	105	20	.9	60
SEP.										
15...	294	370	8.3	16.0	10	9.0	90	24	1.3	120

05464450 CEDAR RIVER NEAR PALO, IOWA

LOCATION.--Lat 42°03'09", long 91°45'16", in NE1/4 NE1/4 sec.33, T.84 N., R.8 W., Linn County, at bridge on county highway E36, 1.2 mi (1.9 km) upstream from Otter Creek, 1.5 mi (2.4 km) southeast of Palo, 2.4 mi (3.9 km) downstream from Bear Creek, and at mile 124.2 (199.8 km) above mouth of Iowa River.

DRAINAGE AREA.--6,380 mi² (16,524 km²).

PERIOD OF RECORD.--Chemical analyses: February 1974 to current year.

Water temperatures: February 1974 to current year.

Biological analyses: February 1974 to current year.

REMARKS.--Water discharge estimated on basis of records at gaging station 11.5 mi (18.5 km) downstream at Cedar Rapids. No significant inflow between gaging station and sampling site. Additional chemical and biological data analyzed by EPA laboratories for the period February 1974 to June 1975 are available through STORET computer storage upon approval from that agency.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

		INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	TOTAL CAL- CIUM (CA) (MG/L) (00916)	TOTAL MAG- NE- SIUM (MG) (MG/L) (00927)	TOTAL PO- TAS- SIUM (K) (MG/L) (00937)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	ALKA- LINITY AS CACO3 (MG/L) (00410)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	
OCT.											
02...	1035	1350	--	--	--	171	0	140	--	--	
15...	1015	1880	--	--	--	222	0	182	--	--	
29...	0935	1500	--	--	--	205	0	168	--	--	
NOV.											
11...	1005	2570	--	--	--	240	0	197	--	--	
25...	1020	1900	--	--	--	240	0	197	--	--	
DEC.											
11...	1030	1760	--	--	--	240	0	197	--	--	
23...	1100	1960	--	--	--	240	0	197	--	--	
JAN.											
06...	0945	1030	--	--	--	222	0	182	--	--	
20...	1025	2700	--	--	--	240	0	197	--	--	
FEB.											
04...	1030	1200	--	--	--	257	0	211	--	--	
18...	0950	1190	--	--	--	240	0	197	--	--	
MAR.											
03...	1615	1100	--	--	--	240	0	197	--	--	
17...	0935	1300	--	--	--	260	0	213	--	--	
APR.											
01...	1740	8930	--	--	--	100	0	82	--	--	
14...	1640	13600	--	--	--	120	0	98	--	--	
29...	0830	11700	--	--	--	140	0	115	--	--	
MAY											
13...	1745	7010	--	--	--	130	0	107	--	--	
27...	1515	4400	--	--	--	110	0	90	--	--	
JUNE											
09...	1630	6050	--	--	--	160	0	131	--	--	
24...	1110	13500	--	--	--	110	0	90	--	--	
JULY											
22...	1050	2130	55	23	2.4	220	--	180	44	20	
AUG.											
18...	1430	1070	45	20	2.6	145	--	119	42	22	
SEP.											
15...	1255	1030	35	20	2.5	138	--	113	45	24	
		TOTAL NITRITE PLUS NITRATE (N) (MG/L) (00630)	AMMONIA NITRO- GEN (N) (MG/L) (00610)	TOTAL ORGANIC NITRO- GEN (N) (MG/L) (00605)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L) (00625)	TOTAL NITRO- GEN (N) (MG/L) (00600)	TOTAL NITRO- GEN (NO3) (MG/L) (71887)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (TONS PER AC-FT) (70303)	DIS- SOLVED SOLIDS (TONS PER DAY) (70302)
JUNE											
09...	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--
JULY											
22...	2.4	.36	1.0	1.4	3.8	17	.24	330	.45	1900	
AUG.											
18...	.05	.01	2.7	2.7	2.8	12	.26	234	.32	676	
SEP.											
15...	.00	.00	2.7	2.7	2.7	12	.31	256	.35	712	

IOWA RIVER BASIN

05464450 CEDAR RIVER NEAR PALO, IOWA--CONTINUED

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TOTAL RESI- DUE (MG/L) (00500)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	TUR- BID- ITY (JTU) (00070)	DIS- SOLVED OXYGEN (MG/L) (00300)	PER- CENT SATUR- ATION (00301)	CHEM- ICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L) (00340)	CARBON DIOXIDE (CO2) (MG/L) (00405)	FECAL COLI- FORM (COL. PER 100 ML) (31616)
OCT.										
02...	--	440	8.3	11.5	10	12.2	112	--	1.4	300
15...	--	490	8.3	9.5	15	11.2	98	--	1.8	410
29...	--	480	8.4	16.0	10	10.8	108	--	1.3	5000
NOV.										
11...	--	560	8.1	8.5	10	11.4	97	--	3.1	3200
25...	--	540	8.2	4.0	4	13.2	101	--	2.4	580
DEC.										
11...	--	570	8.2	.5	6	14.1	97	--	2.4	430
23...	--	520	8.2	.5	9	14.0	97	--	2.4	420
JAN.										
06...	--	610	8.1	.0	10	14.4	99	--	2.8	240
20...	--	620	7.9	.0	4	14.4	99	--	4.8	220
FEB.										
04...	--	720	7.9	.0	4	10.7	116	--	5.2	810
18...	--	620	8.0	.0	3	14.9	102	--	3.8	60
MAR.										
03...	--	580	8.2	.0	4	14.4	98	--	2.4	40
17...	--	500	8.5	.0	3	14.8	101	--	1.3	520
APR.										
01...	--	440	8.1	2.0	50	13.9	101	--	1.3	380
14...	--	430	8.1	7.0	40	11.9	98	--	1.5	270
29...	--	350	8.2	11.0	90	10.8	97	--	1.4	2650
MAY										
13...	--	550	8.2	17.0	20	9.5	98	--	1.3	230
27...	--	500	8.8	22.5	20	8.6	98	--	.3	160
JUNE										
09...	--	520	8.2	19.0	30	8.8	94	--	1.6	350
24...	--	360	8.1	24.5	160	7.6	89	--	1.4	8400
JULY										
22...	417	600	8.6	26.0	20	8.1	99	10	.9	300
AUG.										
18...	353	360	8.4	24.5	20	9.0	106	20	.9	50
SEP.										
15...	251	370	8.3	17.0	15	9.5	98	24	1.1	150

05464700 CEDAR RIVER NEAR BERTRAM, IOWA

LOCATION.--Lat 41°56'02", long 91°32'54", in SE1/4 NW1/4 sec.9, T.82 N., R.6 W., Linn County, at bridge on U.S. Highway 30, 0.2 mi (0.3 km) downstream from Big Creek, 1.7 mi (2.7 km) southwest of Bertram, and at mile 103.1 (155.9 km) above mouth of Iowa River.

DRAINAGE AREA.--6,955 mi² (18,013 km²).

PERIOD OF RECORD.--Chemical analyses: February 1974 to current year.

Water temperatures: February 1974 to current year.

Biological analyses: February 1974 to current year.

REMARKS.--Water discharge estimated on basis of records at gaging station 9.6 mi (15.4 km) upstream at Cedar Rapids. No significant inflow between gaging station and sampling site. Additional chemical and biological data analyzed by EPA laboratories for the period February 1974 to June 1975 are available through STORET computer storage upon approval from that agency.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	TOTAL CAL- CIUM (CA) (MG/L) (00916)	TOTAL MAG- NE- SIUM (MG) (MG/L) (00927)	TOTAL PO- TAS- SIUM (K) (MG/L) (00937)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	ALKA- LINITY AS CACO3 (MG/L) (00410)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	
OCT.											
02...	1130	1350	--	--	--	171	0	140	--	--	
15...	0900	1880	--	--	--	206	0	169	--	--	
29...	0830	1500	--	--	--	188	0	154	--	--	
NOV.											
11...	0855	2570	--	--	--	222	0	182	--	--	
25...	0910	1900	--	--	--	240	0	197	--	--	
DEC.											
11...	0915	1260	--	--	--	257	0	211	--	--	
23...	0850	1960	--	--	--	220	0	180	--	--	
JAN.											
06...	0840	1030	--	--	--	240	0	197	--	--	
20...	0900	2700	--	--	--	222	0	182	--	--	
FEB.											
04...	0930	1200	--	--	--	257	0	211	--	--	
18...	0840	1190	--	--	--	240	0	197	--	--	
MAR.											
03...	1715	1100	--	--	--	220	0	180	--	--	
17...	1045	1300	--	--	--	260	0	213	--	--	
APR.											
01...	1830	8930	--	--	--	110	0	90	--	--	
14...	1735	13600	--	--	--	140	0	115	--	--	
29...	0945	11700	--	--	--	160	0	131	--	--	
MAY											
13...	1840	7010	--	--	--	150	0	123	--	--	
27...	1645	4400	--	--	--	120	0	98	--	--	
JUNE											
09...	1725	6050	--	--	--	150	0	123	--	--	
24...	1220	13500	--	--	--	130	0	107	--	--	
JULY											
22...	1210	2130	51	23	2.9	213	--	175	47	29	
AUG.											
18...	1600	1070	52	20	2.9	190	--	156	47	29	
SEP.											
15...	1350	1030	33	20	3.0	142	--	116	49	35	
DATE		TOTAL NITRITE PLUS NITRATE (N) (MG/L) (00630)	AMMONIA NITRO- GEN (N) (MG/L) (00610)	TOTAL ORGANIC NITRO- GEN (N) (MG/L) (00605)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L) (00625)	TOTAL NITRO- GEN (N) (MG/L) (00600)	TOTAL NITRO- GEN (NO3) (MG/L) (71887)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (TONS PER AC-FT) (70303)	DIS- SOLVED SOLIDS (TONS PER DAY) (70302)
JUNE											
09...	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--
JULY											
22...	2.8	1.0	1.2	2.2	5.0	22	.35	333	.45	1920	
AUG.											
18...	.79	1.1	1.7	2.8	3.6	16	.42	292	.40	844	
SEP.											
15...	.25	.41	3.1	3.5	3.8	17	.47	231	.31	543	

IOWA RIVER BASIN

05464700 CEDAR RIVER NEAR BERTRAM, IOWA--CONTINUED

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TOTAL RESI- DUE (MG/L) (00500)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	TUR- BID- ITY (JTU) (00070)	DIS- SOLVED OXYGEN (MG/L) (00300)	PER- CENT SATUR- ATION (00301)	CHEM- ICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L) (00340)	CARBON DIOXIDE (CO2) (MG/L) (00405)	FECAL COLI- FORM (COL. PER 100 ML) (31616)
OCT.										
02...	--	520	8.3	12.0	15	11.5	106	--	1.4	11000
15...	--	570	8.2	10.5	10	11.1	99	--	2.1	37000
29...	--	540	8.1	15.0	15	11.0	109	--	2.4	42000
NOV.										
11...	--	600	7.9	8.5	10	11.2	96	--	4.5	32000
25...	--	600	8.1	4.0	4	13.3	101	--	3.1	49000
DEC.										
11...	--	650	7.8	1.0	8	13.9	98	--	6.5	110000
23...	--	640	8.1	.5	10	14.0	97	--	2.8	34000
JAN.										
06...	--	690	8.0	1.0	10	14.2	100	--	3.8	34000
20...	--	660	8.1	.0	6	14.5	99	--	2.8	150000
FEB.										
04...	--	850	7.8	2.0	3	10.3	112	--	6.5	76000
18...	--	750	8.0	.0	4	14.4	98	--	3.8	13000
MAR.										
03...	--	670	8.2	.0	4	14.5	100	--	2.2	60
17...	--	590	8.2	.0	9	14.7	100	--	2.6	7800
APR.										
01...	--	420	8.3	2.0	60	14.0	101	--	.9	44000
14...	--	460	8.2	7.0	40	11.8	97	--	1.4	14000
29...	--	500	8.2	11.5	80	11.0	101	--	1.6	25000
MAY										
13...	--	470	8.2	17.0	30	9.5	98	--	1.5	30000
27...	--	550	8.9	22.0	20	8.6	98	--	.2	3000
JUNE										
09...	--	490	8.3	20.0	30	8.8	96	--	1.2	20000
24...	--	420	8.1	24.5	170	7.1	84	--	1.7	67000
JULY										
22...	386	650	8.5	25.5	8	8.2	99	16	1.1	6800
AUG.										
18...	332	500	8.1	24.5	10	8.7	102	20	2.4	6400
SEP.										
15...	313	430	8.4	18.0	10	9.2	97	26	.9	5800

05474500 MISSISSIPPI RIVER AT KEOKUK, IOWA
(National stream-quality accounting network station)

LOCATION.--Lat 40°23'37", long 91°22'27", in SE1/4 SW1/4 sec.30, T.65 N., R.4 W., Lee County, near right bank in tailwater of dam and powerplant of Union Electric Co. at Keokuk, 0.2 mi (0.3 km) upstream from bridge on U.S. Highway 136, 2.7 mi (4.3 km) upstream from Des Moines River, and at mile 364.2 (586.0 km) upstream from Ohio River.

DRAINAGE AREA.--119,000 mi² (308,000 km²), approximately.

PERIOD OF RECORD.--Chemical analysis: November 1974 to current year.

Water temperatures: November 1974 to current year.

Biological analysis: November 1974 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C) , WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	420	450	475	420	340	381	390	388	354	319
2	---	---	425	450	478	432	326	388	398	383	360	325
3	---	---	410	460	477	439	332	381	395	377	353	333
4	---	410	400	450	480	444	343	384	400	375	357	341
5	---	420	410	460	482	448	347	383	398	371	361	337
6	---	440	430	450	470	440	348	380	392	370	346	337
7	---	420	420	460	474	446	367	390	394	369	343	348
8	---	440	420	480	480	438	370	384	401	379	342	228
9	---	440	430	465	482	480	358	384	393	380	346	343
10	---	420	450	465	480	432	376	383	400	382	355	348
11	---	440	450	440	488	420	395	383	400	390	349	346
12	---	560	440	425	484	430	387	384	396	384	347	335
13	---	480	440	460	450	436	410	383	402	387	342	333
14	---	420	430	478	490	438	412	383	402	393	347	337
15	---	410	450	467	510	444	397	384	409	398	346	345
16	---	420	440	483	500	456	400	384	403	392	349	343
17	---	420	440	490	484	470	408	384	412	403	359	346
18	---	420	450	476	481	442	422	384	408	406	361	349
19	---	420	450	515	483	380	424	384	399	402	360	351
20	---	410	440	475	470	356	394	358	411	399	362	343
21	---	420	450	478	490	330	422	362	398	395	373	346
22	---	410	450	477	520	318	420	344	402	390	357	344
23	---	430	440	470	485	320	424	368	406	378	368	335
24	---	430	440	470	445	290	430	364	391	372	367	332
25	---	430	440	468	436	276	409	369	392	380	371	328
26	---	430	460	466	470	273	406	370	389	378	372	336
27	---	440	450	482	462	268	399	384	397	371	365	337
28	---	420	460	485	416	288	390	367	394	367	369	331
29	---	420	460	480	---	297	386	370	393	363	364	325
30	---	410	460	478	---	300	394	378	381	362	379	324
31	---	---	455	481	---	325	---	383	---	356	359	---
MONTH YEAR	MAX	431	439	469	476	386	388	378	398	382	358	334
		560	MIN	228	MEAN	403						

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	3.0	0.5	0.0	0.0	3.0	14.0	22.0	28.0	28.0	25.0
2	---	---	2.0	0.5	0.0	0.0	4.0	14.0	21.0	29.0	27.0	25.0
3	---	---	1.0	0.0	0.0	0.0	3.0	14.0	21.0	29.0	28.0	25.5
4	---	12.0	0.5	0.0	0.0	0.0	3.0	14.0	22.0	29.0	28.5	25.0
5	---	12.0	1.0	0.0	0.5	0.0	4.0	14.0	23.0	29.0	29.0	24.6
6	---	11.0	1.0	0.0	0.0	0.0	4.0	15.0	23.0	29.0	29.0	24.5
7	---	12.0	1.5	0.5	0.0	0.0	4.0	15.0	23.0	29.0	29.0	25.5
8	---	11.0	1.5	0.5	0.0	0.0	4.0	16.0	23.0	28.0	28.0	23.0
9	---	11.0	0.5	1.0	0.0	0.0	5.0	15.0	22.0	28.0	27.0	22.6
10	---	12.0	0.0	2.0	0.0	0.0	5.0	15.0	21.5	27.5	26.6	22.0
11	---	10.0	0.0	2.0	0.0	0.0	5.0	16.0	22.0	27.0	27.0	23.0
12	---	9.5	0.0	1.0	0.0	0.0	5.0	16.0	21.5	27.0	27.0	21.0
13	---	8.0	1.0	0.5	0.0	0.0	6.0	16.0	21.0	25.0	28.0	20.0
14	---	7.0	1.0	0.0	0.0	0.0	7.0	15.0	22.0	24.0	29.0	21.0
15	---	7.0	1.5	0.0	0.0	0.0	7.0	15.0	23.0	24.5	26.0	20.0
16	---	7.0	1.0	0.0	0.0	0.0	8.0	15.0	21.0	24.5	26.0	19.5
17	---	7.0	1.0	0.0	0.0	0.0	8.0	15.0	21.0	25.0	26.0	20.0
18	---	6.0	0.5	0.0	0.0	3.0	10.0	15.0	22.0	26.5	26.5	20.0
19	---	6.0	0.5	0.0	0.0	4.0	10.0	15.0	23.0	25.0	27.0	19.0
20	---	7.0	0.5	0.0	0.0	4.5	10.0	20.0	24.0	26.5	27.5	18.5
21	---	6.0	0.0	0.0	0.0	5.0	10.0	21.0	24.0	26.0	27.6	18.5
22	---	6.0	0.0	0.0	0.5	6.0	11.0	21.0	25.0	26.5	28.0	16.0
23	---	6.0	0.0	0.0	0.0	5.0	12.0	22.0	25.0	27.0	28.0	16.5
24	---	7.0	0.0	0.0	0.0	4.0	12.0	23.0	25.0	27.0	28.0	16.5
25	---	5.0	0.0	0.0	0.0	3.0	13.0	24.0	26.0	26.0	28.0	15.0
26	---	5.0	0.0	0.0	0.5	2.0	13.0	24.0	26.0	25.0	27.0	15.5
27	---	5.0	0.0	0.0	0.0	2.0	13.0	23.5	27.0	26.0	27.0	15.0
28	---	4.5	0.0	0.0	0.0	1.5	14.0	23.5	27.0	27.0	27.0	16.0
29	---	4.0	0.0	0.0	---	1.0	14.0	24.0	28.0	27.0	27.0	16.0
30	---	3.0	0.0	0.0	---	1.5	14.0	23.0	28.0	27.5	26.5	16.0
31	---	---	0.0	0.0	---	1.0	---	22.0	---	28.0	26.0	---
MONTH YEAR	MAX	7.5	0.5	0.5	0.0	1.5	8.0	18.0	23.5	27.0	27.5	20.0
		29.0	MIN	0.0	MEAN	12.6						

MISSISSIPPI RIVER MAIN STEM

05474500 MISSISSIPPI RIVER AT KEOKUK, IOWA--CONTINUED
(National stream-quality accounting network station)

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	ALKA- LINITY AS CAC03 (MG/L) (00410)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)
NOV., 1974												
04...	1230	55500	.4	40	21	10	2.1	211	0	173	29	12
DEC.												
11...	1200	48000	3.2	59	20	12	2.2	218	0	179	30	15
JAN., 1975												
13...	1100	44700	6.8	52	22	12	1.9	229	--	188	30	15
FEB.												
10...	1100	44000	9.4	56	22	12	2.4	226	--	185	32	16
MAR.												
17...	1200	57000	10	51	20	13	2.4	207	--	170	29	17
APR.												
22...	1000	137000	9.3	49	17	10	2.7	187	0	153	28	13
MAY												
26...	1100	136000	6.7	43	16	7.6	2.8	169	0	139	36	11
JUNE												
24...	1100	108000	8.6	51	18	7.2	2.8	177	0	145	29	12
JULY												
22...	1100	77000	11	45	18	7.3	2.6	181	0	148	29	11
AUG.												
27...	1100	60700	1.0	42	19	8.5	2.4	189	0	155	26	12
SEP.												
22...	1200	40900	4.0	38	15	11	2.9	160	0	131	24	12

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	TOTAL NITRITE PLUS NITRATE (N) (MG/L) (00630)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L) (00625)	TOTAL NITRO- GEN (N) (MG/L) (00600)	TOTAL NITRO- GEN (NO3) (MG/L) (71887)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)	DIS- SOLVED SOLIDS (TONS PER AC-FT) (70303)	DIS- SOLVED SOLIDS (TONS PER DAY) (70302)	HARD- NESS (CA,MG) (00900)
NOV., 1974											
04...	.2	.33	.89	1.2	5.4	.16	244	219	.33	36600	190
DEC.											
11...	.2	1.2	1.2	2.4	11	.17	316	249	.43	41000	230
JAN., 1975											
13...	.2	1.6	1.2	2.8	12	.18	244	253	.33	29400	220
FEB.											
10...	.2	1.8	1.6	3.4	15	.19	281	261	.38	33400	230
MAR.											
17...	.3	1.5	1.4	2.9	13	.22	253	245	.34	38900	210
APR.											
22...	.2	1.4	2.8	4.2	19	.17	238	221	.32	88000	190
MAY											
26...	.2	2.0	1.1	3.1	14	.22	257	206	.35	94400	170
JUNE											
24...	.3	3.0	1.5	4.5	20	.30	260	219	.35	75800	200
JULY											
22...	.5	1.5	.99	2.5	11	.22	236	214	.32	49100	190
AUG.											
27...	.2	.15	1.5	1.7	7.3	.19	250	204	.34	41000	180
SEP.											
22...	.3	.32	.95	1.3	5.6	.19	181	186	.25	20000	160

DATE	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	PERCENT SODIUM (00932)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00096)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	TUR- BID- ITY (JTU) (00070)	CARBON DIOXIDE (CO2) (MG/L) (00405)	TOTAL PHYTO- PLANK- TON (CELLS PER ML) (60050)	FECAL COLI- FORM (COL. PER 100 ML) (31616)	STREP- TOCOCCI (COL- ONIES PER 100 ML) (31679)
NOV., 1974											
04...	13	10	.3	410	8.3	12.0	10	1.7	17000	3800	10000
DEC.											
11...	51	10	.3	420	8.4	1.0	10	1.2	29000	80	200
JAN., 1975											
13...	33	11	.4	430	8.6	.0	20	.9	27000	120	67
FEB.											
10...	45	10	.3	490	8.6	.0	5	.8	25000	27	59
MAR.											
17...	40	12	.4	460	8.5	12.0	10	1.0	11000	7	20
APR.											
22...	39	10	.3	420	8.5	20.0	25	.9	20000	300	83
MAY											
26...	35	9	.3	350	8.2	25.0	30	1.7	27000	140	50
JUNE											
24...	56	7	.2	300	8.0	30.0	60	2.8	5600	900	--
JULY											
22...	38	8	.2	380	8.5	29.0	20	.9	13000	130	10
AUG.											
27...	28	9	.3	280	7.8	29.0	9	4.8	11000	--	--
SEP.											
22...	25	13	.4	360	8.5	17.0	15	.8	7800	110	53

05474500 MISSISSIPPI RIVER AT KEOKUK, IOWA--CONTINUED
(National stream-quality accounting network station)

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TOTAL IRON (FE) (UG/L) (01045)	DIS- SOLVED IRON (FE) (UG/L) (01046)	TOTAL MAN- GANESE (MN) (UG/L) (01056)	SUS- PENDE MAN- GANESE (MN) (UG/L) (01054)	DIS- SOLVED MAN- GANESE (MN) (UG/L) (01056)	UNCOR- RECTED PERI- PHYTON CHLORO- PHYLL B MG/SQ M (32226)	UNCOR- RECTED PERI- PHYTON CHLORO- PHYLL A MG/SQ M (32228)	PERI- PHYTON BIOMASS ASH G/SQ M (00572)	PERI- PHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M (00573)	TOTAL ORGANIC CARBON (C) (MG/L) (00680)
DEC. 11...	--	--	--	--	--	.2	.7	.80	--	--
MAR. 17...	860	100	140	30	110	.1	.4	.50	.70	20
JUNE 24...	4700	2200	210	10	200	1.9	32	22	38	12
AUG. 27...	--	--	--	--	--	--	--	--	--	--
SEP. 22...	650	120	140	130	10	--	--	--	--	11

DATE	TOTAL ARSENIC (AS) (UG/L) (01002)	SUS- PENDE ARSENIC (AS) (UG/L) (01001)	DIS- SOLVED ARSENIC (AS) (UG/L) (01000)	TOTAL CAD- MIUM (CD) (UG/L) (01027)	SUS- PENDE CAD- MIUM (CD) (UG/L) (01026)	DIS- SOLVED CAD- MIUM (CD) (UG/L) (01025)	TOTAL CHRO- MIUM (CR) (UG/L) (01034)	SUS- PENDE CHRO- MIUM (CR) (UG/L) (01031)	DIS- SOLVED CHRO- MIUM (CR) (UG/L) (01030)
DEC. 11...	--	--	--	--	--	--	--	--	--
MAR. 17...	2	2	0	1	0	1	<10	<9	1
JUNE 24...	3	2	1	3	0	3	<10	<8	2
AUG. 27...	--	--	--	--	--	2	--	--	--
SEP. 22...	2	0	2	0	0	0	<10	<10	0

DATE	TOTAL COBALT (CO) (UG/L) (01037)	SUS- PENDE COBALT (CO) (UG/L) (01036)	DIS- SOLVED COBALT (CO) (UG/L) (01035)	TOTAL COPPER (CU) (UG/L) (01042)	SUS- PENDE COPPER (CU) (UG/L) (01041)	DIS- SOLVED COPPER (CU) (UG/L) (01040)	TOTAL LEAD (PB) (UG/L) (01051)	SUS- PENDE LEAD (PB) (UG/L) (01050)	DIS- SOLVED LEAD (PB) (UG/L) (01049)
DEC. 11...	--	--	--	--	--	--	--	--	--
MAR. 17...	0	0	0	5	0	5	15	3	12
JUNE 24...	2	0	2	20	5	15	41	31	10
AUG. 27...	--	--	0	--	--	19	--	--	12
SEP. 22...	0	0	0	7	3	4	10	10	0

DATE	TOTAL MERCURY (HG) (UG/L) (71900)	SUS- PENDE MERCURY (HG) (UG/L) (71895)	DIS- SOLVED MERCURY (HG) (UG/L) (71890)	TOTAL SELE- NIUM (SE) (UG/L) (01147)	SUS- PENDE SELE- NIUM (SE) (UG/L) (01146)	DIS- SOLVED SELE- NIUM (SE) (UG/L) (01145)	TOTAL ZINC (ZN) (UG/L) (01092)	SUS- PENDE ZINC (ZN) (UG/L) (01091)	DIS- SOLVED ZINC (ZN) (UG/L) (01090)
DEC. 11...	--	--	--	--	--	--	--	--	--
MAR. 17...	.3	.2	.1	1	0	1	40	10	30
JUNE 24...	.3	.2	.1	1	1	0	40	10	30
AUG. 27...	--	--	--	--	--	--	--	--	0
SEP. 22...	.4	.4	.0	0	0	0	20	0	30

MISSISSIPPI RIVER MAIN STEM

05474500 MISSISSIPPI RIVER AT KEOKUK, IOWA--CONTINUED
(National stream-quality accounting network station)

IDENTIFICATION OF PHYTOPLANKTON, IN PERCENT, OF TOTAL CELL COUNT

Date of sample	Nov 4 '74	Dec 11	Jan 13 '75	Feb 10	Mar 17	Apr 22	May 26	Jun 24	Jul 22	Aug 27	Sep 22 '75
GREEN ALGAE											
Actinastrum	4								4		
Ankistrodesmus	1			1			1			1	
Chodatella	3										
Coelastrum	9										
Crucigenia	6						23				
Dictyosphaerium	11										
Oocystis							6			4	
Pediastrum	13				7					10	
Scenedesmus	10						3		8	5	
Staurastrum	1										
Tetrastrum									4		
BLUE-GREEN ALGAE											
Anabaena		9						4	3		
Anacystis	2		6						4	44	29
Aphanizomenon											43
Gomphosphaeria									7		
Lyngbya	20	32									
Oscillatoria									11		
DIATOMS											
Asterionella			4	5			4				
Cocconeis								2			
Cyclotella	15	55	85	95	89	95	25	13	13	26	19
Gyrosigma								2			
Melosira	1	4	5			2	35	65	43	6	7
Navicula								2		1	1
Nitzschia	1				3	3	3	2	3	3	
Stephanodiscus	3										1
Surirella								9			
Synedra	2	1									
FLAGELLATES											
Dinobryon					1						
Total count (cells/ml)	17000	29000	27000	25000	11000	20000	5600	13000	13000	11000	7800
Diversity index											
Class									1.373	1.516	.857
Order									1.782	1.697	1.625
Family									1.921	2.030	1.625
Genera									2.723	2.289	1.907
Periphyton analysis		yes			yes			yes			
Days of exposure		37			35			29			
Biomass pigment ratio		0			500			500			

Note.--Grab sample used for phytoplankton analysis by Sedgwick-Rafter chamber, 200-x microscope.
Polyethylene strips used for periphyton. See previous table for chlorophyll and biomass data.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDE SEDIM- ENT DIS- CHARGE (MG/L) (80154)	SUS- PENDE SEDIM- ENT DIS- CHARGE (T/DAY) (80155)
NOV. 04...	1230	12.0	55500	23	3450
DEC. 11...	1200	1.0	48000	75	9720
JAN. 13...	1100	.0	44700	36	4350
FEB. 10...	1100	.0	44000	74	8790
APR. 22...	1000	20.0	137000	183	67700
MAY 26...	1100	25.0	136000	114	41900
JUNE 24...	1100	30.0	108000	183	53400
AUG. 27...	1100	29.0	60700	27	4430

05481650 DES MOINES RIVER NEAR SAYLORVILLE, IOWA

LOCATION.--Lat 41°40'50", long 93°40'07", near center of sec.5, T.79 N., R.24 W., Polk County, near center of sec.5, T.79 N. upstream from gaging station, 2.0 mi (3.2 km) west of Saylorville, 2.1 mi (3.4 km) downstream from Rock Creek, 2.4 mi (3.9 km) upstream from Beaver Creek, and at mile 211.6 (340.5 km).

DRAINAGE AREA.--5,841 mi² (15,128 km²).

PERIOD OF RECORD.--Specific conductance: December 1967 to September 1971, October 1971 to current year (partial-record station).

Water temperatures: October 1961 to September 1971, October 1971 to current year (partial-record station).

Sediment records: October 1961 to current year.

EXTREMES.--Current year: Sediment concentrations: Maximum daily, 2,580 mg/l June 26; minimum daily, 20 mg/l Nov. 22.

Sediment discharge: Maximum daily, 85,000 tons (77,100 tonnes) June 26; minimum daily, 13 tons (12 tonnes) Jan. 3.

Period of record: Specific conductance (1967-71): Maximum daily, 1,350 micromhos Jan. 19-21, 1968; minimum daily, 90 micromhos Feb. 19, 1971.

Water temperatures (1967-71): Maximum, 36.0°C June 29, 1971; minimum, freezing point on many days during winter months each year.

Sediment concentrations: Maximum daily, 5,400 mg/l May 14, 1970; minimum daily, 1 mg/l Jan. 8, 1965.

Sediment discharge: Maximum daily, 148,000 tons (134,000 tonnes) June 12, 1966; minimum daily, 1 ton (0.91 tonne) Jan. 8, 1965, Feb. 8-12, 23, 1967.

REMARKS.--Flow affected by ice Dec. 1-4, Dec. 17 to Mar. 19.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25°C), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	650	650	---	---	---	---	---	480	650	520	---	560
2	670	---	630	---	---	---	580	485	---	530	---	---
3	680	---	630	---	---	---	620	520	590	---	520	---
4	690	680	640	---	---	---	610	600	530	---	---	---
5	680	660	680	---	---	---	---	620	580	---	---	---
6	---	650	700	---	---	---	---	640	580	---	---	---
7	660	650	---	---	---	---	620	640	---	---	---	---
8	630	---	---	---	---	---	---	655	---	540	---	---
9	650	---	680	---	---	---	540	---	600	---	---	---
10	640	---	700	---	---	---	540	660	---	---	---	---
11	640	---	730	---	---	---	---	660	---	---	---	---
12	630	---	730	---	---	---	530	660	---	580	---	---
13	650	---	720	---	---	---	---	---	580	---	---	---
14	630	---	710	---	---	---	550	---	---	---	---	---
15	660	---	---	---	---	---	560	660	560	---	---	---
16	---	---	---	---	---	---	570	660	550	---	---	640
17	660	---	720	730	---	600	580	---	570	---	---	---
18	650	630	---	670	---	---	---	650	---	---	---	---
19	---	640	---	---	---	---	600	---	570	---	---	---
20	---	650	---	---	---	420	610	---	500	---	---	680
21	640	640	---	---	---	380	620	690	580	---	650	700
22	640	640	---	---	---	380	---	---	540	---	---	700
23	660	630	---	---	---	---	---	670	560	---	---	710
24	690	620	---	---	---	---	660	590	530	---	---	---
25	---	620	---	---	---	---	---	---	580	---	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	630	---	---	---	---	---	---	510	---	---	---
28	---	630	---	---	---	---	---	670	530	---	---	---
29	640	---	---	---	---	---	640	---	---	---	570	720
30	660	---	---	---	---	---	---	660	---	---	580	720
31	---	---	650	700	---	---	530	640	520	---	---	---
31	---	---	620	---	---	580	---	650	---	---	560	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---
YEAR	MAX	730	MIN	380	MEAN	618	---	---	---	---	---	---

DES MOINES RIVER BASIN

05481650 DES MOINES RIVER NEAR SAYLORVILLE, IOWA--CONTINUED

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

(ONCE DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12.0	15.0	---	---	---	---	---	13.5	19.0	27.0	---	26.0
2	12.5	---	1.0	---	---	---	0.5	13.0	---	25.0	---	---
3	11.0	---	0.0	---	---	---	2.0	13.0	21.0	---	29.0	---
4	16.0	9.0	0.0	---	---	---	2.0	17.0	22.0	---	---	---
5	14.0	8.0	0.0	---	---	---	---	17.0	22.5	---	---	---
6	---	8.0	0.0	---	---	---	---	12.0	23.0	---	---	---
7	12.0	8.5	---	---	---	---	6.0	15.0	---	---	---	---
8	15.0	---	---	---	---	---	---	16.0	---	27.0	---	---
9	15.0	---	0.0	---	---	---	4.5	---	19.0	---	---	---
10	16.0	---	1.0	---	---	---	3.0	---	---	---	---	---
11	17.0	---	1.0	---	---	---	---	---	---	---	---	---
12	14.0	---	1.0	---	---	---	4.5	---	---	22.0	---	---
13	12.0	---	0.5	---	---	---	---	---	20.0	---	---	---
14	11.0	---	0.5	---	---	---	5.0	---	---	---	---	---
15	11.5	---	---	---	---	---	6.0	---	18.0	---	---	---
16	---	---	---	---	---	---	8.0	---	17.5	---	---	12.0
17	15.0	---	0.0	1.0	---	1.0	11.0	---	20.5	---	---	---
18	14.0	5.0	---	0.0	---	---	---	---	---	---	---	---
19	---	7.0	---	---	---	---	8.0	---	21.5	---	---	---
20	---	4.5	---	---	---	1.5	10.0	---	24.5	---	---	14.0
21	11.5	3.5	---	---	---	0.0	10.5	---	23.5	---	25.0	14.0
22	15.0	5.0	---	---	---	1.0	---	---	24.0	---	---	15.0
23	16.0	6.0	---	---	---	---	---	---	25.0	---	---	15.5
24	16.5	3.5	---	---	---	---	14.0	25.0	24.5	---	---	---
25	---	2.0	---	---	---	---	---	---	26.0	---	---	---
26	---	1.5	---	---	---	---	---	---	23.0	---	---	---
27	---	2.0	---	---	---	---	---	25.0	---	---	---	---
28	16.0	---	---	---	---	---	12.0	---	---	---	23.0	15.0
29	16.5	---	---	---	---	---	---	18.5	---	---	24.0	16.0
30	---	---	1.5	0.0	---	---	12.5	18.0	26.0	---	---	---
31	---	---	1.0	---	---	3.0	---	20.0	---	---	26.0	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---
YEAR	MAX	29.0	MIN	0.0	MEAN	12.5	---	---	---	---	---	---

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	TOTAL CAL- CIUM (CA) (MG/L) (00916)	TOTAL MAG- NE- SIUM (MG) (MG/L) (00927)	TOTAL PO- TAS- SIUM (K) (MG/L) (00937)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	ALKA- LINITY AS CACO3 (MG/L) (00410)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)
OCT.										
09...	1255	362	--	--	--	205	0	168	--	--
23...	0755	200	--	--	--	205	0	168	--	--
NOV.										
04...	1320	474	--	--	--	240	0	197	--	--
19...	1230	286	--	--	--	291	0	239	--	--
DEC.										
03...	1315	160	--	--	--	274	0	225	--	--
18...	0830	330	--	--	--	310	0	254	--	--
31...	0910	200	--	--	--	320	0	262	--	--
JAN.										
15...	0815	258	--	--	--	310	0	254	--	--
27...	0800	260	--	--	--	344	0	282	--	--
FEB.										
11...	0930	250	--	--	--	340	0	279	--	--
25...	1145	250	--	--	--	310	0	254	--	--
MAR.										
11...	1000	250	--	--	--	310	0	254	--	--
24...	1325	4730	--	--	--	190	0	156	--	--
APR.										
08...	1245	3800	--	--	--	170	0	139	--	--
21...	1345	7520	--	--	--	160	0	131	--	--
MAY										
07...	1100	9180	--	--	--	160	0	131	--	--
19...	1515	5100	--	--	--	230	0	189	--	--
JUNE										
04...	1200	5440	--	--	--	200	0	164	--	--
18...	0906	8870	--	--	--	180	0	148	--	--
JULY										
14...	1035	2340	79	35	2.1	241	--	198	100	27
AUG.										
13...	0800	560	70	36	3.3	241	--	198	120	36
SEP.										
10...	1315	330	60	30	3.7	225	--	185	110	34

05481650 DES MOINES RIVER NEAR SAYLORVILLE, IOWA--CONTINUED

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TOTAL NITRITE PLUS NITRATE (N) (MG/L) (00630)	AMMONIA NITRO- GEN (N) (MG/L) (00610)	TOTAL ORGANIC NITRO- GEN (N) (MG/L) (00605)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L) (00625)	TOTAL NITRO- GEN (N) (MG/L) (00600)	TOTAL NITRO- GEN (NO3) (MG/L) (71887)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (TONS PER AC-FT) (70303)	DIS- SOLVED SOLIDS (TONS PER DAY) (70302)		
OCT.												
09...	--	--	--	--	--	--	--	--	--	--		
23...	--	--	--	--	--	--	--	--	--	--		
NOV.												
04...	--	--	--	--	--	--	--	--	--	--		
19...	--	--	--	--	--	--	--	--	--	--		
DEC.												
03...	--	--	--	--	--	--	--	--	--	--		
18...	--	--	--	--	--	--	--	--	--	--		
31...	--	--	--	--	--	--	--	--	--	--		
JAN.												
15...	--	--	--	--	--	--	--	--	--	--		
27...	--	--	--	--	--	--	--	--	--	--		
FEB.												
11...	--	--	--	--	--	--	--	--	--	--		
25...	--	--	--	--	--	--	--	--	--	--		
MAR.												
11...	--	--	--	--	--	--	--	--	--	--		
24...	--	--	--	--	--	--	--	--	--	--		
APR.												
08...	--	--	--	--	--	--	--	--	--	--		
21...	--	--	--	--	--	--	--	--	--	--		
MAY												
07...	--	--	--	--	--	--	--	--	--	--		
19...	--	--	--	--	--	--	--	--	--	--		
JUNE												
04...	--	--	--	--	--	--	--	--	--	--		
18...	--	--	--	--	--	--	--	--	--	--		
JULY												
14...	6.3	.00	2.6	2.6	8.9	39	.31	485	.66	3060		
AUG.												
13...	.00	.00	1.1	1.1	1.1	4.9	.16	452	.61	683		
SEP.												
10...	.00	.00	1.7	1.7	1.7	7.5	.22	405	.55	361		
DATE	TOTAL RESI- DUE (MG/L) (00500)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	TUR- BID- ITY (JTU) (00070)	DIS- SOLVED OXYGEN (MG/L) (00300)	PER- CENT SATUR- ATION (00301)	CHEM- ICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L) (00340)	CARBON DIOXIDE (CO2) (MG/L) (00405)	FECAL COLI- FORM (COL. PER 100 ML) (31616)		
OCT.												
09...	--	500	7.9	15.5	35	13.4	134	--	4.1	1600		
23...	--	560	7.1	12.0	35	9.7	89	--	26	40		
NOV.												
04...	--	620	8.6	10.0	35	11.8	104	--	1.0	40000		
19...	--	860	7.9	8.0	7	10.1	89	--	5.9	100		
DEC.												
03...	--	800	8.2	.0	9	13.6	95	--	2.8	20		
18...	--	830	8.4	.0	8	17.0	120	--	2.0	290		
31...	--	850	7.9	.0	8	14.6	102	--	6.4	40		
JAN.												
15...	--	740	--	.0	6	15.4	108	--	--	1600		
27...	--	855	7.5	.0	3	13.9	97	--	17	300		
FEB.												
11...	--	900	8.5	.0	4	13.7	97	--	1.7	300		
25...	--	650	8.8	.0	4	10.0	68	--	.8	3900		
MAR.												
11...	--	800	8.1	.0	5	15.3	105	--	3.9	140		
24...	--	390	8.2	1.0	80	14.7	104	--	1.9	1200		
APR.												
08...	--	600	8.5	6.0	55	9.8	82	--	.9	140		
21...	--	630	8.3	9.0	50	9.6	83	--	1.3	350		
MAY												
07...	--	590	8.2	15.0	45	10.6	91	--	1.6	730		
19...	--	680	8.6	22.0	70	8.5	101	--	.9	980		
JUNE												
04...	--	900	8.2	20.0	40	8.7	97	--	2.0	1800		
18...	--	660	7.9	19.0	80	9.4	99	--	3.6	1000		
JULY												
14...	651	650	8.7	21.0	50	10.9	121	16	.8	70		
AUG.												
13...	548	510	8.3	26.0	20	7.7	93	28	1.9	75		
SEP.												
10...	451	660	8.0	23.0	20	9.8	113	18	3.6	--		
DATE	TIME	TEMPER- ATURE (DEG C) (00010)	NUMBER OF SAM- PLING POINTS (00063)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	BED MAT. FALL DIAM. X FINER THAN .062 MM (80158)	BED MAT. FALL DIAM. X FINER THAN .125 MM (80159)	BED MAT. FALL DIAM. X FINER THAN .250 MM (80160)	BED MAT. FALL DIAM. X FINER THAN .500 MM (80161)	BED MAT. FALL DIAM. X FINER THAN 1.00 MM (80162)	BED MAT. SIEVE DIAM. X FINER THAN 2.00 MM (80169)	BED MAT. SIEVE DIAM. X FINER THAN 4.00 MM (80170)	BED MAT. SIEVE DIAM. X FINER THAN 8.00 MM (80171)
AUG.												
21...	0855	26.0	4	398	1	2	11	56	88	91	95	100

DES MOINES RIVER BASIN

05481650 DES MOINES RIVER NEAR SAYLORVILLE, IOWA--CONTINUED

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	MEAN DISCHARGE (CFS)	OCTOBER MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	NOVEMBER MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	DECEMBER MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	303	52	43	665	58	104	200	29	16
2	259	48	34	593	107	171	170	44	20
3	269	49	36	584	132	208	150	75	30
4	257	65	45	545	115	170	130	65	23
5	249	57	38	475	85	109	285	66	51
6	253	54	37	433	69	81	308	80	67
7	290	61	48	405	67	73	321	74	64
8	336	82	74	397	72	77	260	62	44
9	328	98	87	406	108	118	299	53	43
10	296	89	71	367	86	8F	314	65	55
11	286	72	55	365	80	79	316	80	68
12	310	98	82	361	72	70	310	70	59
13	320	105	91	359	67	65	301	57	46
14	342	117	108	354	62	59	289	60	47
15	323	113	99	349	56	53	316	63	54
16	310	113	95	338	52	47	256	62	43
17	288	112	87	338	48	44	280	68	51
18	283	123	94	337	44	40	270	68	50
19	271	116	85	328	42	37	260	62	44
20	266	100	72	334	47	42	250	61	41
21	258	85	59	324	31	27	260	62	44
22	253	88	60	317	20	17	265	56	40
23	253	93	64	316	55	47	270	70	51
24	252	105	71	309	42	35	275	53	39
25	269	113	82	294	38	30	280	45	34
26	294	156	124	286	37	29	230	35	22
27	265	106	76	284	27	21	220	29	17
28	258	80	56	258	26	18	210	27	15
29	265	85	61	262	23	16	210	32	18
30	285	91	70	221	21	13	220	30	18
31	545	111	163	---	---	---	190	30	15
MONTH	9036	---	2268	11205	---	1985	7915	---	1229

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	MEAN DISCHARGE (CFS)	JANUARY MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	FEBRUARY MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MARCH MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	160	32	14	240	54	35	250	84	57
2	200	38	21	230	52	32	260	86	60
3	150	33	13	220	59	35	270	88	64
4	200	35	19	220	73	43	270	89	65
5	200	37	20	210	68	39	280	90	68
6	180	32	16	210	58	33	290	88	69
7	190	33	17	210	51	29	290	77	60
8	170	37	17	200	54	29	290	73	57
9	170	37	17	200	51	28	280	66	50
10	180	42	20	200	53	29	280	68	51
11	300	92	75	200	46	25	280	70	53
12	220	77	46	200	46	25	280	66	50
13	240	77	50	200	45	24	280	68	51
14	250	65	44	200	44	24	280	64	48
15	260	46	32	200	47	25	280	61	46
16	260	35	25	200	57	31	330	60	53
17	260	37	26	210	67	38	700	200	378
18	260	47	33	210	77	44	1900	1290	6620
19	260	49	34	220	83	49	2600	2050	14400
20	260	47	33	220	87	52	4890	2480	32700
21	250	42	28	230	83	52	6960	1550	29100
22	250	41	28	230	63	39	6670	1590	28600
23	240	39	25	240	52	34	5030	1170	15900
24	240	37	24	240	56	36	4710	800	10200
25	240	36	23	250	75	51	4330	730	8530
26	250	38	26	260	84	59	3940	680	7230
27	250	46	31	260	83	58	3310	620	5540
28	260	53	37	250	86	58	3340	570	5140
29	260	57	40	---	---	---	3180	530	4550
30	260	72	51	---	---	---	3230	480	4190
31	250	52	35	---	---	---	3070	440	3650
MONTH	7120	---	920	6160	---	1056	62350	---	177630

05481650 DES MOINES RIVER NEAR SAYLORVILLE, IOWA--CONTINUED

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	MEAN DISCHARGE (CFS)	APRIL MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MAY MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	JUNE MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	2990	430	3470	18800	840	42600	5880	670	10600
2	3310	440	3930	18900	560	28600	5620	482	7310
3	2570	275	1910	17600	380	18100	5190	442	6190
4	2210	250	1490	15300	410	16900	5240	580	8210
5	2450	390	2580	12600	467	15900	4910	973	12900
6	2840	470	3600	10400	455	12800	4770	750	9660
7	3150	630	5360	9020	400	9740	5500	255	3790
8	3590	1180	11400	8370	487	11000	5810	230	3610
9	4700	1900	24100	7800	595	12500	5650	440	6710
10	6750	2170	39500	7280	580	11400	5510	598	8900
11	7430	1860	37300	6730	450	8180	6240	695	11700
12	7040	1330	25300	6370	598	10300	8650	795	18600
13	6520	1200	21100	6720	607	11000	10100	910	24800
14	6590	1360	24200	7460	545	11000	10900	1010	29700
15	6810	1360	25000	7300	625	12300	10800	930	27100
16	7110	850	16300	6600	470	8380	9330	750	19100
17	7270	930	18300	5540	392	5860	8550	880	20300
18	7290	1170	23000	5640	440	6700	9180	962	23800
19	7260	1280	25100	5050	478	6520	10900	840	24700
20	7270	830	16300	4570	458	5650	10300	662	18400
21	7360	840	16700	4260	450	5180	9790	490	13100
22	7200	1110	21600	4140	502	5610	9640	530	14000
23	7360	1150	22900	3890	645	6770	8880	579	13900
24	7450	900	18100	3670	520	5150	8480	950	21800
25	7530	830	16900	3420	396	3660	8520	690	15900
26	7260	1040	20400	3210	382	3310	11900	2580	85000
27	7000	1270	24000	3050	358	2950	17900	1010	46800
28	8070	1230	26800	2990	440	3550	16500	695	31000
29	10900	1060	31200	3830	620	6410	11600	665	20800
30	15500	1120	46900	4640	860	10800	7920	640	13700
31	---	---	---	5380	953	13800	---	---	---
MONTH	190780	---	574740	230530	---	332620	260160	---	572080
DAY	MEAN DISCHARGE (CFS)	JULY MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	AUGUST MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	SEPTEMBER MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	6610	659	11800	590	117	186	439	90	107
2	8800	565	8850	564	104	155	407	58	64
3	4440	501	6010	537	98	142	398	44	47
4	3970	485	5200	518	98	137	383	42	43
5	4090	490	5410	497	90	121	398	44	47
6	3940	595	6330	465	80	100	381	43	44
7	3720	510	5120	449	80	97	369	41	41
8	3450	485	4520	433	80	94	386	51	53
9	3190	465	4010	431	82	95	356	38	37
10	2980	440	3680	435	83	97	345	37	34
11	2690	418	3040	390	68	72	332	36	32
12	2440	362	2380	411	73	81	315	36	31
13	2270	318	1950	427	83	96	298	34	27
14	2100	310	1760	426	71	82	292	37	29
15	1850	300	1500	417	56	63	284	39	30
16	1810	290	1420	402	55	60	275	43	32
17	1680	280	1270	374	52	53	277	42	31
18	1550	272	1140	399	59	64	288	42	33
19	1430	260	1000	408	65	72	278	40	30
20	1300	230	807	380	58	60	278	33	25
21	1300	200	702	420	68	77	274	32	24
22	1260	250	851	460	80	99	269	33	24
23	1130	245	747	453	80	98	274	43	32
24	1090	203	597	436	66	78	288	60	47
25	991	180	482	421	58	66	248	54	36
26	926	162	405	405	57	62	304	67	55
27	861	142	330	639	193	333	277	67	50
28	799	138	298	587	102	162	244	66	43
29	739	130	259	600	199	322	239	61	39
30	678	122	223	516	154	215	230	64	40
31	632	120	205	470	106	135	---	---	---
MONTH	71716	---	82296	14350	---	3575	9426	---	1207
YEAR	880748	---	1751606						

DES MOINES RIVER BASIN

05484500 RACCOON RIVER AT VAN METER, IOWA

LOCATION.--Lat 41°32'02", long 93°56'59", in SW1/4 SW1/4 sec.22, T.78 N., R.27 W., Dallas County, at bridge on county highway R16, 0.3 mi (0.5 km) northeast of Van Meter, 1.2 mi (1.9 km) downstream from confluence of North and South Raccoon River, and 30 mi (48.3 km) upstream from mouth.

DRAINAGE AREA.--3,441 mi² (8.912 km²).

PERIOD OF RECORD.--Chemical analyses: February 1974 to current year. Partial-record station December 1968 to September 1973.

Water temperatures: February 1974 to current year. Partial-record station September 1968 to September 1973.

Biological analyses: February 1974 to current year.

REMARKS.--Additional chemical and biological data analyzed by EPA laboratories for the period February 1974 to June 1975 are available through STORET computer storage upon approval from that agency.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

		INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	TOTAL CAL- CIUM (CA) (MG/L) (00916)	TOTAL MAG- NE- SIUM (MG) (MG/L) (00927)	TOTAL PO- TAS- SIUM (K) (MG/L) (00937)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	ALKA- LINITY AS CACO3 (MG/L) (00410)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	
OCT.											
09...	1200	300	--	--	--	294	0	241	--	--	
23...	0845	185	--	--	--	205	0	168	--	--	
NOV.											
04...	1225	375	--	--	--	257	0	211	--	--	
19...	1530	240	--	--	--	258	0	212	--	--	
DEC.											
03...	1150	200	--	--	--	274	0	225	--	--	
18...	0930	580	--	--	--	260	0	213	--	--	
31...	1010	220	--	--	--	270	0	221	--	--	
JAN.											
15...	0910	300	--	--	--	260	0	213	--	--	
27...	0850	530	--	--	--	290	0	238	--	--	
FEB.											
11...	1045	208	--	--	--	270	0	221	--	--	
25...	1050	250	--	--	--	240	0	197	--	--	
MAR.											
11...	1100	250	--	--	--	260	0	213	--	--	
24...	1230	6300	--	--	--	150	0	123	--	--	
APR.											
08...	1330	3100	--	--	--	160	0	131	--	--	
21...	1250	3000	--	--	--	160	0	131	--	--	
MAY											
07...	1200	4500	--	--	--	160	0	131	--	--	
19...	1400	2500	--	--	--	190	0	156	--	--	
JUNE											
04...	1000	2650	--	--	--	180	0	148	--	--	
18...	1145	8100	--	--	--	120	0	98	--	--	
JULY											
14...	1230	1200	66	30	1.8	246	--	202	50	18	
AUG.											
13...	0930	350	60	26	2.4	236	--	193	53	18	
SEP.											
10...	1130	418	66	25	3.0	277	--	227	51	20	
		TOTAL NITRITE PLUS NITRATE (N) (MG/L) (00630)	AMMONIA NITRO- GEN (N) (MG/L) (00610)	TOTAL ORGANIC NITRO- GEN (N) (MG/L) (00605)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L) (00625)	TOTAL NITRO- GEN (N) (MG/L) (00600)	TOTAL NITRO- GEN (NO3) (MG/L) (71887)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (TONS PER AC-FT) (70303)	DIS- SOLVED SOLIDS (TONS PER DAY) (70302)
JUNE											
04...	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--
JULY											
14...	7.5	.00	2.3	2.3	9.8	43	.13	384	.52	1240	
AUG.											
13...	.93	.00	1.3	1.3	2.2	9.9	.15	322	.44	304	
SEP.											
10...	.49	.01	1.4	1.4	1.9	8.4	.18	363	.49	410	

054B4500 RACCOON RIVER AT VAN METER, IOWA--CONTINUED

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TOTAL RESI- DUE (MG/L) (00500)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	TUR- BID- ITY (JTU) (00070)	DIS- SOLVED OXYGEN (MG/L) (00300)	PER- CENT SATUR- ATION (00301)	CHEM- ICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L) (00340)	CARBON DIOXIDE (CO2) (MG/L) (00405)	FECAL COLI- FORM (COL. PER 100 ML) (31616)
OCT.										
09...	--	490	7.9	13.5	10	13.3	127	--	5.9	3000
23...	--	560	7.6	12.0	15	10.6	98	--	8.2	90
NOV.										
04...	--	600	8.4	9.0	25	10.3	89	--	1.6	34000
19...	--	690	8.0	10.0	4	10.3	99	--	4.1	280
DEC.										
03...	--	640	8.1	.0	7	13.1	92	--	3.5	150
18...	--	650	8.3	.0	5	15.4	108	--	2.1	700
31...	--	600	8.0	.0	9	13.8	96	--	4.3	600
JAN.										
15...	--	650	--	.0	7	14.3	100	--	--	3400
27...	--	570	7.4	.0	8	15.1	101	--	18	1900
FEB.										
11...	--	660	8.2	.0	4	13.0	92	--	2.7	2800
25...	--	620	8.6	.0	5	9.9	68	--	1.0	2400
MAR.										
11...	--	640	8.2	.0	7	16.2	111	--	2.6	1600
24...	--	380	8.3	2.0	60	13.0	94	--	1.2	1500
APR.										
08...	--	640	8.4	6.5	60	10.0	84	--	1.0	650
21...	--	630	8.3	11.0	40	9.3	84	--	1.3	500
MAY										
07...	--	640	8.2	16.0	65	10.8	93	--	1.6	6600
19...	--	660	8.3	23.0	40	7.5	90	--	1.5	100
JUNE										
04...	--	900	8.4	20.0	50	9.3	103	--	1.1	2700
18...	--	450	7.6	19.0	130	8.0	90	--	4.8	20000
JULY										
14...	426	530	8.7	21.0	20	11.1	123	14	.8	350
AUG.										
13...	387	460	8.7	25.5	20	8.1	98	64	.8	400
SEP.										
10...	411	420	8.3	22.0	25	10.6	116	4	2.2	--

05485520 DES MOINES RIVER BELOW DES MOINES, IOWA

LOCATION.--Lat 41°33'03", long 93°31'29", in NE1/4 NE1/4 sec.20, T.78 N., R.23 W., Polk County, at bridge on State Highway 5 near east edge of Des Moines, 0.2 mi (0.3 km) downstream from unnamed stream, 1.4 mi (2.3 km) upstream from Fourmile Creek, and at mile 195.9 (315.2 km).

DRAINAGE AREA.--9,901 mi² (25,644 km²).

PERIOD OF RECORD.--Chemical analyses: October 1970; February 1974 to current year.

Water temperatures: February 1974 to current year.

Biological analyses: February 1974 to current year.

REMARKS.--Water discharge estimated on basis of records at gaging station 4.8 mi (7.7 km) upstream at SE 14th Street, Des Moines. No significant inflow between gaging station and sampling site. Additional chemical and biological data analyzed by EPA laboratories for the period February 1974 to June 1975 are available through STORET computer storage upon approval from that agency.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

		INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	TOTAL CAL- CIUM (CA) (MG/L) (00916)	TOTAL MAG- NE- SIUM (MG) (MG/L) (00927)	TOTAL PO- TAS- SIUM (K) (MG/L) (00937)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	ALKA- LINITY AS CAC03 (MG/L) (00410)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	
OCT.											
09...	1040	604	--	--	--	188	0	154	--	--	
23...	0945	360	--	--	--	205	0	168	--	--	
NOV.											
04...	1055	2360	--	--	--	223	0	183	--	--	
19...	1345	640	--	--	--	274	0	225	--	--	
DEC.											
03...	1055	330	--	--	--	240	0	197	--	--	
18...	1020	700	--	--	--	240	0	197	--	--	
31...	1125	570	--	--	--	270	0	221	--	--	
JAN.											
15...	1000	530	--	--	--	260	0	213	--	--	
27...	0950	600	--	--	--	274	0	225	--	--	
FEB.											
11...	1145	500	--	--	--	270	0	221	--	--	
25...	0930	500	--	--	--	270	0	221	--	--	
MAR.											
11...	1250	500	--	--	--	310	0	254	--	--	
24...	1130	13600	--	--	--	170	0	139	--	--	
APR.											
08...	1135	7770	--	--	--	180	0	148	--	--	
21...	1140	9660	--	--	--	160	0	131	--	--	
MAY											
07...	1400	16600	--	--	--	160	0	131	--	--	
19...	1230	8600	--	--	--	220	0	180	--	--	
JUNE											
04...	0905	8530	--	--	--	180	0	148	--	--	
18...	1355	15500	--	--	--	160	0	131	--	--	
JULY											
14...	1420	3750	73	33	2.2	250	--	205	85	25	
AUG.											
13...	1035	750	63	31	3.6	228	--	187	99	33	
SEP.											
10...	0940	938	66	27	4.0	250	--	205	84	28	
		TOTAL NITRITE PLUS NITRATE (N) (MG/L) (00630)	AMMONIA NITRO- GEN (N) (MG/L) (00610)	TOTAL ORGANIC NITRO- GEN (N) (MG/L) (00605)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L) (00625)	TOTAL NITRO- GEN (N) (MG/L) (00600)	TOTAL NITRO- GEN (NO3) (MG/L) (71887)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (TONS PER AC-FT) (70303)	DIS- SOLVED SOLIDS (TONS PER DAY) (70302)
JUNE											
04...	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--
JULY											
14...	7.4	.01	2.2	2.2	9.6	43	.24	445	.61	4510	
AUG.											
13...	.46	.58	1.6	2.2	2.7	12	.67	412	.56	834	
SEP.											
10...	1.5	.25	2.5	2.7	4.2	19	.63	388	.53	983	

05485520 DES MOINES RIVER BELOW DES MOINES, IOWA--CONTINUED

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TOTAL RESI- DUE (MG/L) (00500)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	TUR- BID- ITY (JTU) (00070)	DIS- SOLVED OXYGEN (MG/L) (00300)	PER- CENT SATUR- ATION (00301)	CHEM- ICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L) (00340)	CARBON DIOXIDE (CO2) (MG/L) (00405)	FECAL COLI- FORM (COL. PER 100 ML) (31616)
OCT.										
09...	--	680	7.7	17.0	15	10.8	111	--	6.0	7900
23...	--	620	7.3	13.0	20	9.6	92	--	16	590
NOV.										
04...	--	650	8.4	10.0	40	8.7	77	--	1.4	51000
19...	--	790	7.5	10.0	15	10.4	100	--	14	500
DEC.										
03...	--	800	7.8	.0	10	13.4	94	--	6.1	14000
18...	--	760	8.3	1.0	10	15.1	106	--	1.9	12000
31...	--	580	8.0	1.5	10	14.7	106	--	4.3	9000
JAN.										
15...	--	710	--	.0	10	15.7	110	--	--	9400
27...	--	740	7.5	2.0	4	16.3	109	--	14	11000
FEB.										
11...	--	800	8.5	.0	9	13.7	97	--	1.4	4700
25...	--	610	8.6	.0	6	11.6	79	--	1.1	10000
MAR.										
11...	--	850	8.2	.0	7	16.0	110	--	3.1	9600
24...	--	300	8.5	3.0	50	12.5	92	--	.9	3100
APR.										
08...	--	490	8.5	6.5	60	10.1	85	--	.9	250
21...	--	650	8.2	9.0	50	9.9	85	--	1.6	1500
MAY										
07...	--	700	8.5	17.0	55	10.9	94	--	.8	5800
19...	--	700	8.4	24.0	60	7.6	93	--	1.4	5000
JUNE										
04...	--	900	8.4	19.5	50	9.7	104	--	1.1	5700
18...	--	600	8.1	20.0	150	8.8	97	--	2.0	4400
JULY										
14...	552	650	8.6	22.0	30	11.0	125	14	1.0	1100
AUG.										
13...	492	500	8.3	26.0	20	6.8	77	24	1.8	1200
SEP.										
10...	469	620	8.1	21.0	25	7.8	87	30	3.2	--

MISSOURI RIVER MAIN STEM

06486000 MISSOURI RIVER AT SIOUX CITY, IOWA
(National Stream Quality Accounting Network Station)

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

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

PERIOD OF RECORD.--Chemical analyses: January 1974 to current year.

Specific conductance: October 1972 to current year (partial-record station).

Water temperatures: October 1971 to current year (partial-record station).

Sediment records: October 1971 to current year. October 1954 to September 1971 (daily sediment discharge only) in reports of Corps of Engineers.

Biological analyses: May 1974 to current year.

EXTREMES.--Current year: Sediment concentrations: Maximum daily, 959 mg/l Jan. 22; minimum daily, 96 mg/l Sept. 27.

Sediment discharge: Maximum daily, 131,000 tons (119,000 tonnes) Sept. 12; minimum daily, 3,410 tons (3,090 tonnes) Jan. 12.

Period of record: Sediment concentrations: Maximum daily, 1,620 mg/l Nov. 20, 1972; minimum daily, 87 mg/l Nov. 7, 1973.

Sediment discharge: Maximum daily, 222,000 tons (201,000 tonnes) Nov. 20, 1972; minimum daily, 3,410 tons (3,090 tonnes) Jan. 12, 1975.

REMARKS.--Flow affected by ice Jan. 13 to Feb. 26.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C) , WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	730	---	---	---	---	---	---	---	---	710	---
2	---	---	---	---	---	---	---	710	---	---	---	750
3	---	---	---	---	750	---	---	---	680	705	---	---
4	---	710	730	---	---	---	740	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	750	750
6	---	---	---	---	---	690	---	750	750	---	---	---
7	700	710	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	720	---	---	760	710	---
9	---	---	---	---	---	---	---	760	---	---	---	740
10	---	---	---	---	---	---	---	---	750	---	---	---
11	725	725	---	---	---	---	700	---	---	760	---	---
12	---	---	750	---	680	---	---	---	---	---	710	740
13	---	---	---	---	---	---	---	730	740	---	---	---
14	---	730	---	---	---	700	660	---	---	---	---	---
15	710	---	---	---	---	---	---	---	---	760	740	---
16	---	---	---	---	---	---	---	700	---	---	---	720
17	---	---	---	---	---	---	---	---	690	---	---	---
18	600	---	---	---	---	---	730	---	---	660	---	---
19	---	725	---	---	---	690	---	---	---	---	720	---
20	---	---	---	---	---	---	---	740	710	---	---	740
21	---	---	---	---	---	---	---	---	---	---	---	---
22	725	725	---	---	---	---	700	---	---	750	730	---
23	---	---	760	750	---	---	---	750	---	---	---	740
24	---	---	---	---	---	---	---	---	730	---	---	---
25	700	710	---	---	---	---	700	---	---	750	---	---
26	---	---	---	---	---	---	---	---	---	---	750	740
27	---	---	---	---	730	---	---	760	720	---	---	---
28	---	---	---	---	---	650	---	---	---	---	---	---
29	710	750	---	---	---	---	710	---	---	740	745	---
30	---	---	---	---	---	---	---	760	720	---	---	---
31	---	---	---	---	---	660	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---
YEAR	MAX	760	MIN	600	MEAN	723	---	---	---	---	---	---

06486000 MISSOURI RIVER AT SIOUX CITY, IOWA--CONTINUED

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	TEMPERATURE (DEG. C) OF WATER (MEAN VALUES)											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	13.5	---	---	---	---	---	---	---	---	26.5	---
2	---	---	---	---	---	---	---	10.0	---	---	---	25.0
3	13.0	---	---	---	0.0	---	---	---	16.5	24.5	---	---
4	---	8.5	1.0	---	---	---	1.0	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	26.0	20.5
6	---	---	---	---	---	0.5	---	15.5	18.0	---	---	---
7	11.5	10.5	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	3.5	---	---	24.0	23.0	---
9	---	---	---	2.0	---	---	---	13.5	---	---	---	19.5
10	---	---	---	---	---	---	---	---	17.0	---	---	---
11	15.5	7.0	---	---	---	---	2.0	---	---	23.0	---	---
12	---	---	1.5	---	0.0	---	---	---	---	---	25.0	15.0
13	---	---	---	---	---	---	---	15.0	18.5	---	---	---
14	---	4.5	---	---	---	0.0	5.5	---	---	---	---	---
15	12.5	---	---	---	---	---	---	---	---	22.5	24.0	---
16	---	---	---	---	---	---	---	13.5	---	---	---	19.5
17	---	---	---	---	---	---	---	---	18.0	---	---	---
18	7.0	---	---	---	---	---	6.0	---	---	24.0	---	---
19	---	7.0	---	---	---	---	---	---	---	---	23.0	---
20	---	---	---	---	---	6.0	---	19.5	10.5	---	---	16.5
21	---	---	---	---	---	---	---	---	---	---	---	---
22	11.5	8.0	---	---	---	---	12.5	---	---	22.5	24.0	---
23	---	---	0.0	0.0	---	---	---	21.0	---	---	---	17.0
24	---	---	---	---	---	---	---	---	21.0	---	---	---
25	12.0	5.0	---	---	---	---	9.0	---	---	25.0	---	---
26	---	---	---	---	---	---	---	---	---	---	24.5	14.5
27	---	---	---	---	1.0	---	---	16.0	21.0	---	---	---
28	---	---	---	---	---	0.0	---	---	---	---	---	---
29	14.5	2.5	---	---	---	---	10.5	---	---	27.0	23.5	---
30	---	---	---	---	---	---	---	17.0	27.0	---	---	---
31	---	---	---	---	---	2.0	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---
YEAR	MAX	27.0	MIN	0.0	MEAN	13.5	---	---	---	---	---	---

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED ALUM- INUM (AL) (UG/L) (01106)	TOTAL IRON (FE) (UG/L) (01045)	DIS- SOLVED MAN- GANESE (MN) (UG/L) (01056)	TOTAL CAL- CIUM (CA) (MG/L) (00916)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	TOTAL MAG- NE- SIUM (MG) (00927)	DIS- SOLVED MAG- NE- SIUM (MG) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	TOTAL PO- TAS- SIUM (K) (MG/L) (00937)
OCT.												
15...	1500	35200	8.5	0	880	10	--	--	--	--	--	--
29...	1500	34500	8.5	7	1400	15	--	54	--	23	72	--
NOV.												
11...	1400	32900	8.3	7	2000	11	--	--	--	--	--	--
25...	1355	29600	8.1	3	770	16	58	60	50	23	68	4.4
DEC.												
09...	1720	18000	9.7	30	1800	18	--	--	--	--	--	--
23...	1340	18900	9.7	20	26000	10	--	61	--	21	70	--
JAN.												
06...	1215	18900	9.2	6	1300	0	--	--	--	--	--	--
20...	1700	22500	8.9	7	370	0	--	58	--	22	68	--
FEB.												
03...	1310	18000	7.8	10	500	10	--	--	--	--	--	--
17...	0935	18000	9.5	30	260	0	49	62	19	24	76	7.0
MAR.												
03...	1220	20000	10	20	460	10	--	--	--	--	--	--
17...	1230	18000	9.1	4	1200	60	--	60	--	20	60	--
APR.												
01...	0700	26600	10	40	1500	30	--	--	--	--	--	--
14...	1430	30800	8.6	4	2900	10	--	60	--	21	62	--
29...	0935	30800	8.5	0	920	0	--	--	--	--	--	--
MAY												
12...	1145	30300	8.0	0	890	10	58	60	21	22	65	5.0
27...	0815	37000	7.0	30	1600	0	--	--	--	--	--	--
JUNE												
10...	1000	37800	6.1	20	1400	0	--	60	--	21	66	--
23...	1245	39000	6.3	0	1100	10	--	--	--	--	--	--
JULY												
07...	1520	49600	6.6	--	--	--	60	64	21	22	67	4.8
AUG.												
06...	0930	61300	6.9	--	--	--	54	58	21	22	74	4.6
SEP.												
08...	1330	62300	7.7	--	1100	2	56	60	22	22	67	4.5

MISSOURI RIVER MAIN STEM

06486000 MISSOURI RIVER AT SIOUX CITY, IOWA--CONTINUED

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	ALKA- LINIT- AS CACO3 (MG/L) (00410)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	TOTAL NITRITE PLUS NITRATE (N) (MG/L) (00630)	AMMONIA NITRO- GEN (N) (MG/L) (00610)	TOTAL ORGANIC NITRO- GEN (N) (MG/L) (00605)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L) (00625)
OCT.											
15...	--	171	0	140	--	--	--	.04	.01	.32	.33
29...	5.5	171	0	140	200	9.8	.5	.03	.01	.30	.31
NOV.											
11...	--	188	0	154	--	--	--	.04	.00	.19	.19
25...	5.0	188	0	154	200	10	.6	.02	.01	.20	.21
DEC.											
09...	--	188	0	154	--	--	--	.07	.00	.17	.17
23...	5.3	188	0	154	200	9.9	1.2	.07	.01	.32	.33
JAN.											
06...	--	170	0	139	--	--	--	.06	.01	.40	.41
20...	5.2	188	17	183	200	9.9	.6	.06	.01	.24	.25
FEB.											
03...	--	171	17	169	--	--	--	.06	.00	.23	.23
17...	6.0	170	0	139	200	10	.6	.09	.00	.33	.33
MAR.											
03...	--	188	0	154	--	--	--	.09	.01	.26	.27
17...	5.0	188	0	154	190	9.7	.5	.12	.01	.36	.37
APR.											
01...	--	170	17	168	--	--	--	.15	.03	.32	.35
14...	5.1	190	0	156	180	9.7	.3	.18	.02	.28	.30
29...	--	190	0	156	--	--	--	.01	.00	.36	.36
MAY											
12...	5.2	170	0	139	200	10	.5	.00	.05	.24	.29
27...	--	220	0	180	--	--	--	.00	.00	.30	.30
JUNE											
10...	5.0	210	0	172	200	10	.6	.00	.00	.20	.20
23...	--	190	0	156	--	--	--	.03	.00	1.2	1.2
JULY											
07...	5.2	198	0	162	220	11	.5	.01	.01	.47	.48
AUG.											
06...	5.2	202	0	166	220	11	.6	.06	.01	.47	.48
SEP.											
08...	4.5	198	0	162	210	10	.5	.00	.00	.29	.29

DATE	TOTAL NITRO- GEN (N) (MG/L) (00600)	TOTAL NITRO- GEN (NO3) (MG/L) (71887)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L) (70301)	DIS- SOLVED SOLIDS (TONS PER AC-FT) (70303)	DIS- SOLVED SOLIDS (TONS PER DAY) (70302)	TOTAL NON- FILT- RABLE RESIDUE (MG/L) (00530)	TOTAL RESI- DUE (MG/L) (00500)	HARD- NESS (CA, MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)
OCT.											
15...	.37	1.6	.05	499	--	.68 47400		79	--	--	--
29...	.34	1.5	.04	482	458	.66 44900		41	--	230	90
NOV.											
11...	.23	1.0	.04	492	--	.67 4-700		49	--	--	--
25...	.23	1.0	.04	490	467	.67 39200		40	--	240	86
DEC.											
09...	.24	1.1	.04	511	--	.70 24800		62	--	--	--
23...	.40	1.8	.04	513	471	.70 26200		27	--	240	86
JAN.											
06...	.47	2.1	.04	484	--	.66 24700		20	--	--	--
20...	.31	1.4	.02	428	482	.58 26000		0	--	240	57
FEB.											
03...	.29	1.3	.02	492	--	.67 23900		19	--	--	--
17...	.42	1.9	.01	499	472	.68 24300		12	--	250	110
MAR.											
03...	.36	1.6	.03	482	--	.66 26000		0	--	--	--
17...	.49	2.2	.06	442	447	.60 21500		92	--	230	78
APR.											
01...	.50	2.2	.06	467	--	.64 33500		92	--	--	--
14...	.48	2.1	.07	476	440	.65 39600		56	--	240	84
29...	.37	1.6	.03	477	--	.65 39700		51	--	--	--
MAY											
12...	.29	1.3	.02	476	454	.65 38900		37	--	240	100
27...	.30	1.3	.06	489	--	.67 48900		58	--	--	--
JUNE											
10...	.20	.89	.04	493	472	.67 50300		46	--	240	68
23...	1.2	5.4	.10	496	--	.67 52200		52	--	--	--
JULY											
07...	.49	2.2	.07	540	494	.73 72300		--	559	250	88
AUG.											
06...	.54	2.4	.04	511	497	.70 84600		--	530	240	70
SEP.											
08...	.29	1.3	.05	481	479	.65 80900		--	531	240	78

06486000 MISSOURI RIVER AT SIOUX CITY, IOWA--CONTINUED

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	PERCENT SODIUM (00932)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	TUR- BID- ITY (JTU) (00070)	DIS- SOLVED OXYGEN (MG/L) (00300)	PER- CENT SATUR- ATION (00301)	CHEM- ICAL OXYGEN DEMAND (LOW LEVEL) (MG/L) (00335)	CHEM- ICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L) (00340)	CARBON DIOXIDE (CO2) (MG/L) (00405)
OCT.											
15...	--	--	750	7.9	12.5	15	10.3	99	21	--	3.4
29...	40	2.1	725	8.3	14.0	25	10.2	102	9	--	1.4
NOV.											
11...	--	--	580	7.9	7.0	10	11.6	98	20	--	3.8
25...	37	1.9	820	8.1	5.0	15	11.6	94	3	--	2.4
DEC.											
09...	--	--	790	8.0	.0	160	11.0	79	12	--	3.0
23...	38	2.0	700	7.6	.0	10	--	--	13	--	7.6
JAN.											
06...	--	--	750	8.2	.0	10	13.8	99	9	--	1.7
20...	38	1.9	850	8.5	.0	5	13.2	96	18	--	1.1
FEB.											
03...	--	--	800	8.8	.0	5	13.4	94	12	--	.5
17...	39	2.1	800	8.0	.0	4	13.2	94	8	--	2.7
MAR.											
03...	--	--	700	8.1	1.5	6	13.2	96	15	--	2.4
17...	35	1.7	700	7.7	1.0	25	13.0	96	8	--	6.0
APR.											
01...	--	--	680	8.4	1.0	30	13.2	96	9	--	1.3
14...	36	1.8	700	8.0	5.5	35	12.4	102	6	--	3.0
29...	--	--	750	8.1	10.5	15	10.4	98	11	--	2.4
MAY											
12...	36	1.8	700	8.0	18.0	15	10.1	110	16	--	2.7
27...	--	--	750	7.8	16.0	15	9.6	99	9	--	5.6
JUNE											
10...	37	1.9	700	8.1	17.5	20	9.5	102	7	--	2.7
23...	--	--	720	8.2	23.0	20	8.8	105	100	--	1.9
JULY											
07...	36	1.8	760	8.2	26.0	15	8.8	111	--	8	2.0
AUG.											
06...	40	2.1	750	7.8	24.0	15	8.4	102	--	6	5.1
SEP.											
08...	37	1.9	710	7.6	21.0	10	9.0	103	--	--	8.0
DATE	TOTAL PHYTO- PLANK- TON (CELLS PER ML) (60050)	FECAL COLI- FORM (COL. PER 100 ML) (31616)	STREP- TOCOCCI (COL- ONIES PER 100 ML) (31679)	TOTAL ORGANIC CARBON (C) (MG/L) (00680)	DIS- SOLVED ARSENIC (AS) (UG/L) (01000)	DIS- SOLVED CAD- MIUM (CD) (UG/L) (01025)	DIS- SOLVED CHRO- MIUM (CR) (UG/L) (01030)	DIS- SOLVED COPPER (CU) (UG/L) (01040)	DIS- SOLVED LEAD (PB) (UG/L) (01049)	DIS- SOLVED SILVER (AG) (UG/L) (01075)	DIS- SOLVED ZINC (ZN) (UG/L) (01090)
OCT.											
15...	780	4900	--	3.8	2	0	0	4	2	0	8
29...	480	26	30	4.5	2	0	0	3	1	0	10
NOV.											
11...	470	25	--	5.1	2	0	0	2	1	0	10
25...	350	18	19	3.7	2	0	1	3	0	0	20
DEC.											
09...	700	73	--	3.1	2	0	1	5	4	0	10
23...	1900	52	27	3.0	2	1	0	6	2	0	0
JAN.											
06...	6100	27	--	2.6	2	1	1	3	0	0	20
20...	5000	58	27	4.3	1	0	0	3	1	0	20
FEB.											
03...	4000	46	--	2.5	0	1	0	2	2	0	6
17...	2900	170	28	3.2	1	1	0	4	1	0	20
MAR.											
03...	--	52	--	3.5	1	0	0	5	1	0	30
17...	--	82	400	2.9	1	0	1	1	12	0	0
APR.											
01...	--	100	--	4.0	0	1	0	4	4	0	10
14...	--	70	31	5.3	1	0	0	3	1	0	10
29...	--	140	--	3.9	2	0	0	5	1	0	20
MAY											
12...	5400	100	160	8.3	1	1	2	1	2	0	10
27...	--	15	--	18	1	1	0	3	0	0	30
JUNE											
10...	2700	100	35	4.1	1	0	0	3	1	0	10
23...	--	380	--	31	1	1	0	3	1	0	10
JULY											
07...	5200	19	110	--	--	--	--	--	--	--	--
AUG.											
06...	1700	19	75	--	--	--	--	--	--	--	--
SEP.											
08...	2800	240	95	1.0	1	0	0	1	7	--	10

MISSOURI RIVER MAIN STEM

06486000 MISSOURI RIVER AT SIOUX CITY, IOWA--CONTINUED

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS- SOLVED IRON (FE) (UG/L) (01046)	TOTAL MAN- GANESE (MN) (UG/L) (01055)	SUS- PENDE MAN- GANESE (MN) (UG/L) (01054)	TOTAL SODIUM (NA) (MG/L) (00929)	UNCOR- RECTED PERI- PHYTON CHLORO- PHYLL B (MG/SQ M) (32226)	UNCOR- RECTED PERI- PHYTON CHLORO- PHYLL A (MG/SQ M) (32228)	PERI- PHYTON BIOMASS ASH WEIGHT (G/SQ M) (00572)	PERI- PHYTON BIOMASS TOTAL DRY WEIGHT (G/SQ M) (00573)	TOTAL ARSENIC (AS) (UG/L) (01002)	SUS- PENDE ARSENIC (AS) (UG/L) (01001)
OCT. 15...	--	--	--	--	.3	2.9	1.5	--	--	--
NOV. 25...	0	78	62	60	--	--	--	--	3	1
FEB. 17...	10	27	30	72	--	--	--	--	1	0
MAY 12...	0	40	30	58	--	--	--	--	2	1
JUNE 10...	--	--	--	--	.5	5.0	3.9	5.0	--	--
SEP. 08...	20	80	80	--	6.1	19	6.2	13	2	1

DATE	TOTAL CAD- MIUM (CD) (UG/L) (01027)	SUS- PENDE CAD- MIUM (CD) (UG/L) (01026)	TOTAL CHRO- MIUM (CR) (UG/L) (01034)	SUS- PENDE CHRO- MIUM (CR) (UG/L) (01031)	TOTAL COBALT (CO) (UG/L) (01037)	SUS- PENDE COBALT (CO) (UG/L) (01036)	DIS- SOLVED COBALT (CO) (UG/L) (01035)	TOTAL COPPER (CU) (UG/L) (01042)	SUS- PENDE COPPER (CU) (UG/L) (01041)	TOTAL LEAD (PB) (UG/L) (01051)
OCT. 15...	--	--	--	--	--	--	--	--	--	--
NOV. 25...	2	2	<10	<9	6	0	10	4	1	3
FEB. 17...	2	1	<10	<10	2	2	0	3	0	9
MAY 12...	0	0	<10	<8	0	0	0	2	1	10
JUNE 10...	--	--	--	--	--	--	--	--	--	--
SEP. 08...	0	0	20	20	4	4	0	8	7	10

DATE	SUS- PENDE LEAD (PB) (UG/L) (01050)	TOTAL SELE- NIUM (SE) (UG/L) (01147)	SUS- PENDE SELE- NIUM (SE) (UG/L) (01146)	DIS- SOLVED SELE- NIUM (SE) (UG/L) (01145)	TOTAL ZINC (ZN) (UG/L) (01092)	SUS- PENDE ZINC (ZN) (UG/L) (01091)	TOTAL MERCURY (HG) (UG/L) (71900)	SUS- PENDE MERCURY (HG) (UG/L) (71895)	DIS- SOLVED MERCURY (HG) (UG/L) (71890)
OCT. 15...	--	--	--	--	--	--	--	--	--
NOV. 25...	3	2	1	1	70	50	.9	.0	1.1
FEB. 17...	8	2	2	0	30	10	.2	.2	.0
MAY 12...	8	3	2	1	30	20	.2	.0	.2
JUNE 10...	--	--	--	--	--	--	--	--	--
SEP. 08...	3	3	0	3	50	40	.4	.2	.2

06486000 MISSOURI RIVER AT SIOUX CITY, IOWA--CONTINUED

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

IDENTIFICATION OF PHYTOPLANKTON, IN PERCENT, OF TOTAL CELL COUNT

Date of sample	Oct 15 '74	Oct 29	Nov 11	Nov 25	Dec 9	Jan 6 '75	Jan 20	Feb 3	Feb 17	May 12	Jun 10	Jul 7	Aug 6	Sep 8 '75
GREEN ALGAE														
Actinastrum												6		
Ankistrodesmus	3	2			3					9		2		1
Coelastrum		15												
Dictyosphaerium														22
Kirchneriella										9				
Micractinium												8		
Pediastrum														21
Quadrigula			4											
Scenedesmus		6								5		2	33	8
Selenastrum														1
Sphaerocystis		15		22										
BLUE-GREEN ALGAE														
Anacystis	11				25									
Lyngbya	41													
DIATOMS														
Achnanthes					3									
Asterionella					19	100	95	99	99	20	65			
Coscinodiscus								1						
Cyclotella		26	78	49	25		5		1	41	2	13	47	17
Fragilaria											4			
Melosira	11				19						17	59	14	17
Navicula	8		10	11	6					5	4			
Nitzschia	3		2	11						7	6	10	3	11
Synedra		4	2	8										
FLAGELLATES														
Chlamydomonas	24	33	4							2	2			1
Glenodinium										2				
Trachelomonas													3	
Total count (cells/ml)	780	480	470	350	700	6100	5000	4000	2900	5400	2700	5200	1700	2800
Diversity index														
Class													1.085	.991
Order													1.250	1.445
Family													1.250	2.236
Genera													1.722	2.723
Periphyton analysis	yes										yes			yes
Days of exposure	28										27			33
Biomass pigment ratio	.5										210			340

Note.--Grab sample used for phytoplankton analysis by Sedgwick-Rafter chamber, 200-x microscope.
Polyethylene strips used for periphyton. See previous table for chlorophyll and biomass data.

MISSOURI RIVER MAIN STEM

06486000 MISSOURI RIVER AT SIOUX CITY, IOWA--CONTINUED

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	MEAN DISCHARGE (CFS)	OCTOBER			NOVEMBER			DECEMBER	
		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	35400	563	53800	34000	360	33000	19500	341	18000
2	35900	517	50100	32800	327	29000	19200	310	16100
3	36200	485	47400	32300	318	27700	19000	265	13600
4	36200	402	39300	32300	330	28800	18700	192	9690
5	35900	352	34100	33000	428	38100	18700	183	9240
6	36400	378	37100	33600	488	44300	18800	188	9540
7	36400	395	38800	33600	469	42500	18700	192	9690
8	36200	360	35200	33300	382	34300	17800	179	8600
9	36200	381	37200	33300	298	26800	17500	168	7940
10	36400	425	41800	33300	210	18900	19000	313	16100
11	37300	482	48500	32800	142	12600	18700	280	14100
12	37600	541	54900	33000	108	9620	19200	340	17600
13	37300	554	55800	33000	152	13500	18900	331	16900
14	37600	632	64200	33800	260	23700	18900	320	16300
15	35400	577	55100	33000	308	27400	19000	301	15400
16	35400	468	44700	33000	343	30600	18800	292	14800
17	34800	412	38700	33300	423	38000	18000	260	12600
18	34600	405	37800	33600	483	43800	18900	317	16200
19	34800	422	39700	33600	498	45200	19300	327	17000
20	34600	430	40200	33500	474	43000	19400	264	13800
21	34800	467	43900	33300	430	38700	19200	222	11500
22	35100	570	54000	33300	380	34200	19200	211	10900
23	34600	580	54200	33600	310	28100	19400	161	8430
24	34600	483	45100	32600	241	21200	18500	168	8390
25	34300	362	33500	29800	172	13800	18200	165	8110
26	33800	328	29900	27800	132	9910	19000	235	12100
27	33600	325	29500	25400	148	10100	19700	305	16200
28	33800	360	32900	23200	229	14300	19000	304	15500
29	34600	417	39000	21100	307	17500	18900	330	16800
30	34600	419	39100	19900	341	18300	18700	318	16100
31	34300	393	36400	---	---	---	18700	322	16300
MONTH	1098700	---	1331900	944200	---	816930	584500	---	413630
DAY	MEAN DISCHARGE (CFS)	JANUARY			FEBRUARY			MARCH	
		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	18500	350	17500	17800	438	21100	18000	489	23800
2	18500	352	17600	17800	366	17600	17900	458	22100
3	18800	370	18800	18500	330	16500	17800	395	19000
4	18400	335	16600	18500	343	17100	17800	353	17000
5	18500	370	18500	16500	280	12500	17900	290	14000
6	18200	359	17600	14000	182	6880	18700	219	11100
7	17900	323	15500	15000	219	8870	18400	211	10500
8	18500	373	18600	17500	272	12900	17900	171	8260
9	18200	362	17800	17500	248	11700	17900	162	7830
10	18300	375	18500	17500	138	6520	17900	167	8070
11	11600	224	7020	18000	138	6710	18000	156	7580
12	8000	158	3410	19000	125	6410	18200	154	7570
13	11500	236	7330	18500	111	5540	18300	203	10000
14	17000	570	26200	18000	98	4760	17200	155	7200
15	19000	838	43000	18000	118	5730	18000	198	9620
16	20000	879	47500	18500	188	9390	18700	250	12600
17	20000	890	48100	18500	250	12500	19500	303	16000
18	20000	920	49700	18500	320	14000	19900	440	23600
19	20000	922	49800	18500	285	16200	18900	378	19300
20	19500	910	47900	18500	342	17100	18700	349	17600
21	19000	930	47700	18500	402	20100	18500	320	16000
22	18500	959	47900	18500	440	22000	18900	327	16700
23	18500	938	46900	18500	467	23300	21000	468	26500
24	18500	941	47000	18500	513	25600	23400	740	45800
25	19000	940	48200	18000	499	24300	20500	312	17300
26	19000	920	47200	18000	507	24600	21600	245	14300
27	18500	830	41500	17900	485	23400	25000	305	20700
28	18500	758	37900	18000	488	23700	27100	323	23600
29	18000	707	34400	---	---	---	25700	288	20000
30	18000	619	30100	---	---	---	25700	300	20800
31	18000	535	26000	---	---	---	27800	550	41300
MONTH	553900	---	961860	500500	---	417010	620800	---	536730

06486000 MISSOURI RIVER AT SIOUX CITY, IOWA--CONTINUED

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	MEAN DISCHARGE (CFS)	APRIL MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MAY MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	JUNE MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	27600	592	44100	30300	252	20600	36200	265	25900
2	26800	547	39600	31600	278	23700	36700	267	26500
3	29000	590	46200	31600	309	26400	37300	288	26000
4	28800	581	45200	29800	254	20400	37000	247	24700
5	29800	619	49800	30000	261	21100	37300	229	23100
6	30000	617	50000	29800	265	21300	37300	205	20600
7	30300	573	46900	30800	315	26200	36700	206	20400
8	31000	522	43700	30600	298	24600	36400	188	18500
9	31300	500	42300	30000	235	19000	37300	168	16900
10	30600	443	36600	30000	274	22200	38900	167	16500
11	29800	417	33600	30600	345	28500	42500	137	15700
12	29000	390	30500	30300	405	33100	42000	130	14700
13	29300	368	29100	30000	433	35100	41100	128	14200
14	30800	412	34300	31000	345	28900	41700	182	20500
15	30300	392	32100	31300	290	24500	42800	267	30900
16	30000	388	31400	33600	324	29400	42200	350	39900
17	30000	376	30500	35100	355	34600	42800	320	37000
18	31000	410	34300	35100	344	32600	44200	247	29500
19	31000	384	32100	34800	318	29900	42500	163	18700
20	30800	353	29400	34300	267	24700	40300	103	11200
21	31000	342	28600	34600	260	24300	39500	136	14500
22	31300	343	29000	34600	330	30800	39200	197	20900
23	31000	363	30400	35400	430	41100	38600	245	25500
24	29800	335	27000	37800	428	43700	38600	273	28500
25	28800	290	22600	37300	395	39800	38400	265	27500
26	30000	390	31600	37300	334	33600	38100	265	27300
27	30600	418	34500	37000	275	27500	39200	252	26700
28	30600	393	32500	37600	254	25800	43000	263	30500
29	30000	305	24700	36700	259	25700	45000	284	34500
30	28600	207	16000	35600	257	24700	44400	304	36400
31	---	---	---	35900	255	24700	---	---	---
MONTH	898900	---	1038600	1030400	---	868500	1197200	---	723700
DAY	MEAN DISCHARGE (CFS)	JULY MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	AUGUST MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	SEPTEMBER MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	43600	308	36300	62600	180	30400	63600	365	62700
2	43300	306	35700	63600	184	31600	63900	410	70700
3	43600	293	34600	62900	240	40800	63900	408	70400
4	45800	303	37500	62600	307	51900	63600	334	67400
5	48600	312	40900	62900	375	63700	64200	280	48500
6	49800	309	41500	62600	432	73000	63900	247	42600
7	49800	305	41000	62600	529	89400	63900	258	44500
8	49800	287	38600	62600	620	105000	63200	332	56700
9	50100	267	36100	62300	587	98700	63200	445	75900
10	49800	225	30300	63600	486	83600	63600	555	97000
11	50100	170	23000	63200	333	56800	63900	700	121000
12	49800	170	22900	63600	153	26300	63200	770	131000
13	49200	198	26300	63200	129	22000	62900	745	127000
14	49200	255	33900	62900	315	53500	62900	683	116000
15	49200	304	40400	62900	487	82700	62900	605	103000
16	49800	358	48100	63600	462	79300	63200	530	90400
17	52200	410	57800	63200	433	73900	63200	507	86500
18	54900	463	68600	63200	408	69600	63900	502	86600
19	56400	488	74300	62900	379	64400	63600	505	86700
20	57000	500	77000	62600	383	64700	63200	495	84500
21	57600	484	75300	62600	395	66800	62600	479	81000
22	58800	463	73500	63200	395	67400	62600	487	82300
23	60300	475	77300	63900	426	73500	62900	480	81500
24	60600	510	83400	62900	490	83200	62900	397	67400
25	61000	525	86500	63200	563	96100	62900	243	41300
26	62000	493	82500	63600	606	104000	63200	125	21300
27	62300	440	74000	63200	540	92100	63200	96	16400
28	62300	387	65100	63200	430	73400	63200	110	18800
29	62200	333	56800	63600	345	59200	62600	130	22000
30	62600	287	48500	63600	335	57500	62600	175	29600
31	62600	230	38900	63200	345	58900	---	---	---
MONTH	1665300	---	1606500	1955800	---	2093300	1898600	---	2120700
YEAR	12948800	---	12929360	---	---	---	---	---	---

06601200 MISSOURI RIVER AT DECATUR, NEBRASKA

LOCATION.--Lat 42°00'26", long 96°14'29", NE1/4 SW1/4 sec. 36, T.24 N., R.10 E., Burt County, at bridge on State Highway 175 and 51 at Decatur, Nebraska, 6.0 mi (9.7 km) west of Onawa, Iowa and at mile 691.0 (1,111.0 km).

DRAINAGE AREA.--316,160 mi² (818,850 km²).

PERIOD OF RECORD.--Chemical analyses: March 1974 to current year.

Water temperatures: March 1974 to current year.

Biological analyses: March 1974 to current year.

REMARKS.--Water discharge estimated on basis of records at gaging station 41.3 mi (66.4 km) upstream at Sioux City. No significant inflow between gaging station and sampling site. Additional chemical and biological data analyzed by EPA laboratories for the period March 1974 to June 1975 are available through STORET computer storage upon approval from that agency. Records of daily gage heights available in subdistrict office, USGS, Council Bluffs, Iowa.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

		INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	TOTAL CAL- CIUM (CA) (MG/L) (00916)	TOTAL MAG- NE- SIUM (MG) (MG/L) (00927)	TOTAL PO- TAS- SIUM (K) (MG/L) (00937)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	ALKA- LINITY AS CACO3 (MG/L) (00410)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	
OCT.											
15...	1020	34500	--	--	--	154	0	126	--	--	
29...	1000	33900	--	--	--	205	0	168	--	--	
NOV.											
11...	1230	32700	--	--	--	205	0	168	--	--	
25...	1015	29800	--	--	--	205	17	196	--	--	
DEC.											
09...	1545	18000	--	--	--	190	0	156	--	--	
23...	1500	18900	--	--	--	190	0	156	--	--	
JAN.											
06...	1055	18900	--	--	--	190	0	156	--	--	
20...	1335	22500	--	--	--	190	0	156	--	--	
FEB.											
03...	1010	18000	--	--	--	190	0	156	--	--	
17...	1120	18000	--	--	--	190	0	156	--	--	
MAR.											
03...	1100	20000	--	--	--	205	0	168	--	--	
17...	1045	18000	--	--	--	190	0	156	--	--	
APR.											
01...	0915	27000	--	--	--	190	0	156	--	--	
14...	1310	30600	--	--	--	190	0	156	--	--	
29...	1040	30800	--	--	--	190	0	156	--	--	
MAY											
12...	1015	30500	--	--	--	190	0	156	--	--	
27...	0815	36500	--	--	--	210	0	172	--	--	
JUNE											
10...	1130	38000	--	--	--	190	0	156	--	--	
23...	1020	39000	--	--	--	170	0	139	--	--	
JULY											
07...	1200	48900	57	21	4.6	197	0	162	210	11	
AUG.											
06...	1230	61000	59	23	4.4	66	0	54	220	12	
SEP.											
08...	1150	62300	55	22	4.2	192	0	157	200	10	
		TOTAL NITRITE PLUS NITRATE (N) (MG/L) (00630)	AMMONIA NITRO- GEN (N) (MG/L) (00610)	TOTAL ORGANIC NITRO- GEN (N) (MG/L) (00605)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L) (00625)	TOTAL NITRO- GEN (N) (MG/L) (00600)	TOTAL NITRO- GEN (N) (MG/L) (71887)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (TONS PER AC-FT) (70303)	DIS- SOLVED SOLIDS (TONS PER DAY) (70302)
JUNE											
10...	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--	--
JULY											
07...	.08	.01	.41	.42	.50	2.2	.11	520	.71	58700	
AUG.											
06...	.07	.03	.55	.58	.65	2.9	.05	520	.71	85600	
SEP.											
08...	.05	.00	.32	.32	.37	1.6	.06	486	.66	81800	

MISSOURI RIVER MAIN STEM

06601200 MISSOURI RIVER AT DECATUR, NEBRASKA--CONTINUED

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TOTAL RESI- DUE (MG/L) (00500)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	TUR- BID- ITY (JTU) (00070)	DIS- SOLVED OXYGEN (MG/L) (00300)	PER- CENT SATUR- ATION (00301)	CHEM- ICAL OXYGEN DEMAND (HIGH LEVEL) (MG/L) (00340)	CARBON DIOXIDE (CO2) (MG/L) (00405)	FECAL COLI- FORM (COL. PER 100 ML) (31616)
OCT.										
15...	--	730	7.9	12.0	15	10.1	96	--	3.1	16000
29...	--	710	8.1	15.5	20	9.8	101	--	2.6	3300
NOV.										
11...	--	750	8.0	8.0	15	11.2	97	--	3.3	2200
25...	--	700	8.3	6.0	10	11.4	93	--	1.9	2700
DEC.										
09...	--	850	7.8	1.0	170	11.6	85	--	4.8	6800
23...	--	800	7.5	.5	15	--	--	--	9.6	6900
JAN.										
06...	--	720	8.1	.0	10	13.6	97	--	2.4	7500
20...	--	800	8.5	.0	6	13.6	98	--	1.0	2200
FEB.										
03...	--	800	8.3	.0	5	13.4	94	--	1.5	5200
17...	--	850	8.0	.0	5	13.1	94	--	3.0	520
MAR.										
03...	--	760	8.2	.0	7	13.4	94	--	2.1	2500
17...	--	700	8.0	1.0	20	13.0	96	--	3.0	2700
APR.										
01...	--	670	8.2	1.0	30	12.9	93	--	1.9	10000
14...	--	710	7.9	6.5	20	12.0	100	--	3.8	1800
29...	--	725	8.1	12.5	35	10.0	98	--	2.4	16000
MAY										
12...	--	830	8.1	18.0	20	9.9	108	--	2.4	2500
27...	--	730	8.0	16.5	20	9.4	99	--	3.4	1400
JUNE										
10...	--	700	7.9	18.0	20	9.4	103	--	3.8	10000
23...	--	750	8.0	22.5	40	8.6	101	--	2.7	6300
JULY										
07...	580	760	8.0	25.0	20	8.2	102	10	3.2	1600
AUG.										
06...	534	725	8.0	25.5	20	8.2	102	8	1.1	4000
SEP.										
08...	537	700	7.6	21.0	15	8.7	100	4	7.7	1400

LOCATION.--Lat 43a128 12", long 95o07'25", in NE1/4 NW1/4 sec.20, T.100 N., R.36 W., Dickinson County, at gaging station, 2.3 mi (3.7 km) upstream from lake outlet, and 2.3 mi (3.7 km) northwest of Orleans.

DRAINAGE AREA.--75.6 mi² (196 km²).

PERIOD OF RECORD.--Water temperatures: November 1968 to current year.

EXTREMES.--Current year: Water temperatures: Maximum, 23.0°C Aug. 4-6, 21, 22; freezing point on many days during winter period.

Period of record: Water temperatures: Maximum, 25.5°C July 25-27, 1974; freezing point on many days during winter period in 1968, 1969, 1970.

TEMPERATURE (°C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	14.5	14.0	11.0	11.0	---	---	---	---	---	---	---	---
2	14.0	13.0	11.5	11.5	---	---	---	---	---	---	---	---
3	13.0	13.0	11.5	11.0	---	---	---	---	---	---	---	---
4	13.0	13.0	11.0	10.0	---	---	---	---	---	---	---	---
5	13.0	13.0	10.0	10.0	---	---	---	---	---	---	---	---
6	13.0	13.0	10.0	10.0	---	---	---	---	---	---	---	---
7	13.0	12.0	10.0	10.0	---	---	---	---	---	---	---	---
8	12.0	12.0	10.0	10.0	---	---	---	---	---	---	---	---
9	12.0	12.0	10.0	10.0	---	---	---	---	---	---	---	---
10	12.0	12.0	10.0	10.0	---	---	---	---	---	---	---	---
11	12.0	12.0	10.0	10.0	---	---	---	---	---	---	---	---
12	12.0	12.0	10.0	9.0	---	---	---	---	---	---	---	---
13	12.0	12.0	9.0	8.0	---	---	---	---	---	---	---	---
14	12.0	12.0	8.0	7.0	---	---	---	---	---	---	---	---
15	12.0	12.0	---	---	---	---	---	---	---	---	---	---
16	12.0	12.0	---	---	---	---	---	---	---	---	---	---
17	12.0	12.0	---	---	---	---	---	---	---	---	---	---
18	12.0	12.0	---	---	---	---	---	---	---	---	---	---
19	12.0	12.0	---	---	---	---	---	---	---	---	---	---
20	12.0	11.5	---	---	---	---	---	---	---	---	---	---
21	11.5	11.0	---	---	---	---	---	---	---	---	---	---
22	11.0	11.0	---	---	---	---	---	---	---	---	---	---
23	11.0	11.0	---	---	---	---	---	---	---	---	---	---
24	11.0	11.0	---	---	---	---	---	---	---	---	---	---
25	11.0	11.0	---	---	---	---	---	---	---	---	---	---
26	11.0	11.0	---	---	---	---	---	---	---	---	---	---
27	11.0	11.0	---	---	---	---	---	---	---	---	---	---
28	11.0	11.0	---	---	---	---	---	---	---	---	---	---
29	11.0	11.0	---	---	---	---	---	---	---	---	---	---
30	11.0	11.0	---	---	---	---	---	---	---	---	---	---
31	11.0	11.0	---	---	---	---	---	---	---	---	---	---
MONTH	14.5	11.0	---	---	---	---	---	---	---	---	---	---
DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	---	---	17.0	17.0	20.5	20.0	22.0	22.0	21.5	21.0
2	---	---	---	---	17.0	17.0	20.5	20.5	22.0	22.0	21.0	21.0
3	---	---	---	---	17.0	17.0	20.5	20.5	22.0	22.0	21.0	21.0
4	---	---	---	---	17.0	17.0	22.0	20.5	23.0	22.0	21.0	21.0
5	---	---	---	---	17.0	17.0	22.0	22.0	23.0	22.0	21.0	20.5
6	---	---	10.0	10.0	17.0	17.0	22.0	22.0	23.0	22.0	20.5	20.5
7	---	---	10.0	10.0	18.0	17.0	22.0	22.0	22.0	21.5	20.5	20.0
8	---	---	10.0	10.0	18.0	18.0	22.0	22.0	21.5	21.0	20.0	19.5
9	---	---	10.0	10.0	18.0	17.0	22.0	22.0	21.5	21.0	19.5	18.5
10	---	---	11.0	10.0	17.0	17.0	22.0	22.0	22.0	21.5	18.5	18.5
11	---	---	12.0	11.0	17.0	17.0	22.0	22.0	22.0	22.0	18.5	18.0
12	---	---	12.0	12.0	17.0	17.0	22.0	21.5	22.0	22.0	18.0	17.0
13	---	---	12.0	12.0	17.0	17.0	21.5	21.5	22.0	21.5	17.0	17.0
14	---	---	12.0	12.0	17.0	17.0	21.5	21.0	21.5	21.5	17.0	17.0
15	---	---	12.0	12.0	17.0	17.0	21.0	21.0	22.0	21.5	17.0	17.0
16	---	---	12.0	12.0	17.0	17.0	21.0	21.0	22.0	22.0	17.0	17.0
17	---	---	12.0	12.0	17.0	17.0	21.5	21.0	22.0	21.0	17.0	16.5
18	---	---	12.0	12.0	17.0	17.0	21.5	21.5	21.0	20.5	16.5	16.5
19	---	---	12.0	12.0	18.0	17.0	21.5	21.5	21.0	20.5	16.5	16.5
20	---	---	13.5	12.0	18.0	18.0	21.5	21.5	21.0	21.0	16.5	15.5
21	---	---	19.0	13.5	18.0	18.0	21.5	21.5	23.0	21.0	15.5	15.0
22	---	---	19.0	18.5	18.0	18.0	21.5	21.5	23.0	22.0	15.0	14.5
23	---	---	18.5	18.5	18.0	18.0	21.5	21.5	22.0	22.0	14.5	14.5
24	---	---	18.5	18.5	18.5	18.0	21.5	21.5	22.0	22.0	14.5	14.0
25	---	---	18.5	18.5	18.5	18.5	21.5	21.5	22.0	22.0	14.0	14.0
26	---	---	18.5	18.5	18.5	18.5	21.5	21.5	22.0	21.5	14.0	14.0
27	---	---	18.5	18.5	20.0	18.5	22.0	21.5	21.5	21.0	14.0	14.0
28	---	---	18.5	18.0	20.0	20.0	22.0	22.0	21.0	21.0	14.0	14.0
29	---	---	18.0	18.0	20.0	20.0	22.0	22.0	21.0	21.0	14.0	14.0
30	---	---	18.0	17.0	20.0	20.0	22.0	22.0	21.5	21.0	14.0	14.0
31	---	---	17.0	17.0	---	---	22.0	22.0	21.5	21.0	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---
YEAR	23.0	7.0	19.0	10.0	20.0	17.0	22.0	20.0	23.0	20.5	21.5	14.0

BOYER RIVER BASIN

06609600 WILLOW CREEK NEAR LOGAN, IOWA

LOCATION.--Lat 41°37'54", long 95°27'50", in NW1/4 NE1/4 sec.30, T.79 N., R.43 W., Harrison County, at bridge, at gaging station, on county highway F50, 5.5 mi (8.8 km) west of Logan, and 7.5 mi (12.1 km) upstream from mouth.

DRAINAGE AREA.--129 mi² (334 km²).

PERIOD OF RECORD.--Specific conductance: October 1972 to September 1975, partial-record station, (discontinued).
Water temperatures: October 1972 to September 1975, partial-record station, (discontinued).

Sediment records: October 1971 to September 1972 (partial-record station), October 1972 to September 1975 (discontinued).

March 1968 to September 1971 (daily sediment discharge only for most years) in reports of Corps of Engineers, published as Willow Creek near Missouri Valley.

EXTREMES.--Current year: Sediment concentrations: Maximum daily, 17,000 mg/l May 6; minimum daily, 22 mg/l July 31.

Sediment discharge: Maximum daily, 76,500 tons (69,400 tonnes) May 6; minimum daily, 1.0 ton (0.91 tonnes) Oct. 1, 2.

Period of record: Sediment concentrations: Maximum daily, 17,000 mg/l May 6, 1975; minimum daily, 22 mg/l July 31, 1975.

Sediment discharge: Maximum daily, 76,500 tons (69,400 tonnes) May 6, 1975; minimum daily, 1.0 ton (0.91 tonne) Sept. 30, Oct. 1, 2, 1974.

REMARKS.--Flow affected by ice Nov. 29 to Mar. 19, Mar. 25, 26.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25°C), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	420	600	540	550	---	410	---	---
2	---	---	440	430	---	650	560	560	420	450	---	425
3	---	---	540	590	---	---	590	580	480	460	---	480
4	---	420	520	---	---	---	570	---	430	460	450	---
5	---	560	500	570	---	670	---	460	---	---	410	490
6	440	560	---	610	---	---	---	370	420	---	420	530
7	460	480	---	---	---	---	---	475	---	420	420	520
8	440	---	---	400	---	---	410	---	430	---	410	500
9	---	---	---	400	---	---	540	460	---	440	410	510
10	---	---	560	400	---	420	510	---	420	440	---	540
11	430	---	610	---	---	---	560	500	430	440	420	---
12	---	530	530	---	---	---	580	490	430	400	430	540
13	430	520	510	---	---	420	530	---	---	420	420	540
14	440	540	---	---	410	---	520	490	---	---	---	540
15	440	530	---	490	---	---	540	480	---	420	415	560
16	450	540	620	500	580	470	520	---	420	430	---	540
17	---	520	620	440	550	540	---	460	410	440	---	520
18	460	---	600	440	540	490	520	---	440	430	---	450
19	---	---	590	---	---	---	---	450	430	420	---	520
20	450	440	430	420	---	420	560	460	400	440	410	520
21	430	440	570	460	---	400	560	420	---	440	---	---
22	440	430	---	---	---	430	560	480	---	---	410	540
23	---	---	---	420	---	450	---	480	---	450	---	540
24	---	430	---	400	---	450	---	---	420	480	---	560
25	440	480	---	---	---	---	450	520	---	---	---	---
26	430	430	580	---	---	470	480	530	---	---	410	---
27	---	430	---	---	---	490	---	---	420	---	---	---
28	---	460	520	---	580	---	465	560	---	---	---	---
29	---	---	630	---	---	---	480	---	440	---	415	---
30	---	---	620	430	---	540	520	500	---	---	---	---
31	---	---	620	---	---	540	---	520	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---
YEAR	MAX	670	MIN	370	MEAN	484	---	---	---	---	---	---

06609600 WILLOW CREEK NEAR LOGAN, IOWA--CONTINUED

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	(ONCE DAILY)											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	0.0	3.0	0.0	16.0	---	31.0	---	---
2	---	---	0.0	0.0	---	0.0	0.0	15.5	19.0	31.5	---	25.0
3	---	---	0.0	0.0	---	---	0.0	21.0	24.0	31.5	---	22.5
4	---	5.0	0.5	---	---	---	1.0	---	22.0	28.5	28.5	---
5	---	8.5	0.0	0.0	---	0.0	---	20.5	---	---	24.0	21.0
6	3.5	8.5	---	0.0	---	---	---	17.0	23.0	---	22.5	23.0
7	14.0	8.5	---	---	---	---	---	17.0	---	26.5	28.0	23.0
8	18.0	---	---	0.0	---	---	5.0	---	21.5	---	25.5	24.5
9	---	---	---	0.5	---	---	5.5	21.5	---	30.0	28.0	24.5
10	---	---	3.0	0.0	---	0.0	6.0	---	23.0	29.0	---	25.0
11	16.5	---	3.0	---	---	---	7.5	22.0	22.0	25.0	29.5	---
12	---	7.0	1.5	---	---	---	8.0	24.0	24.0	26.5	30.5	20.0
13	13.0	7.0	1.0	---	---	0.0	6.5	---	---	28.5	30.0	19.0
14	11.5	7.0	---	---	0.0	---	6.0	18.5	---	---	---	18.5
15	13.0	7.0	---	0.0	---	---	6.5	17.5	---	30.0	24.0	13.5
16	16.0	7.0	0.5	0.5	0.0	4.5	13.0	---	26.5	30.0	---	15.5
17	---	7.0	0.5	0.5	0.0	4.5	---	24.0	28.5	24.0	---	14.5
18	16.0	---	0.5	0.5	0.0	3.5	9.5	---	22.0	28.5	---	18.5
19	---	---	0.5	---	---	---	---	25.5	24.0	24.0	---	19.5
20	15.5	7.0	0.0	0.0	---	3.0	16.0	26.5	24.5	29.5	28.0	19.0
21	15.5	7.0	0.5	0.0	---	5.0	16.5	24.5	---	31.0	---	---
22	14.5	7.0	---	---	---	3.0	18.0	24.0	---	---	29.5	20.0
23	---	---	---	0.0	---	---	---	25.5	---	28.0	---	18.5
24	---	4.5	---	0.5	---	---	---	---	24.5	28.0	---	16.0
25	15.5	4.5	---	---	---	---	19.0	25.5	---	---	---	---
26	16.0	4.0	1.0	---	---	---	19.0	24.5	---	---	28.0	---
27	---	4.0	---	---	---	2.0	---	---	21.5	---	---	---
28	---	---	2.5	---	3.0	---	12.0	26.5	---	---	---	---
29	---	---	0.5	0.0	---	---	15.5	---	31.0	---	26.0	---
30	---	---	0.5	---	---	7.5	16.0	19.0	---	---	---	---
31	---	---	0.0	---	---	7.5	---	14.5	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---
YEAR	MAX	31.5	MIN	0.0	MEAN	14.0	---	---	---	---	---	---

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	OCTOBER			NOVEMBER			DECEMBER		
	MEAN DISCHARGE (CFS)	CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	15	25	1.0	27	177	13	17	62	2.8
2	15	25	1.0	22	164	9.7	14	99	3.7
3	16	25	1.1	21	162	9.2	13	110	3.9
4	16	25	1.1	21	161	9.1	13	116	4.1
5	17	27	1.2	20	140	7.6	15	157	6.4
6	32	197	17	20	95	5.1	18	136	6.6
7	27	105	7.7	20	151	8.2	20	112	6.0
8	21	68	3.9	21	166	9.4	20	130	7.0
9	19	43	2.2	22	161	9.6	22	114	6.8
10	18	36	1.8	24	160	10	23	87	5.4
11	20	134	7.2	23	159	9.9	23	52	3.2
12	20	103	5.6	22	152	9.0	22	69	4.1
13	19	77	4.0	21	121	6.9	22	73	4.3
14	19	108	5.5	22	118	7.0	21	90	5.1
15	19	119	6.1	22	107	6.4	21	115	6.5
16	19	112	5.7	22	115	6.8	21	92	5.2
17	19	103	5.3	22	107	6.4	20	76	4.1
18	18	93	4.5	22	106	6.3	20	77	4.2
19	18	85	4.1	22	112	6.7	20	50	2.7
20	18	78	3.8	22	125	7.4	20	76	4.1
21	18	86	4.2	21	71	4.0	20	51	2.8
22	18	82	4.0	21	73	4.1	21	50	2.8
23	18	73	3.5	21	93	5.3	23	48	3.0
24	18	70	3.4	21	123	7.0	24	57	3.7
25	19	69	3.5	21	77	4.4	24	61	4.0
26	18	70	3.4	22	78	4.6	24	62	4.0
27	18	68	3.3	23	90	5.6	25	58	3.9
28	18	66	3.2	23	78	4.8	26	61	4.3
29	23	143	8.9	21	74	4.2	27	48	3.5
30	25	126	8.5	20	72	3.9	29	43	3.4
31	32	204	18	---	---	---	31	46	3.9
MONTH	610	---	153.7	652	---	211.6	659	---	135.5

BOYER RIVER BASIN

06609600 WILLOW CREEK NEAR LOGAN, IOWA--CONTINUED

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	MEAN DISCHARGE (CFS)	JANUARY MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	FEBRUARY MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MARCH MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	34	52	4.8	22	168	10	36	162	16
2	35	92	8.7	22	143	8.5	33	84	7.5
3	34	79	7.3	22	67	4.0	32	110	9.5
4	32	82	7.1	22	81	4.8	32	76	6.6
5	30	67	5.4	21	94	5.3	32	61	5.3
6	31	57	4.8	20	103	5.6	32	61	5.3
7	31	57	4.8	20	122	6.6	32	60	5.2
8	31	53	4.4	20	111	6.0	32	91	7.9
9	31	61	5.1	20	113	6.1	32	209	18
10	30	47	3.8	20	108	5.8	32	228	20
11	25	36	2.4	20	102	5.5	32	142	12
12	20	40	2.2	20	101	5.5	32	130	11
13	19	45	2.3	20	100	5.4	31	300	25
14	18	69	3.4	20	100	5.4	30	420	34
15	18	130	6.3	20	102	5.5	30	560	45
16	18	174	8.5	20	96	5.2	32	630	54
17	18	106	5.2	20	94	5.1	40	590	64
18	20	126	6.8	20	91	4.9	50	2070	279
19	20	133	7.2	20	100	5.4	80	1310	283
20	20	100	5.4	20	111	6.0	296	2130	1740
21	20	24	1.3	21	114	6.5	241	1620	1050
22	20	40	2.2	22	114	6.8	130	1330	467
23	21	94	5.3	22	121	7.2	117	490	155
24	23	91	5.7	24	155	10	106	640	183
25	25	71	4.8	27	142	10	66	670	119
26	25	55	3.7	30	141	11	64	840	145
27	24	42	2.7	35	137	13	120	2060	916
28	24	35	2.3	37	126	13	202	10600	5780
29	23	40	2.5	---	---	---	104	3150	885
30	23	108	6.7	---	---	---	77	502	104
31	22	148	8.8	---	---	---	83	591	132
MONTH	765	---	151.9	627	---	194.1	2288	---	12584.3
DAY	MEAN DISCHARGE (CFS)	APRIL MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MAY MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	JUNE MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	72	315	61	66	248	44	39	229	24
2	53	1340	223	67	245	44	38	220	23
3	68	1060	195	78	356	75	37	316	32
4	72	710	138	65	336	59	37	315	31
5	80	670	145	61	328	54	36	262	25
6	74	580	116	441	17000	76500	35	215	20
7	66	550	98	326	5200	7630	35	212	20
8	65	430	75	102	1190	328	34	230	21
9	74	1600	320	81	818	179	35	249	24
10	59	630	100	72	560	109	38	251	26
11	53	233	33	69	440	82	42	229	26
12	51	210	29	67	400	72	50	277	37
13	50	242	33	72	410	80	48	324	42
14	56	224	34	62	364	61	47	291	37
15	52	227	32	55	343	51	47	283	36
16	49	265	35	50	281	38	47	273	35
17	48	233	30	47	232	29	49	235	31
18	52	205	29	45	210	26	75	1260	253
19	60	219	35	43	199	23	87	560	132
20	49	185	24	41	210	23	70	680	129
21	58	205	32	39	230	24	60	580	94
22	61	226	37	40	268	29	70	360	68
23	67	235	43	42	281	32	90	300	73
24	65	238	42	40	290	31	150	250	101
25	55	233	35	36	295	29	100	252	68
26	55	233	35	44	377	45	80	267	58
27	65	526	143	41	293	32	70	274	52
28	393	3540	4810	47	226	29	62	200	33
29	96	500	130	53	320	46	55	90	13
30	72	300	58	44	259	31	50	79	11
31	---	---	---	41	240	27	---	---	---
MONTH	2190	---	7150	2377	---	85862	1713	---	1575

06609600 WILLOW CREEK NEAR LOGAN, IOWA--CONTINUED

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	MEAN DISCHARGE (CFS)	JULY MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	AUGUST MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	SEPTEMBER MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	39	83	8.7	22	64	3.8	22	242	14
2	35	92	8.7	37	152	15	19	159	8.2
3	32	122	11	29	85	6.7	19	68	3.5
4	30	101	8.2	22	70	4.2	50	196	26
5	29	100	7.8	21	75	4.3	43	175	20
6	28	120	9.1	20	87	4.7	26	187	13
7	28	137	10	20	79	4.3	21	185	10
8	28	128	9.7	19	77	4.0	19	113	5.8
9	28	93	7.0	18	78	3.8	18	105	5.1
10	28	83	6.3	20	78	4.2	18	130	6.3
11	27	82	6.0	20	75	4.1	22	166	9.9
12	29	101	7.9	20	70	3.8	21	135	7.7
13	30	94	7.6	20	64	3.5	18	95	4.6
14	30	82	6.6	19	62	3.2	17	97	4.5
15	29	82	6.4	18	68	3.3	17	95	4.4
16	29	126	9.9	18	62	3.0	17	55	2.6
17	29	197	15	18	64	3.1	15	100	4.3
18	28	85	6.4	790	15300	32600	17	65	3.0
19	30	59	4.8	75	627	127	16	40	1.7
20	30	51	4.1	29	198	16	16	36	1.6
21	29	44	3.4	24	72	4.7	15	33	1.3
22	30	41	3.3	21	39	2.2	15	35	1.4
23	75	1020	246	21	34	1.9	15	31	1.3
24	68	555	125	20	40	2.2	14	36	1.4
25	36	102	9.9	19	69	3.5	13	54	1.9
26	29	41	3.2	19	100	5.1	14	40	1.5
27	27	31	2.3	18	95	4.6	15	35	1.4
28	25	27	1.8	28	220	17	16	75	3.2
29	24	25	1.6	118	470	150	28	265	20
30	24	23	1.5	55	425	63	20	110	5.9
31	21	22	1.2	25	293	20	---	---	---
MONTH	984	---	560.4	1623	---	33096.2	597	---	195.5
YEAR	15085	---	141870.2						

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	NUMBER OF SAM- PLING POINTS (00063)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PEN- DED SEDIM- ENT DIS- CHARGE (MG/L) (80154)	SUS- PEN- DED SEDIM- ENT DIS- CHARGE (T/DAY) (80155)	SUS- SED. FALL DIAM. X FINER THAN .002 MM (70337)	SUS. SED. FALL DIAM. X FINER THAN .004 MM (70338)	SUS. SED. FALL DIAM. X FINER THAN .008 MM (70339)	SUS. SED. FALL DIAM. X FINER THAN .016 MM (70340)
OCT.										
02...	1405	11.5	3	16	--	--	--	--	--	--
NOV.										
04...	1045	5.0	3	21	--	--	--	--	--	--
DEC.										
02...	1200	.0	3	14	--	--	--	--	--	--
JAN.										
08...	1255	.0	3	31	--	--	--	--	--	--
FEB.										
14...	1320	.0	3	20	--	--	--	--	--	--
MAR.										
10...	1225	.0	3	32	--	--	--	--	--	--
APR.										
08...	1310	5.0	3	65	--	--	--	--	--	--
MAY										
05...	1235	20.0	3	66	--	--	--	--	--	--
06...	1830	15.5	--	2380	117000	752000	18	24	31	44
06...	1900	15.5	--	2910	102000	801000	17	23	28	43
JUNE										
02...	1230	19.0	3	38	--	--	--	--	--	--
JULY										
07...	1040	26.5	3	29	--	--	--	--	--	--
AUG.										
04...	1300	28.5	3	23	--	--	--	--	--	--
SEP.										
02...	1030	24.0	3	19	--	--	--	--	--	--

BOYER RIVER BASIN

06609600 WILLOW CREEK NEAR LOGAN, IOWA--CONTINUED

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	SUS. SED. FALL DIAM. % FINER THAN .062 MM (70342)	BED MAT. FALL DIAM. % FINER THAN .062 MM (80158)	BED MAT. FALL DIAM. % FINER THAN .125 MM (80159)	BED MAT. FALL DIAM. % FINER THAN .250 MM (80160)	BED MAT. FALL DIAM. % FINER THAN .500 MM (80161)	BED MAT. FALL DIAM. % FINER THAN 1.00 MM (80162)	BED MAT. FALL DIAM. % FINER THAN 2.00 MM (80169)	BED MAT. FALL DIAM. % FINER THAN 4.00 MM (80170)	BED MAT. FALL DIAM. % FINER THAN 8.00 MM (80171)
OCT.									
02...	--	1	1	10	74	96	97	100	--
NOV.									
04...	--	3	3	12	63	91	94	98	100
DEC.									
02...	--	5	6	16	67	94	98	100	--
JAN.									
08...	--	1	1	8	60	96	98	100	--
FEB.									
14...	--	0	18	27	65	81	99	100	--
MAR.									
10...	--	1	2	8	65	94	99	100	--
APR.									
08...	--	1	2	5	58	93	96	98	100
MAY									
05...	--	0	1	4	62	90	96	98	100
06...	100	--	--	--	--	--	--	--	--
06...	100	--	--	--	--	--	--	--	--
JUNE									
02...	--	2	2	23	43	94	98	100	--
JULY									
07...	--	2	3	9	71	97	98	100	--
AUG.									
04...	--	1	1	11	69	97	98	100	--
SEP.									
02...	--	1	--	--	--	--	96	100	--

06610000 Missouri River at Omaha, Nebraska

LOCATION.--Lat 41°15'32", long 95°55'20", in SE1/4 NW1/4 sec.23, T.15 N., R.13 E., Douglas County, 275 ft (84 m) downstream from Interstate 480 highway bridge in Omaha, and at mile 615.9 (991.0 km).

DRAINAGE AREA.--322,800 mi² (836,052 km²), approximately.

PERIOD OF RECORD.--Chemical analyses: July 1959 to June 1972.

Specific conductance: October 1972 to current year (partial-record station).

Water temperatures: October 1971 to current year (partial-record station).

Sediment records: October 1971 to current year. April 1939 to September 1971 (daily sediment discharge only) in reports of Corps of Engineers.

EXTREMES.--Current year: Sediment concentrations: Maximum daily, 5,580 mg/l Apr. 28; minimum daily, 170 mg/l Jan. 14.

Sediment discharge: Maximum daily, 866,000 tons (786,000 tonnes) Apr. 28; minimum daily, 3,990 tons (3,620 tonnes) Jan. 14.

Period of record: Sediment concentrations: Maximum daily, 8,180 mg/l May 19, 1974; minimum daily, 170 mg/l Jan. 14, 1975.

Sediment discharge: Maximum daily, 1,060,000 tons (962,000 tonnes) May 19, 1974; minimum daily, 3,990 tons (3,620 tonnes) Jan. 14, 1975.

REMARKS.--Sediment samples collected from Interstate 80 highway bridge 2.0 mi (3.2 km) downstream from gaging station.

DAY	SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25°C, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	740	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	670	690	---	---	---
3	740	---	---	---	---	---	---	---	---	700	---	---
4	---	740	---	---	---	---	690	---	---	---	710	710
5	---	---	710	---	---	---	---	640	725	---	---	---
6	---	---	---	---	---	730	---	---	---	---	---	---
7	730	710	---	---	---	---	700	---	---	730	750	---
8	---	---	---	740	---	---	---	700	---	---	---	720
9	---	---	---	---	---	---	---	---	735	---	---	---
10	740	---	---	---	---	---	680	---	---	750	---	---
11	---	720	---	---	---	---	---	---	---	---	740	720
12	---	---	710	---	---	---	---	700	710	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	750	---	---	---	---	650	---	---	750	740	---
15	730	---	---	---	---	---	---	720	---	---	---	720
16	---	---	---	---	---	---	---	---	680	---	---	---
17	730	---	---	---	---	700	670	---	---	720	---	---
18	---	720	---	---	---	---	---	---	---	---	700	---
19	---	---	---	---	---	---	---	690	690	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	730	730	---	---	720	---	630	---	---	750	750	---
22	---	---	---	---	---	---	---	735	665	---	---	710
23	---	---	730	---	---	---	---	---	---	---	---	---
24	750	---	---	---	---	---	690	---	---	750	---	---
25	---	740	---	---	---	---	---	---	---	---	730	720
26	---	---	---	---	---	---	---	---	685	---	---	---
27	---	---	---	---	---	---	---	740	---	---	---	---
28	---	---	---	---	750	700	---	---	---	760	720	---
29	750	---	---	---	---	---	550	---	---	---	---	710
30	---	---	---	720	---	---	---	715	710	---	---	---
31	730	---	720	---	---	630	---	---	---	750	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---
YEAR	MAX	760	MIN	550	MEAN	714	---	---	---	---	---	---

MISSOURI RIVER MAIN STEM

06610000 MISSOURI RIVER AT OMAHA, NEBRASKA--CONTINUED

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(MEAN VALUES)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12.0	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	11.0	18.0	---	---	---
3	13.0	---	---	---	---	---	---	---	---	26.5	---	---
4	---	9.5	---	---	---	---	2.0	---	---	---	25.0	23.0
5	---	---	0.5	---	---	---	---	15.0	20.0	---	---	---
6	---	---	---	---	---	1.5	---	---	---	---	---	---
7	13.0	8.5	---	---	---	---	4.0	---	---	27.5	25.0	---
8	---	---	---	1.0	---	---	---	17.0	---	---	---	21.0
9	---	---	---	---	---	---	---	---	19.5	---	---	---
10	12.0	---	---	---	---	---	4.0	---	---	26.0	---	---
11	---	8.5	---	---	---	---	---	---	---	---	25.0	20.5
12	---	---	2.0	---	---	---	---	15.5	18.5	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	5.5	---	---	---	---	5.0	---	20.5	22.0	25.0	---
15	10.0	---	---	---	---	---	---	14.5	---	---	---	18.5
16	---	---	---	---	---	---	---	---	19.0	---	---	---
17	11.5	---	---	---	---	3.0	7.5	---	---	23.5	---	---
18	---	7.0	---	---	---	---	---	---	---	---	22.0	---
19	---	---	---	---	---	---	---	16.5	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	13.0	6.0	---	---	2.0	---	7.0	---	---	26.0	25.0	---
22	---	---	---	---	---	---	---	20.5	---	---	---	16.0
23	---	---	1.5	---	---	---	---	---	20.5	---	---	---
24	12.5	---	---	---	---	---	9.0	---	---	26.0	---	---
25	---	5.0	---	---	---	---	---	---	---	---	24.5	15.0
26	---	---	---	---	---	---	---	---	23.0	---	---	---
27	---	---	---	---	---	---	---	19.5	---	---	---	---
28	---	---	---	---	3.5	1.0	---	---	---	26.0	23.5	---
29	12.0	---	---	---	---	---	12.0	---	---	---	---	16.5
30	---	---	---	0.0	---	---	---	15.5	24.5	---	---	---
31	14.5	---	0.5	---	---	1.0	---	---	---	26.5	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---
YEAR	MAX	27.5	MIN	0.0	MEAN	14.0	---	---	---	---	---	---

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	MEAN DISCHARGE (CFS)	OCTOBER MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	NOVEMBER MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	DECEMBER MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	35000	490	46300	35900	615	59600	20000	400	21600
2	35900	458	44400	35200	875	83200	19700	362	19300
3	36200	401	39200	34400	1100	102000	19800	353	18900
4	36100	381	37100	33600	1150	104000	19700	340	18100
5	36200	385	37600	33600	1020	92500	19800	323	17300
6	36200	447	43700	33700	838	76200	19900	340	18300
7	36200	482	47100	34100	645	59400	20000	350	18900
8	36600	467	46100	34300	602	55800	19900	348	18700
9	36300	470	46100	33900	560	51300	19600	312	16500
10	36400	540	53100	34100	510	47000	18700	285	14400
11	36800	613	60900	34000	488	44800	19300	350	18200
12	37400	650	65600	34200	568	52400	21300	590	33900
13	38100	651	67000	34600	772	72100	21200	580	33200
14	37900	628	64300	34700	746	69900	21400	547	31600
15	37000	583	58200	33800	740	67500	21200	561	32100
16	36100	560	54600	33800	830	75700	20800	528	29700
17	36000	550	53500	33700	905	82300	20200	497	27100
18	36000	582	56600	33800	916	83600	19500	452	23800
19	36400	671	65900	34200	820	75700	18800	423	21500
20	36700	771	76400	34100	718	66100	19400	458	24000
21	36600	822	81200	33300	525	47200	20000	512	27600
22	36500	740	72900	33500	511	46200	19800	510	27300
23	36600	540	53400	34200	710	65600	19000	440	22600
24	36600	360	35600	34600	720	67300	19400	475	24900
25	36500	369	36400	34000	645	59200	19200	503	26100
26	36400	438	43000	31000	580	48500	18200	455	22400
27	35900	472	45800	28400	530	40600	18000	432	21000
28	35500	481	46100	26300	482	34200	19500	500	26300
29	34800	429	40300	23600	452	28800	20200	550	30000
30	35200	389	37000	21700	430	25200	19400	502	26300
31	36100	432	42100	---	---	---	19000	429	22000
MONTH	1126200	---	1597500	984300	---	1883900	611900	---	733600

06610000 MISSOURI RIVER AT OMAHA, NEBRASKA--CONTINUED

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	MEAN DISCHARGE (CFS)	JANUARY MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	FEBRUARY MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MARCH MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	18800	400	20300	17900	328	15900	18800	339	17200
2	18900	394	20100	18000	331	16100	19200	339	17600
3	18900	408	20800	17600	313	14900	19700	363	19300
4	19000	430	22100	18200	343	16900	19800	347	18600
5	18900	421	21500	19300	387	20200	19500	322	17000
6	18600	403	20200	19100	388	20000	19400	318	16700
7	18500	398	19900	16800	340	15400	19900	319	17100
8	18100	387	18900	14200	283	10900	20000	308	16600
9	18000	392	19100	14900	288	11600	19000	295	15100
10	19100	470	24200	17200	310	14400	18500	265	13200
11	18800	468	23800	17700	320	15300	18400	250	12400
12	16300	300	13200	17800	329	15800	18300	250	12400
13	9950	197	5290	18500	359	17900	18600	259	13000
14	8700	170	3990	19200	390	20200	19000	280	14400
15	12000	173	5610	19000	385	19800	18300	254	12600
16	17200	270	12500	18300	359	17700	17300	237	11100
17	20400	350	19300	18600	363	18200	18900	298	15200
18	20800	351	19700	18900	379	19300	20600	382	21200
19	20800	332	18600	19300	383	20000	23100	478	25800
20	20900	332	18700	19300	358	18700	25300	582	39800
21	20400	370	20400	19100	340	17500	27400	654	48400
22	19900	333	17900	19000	350	18000	27800	682	51200
23	19000	298	15300	19200	365	18900	28800	745	57900
24	18800	281	14300	19100	358	18500	34200	1140	105000
25	18800	351	17800	18900	345	17600	35900	1380	134000
26	19400	423	22200	18900	362	18500	30800	1190	99000
27	19600	441	23300	18800	360	18300	29000	1140	89300
28	19100	412	21200	18800	348	17700	30500	1100	90600
29	18700	375	18900	---	---	---	32000	995	86000
30	18300	350	17300	---	---	---	31800	805	69100
31	18100	338	16500	---	---	---	32300	648	56500
MONTH	562750	---	552890	511600	---	484200	732100	---	1237300
DAY	MEAN DISCHARGE (CFS)	APRIL MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MAY MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	JUNE MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	32700	640	56500	44500	2000	240000	40900	700	77300
2	32200	680	59100	42900	1100	127000	40800	450	49600
3	30200	515	42000	42200	1060	121000	40000	420	45400
4	31700	532	45500	41300	1000	112000	39600	470	50300
5	32400	584	51100	39500	930	99200	39400	520	55300
6	33200	586	52500	40700	1090	120000	40500	560	61200
7	34500	622	57900	40100	1220	132000	42500	640	73400
8	36600	750	74100	37500	920	93200	42900	650	75300
9	37900	945	96700	38900	960	101000	42200	530	60400
10	38700	1120	117000	38200	840	86600	41800	437	49300
11	38000	1060	109000	37800	737	75200	43500	482	56600
12	36800	915	90900	37700	610	62100	45800	590	73000
13	36300	850	83300	37600	580	58900	46300	695	86900
14	37500	910	92100	37700	580	59000	45900	685	84900
15	38300	913	94400	37300	575	57900	45700	700	86400
16	38500	785	81600	37400	565	57100	46300	685	85600
17	38200	650	67000	37900	580	59400	46900	700	88600
18	39200	638	67500	39300	600	63700	48800	1000	132000
19	39700	648	69500	39500	520	55500	53600	2660	385000
20	38500	678	70500	38700	480	50200	56100	2830	429000
21	37000	771	77000	38600	490	51100	54100	2880	421000
22	35700	793	76400	39100	490	51700	53300	2880	414000
23	37700	885	90100	39700	480	51500	53200	2660	382000
24	38100	1060	109000	39800	478	51400	52800	2170	309000
25	38100	1100	113000	40500	517	56500	50700	1530	209000
26	37800	1150	117000	41500	525	58800	48200	890	116000
27	41500	2700	303000	40800	485	53400	47000	600	76100
28	57500	5580	856000	41000	495	54800	46300	700	37500
29	54100	4870	711000	41500	570	63900	47900	570	73700
30	48800	3300	435000	42500	875	100000	50600	510	69700
31	---	---	---	41400	865	96700	---	---	---
MONTH	1147400	---	4375700	1233100	---	2520800	1393600	---	4263500

MISSOURI RIVER MAIN STEM

06610000 MISSOURI RIVER AT OMAHA, NEBRASKA--CONTINUED

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	MEAN DISCHARGE (CFS)	JULY MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	AUGUST MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	SEPTEMBER MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	51600	520	72400	64600	398	69400	64900	287	50300
2	50600	460	62800	65700	399	70800	64800	318	55600
3	49500	390	52100	66200	395	70600	65800	315	56000
4	49500	410	54800	65700	397	70400	65500	405	71600
5	50600	450	61500	64700	400	69900	65100	490	87500
6	51600	490	68300	63000	463	78800	64600	460	80200
7	53100	540	77400	63100	477	81300	64500	460	80100
8	53600	595	86100	62600	484	81800	64200	465	80600
9	53100	550	78900	62100	482	80800	64500	470	81900
10	52800	450	64200	63100	448	76300	64700	456	79700
11	52900	440	62800	63600	400	68700	64800	433	75800
12	52900	460	65700	65100	400	70300	65700	457	81100
13	53200	460	66100	66300	410	73400	66200	565	101000
14	53100	450	64500	64700	461	80500	65000	643	113000
15	52900	450	64300	63200	500	85300	65300	680	120000
16	52700	415	59100	63600	530	91000	65200	655	115000
17	52300	395	55800	63700	557	95800	65000	635	111000
18	52800	475	67700	67200	733	133000	65000	600	105000
19	54300	450	66000	67700	726	133000	65100	560	98400
20	56000	475	71800	64800	590	103000	65700	500	88700
21	57300	482	74600	63400	468	80100	65500	440	77800
22	58000	494	77400	63300	438	74900	64900	372	65200
23	59100	478	76300	65300	506	89200	64400	360	62600
24	60600	458	74900	66500	547	98200	65500	438	77500
25	61100	458	75600	66300	458	82000	65600	510	90300
26	62400	451	76000	65500	410	72500	65100	490	86100
27	63000	397	67500	65300	380	67000	64200	480	83200
28	62900	318	54000	65800	308	54700	63900	459	79200
29	63100	332	56600	66500	300	53900	64300	463	80400
30	63500	380	65200	66000	300	53500	64700	476	83200
31	63900	396	68300	65100	300	52700	---	---	---
MONTH	1724000	---	2088700	2009700	---	2462800	1950700	---	2518000
YEAR	13987350	---	24718890	---	---	---	---	---	---

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	TEMPERATURE (DEG C) (00010)	NUMBER OF SAMPLING POINTS (00063)	INSTANTANEOUS DISCHARGE (CFS) (00061)	SUSPENDED SEDIMENT DISCHARGE (MG/L) (80154)	SUSPENDED SEDIMENT DISCHARGE (T/DAY) (80155)	SUS. SED. FALL DIAM. X FINER THAN .002 MM (70337)	SUS. SED. FALL DIAM. X FINER THAN .004 MM (70338)	SUS. SED. FALL DIAM. X FINER THAN .008 MM (70339)	SUS. SED. FALL DIAM. X FINER THAN .016 MM (70340)	SUS. SED. FALL DIAM. X FINER THAN .062 MM (70342)
OCT.											
10...	1140	12.0	3	36200	540	52800	--	--	--	--	21
24...	1050	12.5	--	36300	347	34000	--	--	--	--	--
NOV.											
04...	1015	9.5	3	33600	1170	106000	--	--	--	--	11
14...	1050	5.5	--	34800	746	70100	--	--	--	--	--
DEC.											
05...	1115	.5	3	19800	317	16900	--	--	--	--	37
23...	1125	1.5	--	18900	433	22100	--	--	--	--	--
JAN.											
08...	1345	1.0	3	18100	386	18900	--	--	--	--	23
30...	1415	.0	--	18300	349	17200	--	--	--	--	--
FEB.											
21...	1120	2.0	3	19200	337	17500	--	--	--	--	24
28...	1500	3.5	--	18900	345	17600	--	--	--	--	--
MAR.											
06...	1110	1.5	1	19400	314	16400	--	--	--	--	30
17...	1130	3.0	3	19000	--	--	--	--	--	--	--
28...	1240	1.0	--	30400	1100	90300	--	--	--	--	--
APR.											
10...	1220	4.0	3	38600	1140	119000	27	27	34	38	65
24...	1115	9.0	--	38000	1070	110000	--	--	--	--	--
MAY											
02...	1045	11.0	3	42700	1130	130000	29	30	36	42	73
12...	0915	15.5	--	37700	602	61300	--	--	--	--	--
JUNE											
02...	1000	18.0	3	40700	454	49900	--	--	--	--	40
16...	1010	19.0	--	46600	680	85600	--	--	--	--	--
JULY											
03...	0950	26.5	3	49700	399	53500	--	--	--	--	66
17...	1150	23.5	--	52200	399	56200	--	--	--	--	--
AUG.											
04...	1220	25.0	--	69100	394	73500	--	--	--	--	40
11...	1245	25.0	3	65200	--	--	--	--	--	--	--
18...	1130	22.0	--	70600	1390	265000	21	22	29	38	74
SEP.											
04...	1030	23.0	3	67800	378	69200	--	--	--	--	33
15...	1105	18.5	--	67100	700	127000	--	--	--	--	--

06610000 MISSOURI RIVER AT OMAHA, NEBRASKA--CONTINUED

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	SUS. SED. FALL DIAM. % FINER THAN .125 MM (70343)	SUS. SED. FALL DIAM. % FINER THAN .250 MM (70344)	SUS. SED. FALL DIAM. % FINER THAN .500 MM (70345)	SUS. SED. FALL SIEVE DIAM. % FINER THAN .062 MM (70331)	BED MAT. FALL DIAM. % FINER THAN .062 MM (80158)	BED MAT. FALL DIAM. % FINER THAN .125 MM (80159)	BED MAT. FALL DIAM. % FINER THAN .250 MM (80160)	BED MAT. FALL DIAM. % FINER THAN .500 MM (80161)	BED MAT. FALL DIAM. % FINER THAN 1.00 MM (80162)	BED MAT. FALL SIEVE DIAM. % FINER THAN 2.00 MM (80169)
OCT.										
10...	35	97	100	--	0	1	69	100	--	--
24...	--	--	--	39	--	--	--	--	--	--
NOV.										
04...	19	95	100	--	1	1	73	99	100	--
14...	--	--	--	19	--	--	--	--	--	--
DEC.										
05...	48	100	--	--	--	0	61	97	99	100
23...	--	--	--	20	--	--	--	--	--	--
JAN.										
08...	35	96	100	--	0	1	39	94	99	--
30...	--	--	--	26	--	--	--	--	--	--
FEB.										
21...	37	98	100	--	0	1	33	92	98	100
28...	--	--	--	27	--	--	--	--	--	--
MAR.										
06...	41	96	100	--	1	1	27	91	99	--
17...	--	--	--	--	0	2	30	92	100	--
28...	--	--	--	54	--	--	--	--	--	--
APR.										
10...	75	100	--	--	0	1	65	97	98	--
24...	--	--	--	57	--	--	--	--	--	--
MAY										
02...	82	99	100	--	0	1	31	94	100	--
12...	--	--	--	59	--	--	--	--	--	--
JUNE										
02...	56	98	100	--	0	2	56	90	98	100
16...	--	--	--	48	--	--	--	--	--	--
JULY										
03...	79	100	--	--	0	2	64	98	99	100
17...	--	--	--	37	--	--	--	--	--	--
AUG.										
04...	56	100	--	--	--	--	--	--	--	--
11...	--	--	--	--	0	1	61	97	99	100
18...	80	99	100	--	--	--	--	--	--	--
SEP.										
04...	43	97	100	--	0	30	100	--	--	--
15...	--	--	--	18	--	--	--	--	--	--

MISSOURI RIVER MAIN STEM

06807000 MISSOURI RIVER AT NEBRASKA CITY, NEBRASKA
(National Stream Quality Accounting Network Station)

LOCATION.--Lat 40°40'55", long 95°50'48", in NW1/4 NE1/4 sec.9, T.8 N., R.14 E., Otto County, at Waubensie Highway Bridge at Nebraska City, and at mile 562.6 (905.2 km).

DRAINAGE AREA.--414,400 mi² (1,073,296 km²), approximately.

PERIOD OF RECORD.--Chemical analyses: January 1951 to current year.

Specific conductance: May 1951 to current year.

Water temperatures: May 1951 to current year.

Sediment records: October 1971 to current year. August 1957 to September 1971 (daily sediment discharge only) in reports of Corps of Engineers.

EXTREMES.--Current year: Specific conductance: Maximum daily, 980 micromhos Jan. 16; minimum daily, 500 micromhos Apr. 2.
Water temperatures: Maximum daily, 28.5°C July 6; minimum, freezing point on many days during winter period.
Sediment concentrations: Maximum daily, 3,880 mg/l Apr. 29; minimum daily, 137 mg/l Jan. 14.
Sediment discharge: Maximum daily, 744,000 tons (675,000 tonnes) Apr. 29; minimum daily, 4,140 tons (3,760 tonnes) Jan. 14.

Period of record: Specific conductance: Maximum daily, 994 micromhos Dec. 17, 1962; minimum daily, 273 micromhos June 17, 1964.

Water temperatures: Maximum daily, 29.0°C July 25, 1952; minimum, freezing point on many days during winter period each year.

Sediment concentrations: Maximum daily, 8,220 mg/l May 19, 1974; minimum daily, 137 mg/l Jan. 14, 1975.

Sediment discharge: Maximum daily, 1,590,000 tons (1,440,000 tonnes) May 19, 1974; minimum daily, 4,050 tons (3,670 tonnes) Jan. 17, 1972.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C) , WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975
(ONCE-DAILY)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	732	742	640	790	730	700	630	600	750	660	740	710
2	734	724	670	800	700	720	500	630	750	740	730	700
3	740	722	700	800	750	700	650	650	750	750	730	730
4	754	722	680	770	700	700	660	650	750	750	730	730
5	747	738	675	800	780	700	700	650	750	750	740	630
6	749	713	675	800	770	690	680	660	750	760	740	700
7	736	730	650	800	750	690	680	670	750	760	740	730
8	758	726	640	800	740	680	680	690	750	780	720	700
9	739	743	600	800	680	680	700	700	690	790	740	720
10	750	729	610	810	660	660	680	700	690	800	740	710
11	748	744	610	800	750	670	650	700	690	790	740	720
12	738	738	650	790	750	670	650	560	690	760	720	720
13	743	736	650	800	740	670	620	540	690	760	750	710
14	744	738	630	880	750	690	640	700	690	760	750	700
15	742	739	600	920	750	700	620	700	680	770	750	720
16	743	735	600	980	750	680	650	610	700	770	750	720
17	745	736	700	900	750	690	650	700	690	770	750	750
18	743	738	720	850	750	700	600	710	700	770	750	740
19	742	730	740	810	750	590	640	700	660	770	700	750
20	745	729	750	800	760	640	660	690	610	780	710	740
21	746	740	710	780	750	580	670	700	600	760	740	740
22	746	741	710	760	750	590	680	710	560	790	750	740
23	746	741	710	750	760	590	690	710	600	750	740	740
24	747	738	710	780	750	600	660	720	540	750	630	730
25	748	735	700	780	750	590	660	720	560	740	700	740
26	745	729	700	740	740	600	680	720	580	710	750	740
27	742	732	690	750	750	650	670	720	610	730	710	740
28	743	737	740	750	620	610	660	610	630	700	710	730
29	741	750	740	740	---	600	560	610	640	720	700	730
30	756	749	790	740	---	600	550	630	650	720	710	730
31	726	---	780	760	---	600	---	750	---	710	710	---
MONTH	744	735	683	801	737	653	647	671	672	752	728	723
YEAR	MAX	980	MIN	500	MEAN	712						

06807000 MISSOURI RIVER AT NEBRASKA CITY, NEBRASKA--CONTINUED
(National stream-quality accounting network station)

TEMPERATURE (DEG. C) OF WATER , WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975 (ONCE-DAILY)												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14.0	15.0	2.0	1.0	0.0	1.0	0.5	13.0	18.5	26.5	26.5	24.5
2	13.0	13.5	1.5	0.0	0.0	1.0	0.5	13.0	18.5	27.0	26.5	24.5
3	12.0	12.0	1.0	0.0	0.0	1.0	0.0	13.0	19.0	27.0	25.5	25.0
4	14.0	11.5	0.5	0.0	0.0	1.0	0.0	14.0	20.0	28.0	25.5	24.5
5	14.5	10.0	1.5	0.0	0.0	0.5	0.0	15.0	20.5	28.0	25.5	23.5
6	13.5	8.5	1.5	0.0	0.0	1.0	1.0	17.5	22.0	28.5	25.5	23.0
7	12.0	8.5	2.0	0.0	0.0	1.0	1.0	17.5	21.0	28.0	25.5	23.0
8	12.0	8.5	0.5	0.0	0.0	1.0	5.5	18.0	21.0	28.0	25.0	22.0
9	11.5	8.5	1.0	0.0	0.0	1.0	5.0	18.0	20.5	28.0	25.0	21.5
10	11.5	8.5	0.5	0.5	0.0	0.5	5.0	18.0	19.0	26.5	25.5	21.5
11	14.0	9.0	0.5	0.0	0.0	1.0	5.0	18.0	19.5	26.0	26.0	21.0
12	12.0	8.5	1.5	0.0	0.0	1.0	5.0	16.5	19.0	24.5	25.5	20.5
13	12.0	6.0	1.0	0.0	0.0	1.0	5.5	17.0	19.5	24.5	25.5	20.5
14	13.0	5.5	1.0	0.0	0.0	1.0	6.0	17.0	21.0	24.0	25.0	20.0
15	11.5	4.0	1.0	0.0	0.0	1.0	6.5	18.0	19.5	24.0	25.5	19.0
16	10.5	3.5	1.0	0.0	0.0	1.0	6.5	17.5	20.0	24.5	25.5	19.0
17	12.0	3.5	0.0	0.0	0.0	2.0	8.5	18.5	20.5	25.0	25.0	19.0
18	13.0	6.0	0.0	0.0	0.0	3.0	10.0	19.0	21.0	25.0	25.0	19.0
19	12.0	6.5	0.0	0.0	0.0	3.5	9.0	20.0	21.5	25.5	25.0	19.0
20	13.0	6.0	0.0	0.0	0.0	3.5	8.5	21.0	22.0	25.5	25.0	18.0
21	11.5	4.5	0.0	0.0	0.0	4.5	9.0	20.5	23.5	25.5	25.5	16.5
22	12.0	4.5	0.5	0.0	0.5	5.0	10.5	21.5	23.5	25.5	26.0	15.5
23	13.5	6.5	1.0	0.0	0.5	5.0	11.5	21.0	24.0	26.0	26.5	15.0
24	13.5	5.5	1.5	0.0	0.5	2.5	18.5	21.5	23.0	25.5	26.5	15.5
25	14.0	4.5	0.5	0.0	0.5	1.0	12.0	21.5	24.0	25.5	25.0	15.5
26	13.5	4.0	0.0	0.5	0.5	1.5	13.5	21.0	25.0	26.0	24.5	15.5
27	13.5	3.5	0.0	0.0	0.5	1.0	14.5	20.0	25.0	26.5	25.0	15.5
28	13.5	3.5	0.0	0.0	1.0	0.5	13.5	20.5	25.5	26.0	25.0	16.0
29	13.5	3.0	0.0	0.5	---	0.5	14.0	20.0	26.0	26.0	24.0	15.5
30	14.0	2.0	0.5	0.5	---	0.5	13.5	18.0	26.5	26.5	24.0	16.0
31	15.0	---	1.0	0.0	---	0.5	---	18.0	---	26.5	24.0	---
MONTH	13.0	7.0	0.5	0.0	0.0	1.5	7.5	18.0	21.5	26.0	25.5	19.5
YEAR	MAX	28.5	MIN	0.0	MEAN	12.0						

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)	ALKA- LINITY AS CAC03 (MG/L) (00410)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)
OCT., 1974												
08...	1155	39600	9.6	56	23	80	5.5	210	0	172	200	22
NOV.												
05...	1115	37900	11	51	22	75	6.0	205	0	168	190	19
DEC.												
03...	1030	22300	11	68	22	70	5.1	228	0	187	190	21
JAN., 1975												
13...	1320	15000	11	69	25	72	5.6	239	--	196	200	16
FEB.												
10...	1015	20000	15	73	24	70	6.0	237	--	194	190	21
MAR.												
10...	1130	26000	16	60	20	55	6.5	201	--	165	150	19
APR.												
08...	1130	40900	13	66	21	58	6.0	217	0	178	170	16
MAY												
06...	1200	45500	13	65	22	46	6.5	214	0	176	150	17
JUNE												
03...	1045	42700	8.7	63	22	62	5.2	210	0	172	180	16
JULY												
01...	1120	59000	11	63	21	56	6.2	204	0	167	170	15
AUG.												
12...	1135	64700	8.0	66	23	65	5.7	201	0	165	200	14
SEP.												
16...	1200	65900	8.0	60	22	67	5.2	196	0	161	200	14

MISSOURI RIVER MAIN STEM

06807000 MISSOURI RIVER AT NEBRASKA CITY, NEBRASKA--CONTINUED
(National stream-quality accounting network station)

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	TOTAL NITRITE PLUS NITRATE (N) (MG/L) (00630)	TOTAL KJEL- DAHL- NITRO- GEN (N) (MG/L) (00625)	TOTAL NITRO- GEN (N) (MG/L) (00600)	TOTAL NITRO- GEN (NO3) (MG/L) (71887)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)	DIS- SOLVED SOLIDS (TONS PER AC-FT) (MG/L) (70303)	DIS- SOLVED SOLIDS (TONS PER DAY) (MG/L) (70302)	HARD- NESS (CA, MG) (MG/L) (00900)	
OCT., 1974												
08...	.6	.19	.67	.86	3.8	.14	550	500	.75	58800	230	
NOV.												
05...	.5	.22	.51	.73	3.2	.12	498	476	.68	51000	220	
DEC.												
03...	.5	.31	.89	1.2	5.3	.16	516	500	.70	31100	260	
JAN., 1975												
13...	.6	.28	.78	1.1	4.7	.13	516	517	.70	20900	280	
FEB.												
10...	.4	.38	.82	1.2	5.3	.12	532	516	.72	28700	280	
MAR.												
10...	.7	.44	.52	.96	4.3	.13	437	426	.59	30700	230	
APR.												
08...	.5	1.2	1.1	2.3	10	.10	472	457	.64	52100	250	
MAY												
06...	.5	2.3	1.6	3.9	17	.52	454	426	.62	55800	250	
JUNE												
03...	.5	.70	.88	1.6	7.0	.18	501	461	.68	57800	250	
JULY												
01...	.8	1.3	.90	2.2	9.7	.25	466	444	.63	74200	240	
AUG.												
12...	.7	.12	.58	.70	3.1	.12	488	482	.66	85200	260	
SEP.												
16...	.5	.06	.54	.60	2.7	.18	471	473	.64	83800	240	
DATE	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	PERCENT SODIUM (00932)	SODIUM AD- SORP- TION RATIO (00931)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	TUR- BID- ITY (JTU) (00070)	CARBON DIOXIDE (CO2) (MG/L) (00405)	TOTAL PHYTO- PLANK- TON (CELLS PER ML) (60050)	FECAL COLI- FORM (COL. PER 100 ML) (31616)	STREP- TOCOCCI (COL- ONIES PER 100 ML) (31679)	
OCT., 1974												
08...	62	42	2.3	610	8.3	12.5	30	1.7	4100	550000	11000	
NOV.												
05...	50	42	2.2	750	7.5	8.5	20	10	4200	51000	7400	
DEC.												
03...	73	36	1.9	850	7.9	.5	20	4.6	2500	44000	3800	
JAN., 1975												
13...	79	36	1.9	890	7.6	.0	10	9.6	6200	21000	750	
FEB.												
10...	87	35	1.8	800	7.9	.0	5	4.8	3200	33000	700	
MAR.												
10...	67	33	1.6	660	8.4	.5	10	1.3	8000	8900	1300	
APR.												
08...	73	33	1.6	540	7.7	5.5	55	6.9	6500	10000	530	
MAY												
06...	77	28	1.3	670	7.6	17.5	95	8.6	17000	28000	1800	
JUNE												
03...	76	35	1.7	700	7.6	19.0	35	8.4	67000	32000	430	
JULY												
01...	76	33	1.6	660	7.8	26.5	55	5.2	8000	8200	770	
AUG.												
12...	95	35	1.8	760	7.7	26.0	25	6.4	13000	25000	1000	
SEP.												
16...	80	37	1.9	750	7.6	18.0	15	7.9	--	32000	1300	
DATE	TOTAL IRON (FE) (UG/L) (01045)	DIS- SOLVED IRON (FE) (UG/L) (01046)	TOTAL MAN- GANESE (MN) (UG/L) (01055)	SUS- PENDE MAN- GANESE (MN) (UG/L) (01054)	DIS- SOLVED MAN- GANESE (MN) (UG/L) (01056)	UNCOR- RECTED PERI- PHYTON CHLORO- PHYLL B (MG/SQ M) (32226)	UNCOR- RECTED PERI- PHYTON CHLORO- PHYLL A (MG/SQ M) (32228)	PERI- PHYTON BIOMASS ASH WEIGHT (G/SQ M) (00572)	PERI- PHYTON BIOMASS TOTAL DRY WEIGHT (G/SQ M) (00573)	TOTAL ORGANIC CARBON (C) (MG/L) (00680)	TOTAL ARSENIC (AS) (UG/L) (01002)	SUS- PENDE ARSENIC (AS) (UG/L) (01001)
DEC.												
03...	1900	0	110	92	18	2.2	2.8	6.2	--	5.9	3	0
MAR.												
10...	600	0	60	40	20	--	--	--	--	15	4	2
JUNE												
03...	4900	10	260	250	10	--	--	--	--	6.5	5	0
JULY												
01...	--	--	--	--	--	1.1	16	20	20	--	--	--
SEP.												
16...	1200	50	130	130	4	9.5	52	6.3	6.9	13	3	2

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

[illegible]

MISSOURI RIVER MAIN STEM

06807000 MISSOURI RIVER AT NEBRASKA CITY, NEBRASKA--CONTINUED
(National stream-quality accounting network station)

IDENTIFICATION OF PHYTOPLANKTON, IN PERCENT, OF TOTAL CELL COUNT

Date of sample	Oct 8 '74	Nov 5	Dec 3	Jan 13 '75	Feb 10	Mar 10	Apr 8	May 6	Jun 3	Jul 1	Aug 12	Sep 16 '75
GREEN ALGAE												
Actinastrum											1	
Ankistrodesmus	3							1	4			
Coelastrum									14		2	
Oocystis										1	1	
Ophiocytium									1			
Pediastrum						6					3	
Scenedesmus		8	2						7		3	
BLUE-GREEN ALGAE												
Agmenellum											65	
Anabaena											4	
Anacystis									10	17	6	
Lyngbya		5										
Oscillatoria											3	
DIATOMS												
Asterionella			1	94	89	81	20	5	5	6		
Caloneis						1						
Cocconeis			1				3					
Coscinodiscus	3											
Cyclotella	79	44	63	5	8	2	10	13	2	3	11	
Cymatopleura								1				
Diatoma		4										
Fragilaria					3	5	7	53	33			
Gomphonema							3	1				
Melosira	9	12	11			4	7	6	12	58		
Navicula		8	6	1			37	1		3		
Nitzschia		6	13				10	14	11	11		
Stephanodiscus		4										
Surirella		2	1					3		3		
Synedra	3	2	2									
FLAGELLATES												
Amphora	3	4										
Chlamydomonas		2							1			
Epithemia							3					
Euglena			1									
Rhopalodia						1						
Total count (cells/ml)	4100	4200	2500	6200	3200	8000	6500	17000	67000	8000	38000	
Diversity Index												
Class											.977	
Order											1.357	
Family											1.627	
Genera											1.989	
Periphyton analysis			yes							yes		yes
Days of exposure			28							28		35
Biomass pigment ratio			250							15		12

Note.--Grab sample used for phytoplankton analysis by Sedgwick-Rafter chamber, 200-x microscope.
Polyethylene strips used for periphyton. See previous table for chlorophyll and biomass data.

06807000 MISSOURI RIVER AT NEBRASKA CITY, NEBRASKA--CONTINUED
(National stream-quality accounting network station)

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	MEAN DISCHARGE (CFS)	OCTOBER MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	NOVEMBER MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	DECEMBER MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	37100	380	38100	38800	418	43800	24300	317	20800
2	36800	358	35600	38500	359	37300	22300	313	18800
3	36400	335	32900	37500	353	35800	22300	316	19000
4	36800	401	39800	37600	452	45900	23200	347	21700
5	37600	410	41600	37900	530	54200	22700	328	20100
6	38800	499	52300	37900	452	46300	23200	311	19500
7	38800	502	52600	37600	362	36800	23800	335	21500
8	39700	587	62900	37600	356	36100	24500	423	28000
9	39100	542	57200	38200	469	48400	24100	573	37300
10	38200	480	49500	38500	668	69400	22500	528	32100
11	37400	473	47800	38200	782	80700	21800	442	26000
12	38200	475	49000	38800	847	88700	23000	435	27000
13	39400	525	55900	38500	720	74800	23200	418	26200
14	40000	530	57200	38500	630	65500	23800	400	25700
15	40600	500	54800	37900	543	55600	24500	458	30300
16	38200	418	43100	37900	495	50700	24300	435	28500
17	37100	312	31300	36800	402	39900	23600	389	24800
18	37100	265	26500	36500	358	35400	23000	341	21200
19	37400	277	28000	37600	402	40800	22000	268	15900
20	37400	320	32300	37600	411	41700	21800	258	15200
21	37600	389	39500	37600	578	58700	22500	290	17600
22	37400	465	47000	37100	620	62100	22700	287	17600
23	37900	472	48300	37100	580	58100	22700	278	17000
24	37900	468	47900	37100	495	49600	23000	292	18100
25	37900	613	52500	36800	378	37600	23000	289	17900
26	38200	522	53800	36100	278	27100	22500	245	14900
27	37900	501	51300	33600	260	23600	22300	203	12200
28	37600	499	50700	30600	277	22900	22700	231	14200
29	37600	524	53200	28400	288	22100	23200	295	18500
30	38200	530	54700	26600	310	22300	22700	279	17100
31	39700	548	58700	---	---	---	22000	270	16000
MONTH	1180000	---	1446000	1099600	---	1411900	713200	---	660700
DAY	MEAN DISCHARGE (CFS)	JANUARY MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	FEBRUARY MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MARCH MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	21800	258	15200	23200	618	38700	24800	576	38600
2	21800	253	14900	22700	642	39300	25000	557	37600
3	22000	283	16800	22500	642	39000	25200	515	35000
4	22000	321	19100	22500	638	38800	25600	473	32700
5	21800	378	22300	22300	611	36800	26100	478	33700
6	21800	408	24000	21800	669	39400	26300	492	34900
7	21600	387	22600	21000	499	28300	26600	499	35800
8	21200	351	20100	19400	433	22700	26800	501	36300
9	21200	352	20100	19000	423	21700	26800	510	36900
10	21800	400	23500	20400	530	29200	26100	517	36400
11	20400	338	18600	21400	575	33200	26300	522	37100
12	18200	352	17300	21000	536	30400	26100	505	35600
13	15000	177	7170	20800	500	28100	25900	481	33600
14	11200	137	4140	21000	487	27600	25400	465	31900
15	11600	149	4670	21200	475	27200	25200	439	29900
16	17400	220	10300	20800	478	26800	25200	400	27200
17	21800	290	17100	21600	512	29900	27000	440	32100
18	21800	302	17800	22700	578	35400	29200	680	53600
19	21000	300	17000	23000	625	38800	32100	1140	98800
20	20800	302	17000	23000	625	38800	38800	1450	152000
21	21200	311	17800	23000	590	36600	37400	1350	136000
22	21200	309	17700	23000	590	36600	37100	1300	130000
23	21000	295	16700	23000	605	37600	36800	1300	129000
24	21400	313	18100	23200	610	38200	37400	1220	123000
25	22300	388	23400	23200	618	38700	40900	1420	157000
26	23400	465	29400	23600	628	40000	38500	1330	138000
27	23800	534	34300	24100	605	39400	35100	1070	101000
28	23400	522	33000	24500	590	39000	39400	973	104000
29	23200	527	33000	---	---	---	42400	960	110000
30	23400	550	34800	---	---	---	42100	885	101000
31	23200	558	35000	---	---	---	38800	753	78900
MONTH	643700	---	622880	618900	---	956200	956400	---	2197600

MISSOURI RIVER MAIN STEM

06807000 MISSOURI RIVER AT NEBRASKA CITY, NEBRASKA--CONTINUED
(National stream-quality accounting network station)

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DAY	MEAN DISCHARGE (CFS)	APRIL MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MAY MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	JUNE MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	38200	595	51400	53100	2480	356000	43600	463	54500
2	37600	490	49700	49600	1530	205000	42400	459	52500
3	35100	430	40800	48900	1110	147000	42400	460	52700
4	35800	505	48800	48900	1060	140000	42100	464	52700
5	38500	585	60800	47800	984	127000	41500	477	53400
6	39400	579	61500	45800	920	114000	41500	565	63300
7	40300	610	66400	42400	1180	167000	43300	663	77500
8	41200	685	76200	44500	1090	131000	44200	657	78400
9	43000	860	99800	46100	1010	126000	44200	845	101000
10	45100	1060	129000	44500	920	111000	44200	959	114000
11	46100	1210	151000	43300	840	98200	45800	1050	130000
12	45100	1110	135000	42700	757	87300	49200	1080	143000
13	44200	1040	124000	43000	650	76600	51700	744	104000
14	44800	988	120000	42100	656	74600	51400	570	79100
15	43900	857	102000	42100	660	75000	50300	580	78800
16	44200	886	106000	41200	640	71200	51000	675	92900
17	43900	907	108000	41500	630	70600	50600	710	97000
18	43900	888	105000	41200	660	73400	51700	978	137000
19	44200	890	106000	41800	690	77900	55600	2470	371000
20	44500	893	107000	40500	705	77300	67000	3650	660000
21	43600	760	89500	40000	658	71100	66200	3460	518000
22	43300	663	77500	40300	570	62000	65000	3330	584000
23	44800	867	106000	40600	470	51600	68600	3020	559000
24	46100	1130	141000	41500	440	49300	72600	2650	519000
25	45100	1020	124000	42100	460	52300	69000	2180	406000
26	43900	710	84200	43600	525	61800	66600	1460	263000
27	44800	1070	129000	43600	605	71200	61400	1060	176000
28	57600	2450	383000	44200	770	91900	57600	1010	157000
29	71000	3880	744000	44200	830	99100	56200	927	141000
30	61000	3400	560000	45400	620	76000	57600	858	133000
31	---	---	---	44500	475	57100	---	---	---
MONTH	1340200	---	4295700	1371100	---	3149400	1594500	---	6148800
DAY	MEAN DISCHARGE (CFS)	JULY MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	AUGUST MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	SEPTEMBER MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	58700	788	125000	63400	550	94100	67800	385	70500
2	58000	660	103000	64600	608	106000	67000	360	65100
3	55900	600	90500	65800	590	105000	66600	335	60200
4	54200	575	84100	66200	530	94700	67400	360	65500
5	53100	540	77400	65400	420	74200	68600	440	81500
6	54500	518	76200	64600	397	69200	67800	446	81600
7	55600	490	73600	64600	437	76200	67000	440	79600
8	55600	465	69800	64500	475	82900	66200	405	72400
9	55200	460	68600	64600	478	83400	65400	367	64800
10	54800	462	68400	63800	460	79200	65800	350	62200
11	55200	460	68600	64200	440	75300	66600	378	68000
12	54800	460	68100	64600	420	73300	66600	403	72500
13	54200	458	67000	65400	420	74200	67400	447	81300
14	53800	457	66400	65400	410	72400	67400	466	84800
15	53400	448	64500	64200	395	68500	65800	459	81500
16	52800	440	62700	63000	496	84400	65800	483	85800
17	52800	426	60700	63000	417	70900	65200	497	88800
18	52800	421	60000	64600	470	82000	66600	515	92600
19	53400	425	61300	69400	665	125000	66200	554	99000
20	54500	430	63300	67400	515	93700	67000	557	101000
21	55200	430	65200	64500	405	70600	68200	540	99400
22	57600	468	72800	63800	375	64600	67800	519	95000
23	58400	485	76500	63800	360	62000	66600	446	80200
24	59400	495	79400	64600	365	63700	65400	438	77300
25	60600	580	94900	66000	380	67700	65800	420	74600
26	63800	717	124000	66200	390	69700	65400	355	62700
27	64600	745	130000	67000	375	67800	65000	350	61400
28	64600	656	114000	67800	358	65500	64600	390	68000
29	62600	510	86200	69400	360	67500	65400	471	83200
30	62600	474	80100	70600	430	82000	65800	580	103000
31	62600	483	81600	69000	410	76400	---	---	---
MONTH	1766300	---	2484100	2031600	---	2443100	1995200	---	2363500
YEAR	15320700		28179880						

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

		NUMBER OF SAM- PLING POINTS				INSTAN- TANEOUS DIS- CHARGE (CFS)	SUS- PENDE- SEDIM- MENT {MG/L}	SUS- PENDE- SEDIM- MENT DIS- CHARGE (T/DAY) {80155}	SUS. SED. FALL DIAM. % FINER THAN .002 MM {70337}	SUS. SED. FALL DIAM. % FINER THAN .004 MM {70338}
DATE	TIME	TEMPER- ATURE (DEG C) {00010}		{00063}	{00061}					
OCT.										
04...	1045	15.0	3	36800		400	39700	--	--	
18...	1000	12.0	--	36900		253	25200	--	--	
NOV.										
08...	1120	9.0	3	38000		366	37600	--	--	
22...	1115	7.0	--	36900		629	62700	--	--	
DEC.										
03...	1315	.5	3	22300		315	19000	--	--	
16...	1500	.0	--	24200		426	27800	--	--	
JAN.										
06...	1130	.0	--	21800		413	24300	--	--	
25...	0920	.5	--	22200		383	23000	--	--	
FEB.										
03...	1510	1.0	--	22100		646	38500	--	--	
19...	1200	.0	3	23000		--	--	--	--	
25...	1115	.5	--	23200		618	38700	--	--	
MAR.										
05...	1200	.5	3	26100		479	33800	--	--	
18...	1200	3.0	--	29300		678	53600	--	--	
APR.										
08...	0945	5.5	--	40900		676	74700	16	25	
11...	1040	5.0	3	46500		--	--	--	--	
22...	1010	10.5	--	43600		670	78900	--	--	
MAY										
02...	1010	13.0	3	49900		--	--	--	--	
06...	1145	17.5	--	45500		883	108000	--	--	
16...	1125	17.5	--	41500		643	72000	--	--	
JUNE										
06...	1300	22.0	3	41200		568	63200	--	--	
13...	1010	19.5	--	52000		731	103000	--	--	
20...	1010	22.0	--	67700		3890	711000	--	--	
JULY										
08...	1040	28.0	3	55600		460	69100	--	--	
22...	1045	25.5	--	57600		474	73700	--	--	
AUG.										
01...	0835	26.0	3	63200		558	95200	--	--	
15...	1045	24.0	--	64500		387	67400	--	--	
SEP.										
05...	1030	22.0	3	67500		456	83100	--	--	
19...	1020	17.0	--	66300		561	100000	--	--	
DATE		SUS. SED. FALL DIAM. % FINER THAN .008 MM {70339}	SUS. SED. FALL DIAM. % FINER THAN .016 MM {70340}	SUS. SED. FALL DIAM. % FINER THAN .052 MM {70342}	SUS. SED. FALL DIAM. % FINER THAN .125 MM {70343}	SUS. SED. FALL DIAM. % FINER THAN .250 MM {70344}	SUS. SED. FALL DIAM. % FINER THAN .500 MM {70345}	SUS. SED. FALL DIAM. % FINER THAN .062 MM {70331}	BED MAT. FALL DIAM. % FINER THAN .062 MM {80158}	BED MAT. FALL DIAM. % FINER THAN .125 MM {80159}
OCT.										
04...	--	--	--	33	53	98	100	--	0	2
18...	--	--	--	--	--	--	--	47	--	--
NOV.										
08...	--	--	--	34	51	95	100	--	0	1
22...	--	--	--	--	--	--	--	20	--	--
DEC.										
03...	--	--	--	42	55	97	100	--	--	0
16...	--	--	--	--	--	--	--	31	--	--
JAN.										
06...	--	--	--	24	39	98	100	--	--	--
25...	--	--	--	--	--	--	--	26	--	--
FEB.										
03...	--	--	--	--	--	--	--	12	--	--
19...	--	--	--	--	--	--	--	--	0	1
25...	--	--	--	17	25	97	100	--	--	--
MAR.										
05...	--	--	--	22	30	96	100	--	0	1
18...	--	--	--	--	--	--	--	46	--	--
APR.										
08...	30	37	61	70	97	100	--	--	--	--
11...	--	--	--	--	--	--	--	--	0	1
22...	--	--	--	--	--	--	--	52	--	--
MAY										
02...	--	--	--	--	--	--	--	--	--	0
06...	--	--	--	58	100	--	--	--	--	--
16...	--	--	--	--	--	--	--	55	--	--
JUNE										
06...	--	--	--	--	--	--	--	42	0	1
13...	--	--	--	51	62	100	--	--	--	--
20...	--	--	--	--	--	--	--	86	--	--
JULY										
08...	--	--	--	54	65	99	100	--	0	1
22...	--	--	--	--	--	--	--	38	--	--
AUG.										
01...	--	--	--	37	51	98	100	--	0	1
15...	--	--	--	--	--	--	--	49	--	--
SEP.										
05...	--	--	--	48	61	99	100	--	0	--
19...	--	--	--	--	--	--	--	32	--	--

MISSOURI RIVER MAIN STEM

06807000 MISSOURI RIVER AT NEBRASKA CITY, NEBRASKA--CONTINUED
(National stream-quality accounting network station)

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	BED MAT. FALL DIAM. % FINER THAN .250 MM (80160)	BED MAT. FALL DIAM. % FINER THAN .500 MM (80161)	BED MAT. FALL DIAM. % FINER THAN 1.00 MM (80162)	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM (80169)	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM (80170)	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM (80171)	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM (80172)	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM (80173)
OCT.								
04...	43	61	83	88	97	100	--	--
18...	--	--	--	--	--	--	--	--
NOV.								
08...	39	53	97	99	100	--	--	--
22...	--	--	--	--	--	--	--	--
DEC.								
03...	2	20	60	62	73	84	100	--
16...	--	--	--	--	--	--	--	--
JAN.								
06...	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--
FEB.								
03...	--	--	--	--	--	--	--	--
19...	1	7	62	70	71	86	100	--
25...	--	--	--	--	--	--	--	--
MAR.								
05...	11	24	47	56	57	70	88	100
18...	--	--	--	--	--	--	--	--
APR.								
08...	--	--	--	--	--	--	--	--
11...	57	65	76	79	94	100	--	--
22...	--	--	--	--	--	--	--	--
MAY								
02...	19	40	75	83	94	100	--	--
06...	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--
JUNE								
06...	42	52	79	88	97	100	--	--
13...	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--
JULY								
08...	22	52	89	96	100	--	--	--
22...	--	--	--	--	--	--	--	--
AUG.								
01...	38	51	64	86	96	100	--	--
15...	--	--	--	--	--	--	--	--
SEP.								
05...	--	--	--	94	99	100	--	--
19...	--	--	--	--	--	--	--	--

06897950 ELK CREEK NEAR DECATUR CITY, IOWA
(Hydrologic bench-mark station)

LOCATION.--Lat 40°43'18", long 93°56'19", near the southeast corner sec.34, T.69 N., R.27 W., Decatur County, at gaging station, 1,000 ft (305 m) downstream from West Elk Creek, 5.2 mi (8.4 km) upstream from mouth, and 5.7 mi (9.2 km) southwest of Decatur City.

DRAINAGE AREA.--52.5 mi² (136 km²).

PERIOD OF RECORD.--Chemical analyses: February 1968 to current year.

Water temperatures: November 1967 to current year (partial-record station).

Sediment records: November 1967 to current year (partial-record station).

REMARKS.--Miscellaneous biological data collected September 1970 to September 1972 are available in the District office.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS) (00061)	DIS- SOLVED SILICA (SiO ₂) (MG/L) (00955)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NESIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	PERCENT SODIUM (00932)	SODIUM AD- SORP- TION RATIO (00931)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO ₃) (MG/L) (00440)	CAR- BONATE (CO ₃) (MG/L) (00445)	ALKA- LITY AS CACO ₃ (MG/L) (00410)
OCT. 25...	1205	.01	12	100	--	11	--	--	--	414	0	340
DEC. 12...	1030	4.2	10	90	18	13	9	.3	4.1	269	--	221
JAN. 16...	1300	19	--	--	--	--	--	--	--	--	--	--
MAR. 04...	0930	8.6	--	--	--	--	--	--	--	--	--	--
APR. 10...	1730	42	11	56	12	11	11	.3	3.3	172	0	141
MAY 21...	0900	4.3	9.1	--	--	--	--	--	--	280	0	230
JUNE 10...	1610	7.3	--	--	--	--	--	--	--	--	--	--
JULY 03...	1200	4.3	11	74	15	11	9	.3	4.8	264	0	217
AUG. 13...	1040	.02	9.3	68	16	11	9	.3	4.1	241	0	198
SEP. 25...	0940	.58	8.7	73	15	10	8	.3	4.5	253	0	208

DATE	DIS- SOLVED SULFATE (SO ₄) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	TOTAL NITRITE PLUS NITRATE (N) (MG/L) (00630)	TOTAL PHOS- PHORUS (P) (MG/L) (00665)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L) (70300)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L) (70301)	DIS- SOLVED SOLIDS (TONS PER AC-FT) (70303)	DIS- SOLVED SOLIDS (TONS PER DAY) (70302)	HARD- NESS (CA,MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)
OCT. 25...	40	7.2	.2	--	--	406	403	.55	.01	350	9
DEC. 12...	93	11	.6	.83	.00	394	372	.54	4.47	300	78
JAN. 16...	--	--	--	--	--	--	--	--	--	--	--
MAR. 04...	--	--	--	--	--	--	--	--	--	--	--
APR. 10...	52	6.6	.3	1.0	.17	256	239	.35	29.0	190	48
MAY 21...	28	5.5	.3	.33	.04	352	--	.48	4.14	--	--
JUNE 10...	--	--	--	--	--	--	--	--	--	--	--
JULY 03...	49	7.2	.3	.13	.05	309	302	.42	3.59	250	30
AUG. 13...	33	9.2	.3	.14	.13	317	270	.43	.02	240	38
SEP. 25...	46	6.7	.4	.04	.04	298	289	.41	.47	240	37

GRAND RIVER BASIN

05897950 ELK CREEK NEAR DECATUR CITY, IOWA--CONTINUED
(Hydrologic bench-mark station)

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	SPECIFIC CONDUCTANCE (MICROMHOS) (00095)	PH (UNITS) (00400)	TEMPERATURE (DEG C) (00010)	DISSOLVED OXYGEN (MG/L) (00300)	PERCENT SATURATION (00301)	CARBON DIOXIDE (MG/L) (00405)	IMMEDIATE COLIFORM (COL. PER 100 ML) (31501)	FECAL COLIFORM (COL. PER 100 ML) (31616)	STREPTOCOCCI (COLONIES PER 100 ML) (31679)	DIS-SOLVED RA-226 (RADON METHOD) (PC/L) (09511)	DIS-SOLVED NATURAL URANIUM (U) (MG/L) (22703)
OCT. 25...	600	7.6	14.0	7.8	75	17	--	--	--	--	--
DEC. 12...	600	8.6	.0	12.8	90	1.1	1800	420	380	--	--
JAN. 16...	590	--	.0	12.8	88	--	330	320	400	--	--
MAR. 04...	380	7.7	.0	--	--	--	620	0	100	--	--
APR. 10...	1520	7.9	13.5	10.0	98	3.5	3200	150	230	--	--
MAY 21...	560	8.6	20.0	--	--	1.1	--	--	--	--	--
JUNE 10...	--	--	19.0	--	--	--	--	--	--	--	--
JULY 03...	580	8.6	30.0	--	--	1.1	--	--	--	--	--
AUG. 13...	460	8.3	12.0	--	--	1.9	2900	1800	5600	--	--
SEP. 25...	470	8.2	9.0	--	--	2.6	350	96	13	.04	2.9

DATE	CYANIDE (CN) (MG/L) (00720)	TOTAL IRON (FE) (UG/L) (01045)	TOTAL MANGANESE (MN) (UG/L) (01055)	TOTAL ARSENIC (AS) (UG/L) (01002)	TOTAL BARIUM (BA) (UG/L) (01007)	TOTAL CADMIUM (CD) (UG/L) (01027)	TOTAL CHROMIUM (CR) (UG/L) (01034)	TOTAL COPPER (CU) (UG/L) (01042)	TOTAL LEAD (PB) (UG/L) (01051)	TOTAL MERCURY (HG) (UG/L) (71900)	TOTAL SELENIUM (SE) (UG/L) (01147)
JULY 03...	.00	590	120	0	300	5	<10	18	33	1.6	0
SEP. 25...	.00	360	710	1	10	0	10	2	18	.0	0

DATE	TOTAL SILVER (AG) (UG/L) (01077)	TOTAL ZINC (ZN) (UG/L) (01092)	DIS-SOLVED GROSS ALPHA AS U-NAT. (UG/L) (80030)	SUSPENDED GROSS ALPHA AS U-NAT. (UG/L) (80040)	DIS-SOLVED GROSS BETA AS CS-137 (PC/L) (03515)	SUSPENDED GROSS BETA AS CS-137 (PC/L) (03516)	DIS-SOLVED GROSS BETA AS SR90 /Y90 (PC/L) (80050)	SUSPENDED GROSS BETA AS SR90 /Y90 (PC/L) (80060)	DIS-SOLVED RA-226 (RADON METHOD) (UG/L) (09511)	DIS-SOLVED NATURAL URANIUM (U) (UG/L) (22703)	TOTAL FILTERABLE RESIDUE (MG/L) (00515)
JULY 03...	1	620	--	--	--	--	--	--	--	--	--
SEP. 25...	0	3	6.7	<.4	8.7	1.3	7.0	1.2	.04	2.9	310

DATE	TOTAL NON-FILTERABLE RESIDUE (MG/L) (00530)	TOTAL ALDRIN (UG/L) (39330)	ALDRIN IN BOTTOM MATERIAL (UG/KG) (39333)	TOTAL CHLORDANE (UG/L) (39350)	CHLORDANE IN BOTTOM MATERIAL (UG/KG) (39351)	TOTAL DDD (UG/L) (39360)	DDD IN BOTTOM MATERIAL (UG/KG) (39363)	TOTAL DDE (UG/L) (39365)	DDE IN BOTTOM MATERIAL (UG/KG) (39368)	TOTAL DDT (UG/L) (39370)	DDT IN BOTTOM MATERIAL (UG/KG) (39373)
JULY 03...	--	--	--	--	--	--	--	--	--	--	--
SEP. 25...	6	.00	.0	.0	0	.00	.0	.00	.0	.00	.0

DATE	TOTAL DIAZINON (UG/L) (39570)	TOTAL DIELDRIN (UG/L) (39380)	DI-ELDRIN IN BOTTOM MATERIAL (UG/KG) (39383)	TOTAL ENDRIN (UG/L) (39390)	ENDRIN IN BOTTOM MATERIAL (UG/KG) (39393)	TOTAL HEPTACHLOR (UG/L) (39410)	HEPTACHLOR IN BOTTOM MATERIAL (UG/KG) (39413)	TOTAL HEPTACHLOR EPOXIDE (UG/L) (39420)	HEPTACHLOR EPOXIDE IN BOTTOM MATERIAL (UG/KG) (39423)	TOTAL LINDANE (UG/L) (39340)	LINDANE IN BOTTOM MATERIAL (UG/KG) (39343)
JULY 03...	--	--	--	--	--	--	--	--	--	--	--
SEP. 25...	.00	.00	.0	.00	.0	.00	.0	.00	.0	.00	.0

06897950 ELK CREEK NEAR DECATUR CITY, IOWA--CONTINUED
(Hydrologic bench-mark station)

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

DATE	TOTAL MALA- THION (UG/L) (39530)	TOTAL METHYL PARA- THION (UG/L) (39600)	TOTAL PARA- THION (UG/L) (39540)	TOTAL PCB (UG/L) (39516)	PCB IN BOTTOM MA- TERIAL (UG/KG) (39519)	TOTAL TOX- APHENE (UG/L) (39400)	TOX- APHENE IN BOTTOM MA- TERIAL (UG/KG) (39403)	TOTAL 2,4-D (UG/L) (39730)	TOTAL 2,4,5-T (UG/L) (39740)	TOTAL SILVEX (UG/L) (39760)
JULY 03...	--	--	--	--	--	--	--	--	--	--
SEP. 25...	.00	.00	.00	.0	0	0	0	.00	.00	.00

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDE SEDIMENT CHARGE (MG/L) (80154)	SUS- PENDE SEDIMENT CHARGE (T/DAY) (80155)
DEC. 12...	1030	.0	4.2	30	.34
JAN. 16...	1300	.0	19	60	3.1
SEP. 25...	0940	9.0	.58	31	.05

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS STATIONS

Water-quality records at periodic and miscellaneous stations

The Geological Survey collects data on specific conductance, pH and water temperature at many streamgaging stations and low-flow partial-record stations other than regular water-quality stations. These data are collected during routine visits to the stations for purpose of measuring streamflow. Periodic water-quality stations are those at regular streamgaging stations where samples are taken at 4- to 6-week intervals. Miscellaneous water-quality stations are those at low-flow partial-record stations where samples are taken on approximately a yearly basis. Additional information pertaining to location, drainage area and period of record are published in Part 1 of this report.

ANALYSIS OF PERIODIC STATIONS

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)
MAQUOKETA RIVER BASIN					
05417700 - BEAR CREEK NEAR MONMOUTH, IOWA (LAT 42 02 18 LONG 090 52 59)					
OCT., 1974					
01...	1550	15	12.0	440	7.5
NOV.					
11...	1620	40	4.0	500	7.6
DEC.					
18...	0930	17	.0	520	8.5
JAN., 1975					
29...	1240	32	.0	620	8.0
MAR.					
11...	1800	24	.0	530	8.5
APR.					
23...	1315	46	11.0	520	8.5
JUNE					
03...	0920	21	17.5	520	8.2
AUG.					
21...	1200	9.4	27.0	500	8.7
OCT.					
07...	1120	7.3	13.0	460	8.4
NOV.					
18...	1325	8.6	10.0	460	8.2
DEC.					
16...	1415	12	1.0	500	8.3
IOWA RIVER BASIN					
05464640 - PRAIRIE CREEK AT FAIRFAX, IOWA (LAT 41 55 22 LONG 091 47 02)					
OCT., 1974					
23...	1445	34	14.0	490	7.8
NOV.					
26...	0855	39	.0	550	8.2
DEC.					
02...	1245	41	.0	--	--
JAN., 1975					
13...	1315	149	.0	560	8.2
FEB.					
28...	1120	42	.0	--	--
MAR.					
19...	0735	1500	.0	210	8.2
20...	1220	2620	3.0	--	--
MAY					
05...	1210	106	17.0	530	8.4
JUNE					
24...	0820	347	21.7	285	7.7
26...	0930	227	23.0	--	--
SEP.					
26...	1200	7.9	17.0	560	8.5
OCT.					
29...	1455	8.0	12.5	500	8.4
DES MOINES RIVER BASIN					
05484800 - WALNUT CREEK AT DES MOINES, IOWA (LAT 41 35 14 LONG 093 42 11)					
OCT., 1974					
22...	1530	.96	17.0	800	7.6
DEC.					
06...	0935	6.1	.0	--	--
MAR., 1975					
18...	1220	329	.0	--	--
APR.					
24...	0915	110	9.0	600	8.4
MAY					
27...	1505	31	22.0	600	8.2
JULY					
11...	0900	29	19.5	--	--
AUG.					
19...	1410	5.1	28.0	610	8.2
27...	1500	2710	18.0	170	8.0

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	TEMPER- ATURE (DEG C) (00010)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)
DES MOINES RIVER BASIN--CONTINUED					
05485640 - FOURMILE CREEK AT DES MOINES, IOWA (LAT 41 36 50 LONG 093 32 43)					
NOV., 1974					
05...	1355	12	7.0	--	--
DEC.					
05...	1130	6.0	.0	--	--
JAN., 1975					
14...	1300	28	.0	--	--
MAR.					
05...	1310	20	.0	--	--
APR.					
25...	1240	90	7.0	700	8.6
MAY					
27...	1335	36	21.0	750	8.4
JULY					
10...	1115	51	22.0	--	--
AUG.					
19...	1255	11	26.0	710	7.8
MOSQUITO CREEK BASIN					
06610520 - MOSQUITO CREEK NEAR EARLING, IOWA (LAT 41 45 10 LONG 095 27 50)					
OCT., 1974					
09...	1430	5.0	13.0	660	7.5
NOV.					
04...	1430	6.6	7.0	640	7.8
DEC.					
10...	1110	3.8	.0	670	7.7
FEB., 1975					
18...	1400	4.2	.0	600	7.5
MAR.					
11...	1030	4.8	.5	--	--
APR.					
11...	1040	27	2.5	580	7.7
MAY					
01...	1100	34	7.0	710	8.1
JUNE					
02...	0840	18	9.5	540	7.9
JULY					
07...	1430	17	28.5	550	8.0
AUG.					
04...	0900	8.6	20.0	580	7.9
SEP.					
02...	1325	4.6	22.5	580	8.0

ANALYSES OF MISCELLANEOUS STATIONS

DATE	TIME	DIS- CHARGE (CFS) (00060)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)
MINNESOTA RIVER BASIN						
05317650 - BLUE EARTH R NR LAKOTA, IOWA (LAT 43 30 00 LONG 094 09 00)						
AUG., 1975						
13...	1440	1.4	--	750	--	27.0
05317810 - WF BLUE EARTH R BL MINN-IOWA STATE LINE (LAT 43 26 00 LONG 094 04 00)						
AUG., 1975						
13...	1345	2.5	--	1000	--	25.5
UPPER IOWA RIVER BASIN						
05387300 - UPPER IOWA R AT CHESTER, IOWA (LAT 43 30 00 LONG 092 22 00)						
OCT., 1974						
01...	0800	20	--	480	8.0	6.0
05387400 - UPPER IOWA R NR KENDALVILLE, IOWA (LAT 43 28 00 LONG 092 02 00)						
OCT., 1974						
01...	1440	62	--	440	7.7	10.0
05388100 - CANOE CR NR DECORAH, IOWA (LAT 43 21 00 LONG 091 41 00)						
OCT., 1974						
01...	1650	23	--	470	7.5	10.0
05388300 - BEAR CR NR HIGHLANDVILLE, IOWA (LAT 43 27 00 LONG 091 37 00)						
OCT., 1974						
01...	1455	39	--	460	7.8	10.0
VILLAGE CREEK BASIN						
05388350 - VILLAGE CR AT VILLAGE CREEK, IOWA (LAT 43 19 00 LONG 091 14 00)						
OCT., 1974						
02...	0850	35	--	470	7.5	5.5
YELLOW RIVER BASIN						
05388800 - YELLOW R AT MYRON, IOWA (LAT 43 10 00 LONG 091 32 00)						
OCT., 1974						
02...	1050	12	--	580	7.7	9.0
05389000 - YELLOW RIVER AT ION, IOWA (LAT 43 07 00 LONG 091 16 00)						
OCT., 1974						
03...	0850	71	--	530	7.7	6.5
TURKEY RIVER BASIN						
05411550 - NB TURKEY R NR VERNON SPRINGS, IOWA (LAT 43 21 00 LONG 092 11 00)						
OCT., 1974						
01...	1115	3.4	--	380	7.7	11.5
05411560 - TURKEY R NR VERNON SPRINGS, IOWA (LAT 43 20 00 LONG 092 07 00)						
OCT., 1974						
01...	1210	7.3	--	370	7.8	10.0
MAQUOKETA RIVER BASIN						
05417540 - PLUM C NR EARLVILLE, IOWA (LAT 42 26 04 LONG 091 13 58)						
OCT., 1974						
01...	0850	28	--	520	7.8	8.0
05417560 - MAQUOKETA R NR HOPKINTON, IOWA (LAT 42 22 00 LONG 091 16 00)						
OCT., 1974						
01...	1015	137	--	510	7.7	12.0
05417580 - BUCK CR NR HOPKINTON, IOWA (LAT 42 21 00 LONG 091 17 00)						
OCT., 1974						
01...	1115	13	--	510	7.8	9.0
05418200 - WHITEWATER CR AT FILLMORE, IOWA (LAT 42 19 07 LONG 090 55 26)						
OCT., 1974						
01...	1305	36	--	570	7.9	13.0
05418300 - LYTLE C NR BERNARD, IOWA (LAT 42 17 57 LONG 090 46 56)						
OCT., 1974						
01...	1420	35	--	590	8.0	11.0
05418350 - LYTLE CR NR FULTON, IOWA (LAT 42 12 00 LONG 090 45 00)						
OCT., 1974						
01...	0745	73	--	540	8.0	10.0
05418400 - NF MAQUOKETA R NR FULTON, IOWA (LAT 42 11 00 LONG 090 44 00)						
OCT., 1974						
01...	1040	254	--	560	8.2	10.5
05418500 - MAQUOKETA RIVER NEAR MAQUOKETA, IOWA (LAT 42 05 05 LONG 090 38 04)						
NOV., 1974						
25...	1000	--	652	580	8.1	3.0
MAR., 1975						
18...	0915	--	858	510	8.0	3.0
JUNE						
23...	1000	--	1290	480	8.1	25.5
05418650 - DEEP CR NR CHARLOTTE, IOWA (LAT 42 00 00 LONG 090 24 00)						
OCT., 1974						
01...	1330	11	--	450	8.0	13.0
05418700 - DEEP CR NR PRESTON, IOWA (LAT 42 03 00 LONG 090 26 00)						
OCT., 1974						
01...	1245	19	--	570	8.1	13.0
ELK RIVER BASIN						
05420300 - ELK C NR ALMONT, IOWA (LAT 42 00 39 LONG 090 12 05)						
OCT., 1974						
01...	1430	26	--	615	8.4	14.5

DATE	TIME	DIS- CHARGE (CFS) (00060)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)
WAPSIPINICON RIVER BASIN						
05420540 - WAPSIPINICON R NR RICEVILLE, IOWA (LAT 43 20 00 LONG 092 34 00)						
OCT., 1974						
01...	0955	10	--	380	7.6	7.5
05420680 - WAPSIPINICON R NR TRIPOLI, IOWA (LAT 42 05 00 LONG 092 15 00)						
OCT., 1974						
01...	0855	34	--	360	8.1	9.0
05420720 - EF WAPSIPINICON R NR TRIPOLI, IOWA (LAT 42 51 00 LONG 092 14 00)						
OCT., 1974						
01...	0745	15	--	460	8.2	8.5
05420740 - WAPSIPINICON R AT TRIPOLI, IOWA (LAT 42 48 00 LONG 092 14 00)						
OCT., 1974						
01...	0940	35	--	380	8.3	9.0
05420800 - CRANE C NR DENVER, IOWA (LAT 42 38 32 LONG 092 15 21)						
OCT., 1974						
01...	1105	.57	--	440	8.0	10.0
05421800 - YANKEE RUN AT WHEATLAND, IOWA (LAT 41 49 34 LONG 090 50 25)						
OCT., 1974						
02...	0910	4.9	--	580	8.0	6.0
05421850 - MUD CR NR PLAINVIEW, IOWA (LAT 41 42 02 LONG 090 45 26)						
OCT., 1974						
02...	0830	9.4	--	380	8.0	6.0
05421900 - SILVER C NR DE WITT, IOWA (LAT 41 47 09 LONG 090 33 13)						
OCT., 1974						
02...	0700	15	--	520	7.9	7.0
05422000 - WAPSIPINICON RIVER NEAR DE WITT, IOWA (LAT 41 46 01 LONG 090 32 05)						
NOV., 1974						
25...	1100	--	562	460	8.7	4.0
MAR., 1975						
18...	1020	--	1750	290	8.0	.5
JUNE						
23...	1100	--	1900	420	8.1	26.7
05422100 - BROPHYS C NR LOW MOOR, IOWA (LAT 41 48 56 LONG 090 24 14)						
OCT., 1974						
01...	1555	18	--	440	8.2	13.5

IOWA RIVER BASIN

05448300 - WF IOWA R NR BRITT, IOWA (LAT 43 06 00 LONG 093 45 00)						
AUG., 1975						
04...	0905	2.9	--	650	--	22.0
05448400 - WESTMAIN DRAINAGE DITCH 1 & 2 NR BRITT, IOWA (LAT 43 06 00 LONG 093 47 00)						
AUG., 1975						
04...	0835	2.4	--	600	--	21.5
05451100 - SF IOWA R NR ALDEN, IOWA (LAT 42 28 00 LONG 093 27 00)						
AUG., 1975						
06...	1715	2.0	--	600	--	28.0
05451150 - TIPTON CR NR NEW PROVIDENCE, IOWA (LAT 42 20 00 LONG 093 12 00)						
AUG., 1975						
06...	1445	5.8	--	440	--	28.0
05451200 - SO FK IOWA RIVER NR NEW PROVIDENCE, IOWA (LAT 42 19 00 LONG 093 10 00)						
AUG., 1975						
06...	1200	12	--	350	--	26.5
05451250 - BEAVER CREEK NEAR ELDORA, IOWA (LAT 42 21 00 LONG 093 08 00)						
AUG., 1975						
06...	1400	2.6	--	500	--	26.0
05451300 - HONEY CR NR NEW PROVIDENCE, IOWA (LAT 42 16 00 LONG 093 11 00)						
AUG., 1975						
06...	1100	4.1	--	440	--	21.5
05451350 - HONEY CREEK AT BANGOR, IOWA (LAT 42 10 00 LONG 093 05 00)						
AUG., 1975						
06...	0820	11	--	360	--	17.0
05451400 - MINERVA CR AT CLEMONS, IOWA (LAT 42 08 00 LONG 093 09 00)						
AUG., 1975						
06...	1000	4.7	--	520	--	19.5
05451450 - MINERVA CREEK NEAR CLEMONS, IOWA (LAT 42 07 00 LONG 093 05 00)						
AUG., 1975						
06...	0915	17	--	350	--	18.0
05451600 - LINN C AT MARSHALLTOWN, IOWA (LAT 42 02 22 LONG 092 54 40)						
AUG., 1975						
05...	1330	16	--	610	8.2	24.0
05451650 - S TIMBER CR NR LE GRAND, IOWA (LAT 41 59 00 LONG 092 50 00)						
AUG., 1975						
05...	1425	11	--	510	8.1	26.0
05451800 - DEER CREEK AT TOLEDO, IOWA (LAT 41 59 00 LONG 092 35 00)						
AUG., 1975						
05...	1530	12	--	480	7.9	27.0
05451930 - SALT CR NR CLUTIER, IOWA (LAT 42 03 00 LONG 092 22 00)						
AUG., 1975						
05...	0820	11	--	500	8.0	20.0
05451960 - EB SALT CR NR ELBERON, IOWA (LAT 42 04 00 LONG 092 20 00)						
AUG., 1975						
05...	0855	8.8	--	510	7.9	22.0
05453100 - IOWA RIVER NEAR MARENGO, IOWA (LAT 41 48 41 LONG 092 03 42)						
NOV., 1974						
26...	1415	--	1030	550	8.5	2.0
MAR., 1975						
19...	1150	--	6800	265	7.9	.5
JUNE						
24...	1345	--	8750	265	7.4	22.6
05454200 - CLEAR CR NR OXFORD, IOWA (LAT 41 43 00 LONG 091 47 00)						
AUG., 1975						
07...	1425	.43	--	980	8.2	27.0

ANALYSES OF MISCELLANEOUS STATIONS

DATE	TIME	DIS- CHARGE (CFS) (00060)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)
IOWA RIVER BASIN--CONTINUED						
05454300 - CLEAR CREEK NR CORALVILLE, IOWA (LAT 41 40 36 LONG 091 35 55)						
NOV., 1974						
26...	0700	--	19	520	8.2	.0
MAR., 1975						
19...	0655	--	1100	165	8.1	.0
20...	1700	--	806	--	--	4.0
JUNE						
24...	0730	--	16	510	7.6	22.5
05455050 - OLD MANS CR NR PARNELL, IOWA (LAT 41 36 00 LONG 091 57 00)						
AUG., 1975						
07...	1220	.21	--	510	7.9	24.0
05455100 - OLD MANS CREEK NEAR IOWA CITY, IOWA (LAT 41 36 23 LONG 091 36 56)						
NOV., 1974						
25...	1630	--	36	450	8.6	2.0
MAR., 1975						
18...	1630	--	2420	145	8.6	.5
JUNE						
23...	1750	69	69	435	7.7	28.7
AUG.						
07...	1520	4.7	--	450	8.3	26.0
05455200 - NORTH ENGLISH RIVER NR GUERNSEY, IOWA (LAT 41 38 00 LONG 092 24 00)						
AUG., 1975						
07...	0820	2.7	--	460	8.2	17.0
05455250 - N ENGLISH R NR NORTH ENGLISH, IOWA (LAT 41 33 00 LONG 092 03 00)						
AUG., 1975						
07...	1130	7.4	--	360	8.1	24.0
05455260 - M ENGLISH R NR NORTH ENGLISH, IOWA (LAT 41 32 00 LONG 092 04 00)						
AUG., 1975						
07...	1105	.23	--	490	7.9	20.0
05455400 - S ENGLISH R NR KESWICK, IOWA (LAT 41 28 13 LONG 092 15 31)						
AUG., 1975						
07...	0915	.03	--	500	7.9	20.0
05455450 - S ENGLISH R NR KINROSS, IOWA (LAT 41 30 00 LONG 091 57 00)						
AUG., 1975						
07...	1020	.74	--	400	8.0	23.0
05455500 - ENGLISH RIVER AT KALONA, IOWA (LAT 41 27 59 LONG 091 42 56)						
NOV., 1974						
25...	1500	--	83	475	8.3	2.0
MAR., 1975						
18...	1535	--	3660	142	8.2	1.0
20...	1500	--	6200	--	--	4.0
JUNE						
23...	1620	--	216	370	7.7	27.2
05455700 - IOWA RIVER NEAR LONE TREE, IOWA (LAT 41 25 15 LONG 091 28 25)						
NOV., 1974						
25...	1430	--	1360	600	7.8	3.0
MAR., 1975						
18...	1450	--	8790	250	7.8	1.0
JUNE						
23...	1530	--	4390	435	7.7	25.5
05457300 - OTTER CR NR OTRANTO, IOWA (LAT 43 28 00 LONG 092 58 00)						
AUG., 1975						
04...	1500	10	--	420	--	24.0
05457350 - CEDAR R AT OTRANTO, IOWA (LAT 43 27 00 LONG 092 59 00)						
AUG., 1975						
04...	1435	102	--	550	--	26.5
05457400 - DEER CR NR MELTONVILLE, IOWA (LAT 43 26 00 LONG 093 05 00)						
AUG., 1975						
04...	1315	5.9	--	610	--	26.0
05457450 - DEER CR AT ST ANSGAR, IOWA (LAT 43 23 00 LONG 092 58 00)						
AUG., 1975						
04...	1310	10	--	560	--	26.0
05457600 - ROCK CR NR FLOYD, IOWA (LAT 43 13 00 LONG 092 49 00)						
AUG., 1975						
05...	1100	11	--	500	--	24.0
05457800 - L CEDAR R NR STACEYVILLE, IOWA (LAT 43 28 00 LONG 092 47 00)						
AUG., 1975						
04...	1600	7.8	--	400	--	26.0
05458550 - BEAVERDAM CR NR ROCKWELL, IOWA (LAT 42 58 00 LONG 093 15 00)						
AUG., 1975						
05...	1345	6.1	--	650	--	25.0
05458600 - BAILEY CR NR SHEFFIELD, IOWA (LAT 42 54 00 LONG 093 16 00)						
AUG., 1975						
05...	1250	6.7	--	650	--	25.5
05458750 - OTTER CR NR HANSELL, IOWA (LAT 42 46 00 LONG 093 07 00)						
AUG., 1975						
04...	1000	15	--	500	--	22.0
05458770 - SQUAW CR NR HANSELL, IOWA (LAT 42 44 00 LONG 093 07 00)						
AUG., 1975						
04...	1300	4.8	--	560	--	25.0
05458780 - HARTGRAVE CR NR HANSELL, IOWA (LAT 42 44 00 LONG 093 05 00)						
AUG., 1975						
04...	1125	30	--	320	--	23.0
05458800 - MAYNES CR NR HAMPTON, IOWA (LAT 42 41 00 LONG 093 12 00)						
AUG., 1975						
04...	1400	5.9	--	480	--	27.0

DATE	TIME	DIS- CHARGE (CFS) (00060)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)
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IOWA RIVER BASIN--CONTINUED

05458850 - MAYNES CR NR DUMONT, IOWA (LAT 42 42 00 LONG 092 58 00)						
AUG., 1975						
05...	1055	14	--	480	--	23.0
05459050 - LIME CR NR SCARVILLE, IOWA (LAT 43 27 00 LONG 093 35 00)						
AUG., 1975						
04...	1040	16	--	650	--	23.0
05459200 - WINNEBAGO R NR FOREST CITY, IOWA (LAT 43 18 00 LONG 093 39 00)						
AUG., 1975						
04...	1000	26	--	610	--	24.0
05459300 - WINNEBAGO R NR FERTILE, IOWA (LAT 43 15 00 LONG 093 26 00)						
AUG., 1975						
05...	1850	46	--	580	--	26.0
05459400 - BEAVER CR NR FERTILE, IOWA (LAT 43 16 00 LONG 093 27 00)						
AUG., 1975						
05...	1820	6.6	--	720	--	25.0
05460200 - WILLOW C AT MASON CITY, IOWA (LAT 43 09 46 LONG 093 14 20)						
AUG., 1975						
05...	1715	9.8	--	650	--	25.5
05462700 - BEAVER CR NR ACKLEY, IOWA (LAT 42 34 00 LONG 093 02 00)						
AUG., 1975						
04...	1550	3.4	--	400	--	27.0
05462800 - S BEAVER CR NR PARKERSBURG, IOWA (LAT 42 34 00 LONG 092 49 00)						
AUG., 1975						
05...	1220	13	--	300	--	23.5
05463100 - BLACK HAWK CR NR GRUNDY CENTER, IOWA (LAT 42 22 00 LONG 092 44 00)						
AUG., 1975						
05...	1630	8.1	--	480	--	28.0
05463200 - MOSQUITO CR AT REINBECK, IOWA (LAT 42 20 00 LONG 092 37 00)						
AUG., 1975						
05...	1840	5.8	--	300	--	24.0
05463300 - BLACK HAWK CR AT REINBECK, IOWA (LAT 42 20 00 LONG 092 36 00)						
AUG., 1975						
05...	1750	20	--	300	--	25.0
05463400 - N BLACK HAWK CR AT DIKE, IOWA (LAT 42 27 00 LONG 092 37 00)						
AUG., 1975						
05...	1505	3.5	--	360	--	27.5
05464050 - MILLERS CR NR LAPORTE CITY, IOWA (LAT 42 23 00 LONG 092 15 00)						
OCT., 1974						
21...	0945	12	--	610	8.0	4.5
AUG., 1975						
04...	1800	5.2	--	530	8.5	29.5
SEP.						
24...	1730	4.1	--	600	8.6	17.0
05464100 - WOLF C NR BEAMAN, IOWA (LAT 42 12 47 LONG 092 47 12)						
OCT., 1974						
21...	1100	13	--	640	7.6	9.0
AUG., 1975						
05...	1230	7.4	--	580	7.8	20.0
SEP.						
24...	1130	3.7	--	580	8.0	13.0
05464150 - TWELVE MILE CR NR BUCKINGHAM, IOWA (LAT 42 14 00 LONG 092 26 00)						
OCT., 1974						
21...	1150	21	--	590	7.8	8.0
AUG., 1975						
05...	1050	11	--	380	8.5	23.0
SEP.						
24...	1350	5.1	--	440	8.7	17.0
05464200 - WOLF C NR BUCKINGHAM, IOWA (LAT 42 15 33 LONG 092 21 42)						
OCT., 1974						
21...	1240	89	--	580	7.7	10.0
AUG., 1975						
05...	1000	45	--	470	8.0	26.0
SEP.						
24...	1420	22	--	470	8.5	15.0
05464250 - WOLF CR AT LAPORTE CITY, IOWA (LAT 42 19 00 LONG 092 12 00)						
OCT., 1974						
21...	1100	94	--	520	7.6	5.5
NOV.						
26...	1300	--	159	560	8.5	.0
MAR., 1975						
19...	1300	--	1200	330	8.1	.5
JUNE						
24...	1200	--	986	430	7.6	21.0
AUG.						
04...	1630	62	--	540	8.5	28.0
SEP.						
24...	1340	37	--	470	8.3	13.0
05464300 - SPRING CR NR LAPORTE CITY, IOWA (LAT 42 20 00 LONG 092 06 00)						
OCT., 1974						
21...	1205	12	--	440	7.8	6.0
AUG., 1975						
04...	1600	13	--	490	8.3	27.5
SEP.						
24...	1140	6.8	--	510	8.2	13.0
05464320 - E BLUE C NR CENTER POINT, IOWA (LAT 42 11 41 LONG 091 48 28)						
OCT., 1974						
21...	1645	6.0	--	440	7.9	.0
AUG., 1975						
04...	1500	3.3	--	440	8.1	26.5
SEP.						
24...	1250	1.6	--	430	8.5	17.0

ANALYSES OF MISCELLANEOUS STATIONS

DATE	TIME	DIS- CHARGE (CFS) (00060)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)
IOWA RIVER BASIN--CONTINUED						
05464350 - BEAR C AT SHELLSBURG, IOWA (LAT 42 05 39 LONG 091 53 34)						
OCT., 1974						
21...	1615	11	--	480	7.7	12.0
AUG., 1975						
05...	1215	2.9	--	470	8.1	27.0
SEP.						
24...	1150	1.8	--	430	8.5	16.5
05464400 - BEAR C NR PALO, IOWA (LAT 42 04 55 LONG 091 47 40)						
OCT., 1974						
21...	1115	16	--	400	8.1	7.0
AUG., 1975						
05...	1345	6.4	--	480	8.1	27.5
SEP.						
24...	1040	4.0	--	500	8.3	13.5
05464460 - OTTER C NR CEDAR RAPIDS, IOWA (LAT 42 03 57 LONG 091 44 27)						
OCT., 1974						
21...	1250	11	--	380	8.1	9.5
NOV.						
26...	1100	--	13	450	8.4	.0
MAR., 1975						
19...	1100	--	215	150	8.5	.0
JUNE						
24...	0940	--	119	300	7.7	20.3
AUG.						
04...	1345	7.0	--	450	8.0	28.5
SEP.						
24...	0930	4.0	--	420	8.3	12.0
05464550 - PRAIRIE C NR BLAIRSTOWN, IOWA (LAT 41 56 06 LONG 092 07 51)						
AUG., 1975						
06...	1010	3.8	--	520	8.0	20.0
05464600 - PRAIRIE C AT NORWAY, IOWA (LAT 41 53 35 LONG 091 55 43)						
AUG., 1975						
06...	0840	9.4	--	470	7.9	19.0
05464650 - PRAIRIE C AT CEDAR RAPIDS, IOWA (LAT 41 55 49 LONG 091 40 34)						
AUG., 1975						
04...	1130	25	--	490	7.9	25.5
05464700 - INDIAN C AT CEDAR RAPIDS, IOWA (LAT 41 59 42 LONG 091 37 03)						
AUG., 1975						
04...	1240	6.3	--	490	8.2	24.5
05464750 - BIG C AT BERTRAM, IOWA (LAT 41 57 23 LONG 091 31 35)						
AUG., 1975						
04...	1030	15	--	530	8.0	24.0
05464800 - ROCK C AT ROCHESTER, IOWA (LAT 41 40 40 LONG 091 09 52)						
AUG., 1975						
06...	1445	4.8	--	520	8.7	26.0
05464850 - SUGAR C NR BENNETT, IOWA (LAT 41 41 56 LONG 091 02 43)						
AUG., 1975						
06...	1345	2.5	--	500	8.6	28.5
05464900 - MUD C NR WILTON, IOWA (LAT 41 34 45 LONG 091 02 17)						
AUG., 1975						
06...	1300	6.9	--	625	8.3	24.0
05464920 - SUGAR C NR MOSCOW, IOWA (LAT 41 34 00 LONG 091 04 09)						
NOV., 1974						
25...	1200	--	33	620	8.2	3.0
MAR., 1975						
18...	1200	--	1590	170	8.5	.5
JUNE						
23...	1230	--	55	520	8.2	27.9
AUG.						
06...	1215	14	--	530	8.5	25.5
05464940 - EB WAPSINOC C AT WEST LIBERTY, IOWA (LAT 41 33 26 LONG 091 15 19)						
AUG., 1975						
06...	1100	2.1	--	1410	7.7	22.0
05464950 - WB WAPSINOC C AT WEST LIBERTY, IOWA (LAT 41 33 48 LONG 091 16 13)						
AUG., 1975						
06...	1130	.32	--	740	8.1	23.0
05465000 - CEDAR RIVER NEAR CONESVILLE, IOWA (LAT 41 24 36 LONG 091 17 06)						
NOV., 1974						
25...	1400	--	2500	630	8.4	3.0
MAR., 1975						
18...	1410	--	6190	290	7.7	2.0
JUNE						
23...	1445	--	10400	505	7.7	27.0
05465200 - LONG CR NR AINSWORTH, IOWA (LAT 41 16 00 LONG 091 30 00)						
AUG., 1975						
06...	0930	.39	--	3100	8.0	20.0
05465300 - LONG CR NR WAPELLO, IOWA (LAT 41 12 00 LONG 091 17 00)						
AUG., 1975						
06...	0830	1.1	--	750	8.6	20.5
05465600 - OTTER C NR WAPELLO, IOWA (LAT 41 07 20 LONG 091 09 00)						
AUG., 1975						
06...	0730	5.2	--	500	8.5	16.5
FLINT RIVER BASIN						
05469700 - FLINT CR NR BURLINGTON, IOWA (LAT 40 52 00 LONG 091 12 03)						
SEP., 1975						
29...	0850	7.4	--	550	8.2	12.5

DATE	TIME	DIS- CHARGE (CFS) (00060)	DIS- CHARGE (CFS) (00061)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00095)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)
SKUNK RIVER BASIN							
05469800 - S SKUNK R NR ELLSWORTH, IOWA (LAT 42 19 00 LONG 093 35 00)							
SEP., 1975	29...	1150	.87	--	600	8.6	16.0
05469850 - MUD LAKE DRAINAGE DITCH 71 AT JEWELL, IOWA (LAT 42 19 05 LONG 093 38 05)							
SEP., 1975	29...	1220	.62	--	1050	8.1	18.0
05469950 - S SKUNK R AT RANDALL, IOWA (LAT 42 14 00 LONG 093 35 00)							
SEP., 1975	29...	1115	3.3	--	850	8.4	16.0
05470200 - SQUAW CR NR STANHOPE, IOWA (LAT 42 12 34 LONG 093 47 07)							
SEP., 1975	29...	1320	.78	--	640	8.3	16.0
05471050 - S SKUNK R AT COLFAX, IOWA (LAT 41 40 55 LONG 093 14 47)							
SEP., 1975	29...	1600	70	--	580	8.7	18.5
05471100 - EB INDIAN CR NR NEVADA, IOWA (LAT 41 02 00 LONG 093 22 00)							
SEP., 1975	29...	1425	1.6	--	520	8.4	16.0
05471150 - WB INDIAN CR NR IOWA CENTER, IOWA (LAT 41 56 00 LONG 093 26 00)							
SEP., 1975	29...	1345	2.4	--	1280	8.4	16.0
05471180 - INDIAN CR NR IOWA CENTER, IOWA (LAT 41 55 00 LONG 093 25 00)							
SEP., 1975	29...	1230	8.8	--	780	8.5	18.0
05471350 - CLEAR CR NR MINGO, IOWA (LAT 41 47 00 LONG 093 16 00)							
SEP., 1975	29...	1150	6.4	--	500	8.4	16.0
05471400 - ELK CR NR TAINTOR, IOWA (LAT 41 29 00 LONG 092 51 00)							
SEP., 1975	30...	1220	4.6	--	330	8.2	14.5
05472100 - N SKUNK R NR NEWTON, IOWA (LAT 41 47 00 LONG 093 02 00)							
SEP., 1975	29...	1050	16	--	480	7.9	14.0
05472300 - N SKUNK R NR SEARSBORO, IOWA (LAT 41 32 00 LONG 092 42 00)							
SEP., 1975	30...	1330	34	--	540	8.2	14.0
05472400 - MIDDLE CR NR ROSE HILL, IOWA (LAT 41 20 42 LONG 092 28 25)							
SEP., 1975	30...	1035	4.0	--	540	7.8	12.5
05472450 - CEDAR CR NR SIGOURNEY, IOWA (LAT 41 18 42 LONG 092 13 33)							
SEP., 1975	30...	0905	12	--	540	8.1	12.5
05473000 - SKUNK RIVER AT COPPOCK, IOWA (LAT 41 10 00 LONG 091 43 00)							
SEP., 1975	30...	1505	304	--	550	8.5	17.0
05473020 - EF CROOKED CR NR WINFIELD, IOWA (LAT 41 09 00 LONG 091 26 00)							
SEP., 1975	29...	0930	3.5	--	560	7.9	13.5
05473050 - CROOKED CR NR COPPOCK, IOWA (LAT 41 12 00 LONG 091 42 00)							
SEP., 1975	30...	1655	4.9	--	700	8.4	16.0
05473100 - WALNUT CR AT GERMANVILLE, IOWA (LAT 41 06 00 LONG 091 46 00)							
SEP., 1975	29...	1400	1.2	--	460	8.2	16.0
05473200 - CEDAR CR NR HIGHLAND CENTER, IOWA (LAT 41 05 30 LONG 092 21 58)							
SEP., 1975	30...	0940	5.0	--	540	8.2	14.0
05473250 - COMPETINE CR BELOW FORKS NR BATAVIA, IOWA (LAT 41 02 00 LONG 092 07 00)							
SEP., 1975	30...	1200	4.2	--	570	8.4	15.0
05473300 - CEDAR CREEK NR BATAVIA, IOWA (LAT 41 01 00 LONG 092 07 00)							
SEP., 1975	30...	1130	4.9	--	540	8.5	14.0
05473350 - L CEDAR CR NR SALEM, IOWA (LAT 40 51 00 LONG 091 41 00)							
SEP., 1975	29...	1150	.10	--	460	7.9	14.0
05473400 - CEDAR CR NR OAKLAND MILLS, IOWA (LAT 40 55 00 LONG 091 40 00)							
SEP., 1975	29...	1250	11	--	480	8.6	15.0
05473450 - BIG CR AT MT PLEASANT, IOWA (LAT 41 00 00 LONG 091 32 00)							
SEP., 1975	29...	1050	2.7	--	510	8.1	13.5
DEVILS CREEK BASIN							
05474200 - SUGAR CR NR FRANKLIN, IOWA (LAT 40 39 54 LONG 091 28 39)							
SEP., 1975	30...	1015	.76	--	560	8.1	14.0
05474300 - SUGAR CR NR VIELE, IOWA (LAT 40 36 39 LONG 091 26 24)							
SEP., 1975	30...	1110	2.4	--	660	8.1	15.5

ANALYSES OF MISCELLANEOUS STATIONS

DATE	TIME	DIS- CHARGE (CFS) (00060)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)
DES MOINES RIVER BASIN						
05476600 - SILVER CR NR EMMETTSBURG, IOWA (LAT 43 06 00 LONG 094 43 00)						
AUG., 1975						
12...	1430	1.1	--	650	--	30.0
05476650 - CYLINDER CR NR RODMAN, IOWA (LAT 43 02 00 LONG 094 34 00)						
AUG., 1975						
12...	1535	2.3	--	950	--	28.0
05477700 - EF DES MOINES R NR SWEA CITY, IOWA (LAT 43 19 00 LONG 094 25 00)						
AUG., 1975						
12...	1125	.88	--	600	--	25.5
05478000 - EAST FORK DES MOINES RIVER NEAR BURT, IOWA (LAT 43 12 38 LONG 094 10 35)						
AUG., 1975						
13...	1210	--	5.7	570	--	23.5
05478100 - N BUFFALO CR NR BUFFALO CENTER, IOWA (LAT 43 19 00 LONG 093 58 00)						
AUG., 1975						
13...	1555	.89	--	830	--	29.5
05478150 - BLACK CAT CR NR LONE ROCK, IOWA (LAT 43 12 00 LONG 094 20 00)						
AUG., 1975						
12...	1020	.75	--	900	--	23.0
05478200 - BLACK CAT CR NR ALGONA, IOWA (LAT 43 08 00 LONG 094 14 00)						
AUG., 1975						
13...	1055	.45	--	600	--	23.0
05478350 - LOTTS CR NR WEST BEND, IOWA (LAT 43 58 00 LONG 094 23 00)						
AUG., 1975						
12...	0930	2.8	--	1000	--	23.5
05478400 - LOTTS CR AT LIVERMORE, IOWA (LAT 42 52 00 LONG 094 11 00)						
AUG., 1975						
13...	0930	4.4	--	870	--	21.0
05480660 - BOONE R NR KANAWHA, IOWA (LAT 42 55 00 LONG 093 53 00)						
AUG., 1975						
14...	1230	1.6	--	530	--	22.5
05480700 - BOONE R NR RENWICK, IOWA (LAT 42 53 00 LONG 093 55 00)						
AUG., 1975						
14...	1145	2.5	--	580	--	22.0
05480720 - PRAIRIE CR NR LUVERNE, IOWA (LAT 42 57 00 LONG 094 05 00)						
AUG., 1975						
14...	0950	2.3	--	790	--	19.0
05480760 - PRAIRIE CR NR RENWICK, IOWA (LAT 42 52 00 LONG 093 59 00)						
AUG., 1975						
14...	1050	2.5	--	670	--	23.0
05480800 - OTTER CR NR GOLDFIELD, IOWA (LAT 42 47 00 LONG 093 53 00)						
AUG., 1975						
14...	1415	.74	--	750	--	28.0
05480820 - BOONE R NR GOLDFIELD, IOWA (LAT 42 43 00 LONG 093 57 00)						
AUG., 1975						
14...	1510	9.4	--	500	--	25.0
05480860 - EAGLE CR NR EAGLE GROVE, IOWA (LAT 42 42 00 LONG 093 49 00)						
AUG., 1975						
14...	1605	.93	--	900	--	26.5
05481700 - BEAVER CR NR BEAVER, IOWA (LAT 42 01 55 LONG 094 09 01)						
SEP., 1975						
30...	1100	.61	--	680	8.4	11.5
05481800 - BEAVER CR NR BERKLEY, IOWA (LAT 41 55 00 LONG 094 06 00)						
SEP., 1975						
30...	1020	2.0	--	800	8.1	13.0
05481900 - BEAVER CR AT GRANGER, IOWA (LAT 41 45 39 LONG 093 51 01)						
SEP., 1975						
30...	0920	2.1	--	580	8.5	12.0
05485600 - FOURMILE CR NR ANKENY, IOWA (LAT 41 43 54 LONG 093 34 21)						
SEP., 1975						
29...	1030	.17	--	650	8.2	14.0
05485850 - NB NORTH R AT WINTERSET, IOWA (LAT 41 26 00 LONG 093 56 00)						
AUG., 1975						
12...	1130	2.6	--	450	8.2	27.0
05485900 - NORTH R NR WINTERSET, IOWA (LAT 41 26 00 LONG 093 55 00)						
AUG., 1975						
12...	1030	7.0	--	360	8.3	24.0
05486100 - MIDDLE R NR CASEY, IOWA (LAT 41 30 00 LONG 094 29 00)						
AUG., 1975						
12...	1450	4.7	--	490	8.5	31.0
05486150 - MIDDLE R AT MIDDLE RIVER, IOWA (LAT 41 20 00 LONG 094 14 00)						
AUG., 1975						
12...	1325	12	--	420	8.5	29.0
05486300 - CLANTON CR AT EAST PERU, IOWA (LAT 41 14 00 LONG 093 55 00)						
AUG., 1975						
12...	1230	.46	--	430	8.3	25.0
05486350 - CLANTON CR NR MARTENSDALE, IOWA (LAT 41 21 00 LONG 093 45 00)						
AUG., 1975						
13...	1420	2.9	--	500	8.2	26.0
05486400 - MIDDLE R AT MARTENSDALE, IOWA (LAT 41 22 00 LONG 093 44 00)						
AUG., 1975						
13...	1340	23	--	520	8.4	27.0
05486700 - SOUTH R NR NEW VIRGINIA, IOWA (LAT 41 13 00 LONG 093 44 00)						
AUG., 1975						
13...	0830	.06	--	530	7.9	21.0
05486900 - SQUAW CR NR JAMISON, IOWA (LAT 41 08 00 LONG 093 44 00)						
AUG., 1975						
13...	0730	.12	--	510	8.1	22.0
05487100 - SQUAW CR NR INDIANOLA, IOWA (LAT 41 18 00 LONG 093 36 00)						
AUG., 1975						
13...	1205	2.1	--	490	8.4	26.5
05487200 - SOUTH R NR INDIANOLA, IOWA (LAT 41 20 00 LONG 093 35 00)						
AUG., 1975						
13...	1300	5.6	--	480	8.2	25.5

DATE	TIME	DIS- CHARGE (CFS) (00060)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)
DES MOINES RIVER BASIN--CONTINUED						
05487400 - OTTER CR NR NORWOOD, IOWA (LAT 41 09 00 LONG 093 32 00)						
AUG., 1975	13...	0930	.00	--	500	8.0 23.0
05487450 - OTTER CR NR MILO, IOWA (LAT 41 17 02 LONG 093 29 09)						
AUG., 1975	13...	1140	1.4	--	430	8.2 25.5
05487700 - WHITE BREAST CR NR WOODBURN, IOWA (LAT 40 58 36 LONG 093 35 14)						
AUG., 1975	12...	1800	1.3	--	650	8.3 28.0
05487800 - WHITE BREAST CREEK AT LUCAS, IOWA (LAT 41 01 00 LONG 093 28 00)						
AUG., 1975	12...	1700	.13	--	590	8.3 26.0
05487900 - WHITE BREAST CREEK NEAR NEWBORN, IOWA (LAT 41 10 00 LONG 093 21 00)						
AUG., 1975	13...	1030	.47	--	510	7.9 24.0
05488200 - ENGLISH CR NR KNOXVILLE, IOWA (LAT 41 16 00 LONG 093 05 00)						
AUG., 1975	12...	1030	.40	--	400	8.3 23.0
05488300 - ENGLISH R NR HARVEY, IOWA (LAT 41 20 00 LONG 092 57 00)						
AUG., 1975	12...	1000	2.5	--	1000	8.2 23.0
05488550 - CEDAR CR AT MELROSE, IOWA (LAT 40 58 00 LONG 093 03 00)						
AUG., 1975	12...	1425	.00	--	720	8.3 31.5
05488600 - CEDAR CR NR ALBIA, IOWA (LAT 41 01 00 LONG 092 53 00)						
AUG., 1975	12...	1345	.25	--	590	8.3 31.5
05488700 - CEDAR CR NR LOVILIA, IOWA (LAT 41 07 00 LONG 092 56 00)						
AUG., 1975	12...	1230	1.1	--	550	8.1 26.0
05488800 - N CEDAR CR NR LOVILIA, IOWA (LAT 41 09 00 LONG 093 03 00)						
AUG., 1975	12...	1200	.04	--	510	8.2 25.5
05488900 - N CEDAR CR NR MARVSVILLE, IOWA (LAT 41 11 00 LONG 093 01 00)						
AUG., 1975	12...	1100	.82	--	610	8.0 24.5
05489300 - M AVERY CR NR CHILLICOTHE, IOWA (LAT 41 06 00 LONG 092 33 00)						
SEP., 1975	30...	0900	2.7	--	680	8.1 15.0
05489400 - S AVERY CR AT CHILLICOTHE, IOWA (LAT 41 05 00 LONG 092 32 00)						
SEP., 1975	30...	0830	4.3	--	320	8.1 14.0
05490100 - SOAP CR NR FLORIS, IOWA (LAT 40 53 37 LONG 092 15 53)						
SEP., 1975	29...	1610	3.2	--	650	7.9 16.0
05490200 - LICK CR AT KILBOURN, IOWA (LAT 40 48 00 LONG 091 58 00)						
SEP., 1975	29...	1330	.74	--	580	8.4 16.5
05490300 - CHEQUEST CR NR TROY, IOWA (LAT 40 47 17 LONG 092 11 01)						
SEP., 1975	29...	1530	.52	--	860	8.1 17.0
05490400 - CHEQUEST CR NR PITTSBURG, IOWA (LAT 40 45 41 LONG 092 00 57)						
SEP., 1975	29...	1200	1.2	--	690	8.5 16.0
05490700 - SUGAR CR NR CHARLESTON, IOWA (LAT 40 33 53 LONG 091 23 43)						
SEP., 1975	30...	1210	.06	--	410	8.1 14.0
05491000 - SUGAR CREEK NEAR KEOKUK, IOWA (LAT 40 26 33 LONG 091 28 24)						
SEP., 1975	30...	1300	.25	--	460	8.3 15.5

FOX RIVER BASIN

05494500 - FOX RIVER AT CANTRIL, IOWA (LAT 40 39 35 LONG 092 03 40)
 SEP., 1975
 29... 1500 4.6 -- 550 8.4 17.0

MONONA-HARRISON DITCH BASIN

06601500 - BIG WHISKEY SLOUGH NR KINGSLEY, IOWA (LAT 42.40 00 LONG 095 52 00)
 OCT., 1974
 02... 0955 2.3 -- 800 8.4 3.5
 06601600 - WF L SIOUX R NR FIELDING, IOWA (LAT 42 39 00 LONG 095 52 00)
 OCT., 1974
 02... 0915 6.2 -- 700 8.3 3.0
 06601700 - WF L SIOUX R NR KINGLEY, IOWA (LAT 42 35 00 LONG 095 00 00)
 OCT., 1974
 02... 0825 11 -- 700 8.2 1.0
 06601800 - MUD CR AT MOVILLE, IOWA (LAT 42 29 28 LONG 096 05 24)
 OCT., 1974
 02... 0840 .65 -- 620 8.0 2.5
 06601900 - WF L SIOUX R AT MOVILLE, IOWA (LAT 42 28 30 LONG 096 04 39)
 OCT., 1974
 02... 0900 14 -- 650 8.1 3.0
 06602200 - ELLIOT CR NR BRONSON, IOWA (LAT 42 23 53 LONG 096 14 05)
 OCT., 1974
 02... 0805 .62 -- 580 8.2 2.0
 06602250 - BIG WHISKEY CR NR BRONSON, IOWA (LAT 42 24 04 LONG 096 14 29)
 OCT., 1974
 02... 0740 .96 -- 670 8.2 4.0
 06602300 - WOLF CR NR HOLLY SPRINGS, IOWA (LAT 42 18 06 LONG 096 01 10)
 OCT., 1974
 02... 1015 6.0 -- 600 8.1 3.5

ANALYSES OF MISCELLANEOUS STATIONS

DATE	TIME	DIS- CHARGE (CFS) (00060)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)
LITTLE SIOUX RIVER BASIN						
06603600 - L SIOUX R NR MONTGOMERY, IOWA (LAT 43 26 00 LONG 095 15 00)						
OCT., 1974	01...	1709	.26	--	900	12.0
06603800 - WF L SIOUX R NR MONTGOMERY, IOWA (LAT 43 25 00 LONG 095 16 00)						
OCT., 1974	01...	1637	.39	--	1300	15.5
06603900 - L SIOUX R NR MILFORD, IOWA (LAT 43 19 00 LONG 095 11 00)						
OCT., 1974	02...	1426	.90	--	750	11.5
06604500 - OCHEYEDAN R NR BIGELOW, MINN (LAT 43 27 00 LONG 095 37 00)						
OCT., 1974	01...	1425	.04	--	750	14.0
06604600 - OCHEYEDAN R NR MAY CITY, IOWA (LAT 43 17 00 LONG 095 28 00)						
OCT., 1974	01...	1305	1.5	--	840	9.0
06604700 - OCHEYEDAN R NR MAY CITY, IOWA (LAT 43 16 00 LONG 095 27 00)						
OCT., 1974	01...	1200	8.6	--	800	11.0
06604800 - STONEY CR NR FOSTORIA, IOWA (LAT 43 14 00 LONG 095 20 00)						
OCT., 1974	02...	1440	1.5	--	680	13.5
06604900 - STONEY CR NR EVERLY, IOWA (LAT 43 09 22 LONG 095 14 58)						
OCT., 1974	02...	1530	2.1	--	580	13.5
06605000 - OCHEYEDAN R NR SPENCER, IOWA (LAT 43 07 44 LONG 095 12 37)						
OCT., 1974	02...	1610	12	--	620	13.5
06605100 - L SIOUX R AT SPENCER IOWA (LAT 43 08 13 LONG 095 08 39)						
OCT., 1974	02...	1130	24	--	600	7.0
06505200 - BIG MUDDY CR NR LANGDON, IOWA (LAT 43 11 49 LONG 095 04 11)						
OCT., 1974	02...	1240	1.1	--	680	8.0
06605300 - BIG MUDDY CR NR SPENCER, IOWA (LAT 43 08 28 LONG 095 05 14)						
OCT., 1974	02...	1215	2.4	--	850	7.0
06605500 - LOST ISLAND OUTLET NR DICKENS, IOWA (LAT 43 07 07 LONG 095 01 58)						
OCT., 1974	02...	1345	2.7	--	500	10.0
06605800 - WILLOW CR NR GREENVILLE, IOWA (LAT 42 59 00 LONG 095 09 00)						
OCT., 1974	02...	1020	1.0	--	660	4.0
06605900 - WATERMAN CR NR HARTLEY, IOWA (LAT 43 05 00 LONG 095 27 00)						
OCT., 1974	03...	0835	.91	--	660	5.0
06606000 - WATERMAN CR NR SUTHERLAND, IOWA (LAT 42 57 00 LONG 095 25 00)						
OCT., 1974	03...	1045	4.4	--	650	7.5
06606100 - L SIOUX R NR SUTHERLAND, IOWA (LAT 42 56 00 LONG 095 25 00)						
OCT., 1974	03...	1010	44	--	600	8.0
06606300 - MILL CR NR CHEROKEE, IOWA (LAT 42 47 00 LONG 095 33 00)						
OCT., 1974	03...	1130	.32	--	480	.0
06606400 - L SIOUX R AT CHEROKEE, IOWA (LAT 42 45 00 LONG 095 32 00)						
OCT., 1974	03...	1255	75	--	600	10.0
06606500 - PIERSON CR NR CORRECTIONVILLE, IOWA (LAT 42 29 00 LONG 095 48 00)						
OCT., 1974	02...	1100	3.5	--	620	8.0
06606800 - MAPLE R NR AURELIA, IOWA (LAT 42 43 00 LONG 095 29 00)						
OCT., 1974	03...	1335	1.4	--	0	10.0
06606900 - MAPLE R NR IDA GROVE, IOWA (LAT 42 21 55 LONG 095 27 27)						
OCT., 1974	01...	1510	30	--	650	11.5
06607100 - ODEBOLT CR AT IDA GROVE, IOWA (LAT 42 20 49 LONG 095 28 03)						
OCT., 1974	01...	1400	7.6	--	700	13.0
06607400 - MAPLE R NR TURIN, IOWA (LAT 42 01 00 LONG 095 58 00)						
OCT., 1974	01...	1140	90	--	670	8.1
SOLDIER RIVER BASIN						
06608300 - SOLDIER R NR RICKETTS, IOWA (LAT 42 12 00 LONG 095 35 00)						
OCT., 1974	01...	1245	15	--	680	9.0
06608350 - SOLDIER R NR UTE, IOWA (LAT 42 03 00 LONG 095 43 00)						
OCT., 1974	01...	1250	25	--	640	8.5
06608400 - E SOLDIER R NR UTE, IOWA (LAT 42 03 00 LONG 095 42 00)						
OCT., 1974	01...	1320	12	--	670	7.5
ALLEN DITCH BASIN						
06609220 - ALLEN CREEK NR LOVELAND, IOWA (LAT 41 29 00 LONG 095 55 00)						
OCT., 1974	03...	1345	2.5	--	750	7.6

DATE	TIME	DIS- CHARGE (CFS) (00060)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)
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BOYER RIVER BASIN

06609260 - BOYER R NR EARLY, IOWA (LAT 42 28 00 LONG 095 11 00)
OCT., 1974
01... 1630 4.2 -- 650 8.7 11.5
06609300 - E BOYER R AT VAIL, IOWA (LAT 42 04 00 LONG 095 12 00)
OCT., 1974
01... 1200 11 -- 600 8.7 7.0
06609350 - E BOYER R AT DENISON, IOWA (LAT 42 01 00 LONG 095 22 00)
OCT., 1974
01... 1035 24 -- 620 8.4 6.0
06609400 - BOYER R NR DENISON, IOWA (LAT 42 00 00 LONG 095 23 00)
OCT., 1974
01... 0940 66 -- 920 7.8 6.0
06609550 - BOYER R NR MISSOURI VALLEY, IOWA (LAT 41 31 00 LONG 095 54 00)
OCT., 1974
03... 1125 123 -- 750 7.8 10.5
06609580 - WILLOW CR NR WOODBINE, IOWA (LAT 41 48 00 LONG 095 45 00)
OCT., 1974
02... 1055 7.5 -- 630 8.4 10.5
06609670 - BOYER R NR LOVELAND, IOWA (LAT 41 27 58 LONG 095 54 37)
OCT., 1974
03... 1300 131 -- 800 7.9 13.0

KEG CREEK BASIN

06805700 - KEG CR AT MINDEN, IOWA (LAT 41 27 57 LONG 095 32 15)
SEP., 1975
26... 0845 9.7 -- 600 8.0 19.5
06805800 - KEG CR NR DUMERIES, IOWA (LAT 41 11 20 LONG 095 40 59)
SEP., 1975
26... 1300 21 -- 620 7.8 14.0
06805900 - KEG CR NR GLENWOOD, IOWA (LAT 41 00 56 LONG 095 45 59)
SEP., 1975
26... 1245 34 -- 660 7.9 13.0

NISHNABOTNA RIVER BASIN

06807260 - W NISHNABOTNA R NR MANNING, IOWA (LAT 41 53 00 LONG 095 05 00)
SEP., 1975
24... 1250 5.7 -- 440 8.1 16.0
06807280 - WF W NISHNABOTNA R NR MANILLA, IOWA (LAT 41 52 00 LONG 095 15 00)
SEP., 1975
24... 1150 10 -- 530 8.1 12.0
06807300 - WF W NISHNABOTNA R AT HARLAN, IOWA (LAT 41 40 00 LONG 095 18 00)
SEP., 1975
24... 1045 23 -- 540 8.3 10.5
06807320 - W NISHNABOTNA R AT HARLAN, IOWA (LAT 41 38 00 LONG 095 18 00)
SEP., 1975
24... 0855 49 -- 530 8.3 9.5
06807340 - W NISHNABOTNA R NR RED LINE, IOWA (LAT 41 28 00 LONG 095 21 00)
SEP., 1975
26... 1015 65 -- 600 8.1 11.0
06807360 - EB W NISHNABOTNA R NR RED LINE, IOWA (LAT 41 44 00 LONG 095 06 00)
SEP., 1975
24... 1340 9.7 -- 460 8.0 14.5
06807380 - EB W NISHNABOTNA R NR JACKSONVILLE, IOWA (LAT 41 39 00 LONG 095 14 00)
SEP., 1975
24... 0940 22 -- 500 8.3 9.5
06807400 - EB W NISHNABOTNA R AT AVOCA, IOWA (LAT 41 28 35 LONG 095 19 47)
SEP., 1975
26... 1055 41 -- 560 8.1 10.5
06807420 - GRAYBILL CR NR MACEDONIA, IOWA (LAT 41 11 00 LONG 095 23 00)
SEP., 1975
26... 1135 6.7 -- 570 8.2 13.0
06807440 - FARM CR NR MACEDONIA, IOWA (LAT 41 10 00 LONG 095 23 00)
SEP., 1975
26... 1055 16 -- 620 8.1 11.0
06807480 - INDIAN CR NR HASTINGS, IOWA (LAT 41 01 51 LONG 095 30 04)
SEP., 1975
25... 1445 7.6 -- 510 7.8 13.0
06807500 - W NISHNABOTNA R AT WHITE CLOUD, IOWA (LAT 40 59 00 LONG 095 32 00)
SEP., 1975
26... 1015 204 -- 710 8.2 11.0
06807600 - SILVER CR NR AVOCA, IOWA (LAT 41 25 07 LONG 095 26 53)
SEP., 1975
26... 0935 12 -- 570 8.1 10.0
06807650 - SILVER CR NR TREYNOR, IOWA (LAT 41 10 42 LONG 095 34 34)
SEP., 1975
26... 1235 28 -- 660 8.1 15.0
06807800 - M SILVER CR NR TREYNOR, IOWA (LAT 41 10 41 LONG 095 36 00)
SEP., 1975
26... 1400 17 -- 650 8.2 13.0
06807900 - SILVER CR NR MALVERN, IOWA (LAT 40 56 56 LONG 095 34 20)
SEP., 1975
26... 0930 61 -- 660 8.1 10.5
06808600 - WALNUT CR NR GRISWOLD, IOWA (LAT 41 17 00 LONG 095 13 00)
SEP., 1975
26... 1150 7.6 -- 500 8.2 13.0
06808700 - WALNUT CR NR HAWTHORNE, IOWA (LAT 40 58 00 LONG 095 22 00)
SEP., 1975
25... 1225 15 -- 510 7.5 14.0
06808800 - WALNUT CR NR RANDOLPH, IOWA (LAT 40 47 39 LONG 095 33 25)
SEP., 1975
25... 1030 18 -- 500 7.9 12.0

ANALYSES OF MISCELLANEOUS STATIONS

DATE	TIME	DIS- CHARGE (CFS) (00060)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)
NISHNABOTNA RIVER BASIN--CONTINUED						
06808850	- E NISHNABOTNA R NR AUDUBON, IOWA (LAT 41 47 00 LONG 094 51 00)					
SEP., 1975						
24...	1440	6.4	--	380	8.2	16.0
06808900	- E NISHNABOTNA R AT EXIRA, IOWA (LAT 41 35 00 LONG 094 54 00)					
SEP., 1975						
24...	1550	22	--	480	8.2	18.0
06809050	- DAVIDS CR AT EXIRA, IOWA (LAT 41 35 00 LONG 094 53 00)					
SEP., 1975						
24...	1620	10	--	420	8.3	19.5
06809100	- TROUBLESOME CR NR WIOTA, IOWA (LAT 41 30 00 LONG 094 51 00)					
SEP., 1975						
25...	0755	5.1	--	400	8.1	8.5
06809150	- TROUBLESOME CR NR ATLANTIC, IOWA (LAT 41 25 00 LONG 094 58 00)					
SEP., 1975						
25...	0905	12	--	370	8.0	8.5
06809200	- E NISHNABOTNA R AT ATLANTIC, IOWA (LAT 41 24 00 LONG 095 02 00)					
SEP., 1975						
25...	1330	56	--	570	8.2	16.0
06809250	- TURKEY CR EAST OF ATLANTIC, IOWA (LAT 41 23 00 LONG 094 55 00)					
SEP., 1975						
25...	0955	2.0	--	340	7.9	12.0
06809300	- TURKEY CR NR ATLANTIC, IOWA (LAT 41 19 00 LONG 095 04 00)					
SEP., 1975						
25...	1130	5.0	--	350	8.0	13.0
06809330	- E NISHNABOTNA R NR LEWIS, IOWA (LAT 41 19 00 LONG 095 05 00)					
SEP., 1975						
25...	1240	63	--	450	7.8	15.5
06809350	- INDIAN CR NR ELKHORN, IOWA (LAT 41 33 00 LONG 095 08 00)					
SEP., 1975						
24...	1720	9.7	--	430	8.3	17.5
06809400	- INDIAN CR NR LEWIS, IOWA (LAT 41 18 00 LONG 095 08 00)					
SEP., 1975						
25...	1230	24	--	560	8.2	14.0
06809450	- E NISHNABOTNA R NR GRISWOLD, IOWA (LAT 41 17 00 LONG 095 08 00)					
SEP., 1975						
25...	1135	84	--	560	8.3	12.0
06809800	- E NISHNABOTNA R NR FARRAGUT, IOWA (LAT 40 45 00 LONG 095 29 00)					
SEP., 1975						
25...	1130	123	--	480	8.0	13.0
TARKIO RIVER BASIN						
06811860	- TARKIO R NR COBURG, IOWA (LAT 40 54 00 LONG 095 08 00)					
SEP., 1975						
24...	0900	1.1	--	510	8.2	12.0
06811880	- E TARKIO CR NR YORKTOWN, IOWA (LAT 40 43 00 LONG 095 12 00)					
SEP., 1975						
24...	1010	.40	--	500	7.9	14.0
06811900	- TARKIO R NR YORKTOWN, IOWA (LAT 40 43 00 LONG 095 13 00)					
SEP., 1975						
24...	1100	2.4	--	500	8.0	13.5
06812000	- TARKIO R AT BLANCHARD IOWA (LAT 40 36 00 LONG 095 14 00)					
SEP., 1975						
24...	1130	4.3	--	440	8.1	13.5
06812300	- W TARKIO CR NR COIN, IOWA (LAT 40 41 00 LONG 095 18 00)					
SEP., 1975						
24...	1135	.75	--	460	7.9	13.5
06812400	- W TARKIO CR NR NORTHBORO, IOWA (LAT 40 35 00 LONG 095 21 00)					
SEP., 1975						
24...	1230	2.3	--	420	8.2	16.0
NODAWAY RIVER BASIN						
06816300	- W NODAWAY R NR CUMBERLAND, IOWA (LAT 41 12 00 LONG 094 52 00)					
SEP., 1975						
23...	1115	.38	--	--	--	12.5
06816350	- SEVENMILE CR NR LYMAN, IOWA (LAT 41 15 00 LONG 094 59 00)					
SEP., 1975						
23...	1020	3.0	--	370	8.0	13.0
06816400	- SEVENMILE CR NR MORTONS MILL, IOWA (LAT 41 06 00 LONG 095 00 00)					
SEP., 1975						
24...	1700	18	--	370	7.9	17.0
06816550	- W NODAWAY R NR VILLISCA, IOWA (LAT 40 55 00 LONG 095 00 00)					
SEP., 1975						
24...	0750	22	--	340	8.0	10.0
06816600	- M NODAWAY R NR BRIDGEWATER, IOWA (LAT 41 10 00 LONG 094 39 00)					
SEP., 1975						
23...	1405	1.2	--	520	7.7	18.0
06816700	- WF M NODAWAY R NR FONTANELLE, IOWA (LAT 41 19 00 LONG 094 39 00)					
SEP., 1975						
23...	1220	1.2	--	360	7.9	14.0
06816800	- WF M NODAWAY R NR BRIDGEWATER, IOWA (LAT 41 11 00 LONG 094 39 00)					
SEP., 1975						
23...	1345	4.4	--	460	7.9	19.0
06816900	- M NODAWAY R NR VILLISCA, IOWA (LAT 40 55 00 LONG 094 59 00)					
SEP., 1975						
24...	0830	9.3	--	450	8.0	11.0
06817050	- E NODAWAY R NR WILLIAMSON, IOWA (LAT 41 06 00 LONG 094 33 00)					
SEP., 1975						
23...	1540	.04	--	370	7.8	23.0
06817100	- E NODAWAY R NR SHAMBAUGH, IOWA (LAT 40 38 00 LONG 095 01 00)					
SEP., 1975						
24...	1010	8.0	--	450	8.1	11.0
06817200	- NODAWAY R NR BRADYVILLE, IOWA (LAT 40 37 00 LONG 095 01 00)					
SEP., 1975						
24...	1045	46	--	430	8.1	12.0

ANALYSES OF MISCELLANEOUS STATIONS

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DATE	TIME	DIS- CHARGE (CFS) (00060)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)
PLATTE RIVER BASIN						
06818600 - PLATTE R NR KENT, IOWA (LAT 40 57 00 LONG 094 29 00)						
SEP., 1975	23...	1600	.57	--	690	7.7 19.0
06818650 - E PLATTE R NR KNOWLTON, IOWA (LAT 40 54 00 LONG 094 26 00)						
SEP., 1975	23...	1525	.04	--	360	7.7 19.0
06818700 - PLATTE R NR KNOWLTON, IOWA (LAT 40 52 00 LONG 094 26 00)						
SEP., 1975	23...	1445	2.2	--	400	7.7 15.5
06819100 - W8 102 R NR GRAVITY, IOWA (LAT 40 49 00 LONG 094 49 00)						
SEP., 1975	23...	1010	.59	--	320	8.0 11.5
06819120 - W8 102 R BLW MB NR GRAVITY, IOWA (LAT 40 48 00 LONG 094 49 00)						
SEP., 1975	23...	1045	1.2	--	330	7.9 14.0
06819140 - W8 102 R NR NEW MARKET, IOWA (LAT 40 44 00 LONG 094 51 00)						
SEP., 1975	23...	1120	1.2	--	350	7.9 12.5
06819150 - W8 102 R NR NEW MARKET, IOWA (LAT 40 43 00 LONG 094 51 00)						
SEP., 1975	23...	1210	3.1	--	360	7.8 15.0
06819180 - EF 102 R NR BEDFORD, IOWA (LAT 40 44 00 LONG 094 39 00)						
SEP., 1975	23...	1400	.00	--	400	7.8 20.0
06819195 - MF 102 R NR BEDFORD, IOWA (LAT 40 35 00 LONG 094 49 00)						
GRAND RIVER BASIN						
SEP., 1975	23...	1250	.04	--	370	8.0 17.0
06896100 - GRAND R AT KNOWLTON, IOWA (LAT 40 50 00 LONG 094 20 00)						
AUG., 1975	13...	1340	.23	--	360	8.2 27.0
06896150 - GRAND R NR BLOCKTON, IOWA (LAT 40 37 00 LONG 094 25 00)						
AUG., 1975	13...	1110	5.9	--	470	8.0 24.5
06896200 - EF GRAND R NR MT AYR, IOWA (LAT 40 43 00 LONG 094 10 00)						
AUG., 1975	13...	1240	.31	--	460	8.0 25.0
06896250 - EF GRAND R SOUTH OF MT AYR, IOWA (LAT 40 35 00 LONG 094 14 00)						
AUG., 1975	13...	1040	.94	--	500	7.8 27.0
06897770 - THOMPSON R NR HEBRON, IOWA (LAT 41 14 00 LONG 094 16 00)						
AUG., 1975	12...	1210	2.6	--	450	8.1 26.0
06897800 - THREEMILE CR NR AFTON, IOWA (LAT 41 02 00 LONG 094 08 00)						
AUG., 1975	12...	1255	.40	--	480	8.4 27.5
06897820 - THOMPSON R NR AFTON, IOWA (LAT 41 02 00 LONG 094 06 00)						
AUG., 1975	12...	1400	4.4	--	450	8.4 27.0
06897880 - TWELVEMILE CR NR ARISPE, IOWA (LAT 40 56 00 LONG 094 06 00)						
AUG., 1975	12...	1420	.08	--	510	8.4 28.0
06897900 - THOMPSON R NR GRAND RIVER, IOWA (LAT 40 52 00 LONG 093 58 00)						
AUG., 1975	12...	1510	11	--	490	8.2 27.0
06897940 - LONG CR NR VAN WERT, IOWA (LAT 40 49 00 LONG 093 52 00)						
AUG., 1975	12...	1615	.06	--	580	8.2 30.0
06898300 - WELDON R EAST OF LEON, IOWA (LAT 40 45 18 LONG 093 38 05)						
AUG., 1975	12...	1720	.06	--	380	8.4 29.0
06898450 - WELDON R NR PLEASANTON, IOWA (LAT 40 35 40 LONG 093 36 20)						
AUG., 1975	13...	0850	8.5	--	440	8.3 23.5
06898470 - LITTLE R NR LEON, IOWA (LAT 40 39 36 LONG 093 44 59)						
AUG., 1975	12...	1800	.03	--	1100	7.5 27.0
CHARITON RIVER BASIN						
06903350 - WOLF CR NR CHARITON, IOWA (LAT 40 56 00 LONG 093 16 00)						
AUG., 1975	12...	1525	.09	--	520	8.2 26.0
06903600 - SF CHARITON R NR CAMBRIE, IOWA (LAT 40 49 00 LONG 093 23 00)						
AUG., 1975	12...	1150	.28	--	--	25.0
06903650 - SF CHARITON R NR CORYDON, IOWA (LAT 40 49 00 LONG 093 19 00)						
AUG., 1975	12...	1115	.43	--	--	23.0
06904150 - SHOAL CR NR CINCINNATI, IOWA (LAT 40 37 00 LONG 092 52 00)						
AUG., 1975	12...	1615	.02	--	--	25.0

PERIODIC AND MISCELLANEOUS WATER-QUALITY RECORDS

IA74-026C, WATER RESOURCES, EAST-CENTRAL IOWA

The following data are from stream samples collected as part of a Water Resources Division investigation of the general chemical quality of waters in East-Central Iowa. Samples were collected at various flow conditions during an eight-month period to document any water quality changes, and to approximate compositional extremes.

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

MAQUOKETA RIVER BASIN

05418500 - MAQUOKETA RIVER NEAR MAQUOKETA, IOWA

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	DIS- SOLVED SILICA (SIO2) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED MAN- GANESE (MN) (UG/L) (01056)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)
NOV. 25...	1000	652	9.6	70	20	73	33	8.8	2.0	341	7
MAR. 18...	0915	858	9.6	80	20	61	29	7.2	3.1	268	0
JUNE 23...	1000	1290	9.8	10	<10	63	24	7.4	2.7	243	0
DATE	ALKA- LINIT AS CACO3 (MG/L) (00410)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRATE (N) (MG/L) (00618)	DIS- SOLVED NITRITE (N) (MG/L) (00613)	DIS- SOLVED AMMONIA NITRO- GEN (N) (MG/L) (00608)	TOTAL ORGANIC NITRO- GEN (N) (MG/L) (00605)	PHOS- PHATE (PO4) (MG/L) (00650)	TOTAL SOL- UBLE PHOS- PHATE (PO4) (MG/L) (00653)	TOTAL FILT- RABLE RESIDUE (MG/L) (00515)
NOV. 25...	292	31	10	.2	2.3	.02	.05	.32	.28	.15	391
MAR. 18...	220	43	11	.2	2.2	.04	.51	1.2	1.1	.37	310
JUNE 23...	199	45	12	.2	3.9	.04	.11	.87	.43	.43	326
DATE	VOLA- TILE FILT- RABLE RESIDUE (MG/L) (00520)	FIXED FILT- RABLE RESIDUE (MG/L) (00525)	TOTAL NON- FILT- RABLE RESIDUE (MG/L) (00530)	VOL. NON- FILT- RABLE RESIDUE (MG/L) (00535)	FIXED NON- FILT- RABLE RESIDUE (MG/L) (00540)	TOTAL RESI- DUE (MG/L) (00500)	LOSS ON IGNI- TION (MG/L) (00505)	RESIDUE ON IGNI- TION (MG/L) (00510)	HARD- NESS (CA,MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)
NOV. 25...	--	--	--	--	--	--	--	--	312	20	580
MAR. 18...	--	--	--	--	--	--	--	--	272	52	510
JUNE 23...	147	179	165	14	151	491	161	330	256	57	480
DATE	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED ARSENIC (AS) (UG/L) (01000)	DIS- SOLVED BARIUM (BA) (UG/L) (01005)	DIS- SOLVED CAD- MIUM (CD) (UG/L) (01025)	DIS- SOLVED CHRO- MIUM (CR) (UG/L) (01030)	DIS- SOLVED COPPER (CU) (UG/L) (01040)	DIS- SOLVED LEAD (PB) (UG/L) (01049)	DIS- SOLVED NICKEL (NI) (UG/L) (01065)	DIS- SOLVED SILVER (AG) (UG/L) (01075)	DIS- SOLVED ZINC (ZN) (UG/L) (01090)
NOV. 25...	8.1	3.0	--	--	--	--	--	--	--	--	--
MAR. 18...	8.0	3.0	--	--	--	--	--	--	--	--	--
JUNE 23...	8.1	25.6	<10	100	<10	<10	<10	<10	<10	<10	10
DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDE SEDIM- ENT DIS- CHARGE (T/DAY) (80154)	SUS- PENDE SEDIM- ENT DIS- CHARGE (T/DAY) (80155)						
MAR. 18...	0915	3.0	858	440	1020						
JUNE 23...	1000	25.6	1290	158	550						

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

WAPSIPINICON RIVER BASIN

05422000 - WAPSIPINICON RIVER NEAR DE WITT, IOWA

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	DIS- SOLVED SILICA (SIO2) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED MAN- GANESE (MN) (UG/L) (01056)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)
NOV. 25...	1100	562	7.3	40	10	67	22	9.0	1.8	244	10
MAR. 18...	1020	1750	6.6	190	110	35	11	5.2	6.2	244	0
JUNE 23...	1100	1900	8.6	40	<10	59	15	7.0	2.4	178	0

DATE	ALKA- LITY AS CACO3 (MG/L) (00410)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRATE (N) (MG/L) (00618)	DIS- SOLVED NITRITE (N) (MG/L) (00613)	DIS- SOLVED AMMONIA NITRO- GEN (N) (MG/L) (00608)	TOTAL ORGANIC NITRO- GEN (N) (MG/L) (00605)	PHOS- PHATE (PO4) (MG/L) (00650)	TOTAL SOL- UBLE PHOS- PHATE (PO4) (MG/L) (00653)	TOTAL FILT- RABLE RESIDUE (MG/L) (00515)
NOV. 25...	217	43	14	.2	1.9	.02	.01	.75	.37	.06	286
MAR. 18...	200	24	9.0	.2	1.1	.07	1.6	3.8	3.4	.83	213
JUNE 23...	146	33	16	.2	4.4	.04	.05	1.5	1.3	.37	284

DATE	VOLA- TILE FILT- RABLE RESIDUE (MG/L) (00520)	FIXED FILT- RABLE RESIDUE (MG/L) (00525)	TOTAL NON- FILT- RABLE RESIDUE (MG/L) (00530)	VOL. NON- FILT- RABLE RESIDUE (MG/L) (00535)	FIXED NON- FILT- RABLE RESIDUE (MG/L) (00540)	TOTAL RESI- DUE (MG/L) (00500)	LOSS ON IGNI- TION (MG/L) (00505)	RESIDUE ON IGNI- TION (MG/L) (00510)	HARD- NESS (CA,MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)
NOV. 25...	--	--	--	--	--	--	--	--	252	35	460
MAR. 18...	--	--	--	--	--	--	--	--	132	0	290
JUNE 23...	132	152	298	29	269	582	161	421	210	63	420

DATE	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED ARSENIC (AS) (UG/L) (01000)	DIS- SOLVED BARIUM (BA) (UG/L) (01005)	DIS- SOLVED CAD- MIUM (CD) (UG/L) (01025)	DIS- SOLVED CHRO- MIUM (CR) (UG/L) (01030)	DIS- SOLVED COPPER (CU) (UG/L) (01040)	DIS- SOLVED LEAD (PB) (UG/L) (01049)	DIS- SOLVED NICKEL (NI) (UG/L) (01065)	DIS- SOLVED SILVER (AG) (UG/L) (01075)	DIS- SOLVED ZINC (ZN) (UG/L) (01090)
NOV. 25...	8.7	4.0	--	--	--	--	--	--	--	--	--
MAR. 18...	8.0	.5	--	--	--	--	--	--	--	--	--
JUNE 23...	8.1	26.7	<10	200	<10	<10	<10	<10	<10	<10	100

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDE SEDIM- ENT DIS- CHARGE (T/DAY) (80154)	SUS- PENDE SEDIM- ENT DIS- CHARGE (T/DAY) (80155)
MAR. 18...	1020	.5	1750	873	4130
JUNE 23...	1100	26.7	1900	510	2620

ANALYSES OF MISCELLANEOUS STATIONS

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

IOWA RIVER BASIN

05453100 - IOWA RIVER NEAR MARENGO, IOWA

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS) (00061)	DIS- SOLVED SILICA (SIO2) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED MAN- GANESE (MN) (UG/L) (01056)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)
NOV. 26...	1415	1030	14	10	10	89	31	8.6	1.5	317	5
MAR. 19...	1150	6800	6.6	190	200	22	3.9	4.5	8.3	67	0
JUNE 24...	1345	8750	9.7	410	10	33	10	3.3	3.1	121	0

DATE	ALKA- LITY AS CACO3 (MG/L) (00410)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRATE (N) (MG/L) (00618)	DIS- SOLVED NITRITE (N) (MG/L) (00613)	DIS- SOLVED AMMONIA NITRO- GEN (N) (MG/L) (00608)	TOTAL ORGANIC NITRO- GEN (N) (MG/L) (00605)	PHOS- PHATE (PO4) (MG/L) (00650)	TOTAL SOL- UBLE PHOS- PHATE (PO4) (MG/L) (00653)	TOTAL FILT- RABLE RESIDUE (MG/L) (00515)
NOV. 26...	268	71	15	.2	4.9	.02	.08	.52	.43	.31	382
MAR. 19...	55	21	8.0	.1	1.2	.07	1.6	4.6	3.7	1.5	121
JUNE 24...	99	21	7.0	1.2	3.0	.07	.09	11	5.2	.31	210

DATE	VOLA- TILE FILT- RABLE RESIDUE (MG/L) (00520)	FIXED FILT- RABLE RESIDUE (MG/L) (00525)	TOTAL NON- FILT- RABLE RESIDUE (MG/L) (00530)	VOL. FILT- RABLE RESIDUE (MG/L) (00535)	FIXED NON- FILT- RABLE RESIDUE (MG/L) (00540)	TOTAL RESI- DUE (MG/L) (00500)	LOSS ON IGNI- TION (MG/L) (00505)	RESIDUE ON IGNI- TION (MG/L) (00510)	HARD- NESS (CA,MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)
NOV. 26...	--	--	--	--	--	--	--	--	340	72	550
MAR. 19...	--	--	--	--	--	--	--	--	72	17	255
JUNE 24...	70	140	3970	350	3620	4180	420	3760	120	25	265

DATE	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED ARSENIC (AS) (UG/L) (01000)	DIS- SOLVED BARIUM (BA) (UG/L) (01005)	DIS- SOLVED CAD- MIUM (CD) (UG/L) (01025)	DIS- SOLVED CHRO- MIUM (CR) (UG/L) (01030)	DIS- SOLVED COPPER (CU) (UG/L) (01040)	DIS- SOLVED LEAD (PB) (UG/L) (01049)	DIS- SOLVED NICKEL (NI) (UG/L) (01065)	DIS- SOLVED SILVER (AG) (UG/L) (01075)	DIS- SOLVED ZINC (ZN) (UG/L) (01090)
NOV. 26...	8.5	2.0	--	--	--	--	--	--	--	--	--
MAR. 19...	7.9	.5	--	--	--	--	--	--	--	--	--
JUNE 24...	7.4	22.6	<10	1200	<10	100	90	90	<10	<10	340

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDE D SEDI- MENT DIS- CHARGE (MG/L) (80154)	SUS- PENDE D SEDI- MENT DIS- CHARGE (T/DAY) (80155)
MAR. 19...	1150	.5	6800	1260	23100
JUNE 24...	1345	22.6	8750	4630	109000

ANALYSES OF MISCELLANEOUS STATIONS

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WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

IOWA RIVER BASIN--CONTINUED

05454300 - CLEAR CREEK NR CORALVILLE, IOWA

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	DIS- SOLVED SILICA (SIO2) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED MAN- GANESE (MN) (UG/L) (01056)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)
NOV. 26...	0700	19	13	60	410	65	25	16	1.6	250	0
MAR. 19...	0655	1100	6.8	550	320	16	4.9	3.8	9.6	61	0
JUNE 24...	0730	16	6.3	20	10	61	25	14	2.4	236	0

DATE	ALKA- LITY AS CACO3 (MG/L) (00410)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRATE (N) (MG/L) (00618)	DIS- SOLVED NITRITE (N) (MG/L) (00613)	DIS- SOLVED AMMONIA NITRO- GEN (N) (MG/L) (00608)	TOTAL ORGANIC NITRO- GEN (N) (MG/L) (00605)	PHOS- PHATE (PO4) (MG/L) (00650)	TOTAL SOL- UBLE PHOS- PHATE (PO4) (MG/L) (00653)	TOTAL FILT- RABLE RESIDUE (MG/L) (00515)
NOV. 26...	205	52	21	.2	1.6	.03	.16	.37	.31	.18	307
MAR. 19...	50	15	8.0	<.1	.40	.06	1.8	3.6	2.9	1.1	117
JUNE 24...	194	48	21	.2	3.3	.08	.10	.97	1.1	.67	357

DATE	VOLA- TILE FILT- RABLE RESIDUE (MG/L) (00520)	FIXED FILT- RABLE RESIDUE (MG/L) (00525)	TOTAL NON- FILT- RABLE RESIDUE (MG/L) (00530)	VOL. NON- FILT- RABLE RESIDUE (MG/L) (00535)	FIXED NON- FILT- RABLE RESIDUE (MG/L) (00540)	TOTAL RESI- DUE (MG/L) (00500)	LOSS ON IGNI- TION (MG/L) (00505)	RESIDUE ON IGNI- TION (MG/L) (00510)	HARD- NESS (CA,MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)
NOV. 26...	--	--	--	--	--	--	--	--	256	51	520
MAR. 19...	--	--	--	--	--	--	--	--	60	10	165
JUNE 24...	97	260	161	15	146	518	112	406	260	62	510

DATE	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED ARSENIC (AS) (UG/L) (01000)	DIS- SOLVED BARIUM (BA) (UG/L) (01005)	DIS- SOLVED CAD- MIUM (CD) (UG/L) (01025)	DIS- SOLVED CHRO- MIUM (CR) (UG/L) (01030)	DIS- SOLVED COPPER (CU) (UG/L) (01040)	DIS- SOLVED LEAD (PB) (UG/L) (01049)	DIS- SOLVED NICKEL (NI) (UG/L) (01065)	DIS- SOLVED SILVER (AG) (UG/L) (01075)	DIS- SOLVED ZINC (ZN) (UG/L) (01090)
NOV. 26...	8.2	.0	--	--	--	--	--	--	--	--	--
MAR. 19...	8.1	.0	--	--	--	--	--	--	--	--	--
JUNE 24...	7.6	22.5	<10	200	<10	<10	<10	<10	<10	<10	20

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PEN- DED SEDI- MENT DIS- CHARGE (MG/L) (80154)	SUS- PEN- DED SEDI- MENT DIS- CHARGE (T/DAY) (80155)
MAR. 19...	0655	.0	1100	1550	4600
20...	1700	4.0	806	2230	4850
JUNE 24...	0730	22.5	16	231	10

ANALYSES OF MISCELLANEOUS STATIONS

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

IOWA RIVER BASIN--CONTINUED

05455100 - OLD MANS CREEK NEAR IOWA CITY, IOWA

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	DIS- SOLVED SILICA (SIO2) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED MAN- GANESE (MN) (UG/L) (01056)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)
NOV. 25...	1630	36	9.9	80	380	56	23	11	1.5	238	0
MAR. 18...	1630	2420	6.0	300	270	12	4.7	4.4	9.4	61	0
JUNE 23...	1750	69	12	10	10	52	21	9.9	2.0	199	0

DATE	ALKA- LITY AS CACO3 (MG/L) (00410)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRATE (N) (MG/L) (00618)	DIS- SOLVED NITRITE (N) (MG/L) (00613)	DIS- SOLVED AMMONIA NITRO- GEN (N) (MG/L) (00608)	TOTAL ORGANIC NITRO- GEN (N) (MG/L) (00605)	PHOS- PHATE (PO4) (MG/L) (00650)	TOTAL SOL- UBLE PHOS- PHATE (PO4) (MG/L) (00653)	TOTAL FILT- RABLE RESIDUE (MG/L) (00515)
NOV. 25...	195	40	12	.2	2.0	.03	.08	.35	.21	.09	265
MAR. 18...	50	18	7.0	.1	.50	.07	1.8	4.5	4.3	1.0	113
JUNE 23...	163	29	12	.2	4.7	.08	.15	.91	.80	.40	308

DATE	VOLA- TILE FILT- RABLE RESIDUE (MG/L) (00520)	FIXED FILT- RABLE RESIDUE (MG/L) (00525)	TOTAL NON- FILT- RABLE RESIDUE (MG/L) (00530)	VOL. NON- FILT- RABLE RESIDUE (MG/L) (00535)	FIXED NON- FILT- RABLE RESIDUE (MG/L) (00540)	TOTAL RESI- DUE (MG/L) (00500)	LOSS ON IGNI- TION (MG/L) (00505)	RESIDUE ON IGNI- TION (MG/L) (00510)	HARD- NESS (CA,MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)
NOV. 25...	--	--	--	--	--	--	--	--	236	41	450
MAR. 18...	--	--	--	--	--	--	--	--	52	2	145
JUNE 23...	83	225	170	13	157	478	96	382	220	53	435

DATE	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED ARSENIC (AS) (UG/L) (01000)	DIS- SOLVED BARIUM (BA) (UG/L) (01005)	DIS- SOLVED CAD- MIUM (CD) (UG/L) (01025)	DIS- SOLVED CHRO- MIUM (CR) (UG/L) (01030)	DIS- SOLVED COPPER (CU) (UG/L) (01040)	DIS- SOLVED LEAD (PB) (UG/L) (01049)	DIS- SOLVED NICKEL (NI) (UG/L) (01065)	DIS- SOLVED SILVER (AG) (UG/L) (01075)	DIS- SOLVED ZINC (ZN) (UG/L) (01090)
NOV. 25...	8.6	2.0	--	--	--	--	--	--	--	--	--
MAR. 18...	8.6	.5	--	--	--	--	--	--	--	--	--
JUNE 23...	7.7	28.7	<10	200	<10	<10	<10	<10	<10	<10	20

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDE SEDIM- ENT DIS- CHARGE (MG/L) (80154)	SUS- PENDE SEDIM- ENT DIS- CHARGE (T/DAY) (80155)
MAR. 18...	1630	.5	2420	3100	20300
JUNE 23...	1750	28.7	69	243	45

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

IOWA RIVER BASIN--CONTINUED

05455500 - ENGLISH RIVER AT KALONA, IOWA

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED MAN- GANESE (MN) (UG/L) (01056)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)
NOV. 25...	1500	83	8.8	30	200	56	20	12	2.0	213	0
MAR. 18...	1535	3860	5.4	240	350	14	6.8	3.0	7.0	55	0
JUNE 23...	1620	216	12	100	<10	44	16	9.2	3.0	166	0

DATE	ALKA- LITY AS CACO3 (MG/L) (00410)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRATE (N) (MG/L) (00618)	DIS- SOLVED NITRITE (N) (MG/L) (00613)	DIS- SOLVED AMMONIA NITRO- GEN (N) (MG/L) (00608)	TOTAL ORGANIC NITRO- GEN (N) (MG/L) (00605)	PHOS- PHATE (PO4) (MG/L) (00650)	TOTAL SOL- UBLE PHOS- PHATE (PO4) (MG/L) (00653)	TOTAL FILT- RABLE RESIDUE (MG/L) (00515)
NOV. 25...	175	51	12	.2	1.7	.02	.05	.35	.18	.09	268
MAR. 18...	45	18	5.0	.1	.60	.07	1.3	4.5	4.0	.49	107
JUNE 23...	136	31	8.0	.2	3.5	.06	.15	.21	1.6	.43	293

DATE	VOLA- TILE FILT- RABLE RESIDUE (MG/L) (00520)	FIXED FILT- RABLE RESIDUE (MG/L) (00525)	TOTAL NON- FILT- RABLE RESIDUE (MG/L) (00530)	VOL. NON- FILT- RABLE RESIDUE (MG/L) (00535)	FIXED NON- FILT- RABLE RESIDUE (MG/L) (00540)	TOTAL RESI- DUE (MG/L) (00500)	LOSS ON IGNI- TION (MG/L) (00505)	RESIDUE ON IGNI- TION (MG/L) (00510)	HARD- NESS (CA, MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)
NOV. 25...	--	--	--	--	--	--	--	--	222	47	475
MAR. 18...	--	--	--	--	--	--	--	--	60	15	142
JUNE 23...	100	193	887	86	801	1180	186	994	180	40	370

DATE	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED ARSENIC (AS) (UG/L) (01000)	DIS- SOLVED BARIUM (BA) (UG/L) (01005)	DIS- SOLVED CAD- MIUM (CD) (UG/L) (01025)	DIS- SOLVED CHRO- MIUM (CR) (UG/L) (01030)	DIS- SOLVED COPPER (CU) (UG/L) (01040)	DIS- SOLVED LEAD (PB) (UG/L) (01049)	DIS- SOLVED NICKEL (NI) (UG/L) (01065)	DIS- SOLVED SILVER (AG) (UG/L) (01075)	DIS- SOLVED ZINC (ZN) (UG/L) (01090)
NOV. 25...	8.3	2.0	--	--	--	--	--	--	--	--	--
MAR. 18...	8.2	1.0	--	--	--	--	--	--	--	--	--
JUNE 23...	7.7	27.2	<10	400	<10	10	10	10	<10	<10	170

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDE SEDI- MENT DIS- CHARGE (MG/L) (80154)	SUS- PENDE SEDI- MENT CHARGE (T/DAY) (80155)
MAR. 18...	1535	1.0	3860	2090	21800
20...	1500	4.0	6200	1630	27300
JUNE 23...	1620	27.2	216	877	511

ANALYSES OF MISCELLANEOUS STATIONS

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

IOWA RIVER BASIN--CONTINUED

05455700 - IOWA RIVER NEAR LONE TREE, IOWA

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	DIS- SOLVED SILICA (SIO2) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED MAN- GANESE (MN) (UG/L) (01056)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)
		ALKA- LITY AS CACO3 (MG/L) (00410)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRATE (N) (MG/L) (00618)	DIS- SOLVED NITRITE (N) (MG/L) (00613)	DIS- SOLVED AMMONIA NITRO- GEN (N) (MG/L) (00608)	TOTAL ORGANIC NITRO- GEN (N) (MG/L) (00605)	PHOS- PHATE (PO4) (MG/L) (00650)	TOTAL SOL- UBLE PHOS- PHATE (PO4) (MG/L) (00653)	TOTAL FILT- RABLE RESIDUE (MG/L) (00515)
NOV. 25...	1430	1360	13	<10	20	78	28	10	2.2	293	7
MAR. 18...	1450	8790	6.6	170	260	27	8.7	6.4	7.4	98	0
JUNE 23...	1530	4380	11	20	<10	57	20	7.1	2.7	172	0
NOV. 25...	252	47	16	.2	4.1	.03	.11	.57	.49	.34	361
MAR. 18...	80	26	10	.2	1.2	.07	1.5	3.8	1.5	.61	172
JUNE 23...	141	35	13	.2	5.0	.06	.13	.84	.64	.43	303
NOV. 25...	--	--	--	--	--	--	--	--	310	58	600
MAR. 18...	--	--	--	--	--	--	--	--	104	24	250
JUNE 23...	101	202	129	42	87	432	143	289	230	84	435
NOV. 25...	7.8	3.0	--	--	--	--	--	--	--	--	--
MAR. 18...	7.8	1.0	--	--	--	--	--	--	--	--	--
JUNE 23...	7.7	25.5	<10	100	<10	<10	<10	<10	<10	<10	10
DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDE SEDI- MENT DIS- CHARGE (MG/L) (80154)	SUS- PENDE SEDI- MENT DIS- CHARGE (T/DAY) (80155)						
MAR. 18...	1450	1.0	8790	1080	25600						
JUNE 23...	1530	25.5	4380	207	2450						

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

IOWA RIVER BASIN--CONTINUED

05464250 - WOLF CR AT LAPORTE CITY, IOWA

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	DIS- SOLVED SILICA (SIO2) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED MAN- GANESE (MN) (UG/L) (01056)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)
NOV. 26...	1300	159	12	20	<10	81	27	7.2	.8	274	0
MAR. 19...	1300	1200	7.4	210	30	30	10	5.6	7.0	104	0
JUNE 24...	1200	986	8.0	20	<10	54	18	5.7	2.4	183	0

DATE	ALKA- LITY AS CACO3 (MG/L) (00410)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRATE (N) (MG/L) (00618)	DIS- SOLVED NITRITE (N) (MG/L) (00613)	DIS- SOLVED AMMONIA NITRO- GEN (N) (MG/L) (00608)	TOTAL ORGANIC NITRO- GEN (N) (MG/L) (00605)	PHOS- PHATE (PO4) (MG/L) (00650)	TOTAL SOL- UBLE PHOS- PHATE (PO4) (MG/L) (00653)	TOTAL FILT- RABLE RESIDUE (MG/L) (00515)
NOV. 26...	225	57	13	.2	6.8	.02	.09	.37	.37	.18	348
MAR. 19...	85	26	10	.1	2.6	.07	1.4	4.0	1.8	1.1	176
JUNE 24...	150	29	10	.2	5.0	.04	.09	7.3	3.1	.49	310

DATE	VOLA- TILE FILT- RABLE RESIDUE (MG/L) (00520)	FIXED FILT- RABLE RESIDUE (MG/L) (00525)	TOTAL NON- FILT- RABLE RESIDUE (MG/L) (00530)	VOL. NON- FILT- RABLE RESIDUE (MG/L) (00535)	FIXED NON- FILT- RABLE RESIDUE (MG/L) (00540)	TOTAL RESI- DUE (MG/L) (00500)	LOSS ON IGNI- TION (MG/L) (00505)	RESIDUE ON IGNI- TION (MG/L) (00510)	HARD- NESS (CA,MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)
NOV. 26...	--	--	--	--	--	--	--	--	316	91	560
MAR. 19...	--	--	--	--	--	--	--	--	120	35	330
JUNE 24...	90	220	2810	270	2540	3120	360	2760	210	60	430

DATE	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED ARSENIC (AS) (UG/L) (01000)	DIS- SOLVED BARIUM (BA) (UG/L) (01005)	DIS- SOLVED CAD- MIUM (CD) (UG/L) (01025)	DIS- SOLVED CHRO- MIUM (CR) (UG/L) (01030)	DIS- SOLVED COPPER (CU) (UG/L) (01040)	DIS- SOLVED LEAD (PB) (UG/L) (01049)	DIS- SOLVED NICKEL (NI) (UG/L) (01065)	DIS- SOLVED SILVER (AG) (UG/L) (01075)	DIS- SOLVED ZINC (ZN) (UG/L) (01090)
NOV. 26...	8.5	.0	--	--	--	--	--	--	--	--	--
MAR. 19...	8.1	.5	--	--	--	--	--	--	--	--	--
JUNE 24...	7.6	21.0	<10	1100	<10	40	40	60	<10	<10	230

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDE SED1- MENT DIS- CHARGE (T/DAY) (80154)	SUS- PENDE SED1- MENT DIS- CHARGE (T/DAY) (80155)
MAR. 19...	1300	.5	1200	562	1820
JUNE 24...	1200	21.0	986	2680	7140

ANALYSES OF MISCELLANEOUS STATIONS

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

IOWA RIVER BASIN--CONTINUED

05464460 - OTTER C NR CEDAR RAPIDS, IOWA

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	DIS- SOLVED SILICA (SIO2) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED MAN- GANESE (MN) (UG/L) (01056)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (K) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)
NOV. 26...	1100	13	9.6	<10	90	83	16	6.8	1.2	244	0
MAR. 19...	1100	215	6.0	270	30	23	4.7	3.6	9.2	73	0
JUNE 24...	0940	119	9.1	110	<10	42	7.7	5.3	3.1	111	0

DATE	ALKA- LITY AS CACO3 (MG/L) (00410)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRATE (N) (MG/L) (00618)	DIS- SOLVED NITRITE (N) (MG/L) (00613)	DIS- SOLVED AMMONIA NITRO- GEN (N) (MG/L) (00608)	TOTAL ORGANIC NITRO- GEN (N) (MG/L) (00605)	PHOS- PHATE (PO4) (MG/L) (00650)	TOTAL SOL- UBLE PHOS- PHATE (PO4) (MG/L) (00653)	TOTAL FILT- RABLE RESIDUE (MG/L) (00515)
NOV. 26...	200	58	12	.2	3.4	.02	.03	.29	.15	.03	300
MAR. 19...	60	29	8.0	<.1	.80	.05	1.5	3.4	4.3	.61	136
JUNE 24...	91	29	9.0	.2	3.9	.09	.15	3.2	1.6	.40	238

DATE	VOLA- TILE FILT- RABLE RESIDUE (MG/L) (00520)	FIXED FILT- RABLE RESIDUE (MG/L) (00525)	TOTAL NON- FILT- RABLE RESIDUE (MG/L) (00530)	VOL. NON- FILT- RABLE RESIDUE (MG/L) (00535)	FIXED NON- FILT- RABLE RESIDUE (MG/L) (00540)	TOTAL RESI- DUE (MG/L) (00500)	LOSS ON IGNI- TION (MG/L) (00505)	RESIDUE ON IGNI- TION (MG/L) (00510)	HARD- NESS (CA,MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)
NOV. 26...	--	--	--	--	--	--	--	--	276	76	450
MAR. 19...	--	--	--	--	--	--	--	--	92	32	150
JUNE 24...	82	156	624	80	544	862	162	700	140	46	300

DATE	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED ARSENIC (AS) (UG/L) (01000)	DIS- SOLVED BARIUM (BA) (UG/L) (01005)	DIS- SOLVED CAD- MIUM (CD) (UG/L) (01025)	DIS- SOLVED CHRO- MIUM (CR) (UG/L) (01030)	DIS- SOLVED COPPER (CU) (UG/L) (01040)	DIS- SOLVED LEAD (PB) (UG/L) (01049)	DIS- SOLVED NICKEL (NI) (UG/L) (01065)	DIS- SOLVED SILVER (AG) (UG/L) (01075)	DIS- SOLVED ZINC (ZN) (UG/L) (01090)
NOV. 26...	8.4	.0	--	--	--	--	--	--	--	--	--
MAR. 19...	8.5	.0	--	--	--	--	--	--	--	--	--
JUNE 24...	7.7	20.3	<10	300	<10	<10	10	10	<10	<10	30

DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDE SEDIM- ENT DIS- CHARGE (MG/L) (00154)	SUS- PENDE SEDIM- ENT DIS- CHARGE (T/DAY) (00155)
MAR. 19...	1100	.0	215	370	215
JUNE 24...	0940	20.3	119	755	243

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

IOWA RIVER BASIN--CONTINUED

05454540 - PRAIRIE CREEK AT FAIRFAX, IOWA

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00051)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01045)	DIS- SOLVED MAN- GANESE (MN) (UG/L) (01055)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)
NOV. 26... MAR. 19... JUNE 24...	0855 0735 0820	39 1500 347	11 7.2 8.5	20 300 20	40 110 10	83 21 38	25 7.7 10	9.5 4.1 5.0	1.0 10 2.0	262 67 124	0 0 0
DATE	ALKA- LINITY AS CAC03 (MG/L) (00410)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRATE (N) (MG/L) (00618)	DIS- SOLVED NITRITE (N) (MG/L) (00613)	DIS- SOLVED AMMONIA NITRO- GEN (N) (MG/L) (00608)	TOTAL ORGANIC NITRO- GEN (N) (MG/L) (00605)	PHOS- PHATE (PO4) (MG/L) (00650)	TOTAL SOL- UBLE PHOS- PHATE (PO4) (MG/L) (00653)	TOTAL FILT- RABLE RESIDUE (MG/L) (00515)
NOV. 26... MAR. 19... JUNE 24...	215 55 102	58 25 23	16 9.0 7.0	.2 .1 .2	5.0 10 3.7	.04 .07 .05	.17 2.1 .20	.25 4.4 18	.34 3.4 7.7	.18 .64 .49	347 143 250
DATE	VOLA- TILE FILT- RABLE RESIDUE (MG/L) (00520)	FIXED FILT- RABLE RESIDUE (MG/L) (00525)	TOTAL NON- FILT- RABLE RESIDUE (MG/L) (00530)	VOL. NON- FILT- RABLE RESIDUE (MG/L) (00535)	FIXED NON- FILT- RABLE RESIDUE (MG/L) (00540)	TOTAL RESI- DUE (MG/L) (00500)	LOSS ON IGNI- TION (MG/L) (00505)	RESIDUE ON IGNI- TION (MG/L) (00510)	HARD- NESS (CA,MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)
NOV. 26... MAR. 19... JUNE 24...	-- -- 80	-- -- 170	-- -- 6730	-- -- 670	-- -- 6060	-- -- 6980	-- -- 750	-- -- 6230	304 84 140	89 29 36	550 210 285
DATE	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED ARSENIC (AS) (UG/L) (01000)	DIS- SOLVED BARIUM (BA) (UG/L) (01005)	DIS- SOLVED CAD- MIUM (CD) (UG/L) (01025)	DIS- SOLVED CHRO- MIUM (CR) (UG/L) (01030)	DIS- SOLVED COPPER (CU) (UG/L) (01040)	DIS- SOLVED LEAD (PB) (UG/L) (01049)	DIS- SOLVED NICKEL (NI) (UG/L) (01065)	DIS- SOLVED SILVER (AG) (UG/L) (01075)	DIS- SOLVED ZINC (ZN) (UG/L) (01090)
NOV. 26... MAR. 19... JUNE 24...	8.2 8.2 7.7	.0 .0 21.7	-- -- 10	-- -- 2200	-- -- 10	-- -- 130	-- -- 120	-- -- 150	-- -- 10	-- -- 10	-- -- 470
DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00051)	SUS- PENDE SEDIM- ENT DIS- CHARGE (T/DAY) (80155)							
MAR. 19... JUNE 24...	0735 0820	.0 27.7	1500 347	752 3050 6980 6540							

ANALYSES OF MISCELLANEOUS STATIONS

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

IOWA RIVER BASIN--CONTINUED

05454920 - SUGAR C NR MOSCOW, IOWA

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	DIS- SOLVED SILICA (SI02) (MG/L) (00955)	DIS- SOLVED IRON (FE) (UG/L) (01046)	DIS- SOLVED MAN- GANESE (MN) (UG/L) (01056)	DIS- SOLVED CAL- CIUM (CA) (MG/L) (00915)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) (00925)	DIS- SOLVED SODIUM (NA) (MG/L) (00930)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L) (00935)	BICAR- BONATE (HCO3) (MG/L) (00440)	CAR- BONATE (CO3) (MG/L) (00445)
NOV. 25...	1200	33	11	50	240	71	30	14	2.0	311	0
MAR. 18...	1200	1590	6.0	450	340	15	5.7	3.9	11	49	0
JUNE 23...	1230	55	9.8	20	70	70	30	11	2.4	284	0
DATE	ALKA- LITY AS CAC03 (MG/L) (00410)	DIS- SOLVED SULFATE (SO4) (MG/L) (00945)	DIS- SOLVED CHLO- RIDE (CL) (MG/L) (00940)	DIS- SOLVED FLUO- RIDE (F) (MG/L) (00950)	DIS- SOLVED NITRATE (N) (MG/L) (00618)	DIS- SOLVED NITRITE (N) (MG/L) (00613)	DIS- SOLVED AMMONIA NITRO- GEN (N) (MG/L) (00608)	TOTAL ORGANIC NITRO- GEN (N) (MG/L) (00605)	PHOS- PHATE (PO4) (MG/L) (00650)	TOTAL SOL- UBLE PHOS- PHATE (PO4) (MG/L) (00653)	TOTAL FILT- RABLE RESIDUE (MG/L) (00515)
NOV. 25...	255	42	16	.2	1.7	.05	.33	.55	.80	.49	352
MAR. 18...	40	20	8.0	.1	.30	.17	2.8	5.5	3.4	2.2	132
JUNE 23...	233	46	14	.2	4.5	.14	.11	1.2	.80	.61	356
DATE	VOLA- TILE FILT- RABLE RESIDUE (MG/L) (00520)	FIXED FILT- RABLE RESIDUE (MG/L) (00525)	TOTAL NON- FILT- RABLE RESIDUE (MG/L) (00530)	VOL. NON- FILT- RABLE RESIDUE (MG/L) (00535)	FIXED NON- FILT- RABLE RESIDUE (MG/L) (00540)	TOTAL RESI- DUE (MG/L) (00500)	LOSS ON IGNI- TION (MG/L) (00505)	RESIDUE ON IGNI- TION (MG/L) (00510)	HARD- NESS (CA,MG) (MG/L) (00900)	NON- CAR- BONATE HARD- NESS (MG/L) (00902)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS) (00095)
NOV. 25...	--	--	--	--	--	--	--	--	306	51	620
MAR. 18...	--	--	--	--	--	--	--	--	68	28	170
JUNE 23...	134	222	75	0	75	431	134	297	300	66	520
DATE	PH (UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	DIS- SOLVED ARSENIC (AS) (UG/L) (01000)	DIS- SOLVED BARIUM (BA) (UG/L) (01005)	DIS- SOLVED CAD- MIUM (CD) (UG/L) (01025)	DIS- SOLVED CHRO- MIUM (CR) (UG/L) (01030)	DIS- SOLVED COPPER (CU) (UG/L) (01040)	DIS- SOLVED LEAD (PB) (UG/L) (01049)	DIS- SOLVED NICKEL (NI) (UG/L) (01065)	DIS- SOLVED SILVER (AG) (UG/L) (01075)	DIS- SOLVED ZINC (ZN) (UG/L) (01090)
NOV. 25...	8.2	3.0	--	--	--	--	--	--	--	--	--
MAR. 18...	8.5	.5	--	--	--	--	--	--	--	--	--
JUNE 23...	8.2	27.9	<10	200	<10	<10	<10	<10	<10	<10	10
DATE	TIME	TEMPER- ATURE (DEG C) (00010)	INSTAN- TANEOUS DIS- CHARGE (CFS) (00061)	SUS- PENDE SEDIM- ENT DIS- CHARGE (MG/L) (80154)	SUS- PENDE SEDIM- ENT DIS- CHARGE (T/DAY) (80155)						
MAR. 18...	1200	.5	1590	4470	19200						
JUNE 23...	1230	27.9	55	162	24						

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1975

IOWA RIVER BASIN--CONTINUED

05465000 - CEDAR RIVER NEAR CONESVILLE, IOWA

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS) (00061)	DIS-SOLVED SILICA (MG/L) (00955)	DIS-SOLVED IRON (MG/L) (01046)	DIS-SOLVED MANGANESE (MG/L) (01056)	DIS-SOLVED CALCIUM (MG/L) (00915)	DIS-SOLVED MAGNESIUM (MG/L) (00925)	DIS-SOLVED SODIUM (MG/L) (00930)	DIS-SOLVED POTASSIUM (MG/L) (00935)	BICARBONATE (MG/L) (00440)	CARBONATE (MG/L) (00445)
NOV. 25...	1400	2500	8.7	20	<10	78	25	16	2.2	280	10
MAR. 18...	1410	5190	6.0	240	210	26	9.0	8.2	8.8	98	0
JUNE 23...	1445	10400	11	20	<10	67	21	8.9	2.5	217	0

DATE	ALKALINITY AS CaCO3 (MG/L) (00410)	DIS-SOLVED SULFATE (MG/L) (00945)	DIS-SOLVED CHLORIDE (MG/L) (00940)	DIS-SOLVED FLUORIDE (MG/L) (00950)	DIS-SOLVED NITRATE (MG/L) (00618)	DIS-SOLVED NITRITE (MG/L) (00613)	DIS-SOLVED AMMONIA NITROGEN (MG/L) (00608)	TOTAL ORGANIC NITROGEN (MG/L) (00605)	PHOSPHATE (MG/L) (00650)	TOTAL SOLUBLE PHOSPHATE (MG/L) (00653)	TOTAL FILTERABLE RESIDUE (MG/L) (00515)
NOV. 25...	246	59	26	.2	3.5	.04	.37	.97	.86	.55	355
MAR. 18...	80	30	15	.2	1.0	.09	2.0	4.5	4.9	1.3	173
JUNE 23...	178	43	20	.2	5.5	.06	.06	2.1	1.4	.52	353

DATE	VOLATILE FILTERABLE RESIDUE (MG/L) (00520)	FIXED FILTERABLE RESIDUE (MG/L) (00525)	TOTAL NON-FILTERABLE RESIDUE (MG/L) (00530)	VOL. NON-FILTERABLE RESIDUE (MG/L) (00535)	FIXED NON-FILTERABLE RESIDUE (MG/L) (00540)	TOTAL RESIDUE (MG/L) (00500)	LOSS ON IGNITION (MG/L) (00505)	RESIDUE ON IGNITION (MG/L) (00510)	HARDNESS (CA, MG) (MG/L) (00900)	NON-CARBONATE HARDNESS (MG/L) (00902)	SPECIFIC CONDUCTANCE (MICROMHOS) (00095)
NOV. 25...	--	--	--	--	--	--	--	--	290	44	630
MAR. 18...	--	--	--	--	--	--	--	--	104	24	290
JUNE 23...	160	193	512	63	449	865	223	642	250	76	505

DATE	PH (UNITS) (00400)	TEMPERATURE (DEG C) (00010)	DIS-SOLVED ARSENIC (MG/L) (01000)	DIS-SOLVED BARIUM (MG/L) (01005)	DIS-SOLVED CADMIUM (MG/L) (01025)	DIS-SOLVED CHROMIUM (MG/L) (01030)	DIS-SOLVED COPPER (MG/L) (01040)	DIS-SOLVED LEAD (MG/L) (01049)	DIS-SOLVED NICKEL (MG/L) (01065)	DIS-SOLVED SILVER (MG/L) (01075)	DIS-SOLVED ZINC (MG/L) (01090)
NOV. 25...	8.4	3.0	--	--	--	--	--	--	--	--	--
MAR. 18...	7.7	2.0	--	--	--	--	--	--	--	--	--
JUNE 23...	7.7	27.0	<10	200	<10	<10	10	10	<10	<10	40

DATE	TIME	TEMPERATURE (DEG C) (00010)	INSTANTANEOUS DISCHARGE (CFS) (00061)	SUSPENDED SEDIMENT (MG/L) (80154)	SUSPENDED SEDIMENT CHARGE (T/DAY) (80155)
MAR. 18...	1410	2.0	5190	1030	17200
JUNE 23...	1445	27.0	10400	512	14400

WATER RESOURCES DATA FOR IOWA, 1975

DISCONTINUED WATER-QUALITY STATIONS

The following water-quality stations have been discontinued in Iowa. Continuous daily records of water temperature or sediment and monthly or periodic samples of chemical quality were collected and published for the period of record shown for each station. An asterisk (*) in the type of record column indicates that periodic data is available for that parameter subsequent to the period of daily record.

Discontinued water-quality stations

Station name	Station number	Drainage area (sq mi)	Type of Record	Period of record
Paint Creek at Waterville, Iowa.	05388500	42.8	Temp.	1952-55
Turkey River at Garber, Iowa.	05412500	1,545	Sed.	1952-57
Mississippi River at Dubuque, Iowa.	05414700	1,600	Temp.	1957-62
		8	Sed.	1957-62
			Chem.	1959-73
Wapsipinicon River at Independence, Iowa.	05421000	1,048	Chem. *	1968-70
			Temp. *	1967-70
			Sed. *	1967-70
Iowa River near Rowan, Iowa.	05449500	429	Temp. *	1957-62
			Sed. *	1957-62
Fourmile Creek near Lincoln, Iowa.	05464130	13.78	Chem.	1969-74
			Temp.	1969-74
			Sed.	1969-74
Half Mile Creek near Gladbrook, Iowa.	05464133	1.33	Chem.	1969-74
			Temp.	1969-74
			Sed.	1969-74
Fourmile Creek near Traer, Iowa.	05464137	19.51	Chem.	1969-74
			Temp.	1969-74
			Sed.	1969-74
Cedar River at Cedar Rapids, Iowa.	05464500	6,640	Chem. *	1905-07; 1944-84
			Temp. *	1944-54
			Sed.	1943-54
Mississippi River at Burlington, Iowa.	05469720	4,000	Chem.	1959-73
		11		
Des Moines River at Des Moines, Iowa.	05482000	6,245	Chem.	1954-55
			Temp.	1954-61
			Sed.	1954-61
E. Fork Hardin Creek near Churdan, Iowa.	05483000	24.0	Temp. *	1952-57
			Sed. *	1952-57
Raccoon River at Des Moines, Iowa.	05485000	3,590	Chem.	1945-47
			Temp.	1945-47
Des Moines River below Raccoon River at Des Moines, Iowa.	05485500	9,770	Chem. *	1944-45
			Temp. *	1944-47
			Sed.	1944-47
Middle River near Indianola, Iowa.	05486490	503	Temp. *	1952-67
			Sed.	1952-67
White Breast Creek near Dallas, Iowa.	05487980	342	Chem.	1968-73
			Temp.	1967-73
			Sed.	1967-73
Big Sioux River at Sioux City, Iowa.	06485950	9,410	Chem.	1969-73
Floyd River at James, Iowa.	06600500	882	Temp.	1968-73
			Sed.	1968-73
Floyd River at Sioux City, Iowa.	06600520	921	Chem.	1969-73
Little Sioux River at Correctionville, Iowa.	06606600	2,500	Chem. *	1954-55
			Temp. *	1951-62
			Sed.	1950-62
Little Sioux River near Kennebec, Iowa.	06606700	2,738	Temp.	1950-55
			Sed.	1950-57
Little Sioux River at River Sioux, Iowa.	06607513	3,600	Chem.	1969-73
Soldier River near Mondamin, Iowa.	06608505	440	Chem.	1970-73
Steer Creek near Magnolia, Iowa.	06609200	9.26	Temp.	1963-69
			Sed.	1963-69
Thompson Creek near Woodbine, Iowa.	06609590	6.97	Temp.	1963-69
			Sed.	1963-69
Willow Creek near Logan, Iowa.	06609600	129	Chem.	1972-75
			Temp.	1972-75
			Sed.	1971-75
Mule Creek near Malvern, Iowa.	06808000	10.6	Temp.	1958-69
			Sed.	1954-69
Davids Creek near Hamlin, Iowa.	06809000	26.0	Temp. *	1952-53; 1965-68
			Sed. *	1952-68
East Nishnabotna River at Red Oak, Iowa.	06809500	894	Temp.	1962-73
			Sed.	1962-73
Nishnabotna River above Hamburg, Iowa.	06810000	2,806	Chem. *	1969-70
Platte River near Diagonal, Iowa.	06818750	217	Chem.	1969-73
Thompson River at Davis City, Iowa.	06898000	701	Chem.	1967-73
			Temp.	1968-73
			Sed.	1968-73
Weldon River near Leon, Iowa.	06898400	104	Chem.	1968-73
Chariton River near Chariton, Iowa.	06903400	182	Temp.	1969-73
			Sed.	1969-73
Honey Creek near Russell, Iowa.	06903500	13.2	Sed.	1952-62
Chariton River near Rathbun, Iowa	06903900	551	Temp. *	1962-69
			Sed. *	1962-69

Type of record: Chem. (chemical quality); Temp. (water temperature); Sed. (sediment).

SECTION 3. GROUND WATER RECORDS

GROUND-WATER LEVELS

293

Adair County

411749N0942018.1. Local number 75-30-17bcb1. Formerly 75-30-17E1. F. E. Robert. Drilled unused water-table well in glacial drift, diam 12 in, depth 26 ft, lined with tile. Lsd 1,267 ft above msl. MP top of board platform, 0.80 ft above lsd (since June 1, 1959). Highest water level 0.18 above lsd, Mar. 23, 1943; lowest 8.40 below lsd, July 28, 1953. Records available: 1942 to current year.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Nov. 16, 1971	1.42	May 16, 1973	0.32	July 11, 1974	2.13	Aug. 11, 1975	3.21
Feb. 15, 1972	1.82	Mar. 12, 1974	0.23	Apr. 16, 1975	0.23		

Buena Vista County

423426N0951148.1. Local number 90-37-34abb1. Formerly 90-37-34B1. Ed Zinn. Dug unused water-table well in glacial drift, diam 4 ft, depth 29 ft, lined with rock. Lsd 1,404 ft above msl. MP east side of concrete platform, 2.00 ft above lsd. Highest water level 3.77 below lsd, Oct. 15, 1946; lowest 18.32 below lsd, Aug. 27, 1941. Records available: 1940 to current year.

Nov. 16, 1971	11.94	Mar. 5, 1973	6.90	Nov. 28, 1974	11.00	June 19, 1975	5.94
Jan. 15, 1972	10.57	Oct. 4	9.13	Feb. 21, 1975	10.71	1975 Abandoned	
July 31	7.24	Jan. 21, 1974	8.10				

Carroll County

420335N0945215.1. Local number 84-35-25bddb1. Formerly 84-35-25F1. City of Carroll, test hole 1. Drilled observation artesian well in Dakota Sandstone of Early Cretaceous age, diam 8 in, depth 120 ft, cased to 106. Lsd 1,244 ft above msl. MP top of casing, 4.0 ft above lsd (since July 1975). Highest water level 34.55 below lsd, Sept. 8, 1945; lowest 77.68 below lsd, June 14, 1958. Records available: 1939-49, 1952 to current year.

Nov. 16, 1971	57.58	June 5, 1973	67.62	Nov. 28, 1974	58.87	June 19, 1975	50.95
Jan. 15, 1972	64.12	Mar. 13, 1974	53.21	Feb. 21, 1975	62.43	Aug. 13	74.38
July 29	65.19						

Cerro Gordo County

430442N0952528.1. Local number 95-22-3abb1. Formerly 95-22-381. Knut Olson. Drilled domestic and stock artesian well in limestone of Devonian age, diam 4 in, depth 134 ft, casing information not available. Lsd 1,260 ft above msl. MP top of casing, 1.40 ft above lsd. Highest water level 14.34 below lsd, July 3, 1945; lowest 24.16 below lsd, Dec. 5, 1966. Records available: 1941 to current year.

Mar. 1, 1973	22.15	Oct. 1, 1973	23.05	Nov. 19, 1974	23.80	Aug. 6, 1975	22.26
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430927N0931142.1. Local number 95-20-3cddb1. Formerly 95-20-3P1. Minneapolis & St. Louis RR. Co. Drilled unused artesian well in St. Peter Sandstone of Middle Ordovician age, diam 12 to 10 in, depth 805 ft, cased 12-in 0-30, 10-in 614-730. Lsd 1,120 ft above msl. MP top of wood cover, at lsd. Highest water level 32.71 below lsd, May 7, 1951; lowest 59.45 below lsd Feb. 28, 1959. Records available: 1941 to current year. Records prior to April 1970 are from recording gage; subsequent records are periodic tape measurements.

Mar. 1, 1973	41.63	Jan. 23, 1974	45.23	Nov. 18, 1974	46.30	Aug. 6, 1975	46.00
Oct. 1	45.70						

430754N0931205.1. Local number 95-20-15daal. Formerly 95-20-16J1. Mason City, well 11. Drilled municipal artesian well in Jordan Sandstone of Late Cambrian age, diam 20 to 10 in, depth 1,306 ft, cased 20-in 0-143, 14-in 713-777, 10-in 777-900. Lsd 1,168 ft above msl. MP hole in well cover, 1.21 ft above lsd. Highest water level 162.23 below lsd, June 25, 1942; lowest 298.79 below lsd, Feb. 14, 1963. Records available: 1939-43, 1947-74. Water levels affected by pumping.

Jan. 19, 1972	280.79	July 5, 1972	290.79	Mar. 5, 1973	280.79	Mar. 4, 1974	266.79
Feb. 16	286.79	Aug. 2	280.79	May 1	279.79	Nov. 18	287.29
June 5	280.79	Sept. 5	280.79	Jan. 23, 1974	275.69	1975 Abandoned	

430802N0931640.1. Local number 95-21-13bcc1. Formerly 95-21-13E1. Mason City & Clear Lake RR. Drilled unused artesian well in dolomite in Cedar Valley Limestone of Devonian age, diam 5 in, depth 198 ft, casing information not available. Lsd 1,168 ft above msl. MP top of well curb, 2.00 ft above lsd. Highest water level 1.73 below lsd, June 28, 1951; lowest 17.26 below lsd, Nov. 18, 1955. Records available: 1940 to current year.

Mar. 1, 1973	5.48	Jan. 23, 1974	5.65	Nov. 18, 1974	7.05	Aug. 6, 1975	6.70
Oct. 1	5.94						

430655N0932815.1. Local number 95-22-20ccbb1. Formerly 95-22-20L1. Boy Scouts of America. Drilled unused water-table well in glacial drift, diam 5 in, depth 126 ft, casing information not available. Lsd 1,249 ft above msl. MP hole in side of casing, 1.30 ft above lsd. Highest water level 29.65 below lsd, Mar. 25, 1942; lowest 48.52 below lsd, Aug. 6, 1975. Records available: 1940 to current year.

Mar. 1, 1973	39.84	Jan. 23, 1974	40.07	Nov. 19, 1974	41.50	Aug. 6, 1975	48.52
Oct. 1	41.30						

GROUND-WATER LEVELS

Clayton County

424101N0913200.1. Local number 91-6-22acc1. Formerly 91-6-22G3. Howard Bowman. Dug unused water-table well in glacial drift, diam 36 in, depth 18 ft, cribbed with brick. Lsd 1,221 ft above msl. MP top of board platform, 0.08 ft above lsd. Highest water level 3.54 below lsd, May 6, 1960; lowest 10.03 below lsd, Jan. 24, 1965. Records available: 1957 to current year.

Water level at noon, from recorder graph, water year October 1 to September 30
1971-72

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
5	8.57	6.72	7.90	....	....	....	7.61	5.16	6.55	6.60	5.35	6.48
10	8.75	7.53	....	7.72	....	....	7.38	5.10	6.65	5.84	5.84	6.94
15	8.90	7.75	....	7.81	....	8.52	6.99	5.48	6.30	5.73	6.50	5.43
20	8.88	7.61	....	....	....	8.29	5.98	5.96	6.60	5.53	7.06	6.48
25	8.89	7.80	6.61	8.42	....	7.99	5.42	6.10	6.81	5.81	7.31	7.04
Eom	8.58	7.89	6.88	....	....	7.78	5.37	6.21	6.77	6.14	7.45	6.60

1972-73

5	7.18	5.78	8.00	6.72	7.87	....	....	6.92	6.34	7.12	8.46	8.40
10	7.42	6.35	8.14	....	8.08	....	....	5.60	6.87	7.76	8.07	7.93
15	7.51	6.92	8.37	....	8.27	5.22	....	6.38	7.10	8.09	8.28	8.31
20	7.59	7.35	8.50	....	8.42	5.75	....	7.02	6.15	8.31	8.53	8.10
25	5.42	7.58	8.59	7.77	....	....	6.31	6.68	6.91	8.04	8.26	6.99
Eom	5.60	7.80	6.48	7.95	....	....	6.89	6.37	7.32	8.37	8.60	7.34

1973-74

5	7.52	....	....	....	8.05	7.83	5.95	7.40	7.03	....	8.12	....
10	7.81	....	....	....	8.36	7.43	6.38	7.08	....	....	7.95	....
15	7.75	....	....	....	8.40	7.29	4.96	6.33	....	....	....	....
20	8.03	....	....	....	8.47	7.55	5.80	5.00	....	7.97	....	....
25	8.34	....	....	7.22	8.41	7.74	6.43	5.77	....	8.00	....	....
Eom	....	....	....	7.80	8.41	6.89	6.99	6.52	....	8.16	....	....

1974-75

5	....	8.16	8.74	8.62	8.78	9.15	....	....	....	6.95	8.64	....
10	7.30	8.40	8.08	8.50	8.95	9.00	....	6.50	....	....	....	8.60
15	7.75	8.15	8.18	8.24	9.09	9.06	....	6.75	....	....	....	8.68
20	8.17	8.38	8.12	8.36	9.10	....	....	7.18	....	....	....	8.82
25	8.41	8.57	8.34	8.62	8.78	....	6.24	7.45	....	8.22	....	8.98
Eom	8.23	8.67	8.50	8.80	8.98	....	....	6.89	....	8.37	....	8.90

e Estimated.

424057N0913200.1. Local number 91-6-22acc1. Formerly 91-6-22G2. City of Strawberry Point. well 2. Drilled unused artesian well in dolomite of Silurian age, diam 16 to 10 in, depth 492 ft, cased 16-in 0-130, 12-in 130-161, lined 10-in 229-370. Lsd 1,219 ft above msl. MP top of recorder platform, 2.10 ft above lsd. Highest water level 114.38 below lsd, May 9, 1973; lowest 133.18 below lsd, Feb. 4, 1968. Records available: 1963 to current year.

Water level at noon, from recorder graph, water year October 1 to September 30
1971-72

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
5	125.66	126.10	126.39	125.88	....	....	126.81	125.15	124.40	125.52	124.18	123.90
10	125.65	126.42	125.80	125.91	126.82	....	126.80	124.25	125.50	126.10	123.35	124.34
15	125.90	126.43	125.89	126.85	126.75	....	126.67	123.58	125.50	126.00	123.00	123.24
20	126.38	125.96	125.77	126.12	126.91	....	126.55	124.05	125.64	126.06	123.37	122.97
25	126.24	126.62	125.94	126.78	127.13	126.73	126.09	124.48	125.90	126.06	123.54	122.80
Eom	126.43	126.85	126.00	....	126.78	126.57	125.55	124.34	125.93	125.82	124.10	122.50

1972-73

5	122.11	120.58	119.88	120.77	....	....	....	115.12	115.30	116.58	119.27	120.57
10	122.47	120.11	120.85	120.45	121.64	....	....	114.73	115.53	116.95	119.20	121.10
15	122.70	120.26	120.60	121.05	....	119.37	118.19	115.02	115.50	117.74	119.37	120.96
20	122.88	119.82	120.50	121.05	....	119.12	116.07	115.55	115.98	118.12	120.02	121.03
25	121.60	119.40	120.98	121.07	121.95	118.28	115.30	115.56	115.75	118.12	119.96	120.70
Eom	121.33	119.87	120.96	....	121.87	....	115.14	115.54	116.15	119.09	120.50	121.30

1973-74

5	121.52	122.45	122.40	....	123.46	....	122.25	120.17	118.88	118.57	121.68	123.60
10	121.63	122.70	122.52	....	123.75	....	121.70	120.13	118.36	119.36	122.01	123.62
15	121.67	122.17	....	....	124.01	....	121.26	120.06	118.15	120.35	122.31	123.75
20	122.20	....	123.16	123.18	123.49	....	120.15	119.10	119.04	120.68	122.25	124.25
25	122.26	122.75	....	123.64	....	122.76	120.05	118.84	....	120.74	122.65	124.09
Eom	121.77	123.51	....	123.74	....	....	120.12	118.55	118.14	121.47	123.20	124.78

1974-75

5	124.63	124.94	125.20	125.55	....	126.48	123.84	119.90	123.21	123.68	125.94	128.52
10	124.44	....	125.15	125.00	....	126.71	123.21	120.46	123.76	124.01	125.93	128.53
15	124.45	....	124.60	125.72	....	126.83	122.77	121.14	123.65	124.00	126.35	....
20	125.10	....	....	125.55	....	126.48	121.98	121.56	123.12	124.20	126.25	....
25	124.86	125.40	....	126.08	126.15	124.89	121.40	122.52	123.55	124.80	126.35	....
Eom	124.65	125.20	....	....	126.64	123.27	120.75	122.52	123.50	125.71	127.13	128.13

e Estimated.

425940N0911947.1. Local number 95-4-32ddd1. Formerly 95-4-32R1. Milton and Willis Meier. Drilled stock artesian well in St. Peter Sandstone of Middle Ordovician age, diam 6 in, reported depth 380 ft. Casing information not available. Lsd 1,090 ft above msl. MP plug in pumpbase, 1.00 ft above lsd. Highest water level 82.56 below lsd, Oct. 8, 1974; lowest 126.56 below lsd, Jan. 13, 1969. Records available: 1957 to current year.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
July 19, 1972	108.48	Sept. 13, 1973	88.58	Oct. 8, 1974	82.56	May 6, 1975	85.07
Feb. 6, 1973	103.03	Feb. 4, 1974	90.62	Jan. 24, 1975	85.06	Aug. 5	82.58

GROUND-WATER LEVELS

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Des Moines County

404844N0911427.1. Local number 69-3-6aaba1. Formerly 69-3-6A1. Iowa Ordnance Plant, well 3. Drilled unused artesian well in St. Peter Sandstone of Middle Ordovician age, diam 16 in, depth 1,209 ft, cased 0-855. Lsd 717 ft above ms1. MP top of recorder platform, 1.61 ft above lsd. Highest water level 162.70 below lsd, Mar. 27, 1950; lowest 195.12 below lsd, Aug. 27, 1975. Records available: 1950 to current year.

Water level at noon, from recorder graph, water year October 1 to September 30
1972-73

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
5	189.35	.....	.....	.....	189.48	189.29	189.25	.....	190.88	190.95
10	189.18	189.55	.....	.....	.....	189.47	189.40	189.14	190.75	190.83	190.98
15	189.36	.....	.....	.....	.....	189.44	189.16	189.13	190.81	190.87	190.95
20	189.41	.....	.....	.....	.....	189.45	189.27	.....	190.81	190.94	190.94
25	189.13	.....	.....	.....	.....	189.44	189.38	.....	190.88	190.97	191.08
Eom	189.31	.....	.....	.....	189.73	189.41	189.17	.....	190.86	190.98	191.04

1973-74

5	190.90	190.68	191.07	190.78	190.62	190.94	191.57	192.00	192.00	192.45	.....	194.75
10	191.04	190.68	190.87	190.68	.....	191.47	191.49	192.08	191.92	.....	.....	194.51
15	190.99	191.03	190.92	190.50	190.99	191.07	191.51	191.90	192.15	.....	.....	194.98
20	190.86	191.01	190.85	190.37	190.80	191.22	191.59	192.06	192.16	.....	194.77	194.44
25	191.00	190.97	191.10	190.75	191.31	191.45	191.76	192.15	192.37	.....	.....	.....
Eom	191.05	190.83	190.84	190.72	190.90	191.08	191.85	191.98	192.31	.....	194.50	.....

1974-75

5	194.27	.....	193.51	193.29	193.55	193.18	193.87	193.55	194.15	194.84	195.82	195.82
10	.....	.....	.....	192.14	193.06	193.45	193.64	194.01	194.52	195.17	196.07	195.76
15	.....	.....	.....	.....	193.14	193.68	193.72	193.90	194.08	195.39	195.90	195.88
20	.....	193.62	.....	.....	193.04	193.40	193.80	193.83	194.70	195.44	196.06	195.68
25	.....	.....	.....	.....	193.00	193.60	193.62	194.18	194.79	195.70	195.84	195.84
Eom	.....	193.52	.....	192.65	193.22	193.28	193.61	194.15	194.90	195.80	195.85	195.78

e Estimated.

404753N0911425.1. Local number 69-3-6ddcd1. Formerly 69-3-6R1. Iowa Ordnance Plant, well 2. Drilled unused artesian well in limestone of Devonian and Mississippian age, diam 19 in, depth 675 ft, cased 0-75. Lsd 699 ft above ms1. MP top of recorder platform, 1.91 ft above lsd. Highest water level 74.46 below lsd, Apr. 18, 1975; lowest 83.19 below lsd, Apr. 26, 1950. Records available: 1950 to current year.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 29, 1972	78.67	Nov. 6, 1972	77.54	July 11, 1973	76.66	Sept. 6, 1973	76.58
Apr. 27	78.85	Mar. 29, 1973	76.98	Aug. 20	76.63	Oct. 26	76.47

Water level at noon, from recorder graph, water year October 1 to September 30
1973-74

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
5	75.60	75.66	.....	75.55	75.34	75.51	75.65
10	75.95	75.73	.....	75.36	75.48	75.61	75.53
15	75.98	.....	75.61	.....	75.52	75.15	75.42	75.63
20	75.63	.....	.....	75.68	75.48	75.40	75.47	75.68
25	76.08	.....	.....	75.65	75.41	75.42	75.59	75.69
Eom	75.77	75.53	.....	75.32	75.38	75.41	75.40	75.73

1974-75

5	75.75	75.43	75.47	75.36	75.23	75.14	75.32	74.73	74.88	75.42	75.72	76.08
10	75.80	75.48	75.37	74.74	75.22	75.17	75.07	75.04	75.15	75.48	75.80	76.28
15	75.80	75.53	75.10	75.32	75.13	75.24	75.15	74.89	74.90	75.68	75.72	76.35
20	75.92	75.34	75.28	75.34	75.03	75.01	75.03	74.75	75.38	75.60	.....	76.16
25	75.79	75.62	75.48	74.83	74.75	74.88	74.89	74.98	75.46	75.72	.....	76.48
Eom	75.84	75.48	75.42	75.45	75.04	74.87	74.68	74.89	75.53	75.81	75.86	76.33

e Estimated.

Emmet County

432927N0943455.1. Local number 100-32-11ddd1. Formerly 100-32-11R1. Okamanpedan Lake Reserve State Park. Drilled public-supply artesian well in Dakota Sandstone of Early Cretaceous age, diam 6 in, depth 277 ft, cased 0-1,795. Lsd 1,233 ft above ms1. MP plug in pumpbase, 0.61 ft above lsd. Highest water level 59.60 below lsd, Dec. 19, 1946; lowest 70.38 below lsd, Mar. 2, 1973. Records available: 1939 to current year.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Nov. 17, 1971	69.98	Oct. 2, 1973	70.21	Nov. 19, 1974	69.63	June 20, 1975	69.27
Jan. 17, 1972	69.79	Jan. 22, 1974	69.99	Feb. 20, 1975	69.44	Aug. 7	69.82
Mar. 2, 1973	70.38						

Greene County

420051N0942233.1. Local number 83-30-8cbb1. Formerly 83-30-8M1. City of Jefferson. Drilled public-emergency-supply artesian well in Jordan Sandstone of Late Cambrian age, diam 12 to 6 in, depth 2,307 ft, cased 0-1,795. Lsd 1,065 ft above ms1. MP edge of vent pipe, 1.00 ft above lsd. Highest water level 75.44 below lsd, May 20, 1963; lowest 96.11 below lsd, Apr. 16, 1975. Records available: 1960 to current year.

Nov. 16, 1971	90.92	June 5, 1973	94.03	Nov. 20, 1974	95.94	Apr. 16, 1975	95.11
Jan. 15, 1972	91.90	Mar. 12, 1974	95.31	Feb. 21, 1975	95.80	June 18	95.08
July 29	92.32						

GROUND-WATER LEVELS

Grundy County

422605N0925600.1 Local number 88-18-15dbb1. Formerly 88-18-15K1. Town of Wellsburg. Drilled public-emergency-supply artesian well in English River Siltstone, of Stainbrook (1950), of Early Mississippian age, diam 12 in, depth 280 ft, cased to 128. Lsd 1,060 ft above msl. MP edge of vent pipe, 1.25 ft above lsd. Highest water level 35.95 below lsd, Nov. 18, 1974; lowest 96.81 below lsd, Sept. 27, 1960. Records available: 1960 to current year.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
May 21, 1973	36.73	Nov. 18, 1974	35.95	June 20, 1975	46.14	Aug. 7, 1975	42.49
Oct. 1	36.72						

Hancock County

425447N0934721.1. Local number 94-25-34cbb1. Formerly 94-25-34M1. Clarion-Webster Experimental Farm. Bored unused water-table well in glacial drift, diam 3 in, depth 18 ft (previously reported 17.77 ft), cased with downspout all the way. Lsd 1,197 ft above msl. MP top of casing, 0.30 ft above lsd. Highest water level 3.13 below lsd, June 3, 1965; lowest 11.60 below lsd, Mar. 5, 1968. Records available: 1960 to current year.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Nov. 17, 1971	6.15	Nov. 19, 1974	10.06	June 20, 1975	3.73	Aug. 7, 1975	6.74
Oct. 1, 1973	5.60						

Henry County

405810N0913305.2. Local number 71-6-9aba2. Formerly 71-6-9B2. City of Mount Pleasant, well 4. Drilled municipal artesian well in Jordan Sandstone of Late Cambrian age, diam 20 to 19 in, depth 1,860 ft, cased 20-in 0-523. Lsd 732 ft above msl. MP hole in pumpbase, 2.25 ft above lsd. Highest water level 132.00 below lsd, May 5, 1946; lowest non pumping 190.00 below lsd, June 6, 1968. Records available: 1946-50, 1953-57, 1959 to current year. Water levels affected by pumping.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct. 28, 1971	178.00	Sept. 7, 1973	p196.00	July 8, 1974	187.75	May 13, 1975	189.85
Nov. 6, 1972	188.00	Dec. 6	183.00	Oct. 15	187.75	Sept. 3	187.10
Mar. 30, 1973	p200.00	Feb. 12, 1974	p196.75	Jan. 7, 1975	p203.95		

p Well being pumped.

410848N0913948.1. Local number 73-7-9aab1. Formerly 73-7-9A1. Town of Wayland. Dug unused water-table well in glacial drift, diam 4 ft, depth 52 ft, casing information not available. Lsd 745 ft above msl. MP top of cement cover, 0.21 ft above lsd. Highest water level 2.30 below lsd, Sept. 1, 1965; lowest 14.37 below lsd, Nov. 18, 1963. Records available: 1960 to current year.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct. 28, 1971	9.68	Sept. 7, 1973	8.25	May 15, 1974	6.07	May 13, 1975	9.46
Nov. 6, 1972	8.43	Dec. 6	6.07	July 9	9.23	Sept. 3	9.25
Mar. 30, 1973	6.30	Feb. 13, 1974	8.35	Oct. 15	9.48		

Jasper County

414205N0925920.1. Local number 80-18-31abb1. Formerly 80-18-31C1. P. W. Beukema. Dug stock water-table well in glacial drift, diam 36 in, depth 37 ft, cribbed with brick. Lsd 937 ft above msl. MP top of cement platform, 0.70 ft above lsd (since Apr. 1, 1970). Highest water level 2.67 below lsd, June 10, 1947; lowest 27.15 below lsd, Dec. 18, 1948. Records available: 1940 to current year.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Nov. 15, 1971	15.02	May 16, 1973	4.24	Apr. 16, 1975	5.02	Sept. 2, 1975	9.92
Feb. 15, 1972	18.59	July 11, 1974	4.54				

Jefferson County

410101N0915720.1. Local number 72-10-24dcd1. Formerly 72-10-24Q1. City of Fairfield, well 3. Drilled public-emergency-supply artesian well in glacial sand and gravel, diam 6 in, depth 191 ft, cased. Lsd 738 ft above msl. MP top of vent pipe, 1.60 ft above lsd (since Aug. 1, 1968). Highest water level 31.65 below lsd, Mar. 30, 1973; lowest 87.13 below lsd, Feb. 15, 1958. Records available: 1958-73. Water levels affected by nearby pumping wells. Well destroyed in 1974.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 12, 1971	31.90	Mar. 30, 1973	31.65	Sept. 7, 1973	31.95	1974 Destroyed	
Oct. 28	32.34						

Johnson County

414055N0913236.1. Local number 79-6-4aac1. Forest View Trailer Court. Drilled unused artesian well in limestone of Silurian age, diam 6 in, depth 280 ft, cased to 96 ft. Lsd 735 ft above msl. MP top of casing, 1.00 ft above lsd. Highest water level 106.19 ft below lsd, Feb. 14, 1972; lowest 146.01 ft below lsd, July 17, 1971. Records available: 1971 to current year.

Water level at noon, from recorder graph, water year October 1 to September 30
1971-72

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
5	142.01	141.78	123.31	111.68	107.25	.....	111.70	131.48	138.29	145.48	142.25	138.70
10	141.95	140.64	118.63	110.09	107.12	107.95	112.41	132.09	140.75	145.21	139.75	.....
15	141.87	139.88	116.16	110.10	.....	107.68	117.15	133.24	142.25	145.44	138.70	138.63
20	.....	.....	113.90	108.45	.....	108.52	122.74	135.00	143.25	145.00	139.10	138.80
25	.....	138.24	112.37	108.66	106.58	110.51	125.48	136.06	144.02	144.78	139.00	138.42
Eom	143.12	130.32	112.00	.....	106.61	111.77	129.01	e136.69	144.53	143.76	138.77	138.55

1972-73

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
5	138.42	135.45	119.53	.....	113.82	111.70	109.87	122.15	132.19	138.10	.....	141.57
10	138.63	134.34	119.13	.....	113.19	.....	109.74	125.13	132.93	138.74	140.42	141.14
15	138.73	130.00	118.31	.....	112.61	110.12	110.13	129.17	134.78	139.72	141.40	140.82
20	137.83	125.44	117.45	.....	112.52	e110.39	110.70	129.53	135.70	140.10	141.84	140.75
25	135.67	121.98	117.35	114.84	.....	110.01	110.18	130.30	136.93	140.08	141.08	140.46
Eom	135.56	120.58	e113.68	109.95	e117.35	131.53	137.73	140.17	141.68	140.08

e Estimated.

GROUND-WATER LEVELS

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Johnson County, 414055N0913236.1.--Continued.

Water level at noon, from recorder graph, water year October 1 to September 30
1973-74

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
5	140.15	.....	118.17	113.85	110.10	110.32	112.04	128.88	e132.08	136.26	137.69	137.17
10	139.76	137.84	117.45	112.84	110.16	110.73	112.92	129.77	132.77	136.96	137.29	136.77
15	139.53	130.77	116.77	111.98	.....	109.84	117.49	130.44	133.56	137.20	137.22	137.00
20	138.78	125.62	116.22	111.17	110.15	109.90	122.02	130.42	134.43	137.74	136.93	136.64
25	139.00	122.26	115.14	111.03	110.71	111.00	125.05	131.10	134.84	137.55	137.15	135.58
Eom	138.17	120.39	114.75	110.70	110.35	111.38	127.23	e130.95	135.52	138.12	136.92	135.56

1974-75

5	134.63	133.48	116.53	113.92	112.49	112.99	111.75	125.17	132.68	136.33	139.91	139.64
10	134.57	132.20	115.46	113.15	112.57	112.84	111.03	126.94	134.01	137.44	138.66	138.80
15	134.76	129.68	114.86	113.97	112.92	113.07	110.53	127.76	133.88	137.98	136.79	138.37
20	134.58	.....	114.35	113.32	113.11	112.79	116.42	128.68	134.77	138.48	137.76	137.77
25	134.10	120.66	114.25	112.49	112.87	112.51	121.11	130.27	135.09	138.80	138.94	137.42
Eom	133.70	118.22	113.93	113.15	112.95	111.63	123.56	132.03	135.60	139.68	139.97	137.17

e Estimated.

414315N0912520.1. Local number 80-5-22cbb1. Formerly 80-5-22M1. Chicago, Rock Island & Pacific RR. Co. Dug unused water-table well in glacial drift, diam 4 ft, depth 20 ft, cribbed with brick. Lsd 753 ft above msl. MP top of casing 4.20 ft above lsd (since July 1, 1975). Highest water level 5.88 below lsd, May 22, 1953; lowest dry, Dec. 2-31, 1955, Nov. 8 to Dec. 31, 1964. Records available: 1941-56, 1958 to current year.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Dec. 21, 1971	6.10	May 17, 1973	7.21	Dec. 12, 1974	13.95	May 29, 1975	11.19
Mar. 20, 1972	8.30	Nov. 19	14.85	Jan. 9, 1975	12.10	July 1	13.56
July 3	11.20	July 30, 1974	12.07	Feb. 12	12.66	July 21	16.46
Sept. 20	12.00	Nov. 27	14.49	Mar. 21	7.70	Sept. 8	17.28
Jan. 30, 1973	9.41						

414315N0912520.2. Local number 80-5-22cbb2. Formerly 80-5-22M2. Chicago, Rock Island & Pacific RR. Co. Drilled unused artesian well in limestone of Devonian age, diam 5 in, depth 82 ft cased. Lsd 753 ft above msl. MP top of casing 2.50 ft above lsd (since July 1, 1975). Highest water level 8.15 below lsd, Apr. 21, 1952; lowest 21.05 below lsd, Sept. 25, 1957. Records available: 1941 to current year.

Dec. 21, 1971	14.71	Jan. 30, 1973	13.98	Jan. 9, 1975	14.47	July 1, 1975	16.16
Mar. 20, 1972	14.40	May 17	11.59	Feb. 12	15.55	July 21	16.98
Apr. 24	12.30	Nov. 19	15.62	Mar. 21	14.07	Sept. 8	18.30
July 3	17.93	July 30, 1974	14.13	May 29	15.17		
Sept. 20	14.56	Dec. 12	15.20				

Lee County

403609N0912408.1. Local number 67-5-14caa1. Formerly 67-5-14L1. U.S. Geol. Survey. Driven observation water-table well in alluvial sand, diam 1 1/4 in, depth 13 ft, screened 11-13. Lsd 529 ft above msl. MP top of pipe, 2.40 ft above lsd. Highest water level 5.46 below lsd, Mar. 30, 1973; lowest 10.63 below lsd, Sept. 21, 1964. Records available: 1950-74. Well destroyed in 1974.

Oct. 27, 1971	8.24	Mar. 30, 1973	5.46	Feb. 13, 1974	6.05	1974 Destroyed	
Nov. 6, 1972	7.27	Sept. 7	6.89				

Linn County

415422N0914226.1. Local number 82-7-18cdd1. Formerly 82-7-18P2. Lester Petrak. Formerly Joseph Cerveny, Sr. Dug unused water-table well in glacial drift, diam 4 ft, depth 14 ft, cribbed with brick. Lsd 835 ft above msl. MP base of recorder shelter, 0.08 ft above lsd. Highest water level 1.09 below lsd, Aug. 4, 1968; lowest 11.18 below lsd, Mar. 7, 1964. Records available: 1959 to current year.

Water level at noon, from recorder graph, water year October 1 to September 30
1971-72

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
5	10.49	6.62	9.45	e5.93	6.88	5.70	4.65	4.64	5.16	5.35	4.35	5.15
10	10.62	8.53	9.23	5.37	6.92	5.70	4.80	3.99	5.16	5.41	4.26	5.32
15	10.73	8.71	8.32	....	7.10	5.00	4.90	4.45	4.80	5.40	4.45	5.35
20	10.80	8.92	5.60	6.09	7.34	4.60	4.35	4.68	4.80	4.62	4.87	5.46
25	10.62	9.21	5.94	6.60	7.38	4.74	4.35	4.88	5.03	4.83	5.07	5.52
Eom	10.49	9.30	5.92	6.68	6.50	4.84	4.64	5.01	5.17	4.67	5.27	5.18

1972-73

5	5.42	4.39	4.85	....	4.78	4.94	4.79	4.59	3.80	5.55	6.79	7.10
10	5.60	4.63	4.96	....	4.97	4.58	5.02	4.51	4.89	5.85	6.99	6.71
15	5.74	4.52	5.07	5.24	5.13	4.32	1.60	4.87	5.19	6.10	7.19	6.80
20	5.87	4.55	5.24	5.42	5.31	4.82	....	5.10	5.33	6.28	7.42	6.81
25	4.68	4.61	5.44	....	5.18	5.02	4.55	5.14	5.55	6.40	7.49	5.13
Eom	4.92	4.62	3.98	4.81	5.35	5.07	4.85	4.78	5.64	6.61	7.77	....

1973-74

5	4.77	5.59	4.15	....	4.50	4.53	4.13	....	4.85	5.30	5.94	6.04
10	4.98	5.86	4.57	....	....	....	4.64	....	4.57	5.48	6.34	6.33
15	4.67	6.00	4.86	5.08	5.03	....	....	....	4.56	5.59	4.39	6.52
20	4.92	6.15	5.05	4.57	5.16	4.92	4.32	4.17	4.94	5.85	....	6.62
25	5.06	5.56	4.70	....	5.20	5.06	4.77	4.65	4.70	5.86	5.31	6.98
Eom	5.23	5.39	4.62	4.09	5.18	4.35	....	4.51	5.09	6.17	5.67	7.22

GROUND-WATER LEVELS

Linn County, 415422N0914226.1.--Continued.

Water level at noon, from recorder graph, water year October 1 to September 30
1974-75

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
5	7.33	8.04	8.47	7.12	67.14	8.04	....	4.89	5.82	6.02	8.05	8.97
10	7.49	8.14	7.99	7.33	....	8.15	....	5.07	6.18	6.40	8.32	8.70
15	7.61	8.00	7.57	5.77	....	8.24	....	5.15	5.71	6.78	8.53	9.04
20	7.69	8.14	6.68	....	....	....	....	5.30	5.20	7.12	8.67	9.17
25	7.83	8.32	6.76	6.29	....	4.30	4.88	5.49	5.18	7.40	8.70	9.33
Eom	7.96	8.39	6.94	6.82	7.87	4.07	4.82	5.70	5.67	7.79	8.87	9.48

e Estimated.

415816N0913934.1. Local number 83-7-28add1. Formerly 83-7-28H1. Collins Radio. Drilled unused artesian well in limestone of Silurian age, diam 10 in, depth 420 ft, cased to 75. Lsd 735 ft above msl. MP top of well cover, 6.15 ft below lsd. Highest water level 51.10 below lsd, Feb. 25, 1963; lowest 93.80 below lsd, Aug. 1, 1975. Records available: 1962 to current year.

Water level at noon, from recorder graph, water year October 1 to September 30
1971-72

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
5	88.49	83.65	80.20	74.70	74.34	73.95	73.03	75.90	80.59	84.38	....	....
10	86.51	82.08	81.00	75.76	75.38	74.45	73.50	75.50	82.25	84.39	....	....
15	86.21	82.66	79.85	76.50	74.44	74.40	74.05	75.51	83.25	84.60	....	....
20	85.60	82.40	76.36	76.31	73.90	73.68	76.00	77.45	83.14	85.15	....	....
25	85.04	82.01	74.75	75.42	74.32	73.18	75.60	79.40	83.10	....	....	....
Eom	84.65	82.20	76.38	74.05	74.10	73.10	74.80	79.85	83.70	....	....	....

1972-73

5	....	76.91	74.20	72.80	68.24	66.35	64.19	....	64.55	75.60	79.01	81.65
10	....	75.89	74.59	72.23	68.78	66.33	63.70	....	....	76.05	79.70	81.65
15	....	75.90	74.05	70.44	68.65	65.53	63.22	....	....	76.50	80.58	81.30
20	....	75.35	72.99	69.90	67.10	64.70	63.30	....	....	77.38	81.30	80.41
25	78.40	74.34	71.45	69.59	67.05	64.08	....	63.42	72.02	78.11	80.78	79.14
Eom	77.37	74.23	72.21	68.39	67.19	63.95	....	63.52	73.23	79.02	82.22	78.99

1973-74

5	78.42	73.97	69.82	67.23	65.69	66.85	66.09	68.77	70.11	....	....	85.25
10	78.50	73.50	69.44	66.90	64.87	67.10	66.31	69.32	71.12	....	....	85.55
15	77.45	72.50	68.70	66.22	65.95	66.99	66.80	68.43	72.08	....	....	83.53
20	76.30	71.89	68.53	65.71	65.80	66.80	67.27	68.34	72.10	....	....	83.72
25	75.75	71.08	67.24	67.16	65.18	66.54	67.55	69.77	....	....	85.39	83.18
Eom	74.12	70.78	67.19	66.45	66.72	66.07	68.42	69.93	....	....	86.20	82.00

1974-75

5	82.11	80.37	79.16	....	78.00	76.85	77.30	74.65	83.44	87.13	92.25	91.46
10	82.34	79.38	78.30	....	76.40	77.24	78.16	75.83	83.55	88.84	90.40	90.96
15	81.28	80.79	76.83	....	77.17	78.05	76.47	77.17	83.22	90.74	92.31	89.90
20	81.20	79.90	....	....	79.31	78.18	75.48	79.65	87.05	88.91	91.85	88.55
25	81.20	78.84	....	76.19	76.43	77.47	76.34	80.36	87.25	91.45	91.08	88.35
Eom	81.45	78.45	....	77.81	77.83	76.05	75.73	82.90	87.17	92.65	90.67	87.75

415725N0914104.1. Local number 83-7-32accl. Formerly 83-7-32G1. Floyd Felter. 22nd Ave. SW. and 11th St. SW., Cedar Rapids. Drilled unused artesian well in limestone of Silurian age, diam 5 in, depth 282 ft, cased. Lsd 805 ft above msl. MP plug in well cover, at lsd. Highest water level 75.88 below lsd, Jan. 26, 1942; lowest 103.98 below lsd, Sept. 17, 1975. Records available: 1940 to current year.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct. 19, 1971	99.56	Nov. 20, 1972	94.16	Oct. 22, 1973	98.61	Oct. 22, 1974	94.17
Dec. 21	97.50	Dec. 21	92.44	Nov. 19	96.78	Nov. 22	97.83
Jan. 21, 1972	96.47	Jan. 23, 1973	92.84	Dec. 20	96.41	Dec. 18	97.66
Mar. 20	96.38	Feb. 20	92.69	Feb. 20, 1974	94.39	Feb. 28, 1975	97.76
Apr. 24	95.17	Mar. 20	92.61	Mar. 20	93.49	Mar. 21	96.10
May 23	94.42	Apr. 25	89.60	Apr. 24	93.30	Apr. 24	94.70
June 20	95.47	May 23	90.68	May 20	91.25	May 21	95.49
July 20	97.65	June 21	91.18	June 24	93.56	June 23	98.50
Aug. 22	98.14	July 20	96.48	July 17	94.49	July 21	101.22
Sept. 20	98.02	Aug. 23	98.80	Aug. 22	98.47	Aug. 22	103.01
Oct. 24	95.65	Sept. 20	98.44	Sept. 23	99.22	Sept. 17	103.98

420526N0913707.1. Local number 84-7-13bcbl. Formerly 84-7-13E2. U.S. Geol. Survey. Drilled observation water-table well in glacial drift, diam 1 1/4 in, depth 17 ft, screened 15-17. Lsd 892 ft above msl. MP top of casing, 0.75 ft above lsd. Highest water level 1.11 below lsd, Mar. 29, 1960; lowest 12.90 below lsd, Dec. 3, 1956. Records available: 1940 to current year.

Oct. 19, 1971	7.55	Oct. 24, 1972	3.55	Oct. 22, 1973	4.93	Oct. 22, 1974	7.80
Nov. 22	5.23	Nov. 20	2.95	Nov. 19	6.59	Nov. 22	7.53
Dec. 21	3.30	Dec. 21	3.86	Dec. 20	4.60	Dec. 18	5.25
Jan. 21, 1972	3.88	Jan. 23, 1973	2.82	Jan. 23, 1974	4.30	Jan. 21, 1975	5.55
Feb. 23	4.59	Feb. 20	3.71	Feb. 20	3.70	Feb. 25	6.29
Mar. 20	3.14	Mar. 20	2.18	Mar. 20	2.79	Mar. 21	3.60
Apr. 24	2.00	Apr. 25	2.20	Apr. 24	2.78	Apr. 24	2.25
May 23	3.37	May 23	3.23	May 20	1.96	May 21	3.71
June 20	3.54	June 21	3.33	June 24	2.31	June 23	3.41
July 20	3.83	July 20	5.45	July 17	5.24	July 21	5.75
Aug. 22	4.03	Aug. 23	6.86	Aug. 22	4.92	Aug. 22	7.84
Sept. 20	3.87	Sept. 20	5.48	Sept. 23	7.13	Sept. 17	8.77

GROUND-WATER LEVELS

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Lyon County

432140N0955953.1. Local number 99-44-26ddd1. Formerly 99-44-26R1. State of Iowa. Drilled unused water-table well in glacial drift, diam 20 in, depth 38 ft, lined with tile. Lsd 1,400 ft above msl. MP plug in well cover, 2.01 ft above lsd. Highest water level 0.09 below lsd, Mar. 2, 1973; lowest 9.74 below lsd, Oct. 24, 1940. Records available: 1940-43, 1947 to current year.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Nov. 18, 1971	1.22	Oct. 2, 1973	1.39	Nov. 30, 1974	5.86	June 19, 1975	0.44
Jan. 17, 1972	4.18	Jan. 22, 1974	2.70	Feb. 20, 1975	5.33	Aug. 12	4.28
Mar. 2, 1973	0.09						

432549N0961111.1. Local number 99-45-5ab1. Formerly 99-45-5B1. City of Rock Rapids. Drilled unused artesian well in Dakota Sandstone of Early Cretaceous age, diam 10 in, depth 375 ft, cased to 296. Lsd 1,368 ft above msl. MP plug in cover over casing, 1.00 ft above lsd. Highest water level 100.08 below lsd, July 27, 1964; lowest 113.90 below lsd, Nov. 30, 1974. Records available: 1960 to current year.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Nov. 18, 1971	111.63	Oct. 2, 1973	112.53	Nov. 30, 1974	113.90	June 19, 1975	113.10
Jan. 17, 1972	111.32	Jan. 22, 1974	112.75	Feb. 20, 1975	113.28	Aug. 12	113.44
Mar. 2, 1973	111.38						

Madison County

411725N0934836.1. Local number 75-26-23aaa1. Town of St. Charles, No. 1. Drilled unused artesian well in limestone of Mississippian age, diam 10 in, depth 1,058 ft, cased 0-657. Lsd 1,067 ft above msl. MP plug in well cover, 1.20 ft above lsd (since Jan. 1, 1971). Highest water level 261.62 below lsd, Nov. 20, 1962; lowest 267.44 below lsd, Sept. 13, 1974. Records available: 1962 to current year. Records prior to April 1970 are from recording gage; subsequent records are periodic tape measurements.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Nov. 15, 1971	265.73	May 16, 1973	266.05	July 10, 1974	266.96	Apr. 15, 1975	266.98
Feb. 15, 1972	266.08	Mar. 12, 1974	266.93	Sept. 13	267.44	Aug. 11, 1975	267.19

411948N0940220.1. Local number 75-28-2abb1. Formerly 75-28-2B1. Glen Newton. Drilled unused water-table well in glacial drift, diam 24 in, depth 32 ft, cribbed with rock. Lsd 1,093 ft above msl. MP hole in board platform, 0.50 ft above lsd. Highest water level 9.30 below lsd, May 16, 1973; lowest 20.59 below lsd, Oct. 1, 1943. Records available: 1940 to current year.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Nov. 16, 1971	16.20	May 16, 1973	9.30	July 11, 1974	17.78	Apr. 16, 1975	12.80
Feb. 15, 1972	15.84	Mar. 12, 1974	9.85	Sept. 13	15.67	Aug. 11	15.68

Marion County

411323N0931416.1. Local number 74-21-11dbcd2. Formerly 74-21-11K2. Town of Melcher. Drilled unused water-table well in glacial drift, diam 18 in, depth 25 ft, lined with tile. Lsd 948 ft above msl. MP top of well cover, 1.00 ft above lsd. Highest water level 0.20 below lsd, Oct. 10, 1973; lowest 16.27 below lsd, Oct. 22, 1953. Records available: 1950 to current year.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct. 12, 1971	7.75	Oct. 14, 1972	4.59	Oct. 24, 1973	3.00	Nov. 14, 1974	2.89
21	7.20	25	4.50	Nov. 14	4.15	26	4.88
Nov. 11	5.60	Nov. 13	4.05	28	3.78	Dec. 13	4.27
15	5.82	27	2.53	Dec. 14	2.70	26	4.15
24	5.45	Dec. 13	4.15	Jan. 21, 1974	2.00	Jan. 10, 1975	3.62
Dec. 7	5.08	23	4.29	Feb. 12	3.56	23	4.15
22	4.55	Jan. 13, 1973	3.77	20	3.90	Feb. 11	4.96
Jan. 8, 1972	4.56	24	2.97	Mar. 12	1.74	26	4.30
20	5.15	Feb. 12	2.35	14	2.05	Mar. 13	4.38
Feb. 5	5.56	26	2.39	27	3.27	26	4.45
23	5.14	Mar. 12	0.90	Apr. 10	2.49	Apr. 12	2.00
Mar. 14	4.75	23	1.96	26	2.57	15	1.95
25	4.84	Apr. 23	1.20	May 10	3.06	23	1.25
Apr. 11	4.70	May 11	1.55	22	1.69	May 10	3.10
24	2.28	15	2.35	June 11	1.89	23	4.10
May 11	1.15	24	3.60	22	2.46	June 12	3.70
23	2.90	June 8	2.80	July 13	4.07	19	3.76
June 8	3.64	23	3.62	24	4.70	July 15	4.68
23	4.15	July 18	4.25	Aug. 15	8.40	24	4.94
July 12	5.28	25	3.04	24	8.95	Aug. 11	4.69
Aug. 7	2.75	Aug. 13	2.60	Sept. 10	6.00	26	4.88
23	1.28	25	3.74	13	5.24	Sept. 2	4.25
Sept. 14	0.90	Sept. 14	3.75	25	5.70	15	4.00
23	3.15	26	2.60	Oct. 12	2.85	24	4.59
		Oct. 10	0.20	26	6.00		

411541N0931234.1. Local number 75-20-31dbcd1. Formerly 75-20-31C2. Miss Amanda Elliot. Drilled unused water-table well in glacial drift, diam 15 in, depth 29 ft, lined with tile. Lsd 919 ft above msl. MP hole in top of plank platform, 1.31 ft above lsd. Highest water level 2.31 below lsd, June 11, 1947; lowest 27.42 below lsd, Oct. 28, 1953. Records available: 1940 to current year.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Nov. 15, 1971	15.62	Nov. 14, 1973	6.96	July 10, 1974	7.18	Apr. 15, 1975	7.04
Feb. 15, 1972	17.25	Mar. 12, 1974	5.31	Sept. 13	12.09	Sept. 2	12.41
May 15, 1973	3.31						

Marshall County

420355N0925347.1. Local number 84-18-24dbad1. Formerly 84-18-24P1. City of Marshalltown. Drilled unused artesian well in glacial sand and gravel of Pleistocene age, diam 8 in, depth 200 ft, cased to 190, screened 190-200. Lsd 871 ft above msl. MP hole in plate over casing, 1.80 ft above lsd. Highest water level 4.92 below lsd, July 13, 1951; lowest 44.36 below lsd, Aug. 26, 1971. Records available: 1949 to current year.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Mar. 5, 1973	32.77	Nov. 18, 1974	36.78	June 20, 1975	36.06	Aug. 7, 1975	43.84
Oct. 1	37.56						

GROUND-WATER LEVELS

Montgomery County

405835N0950129.1. Local number 71-36-6dadi. Formerly 71-36-6J1. State of Iowa. Drilled observation water-table well in glacial drift, diam 1 1/4 in, depth 38 ft, screened 36-38. Lsd 1,081 ft above msl. MP top of casing, 3.02 ft above lsd. Highest water level 2.52 below lsd, May 31, 1951; lowest 30.99 below lsd, Apr. 26, 1950. Records available: 1950 to current year.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct. 15, 1971	15.15	Oct. 15, 1972	13.32	Oct. 17, 1973	12.62	Oct. 14, 1974	12.00
Nov. 15	14.96	Nov. 16	11.13	Nov. 16	13.02	Nov. 15	14.38
Dec. 15	14.92	Dec. 16	7.85	Dec. 13	11.59	Dec. 14	14.34
Jan. 17, 1972	15.18	Jan. 13, 1973	12.20	Jan. 14, 1974	7.44	Jan. 14, 1975	14.31
Feb. 14	15.32	Feb. 14	11.03	Feb. 18	13.54	Feb. 13	14.26
Mar. 15	15.47	Mar. 13	11.58	Mar. 15	12.29	Mar. 15	14.08
Apr. 15	15.20	Apr. 16	11.08	Apr. 14	12.52	Apr. 14	13.86
May 15	14.64	May 15	10.78	May 15	11.94	May 15	13.15
June 15	14.22	June 16	11.38	June 14	12.18	June 15	13.44
July 15	14.15	July 15	12.21	July 14	12.08	July 14	13.37
Aug. 15	13.72	Aug. 15	12.50	Aug. 15	13.38	Aug. 17	13.94
Sept. 15	13.44	Sept. 17	13.16	Sept. 16	13.08	Sept. 15	13.48

Muscatine County

412120N0910804.4. Local number 76-2-30cbaa4. Formerly 76-2-30M4. U.S. Geol. Survey. Drilled observation water-table well in alluvial sand and gravel, diam 6 in, depth 27 ft, screened 24-27. Lsd 546 ft above msl. MP base of recorder shelter, 3.70 ft above lsd. Highest water level 8.51 below lsd, May 16, 1973; lowest 13.78 below lsd, Dec. 4-5, 10, 1971. Records available: 1966 to current year.

Water level at noon, from recorder graph, water year October 1 to September 30
1971-72

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
5	13.24	13.54	13.78	.....	.....	13.04	.....	.....	.....	.....	.....	.....
10	13.29	13.58	13.78	.....	13.09	12.95	.....	.....	.....	.....	.....	.....
15	13.36	13.64	13.47	.....	13.14	12.90	.....	.....	.....	.....	.....	.....
20	.....	13.67	.....	.....	13.15	12.88	.....	.....	.....	.....	.....	.....
25	.....	13.72	.....	.....	13.16	12.88	.....	.....	.....	.....	.....	.....
Eom	13.50	13.76	.....	.....	13.14	12.86	.....	.....	.....	.....	.....	.....

1972-73

5	.....	.....	12.90	.....	.....	.....	10.94	8.68	.....	.....	9.71	e10.51
10	.....	12.85	12.91	.....	.....	11.96	10.87	8.53	.....	9.09	9.86	10.51
15	.....	12.87	12.92	.....	.....	11.54	10.54	8.56	.....	9.18	9.96	10.54
20	.....	12.88	12.93	.....	.....	11.23	10.36	.....	.....	9.31	10.08	10.57
25	.....	12.89	12.95	.....	.....	11.07	9.38	.....	.....	9.40	.....	10.57
Eom	.....	12.89	.....	.....	.....	10.99	9.23	.....	.....	9.54	.....	9.26

1973-74

5	9.15	.....	.....	10.42	.....	9.92	e10.10	.....	9.16	e9.24	10.02	10.44
10	9.06	.....	.....	10.42	.....	9.95	.....	.....	9.10	9.38	10.15	10.56
15	9.04	.....	10.47	10.44	10.05	9.99	.....	10.27	9.09	9.46	10.32	10.67
20	9.17	.....	10.47	10.44	10.05	10.08	.....	9.37	9.17	9.61	e10.28	10.77
25	9.25	.....	10.62	10.31	9.99	10.09	.....	9.18	9.09	9.67	.....	10.92
Eom	.....	.....	10.47	9.97	9.95	10.11	.....	9.12	9.10	9.88	10.30	11.04

1974-75

5	11.11	11.56	.....	.....	.....	.....	11.79	11.69	11.84	12.06	12.64	12.56
10	11.14	11.63	.....	12.21	e12.38	.....	11.65	11.75	11.72	12.14	12.73	12.53
15	11.20	11.70	.....	12.24	12.48	.....	11.62	11.82	11.73	12.25	12.79	12.48
20	11.27	11.80	.....	.....	.....	12.38	11.59	11.89	11.75	12.40	12.80	12.47
25	11.36	11.90	.....	.....	.....	12.26	11.60	11.94	11.85	12.48	12.56	12.49
Eom	11.46	.....	.....	.....	.....	12.03	11.62	11.99	11.96	12.57	12.56	12.57

e Estimated.

Page County

404257N0951512.1. Local number 68-38-7ccal. Formerly 68-38-7N1. William Brayman. Drilled unused water-table well in glacial drift, diam 12 in, depth 44 ft, lined with tile. Lsd 1,087 ft above msl. MP top of 3/4-in pipe inserted through board cover, 1.50 ft above lsd. Highest water level 1.44 below lsd, June 23, 1947; lowest 20.96 below lsd, Nov. 24, 1958. Records available: 1934 to current year.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct. 16, 1971	12.39	Oct. 15, 1972	13.98	Oct. 16, 1973	7.27	Oct. 14, 1974	14.18
Nov. 18	5.82	Nov. 15	8.40	Nov. 16	13.30	Nov. 15	13.85
Dec. 16	11.82	Dec. 15	10.10	Dec. 13	10.52	Dec. 17	13.47
Jan. 17, 1972	12.88	Jan. 15, 1973	4.61	Jan. 14, 1974	12.51	Jan. 16, 1975	13.90
Feb. 14	13.86	Feb. 9	9.60	Feb. 17	12.29	Feb. 14	13.72
Mar. 16	14.02	Mar. 13	5.25	Mar. 15	10.90	Mar. 17	11.47
Apr. 15	14.34	Apr. 17	3.47	Apr. 16	12.96	Apr. 15	9.97
May 16	11.26	May 15	9.08	May 15	8.37	May 16	11.20
June 16	13.05	June 15	12.38	June 17	11.30	June 16	12.13
July 15	13.97	July 18	12.97	July 17	12.22	July 16	12.45
Aug. 16	13.70	Aug. 17	12.66	Aug. 16	13.66	Aug. 15	13.49
Sept. 18	12.86	Sept. 18	13.17	Sept. 16	13.70	Sept. 16	16.64

Polk County

413839N0932320.1. Local number 79-22-22aab1. Formerly 79-22-22A1. J. G. Reed. Dug unused water-table well in glacial drift, diam 36 in, depth 39 ft, cribbed with drain tile. Lsd 930 ft above msl. MP top of pipe in concrete cover, 0.45 ft above lsd. Highest water level 1.75 below lsd, May 16, 1973; lowest 11.22 below lsd, Dec. 6, 1956. Records available: 1940 to current year.

Nov. 15, 1971	5.06	Nov. 15, 1973	4.32	July 11, 1974	2.75	Apr. 16, 1975	1.78
Feb. 15, 1972	4.89	Mar. 13, 1974	2.18	Sept. 10	5.56	Sept. 2	5.29
May 16, 1973	1.75						

GROUND-WATER LEVELS

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Sac County

421700N0950257.1. Local number 86-36-4cdd1. Formerly 86-36-4N1. State Conservation Commission. Dug unused water-table well in glacial drift, diam 36 in, depth 9 ft, cribbed with concrete. Lsd 1,223 ft above msl. MP top of concrete cover, 2.70 ft above lsd. Highest water level 2.48 below lsd, June 28, 1945; lowest dry, Aug. 29, 1956, Feb. 19, 1957. Records available: 1940 to current year.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Nov. 16, 1971	7.51	June 5, 1973	3.96	Nov. 28, 1974	6.15	June 19, 1975	7.17
July 29, 1972	4.95	Mar. 13, 1974	4.02	Feb. 21, 1975	5.88	Aug. 13	7.16

423012N0951742.1. Local number 89-38-26ab1. Formerly 89-38-26A2. City of Schaller. Drilled public-emergency-supply artesian well in Dakota Sandstone of Early Cretaceous age, diam 10 to 8 in, depth 352 ft, cased to 352, perforated 304-352. Lsd 1,376 ft above msl. MP edge of pump breather pipe, 1.80 ft above lsd. Highest water level 210.04 below lsd, Mar. 25, 1948; lowest 229.93 below lsd, Aug. 13, 1975. Records available: 1940 to current year.

Nov. 16, 1971	227.96	Mar. 5, 1973	228.72	Jan. 21, 1974	229.20	June 19, 1975	229.14
Jan. 15, 1972	228.46	June 5	228.86	Nov. 28	229.50	Aug. 13	229.93
July 29	228.80	Oct. 4	229.55	Feb. 21, 1975	229.40		

Story County

415901N0963927.1. Local number 83-24-20dad1. Formerly 83-24-20J1. Agricultural Engineering Experiment Station. Dug unused water-table well in glacial drift, diam 36 in, depth 38 ft, cribbed with brick. Lsd 1,022 ft above msl. MP top west side of cement platform, 0.25 ft above lsd. Highest water level 5.90 below lsd, May 31, 1944; lowest 26.09 below lsd, July 14, 1939. Records available: 1939 to current year.

Nov. 22, 1971	14.01	Mar. 5, 1973	7.68	Mar. 13, 1974	8.81	Feb. 19, 1975	10.66
Jan. 18, 1972	13.08	Oct. 4	11.31	Nov. 20	11.90	Aug. 14	11.21
July 31	9.82	Jan. 21, 1974	8.72				

Warren County

412343N0934512.1. Local number 76-25-17aaba1. Formerly 76-25-17A1. John F. Johnson, Jr. Formerly Mrs. Gertrude Kelley. Dug stock water-table well in glacial drift, diam 30 in, depth 40 ft, cribbed with cement tile. Lsd 984 ft above msl. MP top of board cover, 0.71 ft above lsd. Highest water level 3.15 below lsd, Mar. 28, 1961; lowest 37.16 below lsd, Aug. 14, 1968. Records available: 1958 to current year.

Nov. 15, 1971	19.34	May 16, 1973	6.31	July 10, 1974	8.84	Apr. 15, 1975	5.18
Feb. 15, 1972	21.79	Mar. 12, 1974	5.46	Sept. 13	14.76	Aug. 11	10.79

Webster County

421837N0940836.1. Local number 87-28-29ccc1. Formerly 87-28-29N1. Ransom Helms. Drilled unused water-table well in glacial drift, diam 12 in, depth 42 ft, lined with tile. Lsd 1,165 ft above msl. MP top of recorder platform, 4.10 ft above lsd. Highest water level 0.05 below lsd, Aug. 1, 1972; lowest 13.62 below lsd, Mar. 12, 1956. Records available: 1942 to current year.

Water level at noon, from recorder graph, water year October 1 to September 30
1971-72

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
5	8.67	....	3.42	....	....	....	....	0.53	....	3.50	2.30	....
10	9.00	....	3.22	....	....	3.42	....	1.96	....	....	1.96	....
15	9.00	....	3.45	....	....	2.55	3.10	1.89	1.85	3.54	2.57	1.93
20	7.21	2.64	3.80	....	....	2.18	....	2.77	2.54	2.75	....	2.55
25	....	3.30	3.53	....	5.23	....	....	1.61	3.00	....	3.30	2.95
Eom	....	e3.40	....	....	....	....	1.17	2.16	3.30	2.83	3.04	2.17

1972-73

5	....	....	....	....	....	....	....	....	2.23	....	3.66	3.16
10	....	....	....	....	....	....	....	....	2.85	....	3.82	2.96
15	....	....	....	....	....	....	....	....	3.15	....	3.28	3.14
20	....	....	....	....	....	1.76	....	....	3.12	....	3.59	2.75
25	....	....	....	....	....	....	....	....	3.45	....	2.75	3.04
Eom	....	....	....	....	....	....	....	....	....	....	....	....

1973-74

5	2.38	....	3.04	....	3.11	....	1.59	3.17	3.35	3.75	3.65	....
10	1.58	....	....	....	3.55	1.62	2.37	3.32	3.03	4.03	4.05	4.97
15	2.09	3.09	....	....	3.15	2.07	2.06	2.99	3.27	4.10	4.19	4.79
20	2.45	1.98	3.48	....	2.23	2.64	2.70	2.25	3.10	4.32	3.87	5.09
25	2.65	2.42	2.83	3.40	2.86	2.97	2.39	2.78	2.77	4.68	....	....
Eom	2.84	2.76	....	1.89	2.08	3.00	2.83	3.05	3.35	....	4.62	....

1974-75

5	....	3.57	4.34	4.54	....	....	2.55	2.10	2.11	2.85	4.55	5.53
10	....	3.57	....	4.52	....	....	1.95	2.05	2.08	3.25	....	5.50
15	....	3.88	3.87	....	....	....	2.22	2.30	1.52	3.52	5.02	5.52
20	....	4.07	....	....	....	2.10	2.30	2.77	1.85	3.81	5.15	....
25	....	4.25	....	....	....	2.60	1.94	3.05	1.37	4.02	5.33	....
Eom	....	4.33	4.25	....	....	....	1.78	2.70	2.15	4.35	5.50	....

e Estimated.

GROUND-WATER LEVELS

Webster County.--Continued.

423013N0942147.1. Local number 89-30-22ddal. Formerly 89-30-22R1. Johnson Township Consolidated School, Barnum. Drilled unused artesian well in sandstone of Cretaceous age, diam 4 in, reported depth 208 ft, cased to bottom, perforated 203-208, measured depth 203 ft. Lsd 1,174 ft above msl. MP top of casing, 6.40 ft below lsd. Highest water level 30.86 below lsd, July 2, 1945; lowest 41.72 below lsd, Nov. 16, 1971. Records available: 1942-45, 1947 to current year.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Nov. 16, 1971	41.72	Mar. 5, 1973	39.71	Jan. 21, 1974	40.00	Feb. 19, 1975	41.50
Jan. 18, 1972	41.60	Oct. 4	39.94	Nov. 19	40.89	Aug. 13	41.69

423341N0940516.1. Local number 90-27-31ccbl. Formerly 90-27-31N1. C. S. Knudson. Drilled unused water-table well in glacial drift, diam 15 in, depth 53 ft, lined with tile. Lsd 1,125 ft above msl. MP top of plank platform, 1.00 ft above lsd. Highest water level 2.96 below lsd, June 4, 1965; lowest 13.90 below lsd, Dec. 17, 1948. Records available: 1942-43, 1948-54, 1956 to current year.

Nov. 17, 1971	5.89	Oct. 4, 1973	3.73	Nov. 19, 1974	5.77	June 5, 1975	3.52
Jan. 18, 1972	5.74	Jan. 21, 1974	5.38	Feb. 19, 1975	7.08	Aug. 14	6.98
Mar. 5, 1973	5.70						

Note.--Measurements were discontinued in 1970 for the following wells:

Tama County 421318N0923623.2. Local number 86-15-33bad2.

Tama County 421318N0923623.4. Local number 86-15-33bad4.

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1974

OCTOBER

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1975

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