

CALENDAR FOR WATER YEAR 1977

1976

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Recd 12/8/78

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Water Resources Data for Indiana Water Year 1977



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT IN-77-1

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

UNITED STATES DEPARTMENT OF THE INTERIOR

CECIL D. ANDRUS, Secretary

GEOLOGICAL SURVEY

H. W. Menard, Director

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Indianapolis, Indiana 46202

1978

PREFACE

This report was prepared by the U.S. Geological Survey in cooperation with the State of Indiana and with other agencies by personnel of the Indiana district of the Water Resources Division, under the supervision of D. K. Stewart, District Chief, and James E. Biesecker, Regional Hydrologist, Northeastern 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.

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15. Supplementary Notes Prepared in cooperation with the State of Indiana and with other agencies.		14.		
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FOR WHICH RECORDS ARE PUBLISHED

(w-discharge, c-chemical, t-temperature, s-sediment)

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WATER RESOURCES DATA FOR INDIANA, 1977

INTRODUCTION

Water resources data for the 1977 water year for Indiana consist of records of streamflow or reservoir storage at gaging stations, partial-record stations, miscellaneous sites, and records of water-quality data on the chemical and physical characteristics of surface water, and water levels of wells. Records for a few pertinent streamflow and water-quality stations in bordering states also are included. The records were collected and computed by the Water Resources Division of the U.S. Geological Survey. These data represent that portion of the National Water Data System collected by the U.S. Geological Survey and cooperating State and Federal agencies in Indiana.

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, and ground-water data since the 1971 water year have been similarly released either in separate reports or in conjunction with streamflow records. These reports provided rapid release of preliminary water data shortly after the end of the water year. The final data were then released in the water-supply paper series mentioned above. Beginning with the 1975 water year, water data will be released on a state-boundary basis in final form and will not be republished in the water-supply paper series. The 1975 and subsequent water year reports will be in a series which will carry an identification number consisting of the two-letter state abbreviation, the last two digits of the water year, and the volume number. For example, this report is identified as "U.S. Geological Survey Water-Data Report IN-77-1." 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 Indiana have had cooperative agreements for the systematic collection of surface-water records since 1930, for ground-water levels since 1940, and for water-quality records since 1951. Organizations that supplied data are acknowledged in station descriptions. Organizations that assisted in collecting data through cooperative agreement with the Survey are:

State of Indiana, Department of Natural Resources, J. D. Cloud, director, through Bureau of Water and Mineral Resources, W. J. Andrews, deputy director.

Indiana State Board of Health, W. T. Paynter, commissioner, and R. C. Pickard, assistant commissioner for environmental health.

Indiana State Highway Commission, J. A. Gardner, chairman, Roger F. Marsh, executive director, and G. K. Hallock, chief engineer.

Assistance in the form of funds or services was given by the Corps of Engineers, U.S. Army, in collecting records for surface-water gaging stations and water-quality gaging stations published in this report. The following organizations aided in collecting records:

The cities of Anderson, Bloomington, Ft. Wayne, Hammond, Indianapolis, Muncie, and Richmond; Indianapolis Water Co.; Indianapolis Power and Light Co.; Public Service Co. of Indiana; Container Corporation of America; and Sanitary District of Chicago.

DEFINITION OF TERMS

Terms related to streamflow, water quality, and other hydrologic data, as used in this report, are defined as follows. See also table for converting English units to International System (SI) units on page 4.

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.

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 + 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 + 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°C + 1.0°C on M-enterococcus medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 ml of sample.

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

Cubic feet per second per day ($\text{ft}^3/\text{s}/\text{day}$) is the volume of water represented by a flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, approximately 1.9835 acre-feet, or about 646,000 gallons, and represents a runoff of approximately 0.0372 inch from 1 square mile.

Color unit is produced by one milligram per liter of platinum in the form of the chloroplatinate ion. Color is expressed in units of the platinum-cobalt scale.

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

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

Cubic feet per second per square mile ($\text{ft}^3/\text{s}/\text{mi}^2$, 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 (ft^3/s , cfs) is the rate of discharge representing a volume of 1 cubic foot passing a given point during 1 second and is equivalent to approximately 7.48 gallons per second or 448.8 gallons per minute.

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

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

Instantaneous discharge is the discharge at a particular instant of time. If this discharge is reported instead of the daily mean, the heading of the discharge column in the tables is "Discharge (ft^3/s)".

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-micrometer 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 may include an estimate of that portion of the total drainage area which does not contribute directly to surface runoff.

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

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

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

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

Milligrams per liter (mg/L, MG/L) is a unit for expressing the concentration of chemical constituents in solution. Milligrams per liter represents the weight of solute per unit volume of water. Milligrams or micrograms per liter may be converted to milliequivalents (one thousandth of a gram-equivalent weight of a constituent) per liter by multiplying by the factors in table 1, page 8. Concentration of suspended sediment also is expressed in mg/L, and is based on the weight of sediment per liter of water-sediment mixture. Sediment concentrations may be converted to parts per million by using the factors in table 2, page 8.

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

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

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 distributions 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.

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

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/mL of sample.

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

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

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

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

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

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

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

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

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

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

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

Table 2.--Factors for conversion of sediment concentrations in milligrams per liter to parts per million*

(All values calculated to three significant figures)

<u>Range of concentration in 1000 mg/L</u>	<u>Di- vide by</u>	<u>Range of concentration in 1000 mg/L</u>	<u>Di- vide by</u>	<u>Range of concentration in 1000 mg/L</u>	<u>Di- vide by</u>	<u>Range of concentration in 1000 mg/L</u>	<u>Di- vide by</u>
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	492-508	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. This ratio should be known especially for water used for irrigating farmland.

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

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

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

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

Tons per 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.

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 reference to previously published reports.

DOWNSTREAM ORDER AND STATION NUMBER

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

As an added means of identification, each gaging station, partial-record station, and water-quality station has been assigned a station number. These are in the same downstream order used in this report. In assigning station numbers, no distinction is made between partial-record stations and gaging stations; therefore, the station number for a partial-record station indicates downstream order position in a list made up of both types of stations. Water-quality stations located at or near gaging stations or partial-record stations have the same number as the gaging or partial-record station. Gaps are left in the series of numbers to allow for new stations that may be established; hence, the numbers are not consecutive. The complete 8-digit number for each station, such as 03335500, which appears just to the left of the station name includes the 2-digit part number "03" plus the 6-digit downstream order number "335500." 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 3 (Ohio River basin), Part 4 (St. Lawrence River basin) and Part 5 (Upper Mississippi River basin). All records for 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.

NUMBERING SYSTEM FOR WELLS

Ground-water wells are listed alphabetically by counties in this report. Each well in Indiana carries dual-identification numbers. The first system is by a county name with a sequential number of the well, that is, number one is the first well in that county for which records were obtained. The second system is based on the latitude and longitude of the well. An additional identification of the well in this system is given following the seconds of longitude. Each well within the boundary of a particular second of latitude and longitude is numbered by tenths of a unit, with the first established well numbered as ".1".

SPECIAL NETWORK

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.

EXPLANATION OF STAGE AND WATER-DISCHARGE 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 non-recording gage or from a water-stage recorder that gives either a continuous graph of the fluctuations or a tape punched at selected intervals. Measurements of discharge are made with a current meter, using the general methods adopted by the Geological Survey. These methods are described in standard textbooks, in Water-Supply Paper 888, and in U.S. Geological Survey Techniques of Water Resources Investigations, book 3, chapter A6. Surface areas of lakes or reservoirs are determined from instrument surveys using standard methods. The configuration of the reservoir bottom is determined by sounding at many points.

For stream-gaging stations, rating tables giving the discharge for any stage are prepared from stage-discharge relation curves. If extensions to the rating curves are necessary to express discharge greater than measured, they are made on the basis of indirect measurements of peak discharge (such as slope-area or contracted-opening measurements, computation of flow over dams or weirs), step-back water techniques, 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 is 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 is given. Records are published for the water year, which begins on October 1 and ends on September 30. A calendar for the current water year is shown on the reverse side of the front cover to facilitate finding the day of the week for any date.

The description of the gaging stations gives the location, drainage area, period of record, type and history of gages, average discharge, extremes of discharge or contents, general remarks, and notations of revisions of previously published records. The location of the gaging station and the drainage area are obtained from the most accurate maps available. River mileage, given under "LOCATION" for some stations, is that determined and used by the Corps of Engineers or other agencies. Periods for which there are published records for the present station or for stations generally equivalent to the present one are given under "PERIOD OF RECORD." The type of gage currently in use, the datum of the present gage above mean sea level, and a condensed history of the types, locations, and datums of previous gages used during the period of record are given under "GAGE." In references to datum of gage, the phrase "mean sea level" denotes "Sea Level Datum of 1929" as used by the Topographic Division of the Geological Survey unless otherwise qualified. The average discharge for the number of years indicated is given under "AVERAGE DISCHARGE;" it is not given for stations having fewer than 5 complete years of record or for stations where changes in water development during the period of record cause the figure to have little significance. The maximum discharge (or contents) and the maximum gage height, the minimum daily discharge (or minimum contents) are given under "EXTREMES." In the first paragraph headed "Current year," the data given are for the complete current water year unless otherwise specified. In the second paragraph under "EXTREMES" headed "Period of record:" the data given are for the period of record given in "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, and to conditions which affect the natural flow at the gaging station 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.

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"). Figures for cubic feet per second per square mile and runoff in inches are omitted if there is extensive regulation or diversion.

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 discharge 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 most gaging stations on lakes and reservoirs the data presented comprise a description of the station and a monthly summary table of stage and contents.

Data collected at partial-record stations and miscellaneous sites are given in tables at the end of the surface-water records in this report.

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; "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 ft^3/s ; to tenths between 1.0 and 10 ft^3/s ; to whole numbers between 10 and 1,000 ft^3/s ; and to 3 significant figures above 1,000 ft^3/s . 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 other changes incident to

use and control. Evaporation from a reservoir is not included in the adjustments for changes in reservoir contents, unless it is so stated. Even at those stations where adjustments are made, large errors in computed runoff may occur if adjustments or losses are large in comparison with the observed discharge.

Publications

In each water-supply paper entitled, "Surface Water Supply of the United States" there is a list of numbers of preceding water-supply papers containing streamflow information for the area covered by that report. In addition, there is a list of numbers of water-supply papers containing detailed information on major floods in the area. Records for stations in Indiana for the period October 1960 to September 1965 are in Water-Supply Papers 1908, 1909, 1911, 1912, and 1915.

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 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 Indiana are compiled in Water-Supply Papers 1305, 1307, and 1308 through September 1950, and in 1725, 1727, and 1728 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 observations of water temperatures, discharge measurements, gage-height records, and rating tables, is on file in the district office. Also most gaging-station records are available in computer-usable form and many statistical analyses have been made.

EXPLANATION OF WATER-QUALITY RECORDS

Collection and examination of data

Surface-water samples for analyses usually are collected at or near gaging stations. The quality-of-water records are given immediately following the discharge records at these stations.

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, within the format for streamflow gaging stations.

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

Prior to the 1968 water year, data for chemical constituents and concentration of suspended sediment were reported in parts per million (ppm) and water temperatures were reported in degrees Fahrenheit (°F). In October 1967 the U.S. Geological Survey began to use the metric system; data for chemical constituents and concentrations of suspended sediment are now reported in milligrams per liter (mg/L), and water temperatures are given in degrees Celsius (centigrade, °C). In waters with a density of 1.000 g/mL (grams per milliliter), parts per million and milligrams per liter can be considered equal. In waters with a density greater than 1.000 g/mL, values in parts per million should be multiplied by the density to convert to milligrams per liter. To convert temperatures in degrees Celsius to degrees Fahrenheit, see table 3 on page 19.

In October 1968 the Geological Survey began reporting many of the chemical constituents as well as the minor elements in micrograms per liter instead of milligrams per liter. (See "Definition of Terms," p. 3.)

Solutes

The methods of collecting and analyzing water samples for determining the kinds of concentrations of solutes are described by Brown, Skougstad, and Fishman (1970). One sample can define adequately the water quality at a given time if the mixture of solutes throughout the stream cross section is homogeneous. However, the concentration of solutes at different locations in the cross section may vary widely with different rates of water discharge, depending on the source of material and the turbulence and mixing of the stream. Some streams must be sampled at several verticals across the channel to determine accurately the solute load.

At chemical quality stations where monitors are installed, the records consist of daily maximum, minimum, and mean values for each constituent measured. More detailed records (hourly values) may be obtained from the district office of the U.S. Geological Survey at the address given on the back of the title page of this report.

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

°C	°F	°C	°F	°C	°F	°C	°F	°C	°F
0.0	32	10.0	50	20.0	68	30.0	86	40.4	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).

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 sample is collected. Large streams have a small diurnal temperature change while small, shallow streams may have a daily range of several degrees and may follow closely the changes in air temperature. Some streams may be affected by waste-heat discharges.

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

Sediment

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

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

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

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

PublicationsTable 4.--Water-supply paper numbers and parts, water years,
1947-67

<u>Year</u>	<u>Parts 3-4</u>	<u>Parts 5-6</u>	<u>Year</u>	<u>Parts 3-4</u>	<u>Parts 5-6</u>
1947	1102	1102	1958	1571	1572
1948	1132	1132	1959	1642	1643
1949	1162	1162	1960	1742	1743
1950	1186	1187	1961	1882	1883
1951	1197	1198	1962	1942	1943
1952	1250	1251	1963	1948	1949
1953	1290	1291	1964	1955	1956
1954	1350	1351	1965	1962	1963
1955	1400	1401	1966	1992	1993
1956	1450	1451	1967	2012	2013
1957	1520	1521			

EXPLANATION OF GROUND-WATER LEVEL RECORDS

Collection of the data

Only ground-water level data from a basic 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.

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.

Publications

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

<u>Calendar year</u>	<u>WSP No.</u>	<u>Calendar year</u>	<u>WSP No.</u>	<u>Calendar year</u>	<u>WSP No.</u>	<u>Calendar year</u>	<u>WSP No.</u>
1935	777	1942	944	1949	1156	1956-57	1537
1936	817	1943	986	1950	1165	1958-62	1782
1937	840	1944	1016	1951	1191	1963-67	1977
1938	845	1945	1023	1952	1221	1968-72	2140
1939	886	1946	1071	1953	1265		
1940	906	1947	1096	1954	1321		
1941	936	1948	1126	1955	1404		

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

HYDROLOGIC CONDITIONS

The weather dealt Indiana for the water year included a mixture of extremes in both temperature and precipitation. Cold, dry winter conditions started early in the year and continued until February. Warm weather began early in February but conditions remained extremely dry until mid summer. A wet and hot cycle began at the end of June and continued until the end of the water year.

Streamflow had become near deficient by the middle of September 1976, and remained so through the end of December. Extremely cold temperatures during January brought the streamflows to record lows and produced some zero flows in smaller drainage basins. The precipitation that fell in Indiana from the end of November to the beginning of February was as snow and accumulated on the ground. The warm, dry weather during February melted this snow and some annual peaks resulted at the end of the month. The spring precipitation was light and scattered in March and April. Some lowland flooding existed in the Fort Wayne area at the end of April. A warm, dry period began at the end of April and continued through June. Streamflow became deficient by the beginning of June and remained well below normal throughout the month.

Heavy thunderstorms at the end of June foretold the wet, warm summer to come. Although precipitation for July was normal, it existed in one or two storms during the month. Precipitation totals for August were generally the second or third highest on record. Heavy thunderstorms throughout August produced annual peaks on small to medium size drainage areas. September precipitation was normal and was divided throughout the month.

The water year was not a critically higher low flow year, but was interesting in its ability to change from dry to wet conditions in a very short time period.

With the heavier than normal precipitation in late summer, and the extremely dry and cold weather in January, most annual lows occurred during the winter periods.

HYDROLOGIC CONDITIONS

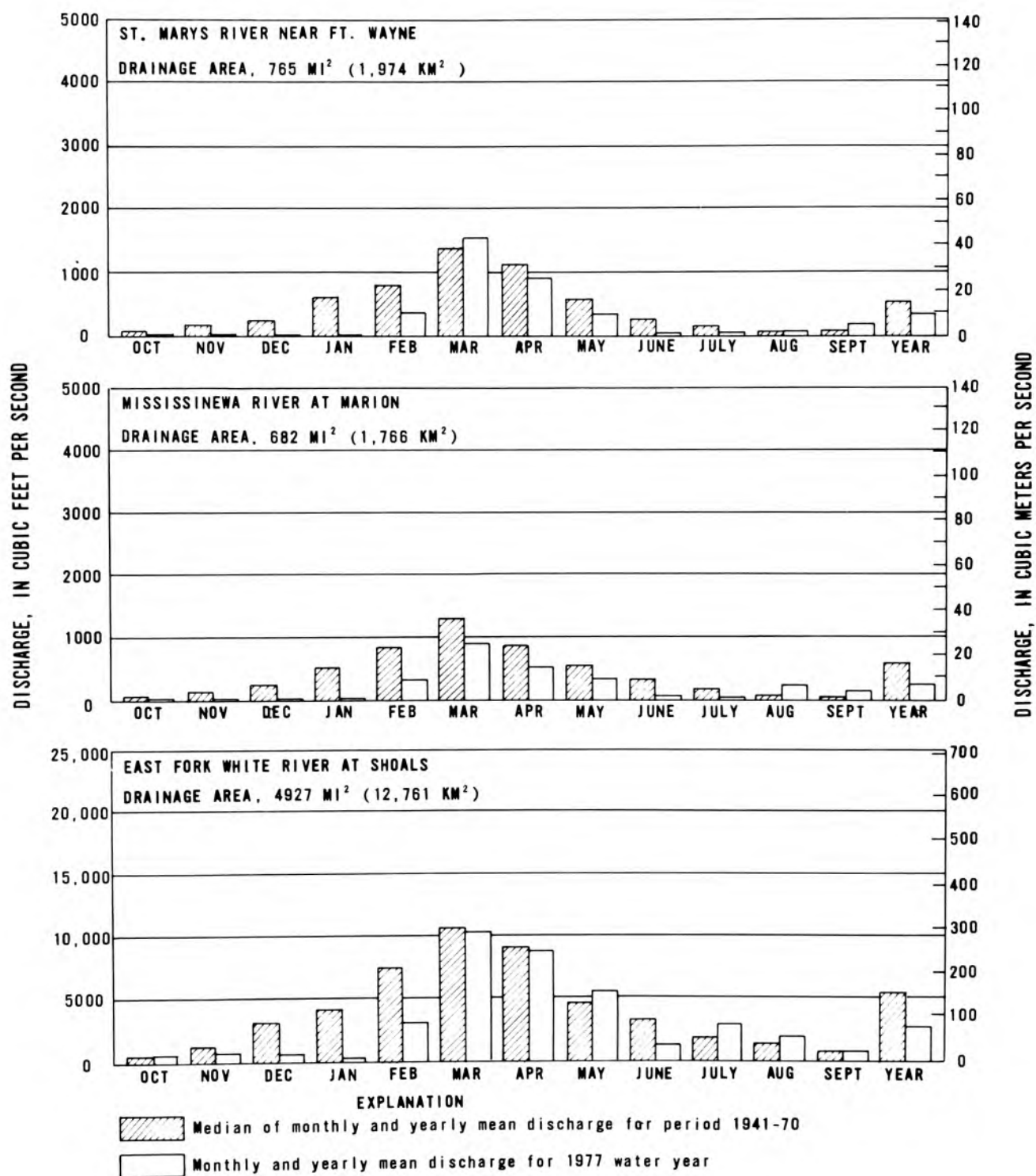
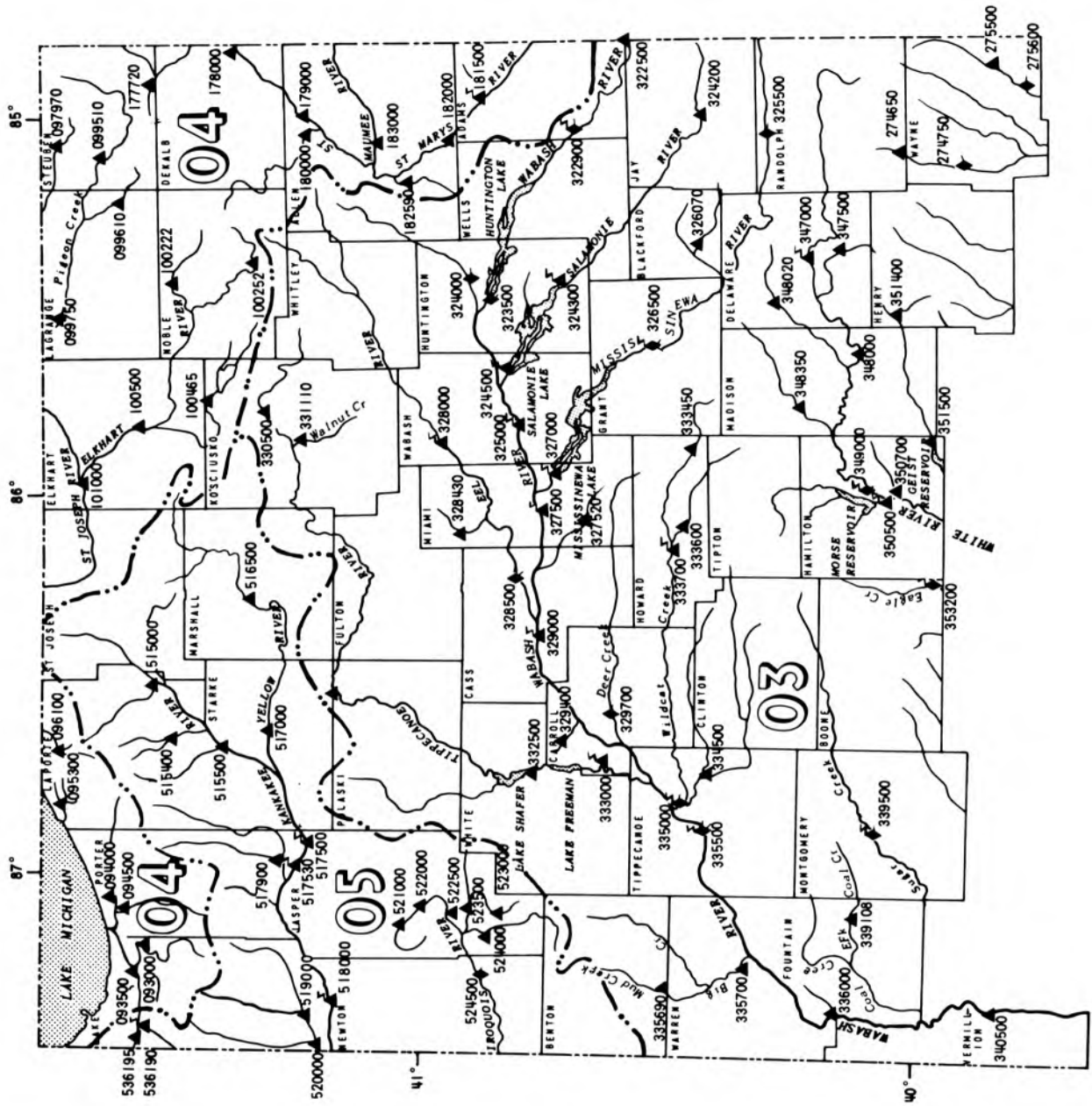


Figure 1.--Comparison of discharge at three long-term representative gaging stations during 1977 water year with median discharge for period 1941-70.

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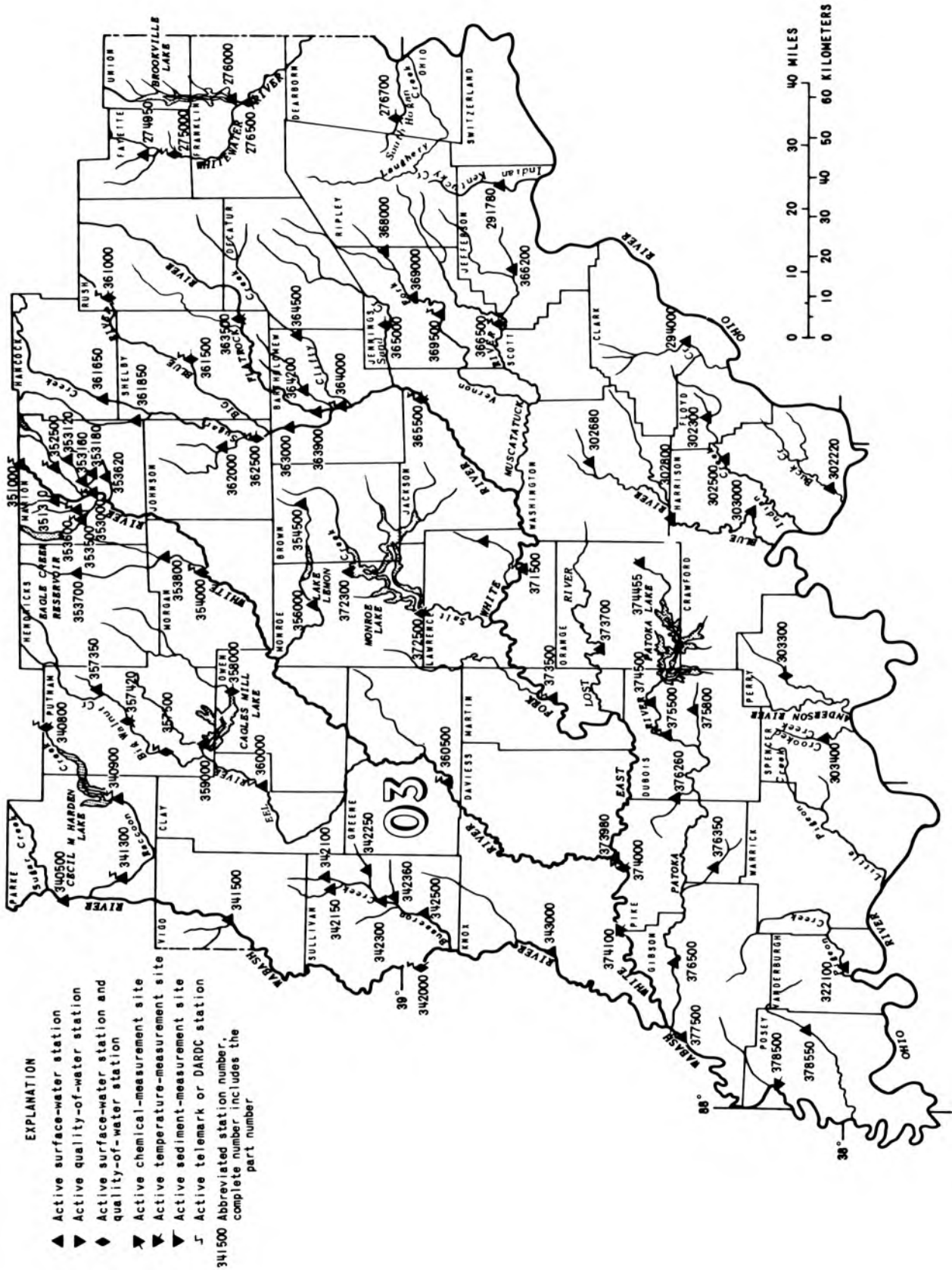


Figure 2.--Location of stream-flow and water quality gaging stations in Indiana.

05274650 WHITEWATER RIVER NEAR ECONOMY, IN

LOCATION.--Lat 40°00'05", long 85°06'56", in M&N sec.19, T.18 N., R.13 E., Wayne County, Hydrologic Unit 05080003, on right bank 6 ft (1.8 m) downstream from bridge on Wayne County Line Road, 1.7 miles (2.7 km) upstream from Little Creek, 2.4 miles (3.9 km) northwest of Economy, and at mile 91.9 (147.9 km).

DRAINAGE AREA.--10.4 mi² (26.9 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 1,066.00 ft (324.917 m) above mean sea level.

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

AVERAGE DISCHARGE.--7 years, 10.0 ft³/s (0.283 m³/s), 13.06 in/yr (332 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 820 ft³/s (23.2 m³/s) Feb. 23, 1975, gage height, 8.00 ft (2.438 m); maximum gage height, 8.13 ft (2.478 m) Apr. 25, 1975; minimum daily, 0.28 ft³/s (0.008 m³/s) Jan. 17, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 200 ft³/s (5.66 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage Height (ft) (m)
Apr. 02	1000	*394 11.2	*6.18 1.884

Minimum daily discharge, 0.28 ft³/s (0.008 m³/s) Jan. 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.45	.73	.50	.34	.34	8.0	7.1	3.0	1.1	.76	.48	.68
2	.42	.63	.47	.31	.34	6.0	171	2.8	1.1	.72	.48	.66
3	.44	.59	.50	.31	.36	7.0	65	2.6	1.1	.71	.47	.66
4	.47	.58	.47	.32	.37	48	35	4.7	1.1	.63	.44	.65
5	.50	.62	.49	.33	.40	32	22	5.0	1.1	.60	.43	.73
6	.70	.63	.51	.34	.43	14	11	4.7	1.2	.59	.45	.67
7	.58	.59	.51	.35	.45	8.6	8.3	4.9	1.1	.59	1.3	.61
8	.54	.58	.50	.34	.47	6.8	6.7	4.0	1.5	.63	1.5	.60
9	.49	.55	.49	.33	.48	6.3	5.8	3.2	2.5	.69	.76	.59
10	.44	.58	.52	.33	.50	5.4	5.3	2.9	1.3	.63	.69	.59
11	.43	.58	.55	.33	.53	4.7	4.8	2.6	1.1	.65	.81	.57
12	.42	.55	.58	.33	2.0	6.1	4.4	2.4	1.1	.61	.84	.58
13	.42	.57	.54	.32	5.0	6.7	4.2	2.3	1.0	.59	.85	1.9
14	.52	.54	.54	.31	3.1	5.1	4.2	2.2	1.0	.55	.97	1.2
15	.52	.54	.54	.30	2.0	4.5	3.7	1.9	.99	.54	.86	1.1
16	.52	.54	.54	.29	1.2	4.0	3.5	1.8	.96	.54	.84	2.1
17	.52	.54	.55	.28	1.0	3.8	3.3	1.8	.94	.52	.77	1.7
18	.52	.54	.58	.30	.90	7.3	3.2	1.7	.89	.51	.71	1.1
19	.50	.54	.59	.31	.81	6.0	3.0	1.7	.87	.51	.65	.93
20	.50	.57	.64	.32	.77	6.6	3.0	1.6	.85	.47	.62	.85
21	.46	.56	.59	.33	.74	5.8	2.8	1.5	.81	.57	.76	.82
22	.48	.54	.62	.34	1.8	15	3.1	1.5	.85	.56	.68	.80
23	.56	.52	.56	.35	39	16	4.1	1.4	.84	.49	.66	.79
24	1.2	.53	.57	.35	47	9.2	3.7	1.3	.82	.49	.92	.78
25	.95	.54	.51	.36	16	7.3	3.5	1.3	.88	.51	.68	.77
26	.80	.67	.50	.36	12	6.3	3.4	1.3	.77	.48	.66	.75
27	.70	.67	.34	.35	45	6.4	2.9	1.3	.79	.47	.64	.74
28	.67	.59	.35	.34	14	47	3.3	1.2	.78	.47	.62	.72
29	.63	.54	.36	.34	---	22	3.8	1.4	.75	.51	.75	.73
30	.70	.51	.37	.33	---	12	3.2	1.5	.74	.52	.73	.74
31	.78	---	.37	.33	---	8.3	---	1.2	---	.49	.70	---
TOTAL	17.83	17.26	15.75	10.17	196.99	352.2	408.3	72.7	30.83	17.60	22.72	26.11
MEAN	.58	.58	.51	.33	7.04	11.4	13.6	2.35	1.03	.57	.73	.87
MAX	1.2	.73	.64	.36	.47	48	171	5.0	2.5	.76	1.5	2.1
MIN	.42	.51	.34	.28	.34	3.8	2.8	1.2	.74	.47	.43	.57
CFSM	.06	.06	.05	.03	.68	1.10	1.31	.23	.10	.06	.07	.08
IN.	.06	.06	.06	.04	.70	1.26	1.46	.26	.11	.06	.08	.09

CAL YR 1976 TOTAL 2861.15 MEAN 7.82 MAX 213 MIN .34 CFSM .75 IN 10.23
WTR YR 1977 TOTAL 1188.46 MEAN 3.26 MAX 171 MIN .28 CFSM .31 IN 4.25

03274750 WHITEWATER RIVER NEAR HAGERSTOWN, IN

LOCATION.--Lat 39°52'25", long 85°09'47", in NE¼ sec.3, T.16 N., R.12 E., Wayne County, Hydrologic Unit 05080003, on left bank at downstream side of bridge on Jerry Meyers Road, 1.0 mile (1.6 km) upstream from Pronghorn Run, 1.5 miles (2.4 km) north of Interstate 70, 2.0 miles (3.2 km) downstream from Nettle Creek, 2.6 miles (4.2 km) south of Hagerstown, and at mile 84.9 (136.6 km).

DRAINAGE AREA.--58.7 mi² (152.0 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 950.00 ft (289.560 m) above mean sea level (Indiana Flood Control and Water Resources Commission bench mark).

REMARKS.--Records good except those for period of no gage-height record, Jan. 18 to Feb. 22, which is poor.

AVERAGE DISCHARGE.--7 years, 63.0 ft³/s (1.784 m³/s), 14.57 in/yr (370 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,300 ft³/s (65.1 m³/s) Jan. 26, 1976, gage height, 10.89 ft (3.319 m); minimum daily, 5.3 ft³/s (0.15 m³/s) Aug. 5, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 900 ft³/s (25.5 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Apr. 2	1700	*1570 44.5	*8.88 2.707

Minimum daily discharge, 5.3 ft³/s (0.15 m³/s) Aug. 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	14	14	8.4	7.8	57	39	27	13	13	6.1	9.0
2	10	13	14	8.6	8.0	46	856	26	13	9.8	5.9	9.2
3	8.3	13	12	11	8.2	51	308	27	13	9.2	5.8	7.4
4	9.1	13	14	11	8.6	265	151	41	12	8.8	5.7	7.3
5	9.5	12	12	12	9.0	122	118	40	13	9.4	5.3	11
6	15	12	14	10	9.5	72	91	39	14	9.2	6.6	10
7	12	11	14	9.6	10	56	73	42	13	9.0	59	9.7
8	11	12	13	9.3	11	47	61	37	16	10	21	8.6
9	11	12	12	9.0	11	43	53	33	42	9.1	16	8.4
10	9.1	12	13	8.8	12	39	49	31	21	8.3	14	8.4
11	9.7	11	12	8.7	12	36	44	29	17	12	15	7.5
12	10	11	12	8.5	29	41	41	27	16	11	16	8.0
13	9.6	11	13	8.1	60	40	39	25	16	9.6	15	8.2
14	9.5	11	12	7.8	35	35	38	24	15	8.5	24	18
15	9.7	11	13	7.5	27	33	36	23	14	8.1	16	17
16	9.4	11	13	7.1	23	30	34	23	13	6.8	13	42
17	8.6	11	12	6.8	21	29	32	22	13	6.5	13	26
18	9.6	11	12	7.0	19	35	32	20	12	7.2	11	18
19	11	11	12	7.2	17	33	30	19	12	7.1	10	16
20	13	11	14	7.4	16	33	31	19	12	6.7	9.8	14
21	11	10	12	7.6	15	31	30	18	11	6.9	11	13
22	11	11	11	7.7	59	49	34	17	13	7.6	12	13
23	12	11	12	8.0	260	57	36	17	13	6.6	10	12
24	22	11	9.5	8.2	277	42	32	16	12	5.4	12	12
25	15	10	10	8.4	95	37	31	16	17	8.2	11	11
26	14	17	11	8.4	74	33	31	15	12	6.4	9.5	11
27	13	16	10	8.4	259	33	28	15	12	6.0	9.2	11
28	12	14	11	8.4	81	134	30	13	13	5.8	7.8	11
29	12	14	9.1	8.2	---	89	31	14	13	6.8	12	11
30	15	14	9.7	8.0	---	56	28	14	13	8.6	11	11
31	18	---	9.2	7.8	---	44	---	14	---	5.9	9.7	---
TOTAL	360.1	362	371.5	262.9	1474.1	1748	2467	743	439	253.5	403.4	379.7
MEAN	11.6	12.1	12.0	8.48	52.6	56.4	82.2	24.0	14.6	8.18	13.0	12.7
MAX	22	17	14	12	277	265	856	42	42	13	59	42
MIN	8.3	10	9.1	6.8	7.8	29	28	13	11	5.4	5.3	7.3
CFSM	.20	.21	.20	.14	.90	.96	1.40	.41	.25	.14	.22	.22
IN.	.23	.23	.24	.17	.93	1.11	1.56	.47	.28	.16	.26	.24
CAL YR 1976	TOTAL	19015.3	MEAN	52.0	MAX	1290	MIN	8.3	CFSM	.89	IN	12.05
WTR YR 1977	TOTAL	9264.2	MEAN	25.4	MAX	856	MIN	5.3	CFSM	.43	IN	5.87

03274950 LITTLE WILLIAMS CREEK AT CONNERSVILLE, IN

LOCATION.--Lat 39°38'16", long 85°10'20", in SW¼ sec. 27, T.14 N., R.12 E., Fayette County, Hydrologic Unit 05080003, on downstream left bank wingwall of bridge on State Highway 44, 1 mile (2 km) west of Connerville, and 2.6 miles (4.2 km) upstream from mouth.

DRAINAGE AREA.--9.16 mi² (23.72 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 842.00 ft (256.642 m) above mean sea level.

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

AVERAGE DISCHARGE.--9 years, 9.15 ft³/s (0.259 m³/s), 13.56 in/yr (344 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,560 ft³/s (101 m³/s) June 22, 1974, gage height, 10.13 ft (3.088 m); minimum daily, 0.35 ft³/s (0.010 m³/s) Aug. 6, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 180 ft³/s (5.10 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Feb. 12	Unknown	284 8.04	4.61 1.405	May 07	0400	291 8.24	4.71 1.436
April 02	Unknown	595 16.8	5.79 1.765	Aug. 14	0100	*771 21.8	*6.34 1.932

Minimum daily discharge, 0.35 ft³/s (0.010 m³/s) Aug. 6.

DISCHARGE IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.76	1.9	1.2	.93	.61	6.7	8.7	2.7	2.5	18	.41	.86
2	.75	1.4	1.1	.95	.60	5.1	135	2.8	2.4	4.3	.40	.82
3	.77	1.2	1.1	.97	.61	15	28	3.2	2.1	1.6	.38	.82
4	.72	1.1	1.0	.98	.62	48	18	19	1.9	1.1	.37	.77
5	.78	1.1	1.0	1.0	.64	18	15	18	1.9	1.0	.36	.77
6	1.8	1.1	1.0	1.0	.66	12	11	13	5.1	.98	.35	.77
7	1.2	1.1	1.0	1.0	.69	9.6	11	73	3.2	.94	1.3	.77
8	.78	1.1	1.1	.99	.73	8.3	8.7	18	5.1	.89	14	.77
9	.72	1.1	1.0	.97	.78	7.5	7.5	15	11	.82	7.9	.72
10	.67	1.1	1.0	.94	.85	7.1	7.1	11	2.4	11	1.8	.72
11	.58	1.1	.98	.87	3.8	6.7	5.7	8.3	1.9	2.3	4.8	.67
12	.58	1.1	1.0	.81	146	20	4.9	7.1	1.8	1.0	5.2	.62
13	.53	1.1	1.3	.78	98	15	4.5	6.2	1.8	.88	18	.62
14	.58	1.1	1.1	.95	52	11	4.2	5.4	1.8	.77	111	.67
15	.62	1.1	1.0	.71	45	8.3	3.9	4.7	1.8	.72	11	.87
16	.62	1.1	.95	.64	21	7.5	3.7	4.1	1.6	.69	4.1	5.0
17	.62	1.1	.92	.50	18	7.0	3.5	3.7	1.5	1.7	2.5	1.5
18	.62	1.2	.97	.53	11	10	3.3	3.4	1.5	.91	1.7	.82
19	.72	1.2	1.0	.55	17	7.5	3.3	3.1	1.4	.70	1.2	3.7
20	1.1	1.2	1.1	.57	25	10	3.3	2.9	1.4	.67	1.0	1.7
21	.93	1.1	1.1	.58	17	8.3	3.1	2.7	1.3	.62	2.0	.67
22	.82	1.1	1.2	.59	76	12	4.4	2.5	3.1	.62	2.9	.67
23	.93	1.1	1.2	.61	79	9.1	4.8	2.3	2.2	.58	1.4	.62
24	2.8	1.1	1.2	.63	43	7.5	3.9	2.2	1.5	.53	9.0	.62
25	1.9	1.1	1.1	.63	13	7.5	4.0	2.1	4.5	.50	1.5	.62
26	1.4	4.2	1.1	.64	7.9	7.1	3.7	1.9	5.0	.48	.92	.62
27	1.2	3.0	1.0	.64	16	7.5	3.0	1.9	8.3	.46	.82	.62
28	1.1	1.6	.95	.63	7.1	31	3.6	1.8	2.4	.43	.77	.58
29	1.0	1.4	.92	.62	---	16	3.6	2.0	2.1	.41	2.4	.53
30	1.8	1.2	.92	.61	---	11	2.8	2.6	16	.41	1.7	.53
31	3.6	---	.93	.61	---	9.1	---	2.6	---	.41	.97	---
TOTAL	33.00	40.4	32.44	23.43	702.59	366.4	327.2	249.2	100.5	56.42	212.15	30.04
MEAN	1.06	1.35	1.05	.76	25.1	11.8	10.9	8.04	3.35	1.82	6.84	1.00
MAX	3.6	4.2	1.3	1.0	146	48	135	73	16	18	111	5.0
MIN	.53	1.1	.92	.50	.60	5.1	2.8	1.8	1.3	.41	.35	.53
CFSM	.12	.15	.12	.08	2.74	1.29	1.19	.88	.37	.20	.75	.11
IN.	.13	.16	.13	.10	2.85	1.49	1.33	1.01	.41	.23	.86	.12
CAL YR 1976 TOTAL	1968.22			MEAN 5.38	MAX 105	MIN .53	CFSM .59	IN 7.99				
WTR YR 1977 TOTAL	2173.77			MEAN 5.96	MAX 146	MIN .35	CFSM .65	IN 8.83				

3275000 WHITEWATER RIVER NEAR ALPINE, IN

LOCATION.--Lat 38°34'23", long 85°09'27", in SW 1/4 sec. 14, T.15 N., R.12 E., Fayette County, Hydrologic Unit 5280005, on right bank 500 ft (152 m) downstream from highway bridge, 0.4 mile (0.6 km) downstream from Wilson Creek, 1.6 miles (2.6 km) north-east of Alpine, 4.6 miles (7.4 km) upstream from Bear Creek, and at mile 84.3 (87.4 km).

DRAINAGE AREA.--528 mi² (1,377 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1928 to current year. Prior to October 1936, published as Best Fork Whitewater River near Alpine.

REVISED RECORDS.--WSP 1143: 1943-44(M), 1947(M). WSP 1335: 1929-30, 1932(M), 1938, 1946-47(M), 1949-50. WSP 1505:1942(F), WSP 1908: 1937(M), 1944, 1949(M), drainage area.

GAGE.--Water-stage recorder. Datum of gage is 750.19 ft (228.658 m) above mean sea level. Prior to Nov. 9, 1928, nonrecording gage at same site and datum.

REMARKS.--Records fair except those for winter periods and period of no gage-height record, Apr. 30 to June 9, which are poor.

AVERAGE DISCHARGE.--49 years, 534 ft³/s (15.12 m³/s), 13.71 in/yr (348 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 57,100 ft³/s (1,650 m³/s) Jan. 14, 1937, gage height, 10.51 ft (3.203 m); minimum daily discharge, 6.0 ft³/s (0.17 m³/s) Sept. 8, 9, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 6,500 ft³/s (184 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Apr. 03	0630	*7300 207	*10.94 3.334

Minimum daily discharge, 47 ft³/s (1.33 m³/s) Aug. 3.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

SEDIMENT DISCHARGE: July 1968 to September 1976 (partial-record station).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FFB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	64	96	93	73	72	458	372	240	140	442	62	90
2	60	108	87	72	72	412	2900	220	130	153	50	88
3	60	95	87	70	72	525	4570	190	130	107	47	86
4	57	93	85	68	72	1800	1900	170	120	95	51	86
5	57	90	85	67	71	1530	1310	270	130	94	54	88
6	66	87	82	66	70	830	970	450	150	78	53	93
7	82	87	82	65	64	590	760	700	200	78	54	90
8	74	85	80	64	60	466	645	580	330	76	530	93
9	67	85	80	64	58	399	555	450	240	75	250	93
10	62	85	80	63	57	337	495	360	215	74	145	82
11	62	85	80	62	170	305	453	300	178	78	117	78
12	62	82	80	61	690	386	408	280	160	120	150	68
13	60	80	82	60	520	471	372	270	153	106	170	68
14	60	80	82	59	380	408	354	240	148	90	230	66
15	60	80	80	58	270	333	341	230	138	74	210	64
16	60	80	80	56	194	293	345	220	130	66	160	90
17	60	80	80	53	153	269	305	210	124	65	148	250
18	60	80	85	55	130	333	285	200	124	63	130	205
19	60	80	82	56	118	317	277	190	122	62	110	155
20	74	80	82	58	115	321	289	180	107	60	103	125
21	70	80	100	59	118	317	285	170	94	56	107	103
22	67	80	109	60	297	325	289	160	97	66	110	100
23	67	80	117	62	1870	460	313	160	95	71	113	99
24	80	80	138	63	2980	390	301	150	94	68	128	98
25	98	87	82	64	1200	325	281	150	94	74	113	103
26	132	115	80	65	725	285	277	150	95	104	108	103
27	94	98	87	66	910	261	250	140	124	74	99	100
28	82	90	80	67	725	660	228	130	107	60	96	90
29	85	90	80	68	---	880	240	120	105	57	96	90
30	85	93	76	70	---	620	260	130	107	68	99	85
31	100	---	74	71	---	435	---	160	---	66	93	---
TOTAL	2227	2611	2677	1965	12233	15741	20630	7570	4181	2820	3986	3029
MEAN	71.8	87.0	86.4	63.4	437	508	688	244	139	91.0	129	101
MAX	132	115	138	73	2980	1800	4570	700	330	442	530	250
MIN	57	80	74	53	57	261	228	120	94	56	47	64
CFSM	.14	.16	.16	.12	.83	.96	1.30	.46	.26	.17	.24	.19
IN.	.16	.18	.19	.14	.86	1.11	1.45	.53	.29	.20	.28	.21
CAL YR 1976	TOTAL	132431	MEAN	362	MAX	6780	MIN	57	CFSM	.68	IN	9.31
WTR YR 1977	TOTAL	79670	MEAN	218	MAX	4570	MIN	47	CFSM	.41	IN	5.60

03275500 EAST FORK WHITEWATER RIVER AT RICHMOND, IN

LOCATION.--Lat 39°48'24", long 84°54'26", in NW¼SW¼ sec.8, T.13 N., R.1 W., Wayne County, Hydrologic Unit 05080003, on left bank 50 ft (15 m) downstream from highway bridge, 0.8 mile (1.3 km) south of Richmond, 1.5 miles (2.4 km) upstream from Short Creek, and at mile 33.4 (53.7 km).

DRAINAGE AREA.--121 mi² (313 km²).

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

REVISED RECORDS.--WSP 1235: 1951. WSP 1908: Drainage area, 1960.

GAGE.--Water-stage recorder. Datum of gage is 854.01 ft (260.302 m) above mean sea level (levels by State of Indiana, Department of Natural Resources). Prior to July 27, 1949, nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter periods, which are poor. Some regulation at low flow by powerplant upstream from station. Natural flow also affected by diversion of municipal water supply by City of Richmond.

AVERAGE DISCHARGE.--28 years, 114 ft³/s (3.228 m³/s), 12.79 in/yr (325 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,000 ft³/s (425 m³/s) July 20, 1969, gage height, 12.68 ft (3.865 m), from rating curve extended above 5,000 ft³/s (142 m³/s) on basis of contracted-opening measurement of peak flow at stage of 12.44 ft (3.792 m); minimum daily, 1.2 ft³/s (0.034 m³/s) Aug. 1, 1954.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of 15.0 ft (4.572 m), discharge not determined from floodmarks.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 2,000 ft³/s (56.6 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Apr. 02	2000	*3480 95.6	*7.01 2.137

Minimum daily discharge, 5.1 ft³/s (0.14 m³/s) Aug. 4-6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	17	18	9.6	9.2	95	72	32	16	50	7.0	10
2	11	16	16	9.9	9.0	74	1280	38	14	26	6.0	9.8
3	10	15	14	10	8.5	93	999	30	14	18	5.4	10
4	11	15	15	10	8.4	620	358	118	14	15	5.1	9.9
5	13	15	14	11	8.7	388	250	126	14	14	5.1	9.6
6	29	15	15	10	9.1	192	175	92	17	11	5.1	20
7	18	14	14	10	9.5	128	133	110	16	13	33	14
8	13	14	12	10	10	95	105	87	15	12	82	11
9	14	14	11	9.9	12	80	84	67	40	13	37	9.6
10	12	14	11	9.7	20	68	77	56	20	12	22	11
11	11	14	12	9.5	36	62	70	49	16	10	34	9.7
12	11	14	12	9.2	78	99	61	45	15	9.5	52	8.7
13	11	15	11	8.8	165	196	56	43	16	11	29	9.4
14	10	15	10	8.5	86	120	53	38	18	9.5	82	9.7
15	10	14	10	8.1	66	88	48	38	17	8.2	33	18
16	11	15	11	7.5	53	70	44	34	14	7.9	22	67
17	12	15	10	7.0	45	60	43	32	12	7.8	19	35
18	12	14	10	7.7	41	102	38	30	9.6	7.0	17	23
19	12	14	11	7.8	36	88	37	27	14	6.7	15	21
20	20	15	11	8.0	33	95	36	25	16	6.3	13	18
21	14	15	11	8.4	32	86	34	23	14	20	25	15
22	12	15	10	8.5	180	99	43	21	14	12	18	14
23	24	14	10	8.7	381	104	49	21	13	7.3	14	13
24	37	14	9.2	8.8	372	84	48	21	12	6.8	18	13
25	20	15	9.7	8.9	130	68	41	20	32	9.0	12	13
26	16	48	9.7	9.0	80	62	37	19	17	6.5	11	12
27	15	23	9.7	9.3	179	68	32	18	18	5.7	12	11
28	14	18	11	9.5	149	204	43	18	18	5.8	11	10
29	14	16	10	9.5	---	196	40	18	21	16	30	9.9
30	26	17	9.4	9.4	---	122	35	21	68	12	16	9.9
31	23	---	9.2	9.4	---	86	---	19	---	8.2	12	---
TOTAL	478	489	356.9	281.6	2246.4	3992	4421	1336	554.6	377.2	702.7	455.2
MEAN	15.4	16.3	11.5	9.08	80.2	129	147	43.1	18.5	12.2	22.7	15.2
MAX	37	48	18	11	381	620	1280	126	68	50	82	67
MIN	10	14	9.2	7.0	8.4	60	32	18	9.6	5.7	5.1	8.7
CFSM	.13	.14	.10	.08	.66	1.07	1.22	.36	.15	.10	.19	.13
IN.	.15	.15	.11	.09	.69	1.23	1.36	.41	.17	.12	.22	.14

CAL YR 1976	TOTAL	22600.6	MEAN 61.8	MAX 2160	MIN 8.1	CFSM .51	IN 6.95
WTR YR 1977	TOTAL	15690.6	MEAN 43.0	MAX 1280	MIN 5.1	CFSM .36	IN 4.82

13275670 EAST FORK WHITEWATER RIVER AT ARLINGTON, IN

LOCATION.--Lat 39°43'S", long 84°57'35", in T12S, R12E, First principal meridian, Wayne County, Hydrologic Unit 05080003, at downstream side of center pier of bridge on county road at Arlington, 3 miles 3 km downstream from Elk-horn Creek, 8 miles 13 km southwest of Richmond, and at mile 26.7 43.1 km.

DRAINAGE AREA.--100 mi² 261 km².

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--ASF 2135: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 791.00 ft (241.09 m) above mean sea level.

REMARKS.--Records good except these for period of no gage-height record, Dec. 30 to Mar. 5, which is poor.

AVERAGE DISCHARGE.--12 years, 217 ft³/s (6.145 m³/s), 14.71 in/yr (374 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,400 ft³/s (379 m³/s) July 20, 1969, gage height, 16.18 ft (4.932 m); minimum daily, 16 ft³/s (0.45 m³/s) July 24, 27, 28, Aug. 4-6, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 2,500 ft³/s (70.8 m³/s) and maximum *11.

Date	Time	Discharge (ft ³ /s m ³ /s)	Gage height (ft) (m)
Apr. 22	2200	*6770 192	*11.66 3.584

Minimum daily discharge, 16 ft³/s (0.45 m³/s) July 24, 27, 28, Aug. 4-6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	40	32	21	21	195	142	71	25	203	20	31
2	22	35	31	22	22	160	2480	79	23	79	19	27
3	22	33	25	23	21	204	2360	68	22	52	17	26
4	22	31	29	24	21	1290	727	289	21	42	16	24
5	23	30	25	25	21	700	491	286	21	38	16	24
6	62	30	29	25	21	380	354	225	28	34	16	36
7	34	28	35	24	22	240	277	389	24	30	53	35
8	26	28	28	24	23	185	225	255	32	42	142	28
9	28	27	27	23	24	150	185	178	98	30	88	24
10	25	28	28	23	45	132	166	134	44	27	50	26
11	23	27	31	22	96	121	146	110	38	28	63	22
12	23	27	29	21	210	231	132	96	34	29	112	22
13	22	26	27	20	340	389	119	86	35	26	66	22
14	22	27	25	19	175	244	108	79	39	24	189	26
15	22	27	27	18	125	183	101	70	35	24	88	27
16	21	27	26	18	106	144	93	64	32	22	56	121
17	23	27	27	17	90	121	86	60	29	21	46	79
18	23	28	25	18	80	214	83	55	27	20	38	50
19	26	28	25	18	73	183	79	50	32	20	34	45
20	44	27	31	19	68	196	76	47	36	18	31	39
21	33	28	27	20	67	172	71	43	27	25	77	35
22	28	28	24	21	450	200	91	39	33	39	70	32
23	28	28	25	21	1000	193	103	39	35	20	42	30
24	90	27	22	22	350	164	101	39	31	16	56	29
25	47	27	23	22	220	134	91	42	61	25	40	27
26	37	90	23	22	170	117	82	34	43	19	34	26
27	31	62	23	22	375	117	70	32	39	16	31	24
28	28	43	26	22	330	398	100	30	43	16	28	24
29	28	37	23	22	---	358	91	36	41	52	71	23
30	41	30	22	21	---	239	79	37	96	48	53	22
31	60	---	21	21	---	172	---	31	---	24	37	---
TOTAL	989	981	821	660	4566	7950	9709	3093	1124	1109	1699	1006
MEAN	31.9	32.7	26.5	21.3	163	256	124	99.8	37.5	35.8	54.8	33.5
MAX	90	90	35	25	1000	1290	2880	389	98	203	189	121
MIN	21	26	21	17	21	117	70	30	21	16	16	22
CFSM	.16	.16	.13	.11	.82	1.28	1.62	.50	.19	.18	.27	.17
IN.	.18	.18	.15	.12	.85	1.48	1.81	.58	.21	.21	.32	.19
CAL YR 1976	TOTAL	45326	MEAN	124	MAX	4520	MIN	18	CFSM	.62	IN	8.43
WTR YR 1977	TOTAL	33707	MEAN	92.3	MAX	2880	MIN	16	CFSM	.46	IN	6.27

05275600 EAST FORK WHITEWATER RIVER AT ARINGTON, IN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

CHEMICAL ANALYSES: October 1969 to September 1976.

WATER TEMPERATURE: August 1970 to September 1971, March 1973 to September 1976.

SEDIMENT DISCHARGE: April 1967 to September 1977 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--

WATER TEMPERATURE: Maximum 27.5°C July 9, 1973; minimum, freezing point on many days during most winter periods.

WATER QUALITY DATA. WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	SUS- PENDE SEDIM- ENT DIS- CHARGE (MG/L)	SUS- PENDE SEDIM- ENT DIS- CHARGE (T/DAY)	DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	SUS- PENDE SEDIM- ENT DIS- CHARGE (MG/L)	SUS- PENDE SEDIM- ENT DIS- CHARGE (T/DAY)
NOV 17...	1345	23	5.0	1	.62	MAY 11...	1145	126	--	25	8.5
APR 07...	1200	277	--	34	25	AUG 31...	1400	34	23.5	18	1.6

GREAT MIAMI RIVER BASIN

57

83275990 BROOKVILLE LAKE AT BROOKVILLE, IN

LOCATION.--Lat 39°26'27", long 85°00'10", in NE1/4 sec. 17, T.9 N., R.2 W., Franklin County, Hydrologic Unit 76080003, in discharge tower of reservoir on East Fork Whitewater River, 1.4 miles (2.3 km) northeast of Brookville, and 2.2 miles (3.5 km) above mouth.

DRAINAGE AREA.--379 mi² (982 km²).

PERIOD OF RECORD.--January 1974 to current year.

GAGE.--Water-stage recorder. Datum of gage is 700.00 ft (213.360 m) above mean sea level (levels by Corps of Engineers).

REMARKS.--Reservoir is formed by earth and rock-fill dam. Releases normally controlled by two gates, 5.25 ft (1.60 m) wide and 12 ft (3.66 m) high, in circular conduit through dam. Minimum design capacity is 55,600 acre-ft (68.6 km³), elevation, 713 ft (217.3 m). Seasonal pool capacity is 184,000 acre-ft (227 km³), elevation, 748 ft (228.0 m). Capacity at uncontrolled spillway is 359,600 acre-ft (443 km³), elevation, 775 ft (236.2 m). Reservoir is used for flood control and recreation. Reservoir was put in operation on January 22, 1974.

COOPERATION.--Water-stage recorder graph and capacity tables furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 200,260 acre-ft (247 km³) Apr. 28, 1975, elevation, 751.01 ft (228.908 m); minimum, 127,370 acre-ft (157 km³) Feb. 3, 1976, elevation, 735.85 ft (224.311 m).

EXTREMES FOR CURRENT YEAR.--Maximum contents, 189,320 acre-ft (233 km³) May 9, elevation, 747.00 ft (228.295 m); minimum, 144,944 acre-ft (179 km³) Mar. 2, elevation, 740.02 ft (225.558 m).

MONTHEND ELEVATION AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

Date	Elevation feet	Contents acre-feet	Change in contents (acre-feet)
Sept. 30.....	746.85	178,050	
Oct. 31.....	744.34	165,400	-12,650
Nov. 30.....	740.24	146,340	-19,060
Dec. 31.....	740.08	145,310	-730
CAL YR 1976.....			+15,480
Jan. 31.....	740.09	145,350	+40
Feb. 28.....	740.08	145,310	-40
Mar. 31.....	743.64	161,460	+16,670
Apr. 30.....	747.48	181,300	+19,320
May 31.....	748.00	184,010	+2,710
June 30.....	748.53	186,820	+2,810
July 31.....	747.83	183,120	-3,700
Aug. 31.....	748.28	185,490	+2,370
Sept. 30.....	747.27	180,200	-5,290
WTR YR 1977.....			+2,170

03276000 EAST FORK WHITEWATER RIVER AT BROOKVILLE, IN

LOCATION.--Lat 39°26'02", long 85°00'12", in NE1/4 sec.20, T.9 N., R.2 W., Franklin County, Hydrologic Unit 05080003, on right bank 100 ft (30 m) upstream from bridge on State Highway 101, at Brookville, 0.4 mile (0.6 km) downstream from Brookville Lake, and 1.8 miles (2.9 km) upstream from mouth.

DRAINAGE AREA.--380 mi² (984 km²).

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

REVISED RECORDS.--WSP 1555: 1954(M), 1955(P). WSP 1908: 1955, drainage area.

GAGE.--Water-stage recorder. Datum of gage is 621.76 ft (189.512 m) above mean sea level. Prior to May 22, 1954, nonrecording gage at site 100 ft (30 m) downstream at datum 2.00 ft (0.610 m) higher. May 22, 1954, to Aug. 20, 1965, water-stage recorder at site 165 ft (50 m) downstream at datum 2.00 ft (0.610 m) higher.

REMARKS.--Records good except those for period of no gage-height record, Dec. 22 to Feb. 16, which is poor. Flow regulated by Brookville Lake since January 1974 (see sta 03275990).

AVERAGE DISCHARGE.--23 years, 368 ft³/s (10.42 m³/s), 13.15 in/yr (334 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 36,100 ft³/s (1,020 m³/s) Jan. 21, 1959; maximum gage height, 17.35 ft (5.288 m) May 24, 1968; minimum daily discharge, 10 ft³/s (0.28 m³/s) Oct. 6, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,520 ft³/s (100 m³/s) Mar. 4, gage height, 6.49 ft (1.978 m); minimum daily, 10 ft³/s (0.28 m³/s) Oct. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35	465	142	35	35	452	55	56	51	177	57	32
2	39	465	58	35	35	285	72	57	35	213	45	32
3	43	460	58	35	35	209	114	56	27	213	45	32
4	26	460	58	35	35	2000	1370	63	27	213	45	32
5	17	460	58	35	35	3160	3070	64	27	213	45	32
6	10	460	58	35	35	1670	1980	59	27	103	45	32
7	63	460	58	35	35	463	676	86	27	152	46	32
8	170	460	58	35	35	388	560	58	28	155	48	32
9	168	460	58	35	35	112	285	206	27	155	47	32
10	168	456	58	35	35	55	100	213	27	77	47	36
11	168	395	58	35	35	55	100	241	27	48	53	43
12	166	335	58	35	180	67	66	147	27	39	48	44
13	168	325	58	35	1000	59	80	335	27	25	47	61
14	166	322	68	35	1200	56	95	350	28	25	51	49
15	166	342	55	35	560	55	95	361	26	25	46	160
16	166	349	55	35	142	55	95	377	26	25	26	213
17	166	345	55	35	144	55	95	1190	26	25	25	221
18	329	349	55	35	146	57	96	488	26	26	25	225
19	391	352	56	35	146	55	67	57	26	29	25	291
20	380	345	56	35	146	57	54	112	26	61	25	318
21	373	144	56	35	146	56	54	313	26	80	25	307
22	395	130	48	35	150	57	55	291	28	66	25	257
23	423	356	41	35	460	56	55	137	28	66	25	241
24	414	345	35	35	2230	55	54	51	28	66	35	236
25	406	345	35	35	2700	55	55	53	33	66	33	236
26	437	345	35	35	1100	56	54	53	29	66	32	192
27	470	342	35	35	623	56	55	51	76	66	32	174
28	470	349	35	35	476	116	56	53	100	65	32	174
29	470	356	35	35	---	202	56	53	98	67	32	174
30	470	356	35	35	---	84	56	53	102	66	32	174
31	470	---	35	35	---	55	---	53	---	65	32	---
TOTAL	7803	11133	1663	1085	11934	10213	9675	5737	1116	2738	1176	4114
MEAN	252	371	53.6	35.0	426	329	323	185	37.2	88.3	37.9	137
MAX	470	465	142	35	2700	3160	3070	1190	102	213	57	318
MIN	10	130	35	35	35	55	54	51	26	25	25	32
CAL YR 1976	TOTAL	72600	MEAN 198	MAX 4310	MIN 10							
WTR YR 1977	TOTAL	68387	MEAN 187	MAX 3160	MIN 10							

GREAT MIAMI RIVER BASIN

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03276500 WHITEWATER RIVER AT BROOKVILLE, IN
(National stream-quality accounting network station)

LOCATION.--Lat 39°24'24", long 85°00'46", in NE1/4 sec. 32, T.9 N., R.2 E., Franklin County, Hydrologic Unit 1508103, on right bank at downstream side of highway bridge, 0.3 mile (0.5 km) downstream from East Fork Whitewater River, 1.1 miles (1.8 km) south of Brookville, and at mile 20.3 (47.1 km).

DRAINAGE AREA.--1,224 mi² (3,170 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1915 to September 1917, October 1917 to May 1920 (gage heights only), and July 1923 to current year. Monthly discharge only for some periods, published in WSP 1505.

REVISED RECORDS.--WSP 1535: 1915-17, 1929, 1930(M), 1933(M), 1934, 1935(M), 1936. WSP 1505: 1916(M). WSP 1908: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 505.71 ft (181.57 m) above mean sea level. Prior to July 1923, nonrecording gage at same site at datum 1.5 ft (0.45 m) higher. July 1923 to Sept. 27, 1928, nonrecording gage at same site and datum.

REMARKS.--Records good. Flow regulated by Brookville Lake since January 1974 (see sta 03275980).

AVERAGE DISCHARGE.--56 years (1915-17, 1923 to current year), 1,248 ft³/s (35.34 m³/s), 13.65 in/yr (352 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 81,800 ft³/s (2,320 m³/s) Jan. 21, 1959, gage height, 27.78 ft (8.46 m), from rating curve extended above 45,000 ft³/s (1,270 m³/s) on basis of contracted-opening measurement of peak flow; minimum daily, 60 ft³/s (1.70 m³/s) July 27, 1934.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 25, 1913, reached a stage of 39.0 ft (11.9 m), at present datum, from floodmarks (discharge not determined).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 14,100 ft³/s (399 m³/s) Apr. 2; gage height, 10.33 ft (3.14 m); minimum daily, 72 ft³/s (2.04 m³/s) Feb. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	149	767	308	126	100	1720	741	433	297	1140	139	193
2	145	706	170	123	95	1060	6230	468	242	646	129	178
3	152	686	159	126	88	1170	7370	426	214	498	126	170
4	139	663	159	123	106	7580	3880	1940	202	440	123	163
5	117	663	156	126	114	5200	4420	2490	202	405	120	163
6	135	671	152	120	117	2930	3300	1530	210	319	114	159
7	197	663	159	115	100	1640	1820	3610	202	319	120	170
8	274	638	156	110	88	1330	1740	1810	202	303	156	181
9	271	638	152	108	81	921	1290	1550	251	292	475	170
10	266	638	152	104	72	706	960	1100	237	386	405	163
11	266	552	152	99	123	630	865	960	228	319	256	163
12	266	447	156	96	1020	1680	758	784	214	261	706	159
13	261	433	154	92	3110	1790	714	912	202	193	361	166
14	237	426	163	88	2110	1040	671	847	214	174	1020	379
15	256	447	149	86	1190	811	638	820	193	159	433	292
16	256	461	149	82	513	680	590	793	185	152	292	419
17	256	454	149	80	405	590	567	1420	178	145	454	419
18	386	461	149	81	367	1030	545	1140	174	152	266	475
19	475	468	149	82	331	893	506	386	206	145	210	614
20	475	454	152	83	319	884	461	475	185	142	193	630
21	468	281	156	84	319	802	447	630	170	135	178	529
22	498	197	139	85	412	847	454	598	178	132	256	454
23	552	454	142	85	3210	793	552	468	202	129	202	405
24	598	461	123	90	7500	767	521	331	181	126	1150	399
25	638	447	142	114	4350	671	490	399	266	129	399	392
26	630	475	135	120	2290	598	468	297	2240	126	266	361
27	663	622	129	123	2390	552	440	281	545	126	219	314
28	646	567	135	118	1950	1910	426	261	521	123	202	308
29	638	537	126	107	---	1770	529	256	373	152	197	303
30	646	513	117	100	---	1240	454	802	337	266	232	303
31	829	---	120	100	---	893	---	361	---	152	206	---
TOTAL	11787	15884	4711	3176	32870	45128	42847	28578	9251	8186	9605	9194
MEAN	380	529	152	102	1174	1456	1428	922	308	264	310	306
MAX	829	767	308	126	7500	7580	7370	3610	2240	1140	1150	630
MIN	117	197	117	80	72	552	426	256	170	123	114	159
CFSM	.31	.43	.12	.08	.96	1.19	1.17	.75	.25	.22	.25	.25
IN.	.36	.48	.14	.10	1.00	1.37	1.30	.87	.28	.25	.29	.28
CAL YR 1976	TOTAL	268833	MEAN 735	MAX 12000	MIN 117	CFSM .60	IN 8.17					
WTR YR 1977	TOTAL	221217	MEAN 606	MAX 7580	MIN 72	CFSM .50	IN 6.72					

GREAT MIAMI RIVER BASIN

03276500 WHITEWATER RIVER AT BROOKVILLE, IN--Continued
(National stream-quality accounting network station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

CHEMICAL ANALYSES: October 1974 to current year.

WATER TEMPERATURE: October 1974 to current year.

SEDIMENT DISCHARGE: October 1974 to current year (partial-record station).

EXTREMES FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 600 micromhos May 19, 1977; minimum, 220 micromhos Nov. 26, 1977.

WATER TEMPERATURE: Maximum, 28.0°C July 31, Aug. 21, 1975; minimum, freezing point on many days during 1976-77 winter periods.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 600 micromhos May 19; minimum, 220 micromhos Nov. 26.

WATER TEMPERATURE: Maximum, 25.5°C July 15-22; minimum, freezing point on many days during winter period.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15.0	11.0	3.0	.0	.5	3.5	12.0	14.5	20.0	21.0	23.0	24.0
2	15.0	11.0	2.5	.0	1.0	4.0	12.5	15.5	20.0	21.0	25.0	25.0
3	16.0	11.0	1.5	.0	2.0	4.0	12.0	16.0	19.0	21.0	25.0	24.5
4	17.0	10.5	2.0	1.0	2.0	4.5	11.5	16.0	17.5	21.5	24.5	22.5
5	17.0	10.5	4.0	1.5	.0	4.5	8.5	17.0	19.5	22.0	23.5	23.5
6	17.0	9.5	2.5	1.0	.0	4.0	7.0	18.5	20.0	24.5	24.5	23.5
7	16.5	9.5	3.0	.5	.5	4.0	8.0	16.0	18.0	24.0	23.5	23.0
8	15.0	10.0	2.0	.5	.5	5.0	9.5	16.0	18.0	24.0	22.5	22.0
9	15.0	11.0	2.5	---	2.0	7.5	9.5	13.0	16.0	23.5	23.0	22.0
10	14.5	10.5	3.0	---	2.5	8.0	9.5	14.0	17.0	23.5	25.0	21.5
11	14.5	9.5	3.0	---	2.0	9.0	12.5	14.5	17.5	22.5	24.0	20.0
12	17.0	9.0	4.5	---	1.0	10.0	14.5	16.0	19.0	22.5	22.0	19.0
13	16.0	8.0	2.5	---	1.0	10.0	14.5	15.0	19.5	23.5	21.5	20.0
14	15.0	7.0	2.0	---	2.0	9.5	15.5	16.5	20.5	24.5	22.0	20.0
15	15.0	7.0	2.5	---	2.0	10.0	15.0	15.5	20.5	25.5	22.5	20.0
16	14.5	7.0	2.5	---	1.0	10.5	16.0	16.0	21.5	25.5	23.5	21.0
17	13.5	9.5	3.0	---	1.5	9.5	16.0	12.5	22.5	25.5	23.5	22.0
18	12.5	10.0	4.0	---	1.5	9.0	15.0	13.0	23.0	25.5	21.0	22.0
19	14.5	9.5	4.0	---	2.5	7.0	16.5	16.0	22.5	25.5	20.0	22.0
20	13.5	9.0	5.0	---	2.0	7.0	14.0	17.0	21.5	25.5	20.5	20.0
21	13.5	6.5	1.0	---	2.0	6.0	17.5	19.0	20.5	25.5	20.5	20.0
22	14.0	6.0	1.0	1.0	3.0	7.0	16.5	19.0	19.5	25.5	20.0	19.5
23	12.5	6.0	1.0	.0	2.5	6.0	15.0	18.5	18.5	24.5	20.0	20.0
24	13.5	6.5	2.0	1.0	2.5	7.0	14.0	20.5	21.5	24.5	20.5	21.0
25	13.5	6.5	1.5	2.0	3.0	7.0	12.5	22.0	21.5	25.5	19.0	20.5
26	12.0	8.0	1.0	2.0	4.0	7.5	13.5	20.0	21.0	25.0	19.0	20.5
27	11.5	8.5	.5	.5	3.0	8.0	13.0	20.0	21.5	25.0	19.0	21.0
28	11.0	6.5	1.5	1.0	3.5	8.5	13.0	20.5	22.5	21.0	19.5	21.0
29	11.0	5.0	.0	.5	---	8.5	12.0	21.0	22.5	22.0	19.0	21.0
30	11.0	4.5	1.5	.0	---	9.5	12.5	19.5	21.5	22.0	21.5	19.5
31	11.0	---	.0	.0	---	9.0	---	21.5	---	22.0	22.5	---
MEAN	14.0	8.5	2.5	.5	2.0	7.0	13.0	17.0	20.0	23.5	22.0	21.5
WTR YR 1977	MEAN	13.0	MAX	25.5	MIN	.0						

03276500 WHITEWATER RIVER AT BROOKVILLE, IN--Continued
 (National stream-quality accounting network station)

 SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
 ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	540	450	460	425	515	490	445	515	570	430	500	520
2	545	455	470	425	515	515	480	535	570	440	490	550
3	545	460	580	400	570	515	360	535	575	480	490	540
4	555	390	440	380	550	415	470	350	550	510	490	520
5	570	330	470	335	520	415	480	430	580	510	495	530
6	540	410	400	435	530	490	490	475	580	510	510	540
7	550	485	460	420	595	495	515	375	535	520	510	570
8	500	470	440	410	540	525	530	485	560	520	470	575
9	485	485	500	---	535	550	535	505	550	520	380	550
10	480	485	290	---	550	565	535	520	570	490	375	560
11	480	485	290	---	575	490	515	500	550	480	395	565
12	470	485	340	---	515	560	540	500	570	490	350	560
13	480	495	435	---	510	480	535	525	560	535	380	565
14	480	495	500	---	470	515	535	460	535	560	490	460
15	485	490	520	---	460	550	510	510	560	560	365	470
16	480	490	420	---	470	560	500	500	515	560	460	470
17	475	495	420	---	515	560	515	490	560	560	425	480
18	480	495	470	---	550	560	520	500	560	540	445	505
19	455	490	450	---	550	500	520	600	560	540	480	485
20	455	490	415	---	550	535	520	550	535	550	535	480
21	460	425	490	---	560	435	530	525	560	550	520	460
22	460	475	490	440	550	460	510	515	550	530	490	510
23	460	380	420	545	360	465	510	510	550	530	490	475
24	465	370	340	525	400	520	520	520	560	540	365	510
25	460	265	290	560	460	520	520	490	570	515	455	505
26	470	220	390	500	485	560	520	510	290	515	505	485
27	460	390	360	450	485	560	520	540	400	550	515	460
28	460	380	400	385	480	450	475	560	470	530	515	475
29	460	360	310	385	---	500	480	550	490	520	530	475
30	460	415	300	435	---	510	505	385	520	450	530	480
31	460	---	405	475	---	490	---	490	---	415	520	---
MEAN	489	434	418	441	513	508	505	499	537	515	467	511
#TR YR 1977		MEAN	488	MAX	600	MIN	220					

GREAT MIAMI RIVER BASIN

U3276500 WHITEWATER RIVER AT BROOKVILLE, IN--Continued
(National stream-quality accounting network station)

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	SPECIFIC CONDUCTANCE (MICRO- MHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	TOTAL DISSOLVED SOLIDS (MG/L)	FECAL COLIFORM (COL. PER 100 ML)	FECAL STREPTOCOCCI (COL. PER 100 ML)	HARDNESS (CA, MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)
NOV 03...	1100	685	470	8.0	11.5	2	--	25000	1400	340	220	44
DEC 02...	1600	340	565	8.2	2.4	4	16.5	45000	34000	580	290	50
JAN 13...	1000	331	520	--	.5	1	--	5400	170	243	320	54
FEB 03...	1800	79	583	8.4	1.7	3	13.0	23000	8200	7500	300	140
MAR 03...	1630	950	610	7.5	4.0	8	12.8	20500	2000	3800	260	55
APR 07...	1015	2090	500	7.8	8.0	9	12.1	900	757	2140	260	78
MAY 06...	1015	1380	445	8.1	19.0	2	8.8	47000	11800	5700	240	55
JUN 02...	1100	407	530	7.8	22.5	55	--	62000	16100	2450	420	230
JUN 28...	1630	561	550	8.0	25.5	1	8.0	23000	8000	3700	240	71
AUG 04...	1430	288	515	8.4	26.5	2	--	72000	7700	624	250	80
SEP 13...	1545	315	600	8.3	21.5	15	10.1	32000	--	700	270	46

DATE	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG)	DIS-SOLVED SODIUM (NA) (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)
NOV 03...	53	22	11	10	.3	3.0	218	0	179	3.5	44	22
DEC 02...	70	27	13	9	.3	2.5	288	0	236	2.9	45	23
JAN 13...	78	30	12	8	.3	2.5	322	--	264	--	49	24
FEB 03...	75	28	15	10	.4	2.5	201	0	165	1.3	27	17
MAR 03...	65	24	11	8	.3	2.7	251	0	206	13	46	22
APR 07...	64	24	8.6	7	.2	2.4	220	0	180	5.6	43	21
MAY 06...	63	19	6.7	6	.2	2.9	220	0	180	2.8	38	14
JUN 02...	76	55	9.7	5	.2	2.9	230	0	190	5.8	41	19
JUN 28...	63	21	9.8	8	.3	3.2	206	0	169	3.3	38	21
AUG 04...	58	26	18	13	.5	2.9	210	0	170	1.3	46	36
SEP 13...	66	25	18	13	.5	2.0	270	0	220	2.2	48	24

DATE	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED SILICA (SiO2) (MG/L)	DIS-SOLVED SOLIDS (REST-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	DIS-SOLVED SOLIDS (TONS PER DAY)	TOTAL KJFI- DAHL NITROGEN (N) (MG/L)	TOTAL NITROGEN (NO3) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)
NOV 03...	.2	1.6	267	264	.36	494	.45	5.3	.06	9	17
DEC 02...	.2	4.2	314	327	.43	288	.40	4.9	.03	88	80
JAN 13...	.2	5.0	378	359	.51	338	.51	11	.05	--	--
FEB 03...	.1	3.3	267	267	.36	57.0	.65	11	.06	94	20
MAR 03...	.2	5.1	313	300	.43	803	.66	12	.09	39	100
APR 07...	.2	4.2	298	276	.41	1680	.50	13	.07	49	277
MAY 06...	.1	6.1	284	258	.39	1060	1.2	16	.13	94	350
JUN 02...	.2	5.8	359	323	.49	795	.85	14	.09	103	113
JUN 28...	.2	5.2	318	263	.43	482	1.3	16	.04	185	280
AUG 04...	.2	2.7	326	293	.44	253	.98	7.3	.08	86	67
SEP 13...	.1	3.9	295	320	.40	251	.48	7.0	.07	28	24

3376500 WHITWATER RIVER AT BROOKVILLE, IN--Continued
(National stream-quality accounting network station)

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	TOTAL ARSENIC (AS) (UG/L)	SUS- PENDE D ARSENIC (AS) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	TOTAL CAD- MIUM (CD) (UG/L)	SUS- PENDE D CAD- MIUM (CD) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	SUS- PENDE D CHRO- MIUM (CR) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)
NOV 03...	1100	1	1	0	0	0	0	<10	0	<10	0
FEB 03...	1800	0	0	0	3	1	2	<10	0	<10	0
MAY 06...	1015	1	0	1	0	0	0	10	0	11	1
AUG 04...	1430	0	0	0	0	0	0	<10	<10	0	0

DATE	SUS- PENDE D COBALT (CO) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	SUS- PENDE D COPPER (CU) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	TOTAL LEAD (PR) (UG/L)	SUS- PENDE D LEAD (PR) (UG/L)	DIS- SOLVED LEAD (PR) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	SUS- PENDE D MAN- GANESE (MN) (UG/L)
NOV 03...	0	1	10	10	0	180	8	6	2	160	120
FEB 03...	0	0	10	0	10	110	11	9	2	40	10
MAY 06...	1	0	6	3	3	2600	7	7	0	130	120
AUG 04...	0	0	7	5	2	1200	3	1	2	50	40

DATE	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	SUS- PENDE D MERCURY (HG) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	TOTAL SELE- NIUM (SE) (UG/L)	SUS- PENDE D SELE- NIUM (SE) (UG/L)	DIS- SOLVED SELE- NIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	SUS- PENDE D ZINC (ZN) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
NOV 03...	40	<.5	.0	<.5	0	0	0	0	0	0	6.2
FEB 03...	30	<.5	.0	<.5	0	0	0	40	10	30	2.9
MAY 06...	10	.3	.3	.0	0	0	0	20	10	10	6.9
AUG 04...	10	.0	.0	.0	0	0	0	10	10	0	4.8

GREAT MIAMI RIVER BASIN

03276500 WHITEWATER RIVER AT BROOKVILLE, IN--Continued
(National stream-quality accounting network station)

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	TOTAL PCB (UG/L)	PCB IN BOTTOM MA- TERIAL (UG/KG)	TOTAL ALDRIN (UG/L)	ALDRIN IN BOTTOM MA- TERIAL (UG/KG)	TOTAL CHLOR- DANE (UG/L)	CHLOR- DANE IN BOTTOM MA- TERIAL (UG/KG)	TOTAL DDD (UG/L)	DDD IN BOTTOM MA- TERIAL (UG/KG)	TOTAL DDE (UG/L)	DDE IN BOTTOM MA- TERIAL (UG/KG)
FEB 03...	1630	.0	0	.00	.0	.0	0	.00	.0	.00	.0

DATE	TOTAL DDT (UG/L)	DDT IN BOTTOM MA- TERIAL (UG/KG)	TOTAL DI- AZINON (UG/L)	DI- AZINON IN BOTTOM MA- TERIAL (UG/KG)	TOTAL DI- ELDRIN (UG/L)	DI- ELDRIN IN BOTTOM MA- TERIAL (UG/KG)	TOTAL ENDRIN (UG/L)	ENDRIN IN BOTTOM MA- TERIAL (UG/KG)	TOTAL ETHION (UG/L)	ETHION IN BOTTOM MA- TERIAL (UG/KG)	TOTAL HEPTA- CHLOR (UG/L)
FEB 03...	.00	.0	.00	.0	.00	2.4	.00	.0	.00	.0	.00

DATE	HEPTA- CHLOR IN BOTTOM MA- TERIAL (UG/KG)	TOTAL HEPTA- CHLOR EPOXIDE (UG/L)	HEPTA- CHLOR EPOXIDE IN BOT- TOM MA- TERIAL (UG/KG)	TOTAL LINDANE (UG/L)	LINDANE IN BOTTOM MA- TERIAL (UG/KG)	TOTAL MALA- THION (UG/L)	MALA- THION IN BOTTOM MA- TERIAL (UG/KG)	TOTAL METH- OXY- CHLOR (UG/L)	TOTAL METHYL PARA- THION (UG/L)	METHYL PARA- THION IN BOT- TOM MA- TERIAL (UG/KG)	TOTAL METHYL TRI- THION (UG/L)
FEB 03...	.0	.00	.0	.00	.0	.00	.0	.00	.00	.0	.00

DATE	METHYL TRI- THION IN BOT- TOM MA- TERIAL (UG/KG)	TOTAL PARA- THION (UG/L)	PARA- THION IN BOTTOM MA- TERIAL (UG/KG)	TOTAL TOX- APHENE (UG/L)	TOX- APHENE IN BOTTOM MA- TERIAL (UG/KG)	TOTAL TRI- THION (UG/L)	TRI- THION IN BOTTOM MA- TERIAL (UG/KG)	TOTAL 2,4-D (UG/L)	TOTAL 2,4,5-T (UG/L)	TOTAL SILVEX (UG/L)
FEB 03...	.0	.00	.0	0	0	.00	.0	.00	.00	.00

03276700 SOUTH HOGAN CREEK NEAR DILLSBORO, IN
(Hydrologic bench-mark station)

LOCATION.--Lat 39°01'47", long 85°02'17", in SW¼NW¼ sec.7, T.4 N., R.2 W., Dearborn County, Hydrologic Unit 05090203, on left downstream abutment of bridge on county road at Dillsboro Station, 1.2 miles (1.9 km) northeast of Dillsboro, and 1.5 miles (2.4 km) downstream from Whitaker Creek.

DRAINAGE AREA.-- 38.1 mi² (98.7 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1961 to current year. Occasional low-flow measurements, water year 1960.

REVISED RECORDS.--WRD Ind. 1972: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 571.00 ft (174.041 m) above mean sea level.

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

AVERAGE DISCHARGE.--16 years, 39.0 ft³/s (1.104 m³/s), 13.90 in/yr (353 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,000 ft³/s (368 m³/s) Apr. 29, 1970, gage height, 12.7 ft (3.87 m), from floodmarks; no flow at times most years.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Jan. 21, 1959, reached a stage of 14.00 ft (4.267 m), discharge, 16,300 ft³/s (462 m³/s), on basis of contracted-opening measurement.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 2,500 ft³/s (70.8 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Mar. 12	1645	*2340 66.3	*6.52 1.987

Minimum daily discharge, no flow Aug. 5, 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.5	17	4.9	.90	.90	35	37	9.6	1.8	326	.08	1.4
2	1.1	10	4.6	1.0	1.0	26	159	12	1.3	46	.04	.85
3	1.2	6.1	3.3	1.1	1.2	152	88	10	.52	23	.03	.42
4	1.4	4.6	3.3	1.2	1.4	592	45	116	.21	15	.01	.26
5	1.2	3.8	3.0	1.1	1.4	157	71	926	.12	9.8	.00	.21
6	2.1	3.5	3.2	1.0	1.3	67	48	138	.16	6.6	.00	.24
7	2.6	3.3	4.8	1.0	1.2	43	73	122	.10	5.3	.02	.42
8	3.6	2.9	4.4	1.0	1.2	34	41	59	.12	4.2	.04	.52
9	2.9	2.7	3.7	1.0	1.4	26	30	32	6.9	3.6	.04	.85
10	2.4	2.5	3.5	.90	1.7	19	25	23	4.6	20	.31	.63
11	1.9	2.4	4.5	.86	2.5	16	19	17	2.6	24	.91	.33
12	1.8	2.4	4.9	1.0	70	640	17	13	1.7	22	14	.26
13	1.9	2.3	4.0	1.1	150	238	14	10	.98	9.4	7.2	.16
14	1.5	2.1	3.9	1.1	50	74	13	8.3	.63	5.9	4.1	.10
15	1.4	2.1	4.0	1.0	22	44	12	6.4	.33	4.3	2.5	.14
16	1.4	2.1	3.6	.85	18	28	11	5.4	.16	3.3	2.3	12
17	1.3	2.0	3.9	.70	15	24	9.8	4.6	.10	2.7	3.3	14
18	1.3	2.0	3.6	.80	13	433	8.7	3.6	.10	2.2	2.7	4.8
19	1.3	2.2	3.5	.80	11	78	8.6	3.2	16	2.2	1.5	3.5
20	2.5	2.1	3.9	.85	10	75	8.5	4.4	4.0	1.6	.97	2.6
21	4.3	2.0	3.1	.85	15	53	7.5	3.8	1.7	1.4	2.6	2.0
22	4.9	2.0	2.3	.85	80	75	15	2.8	1.7	.99	7.1	1.7
23	4.6	1.8	2.2	.90	150	47	16	4.0	3.1	.50	158	1.4
24	49	1.9	1.8	1.0	250	34	13	2.9	20	.33	40	1.1
25	27	1.9	1.7	1.0	77	28	24	2.5	88	.33	11	1.1
26	10	5.2	1.7	1.0	44	24	13	3.1	55	.42	5.8	.85
27	5.7	30	1.6	1.0	166	32	11	2.3	150	.26	3.5	.73
28	3.9	14	1.5	.90	44	222	11	5.4	216	.10	2.6	.63
29	2.9	8.3	1.4	.90	---	71	20	8.6	137	.16	2.1	.42
30	18	5.4	1.2	.90	---	43	13	4.0	60	.26	1.7	.26
31	62	---	.85	.90	---	43	---	2.6	---	.16	1.7	---
TOTAL	228.6	150.6	97.85	29.46	1200.20	3473	882.1	1565.5	774.93	542.01	276.15	53.90
MEAN	7.37	5.02	3.16	.95	42.9	117	29.4	50.5	25.8	17.5	8.91	1.80
MAX	62	30	4.9	1.2	250	640	159	926	216	326	158	14
MIN	1.1	1.8	.85	.70	.90	16	7.5	2.3	.10	.10	.00	.10
CFSM	.19	.13	.08	.03	1.13	2.94	.77	1.33	.68	.46	.23	.05
IN.	.22	.15	.10	.03	1.17	3.39	.86	1.53	.76	.53	.27	.05
CAL YR 1976	TOTAL	7077.22	MEAN	19.3	MAX	752	MIN	.02	CFSM	.51	IN	6.91
WTR YR 1977	TOTAL	9274.30	MEAN	25.4	MAX	926	MIN	.00	CFSM	.67	IN	9.05

HOGAN CREEK BASIN

03276700 SOUTH HOGAN CREEK NEAR DILLSBORO, IN--Continued
(Hydrologic bench-mark station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

CHEMICAL ANALYSES: October 1968 to current year.

SEDIMENT DISCHARGE: August 1969 to current year (partial-record station).

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1977

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	IMPF- DIATE COLI- FORM (COL. PER 100 ML)	FECAL COLI- FORM (COL. PER 100 ML)	FECAL STREP- TOCOCCI KF AGAR (COL. PER 100 ML)	HARD- NESS (CA, MG/L)
NOV										
03...	1645	5.7	490	8.1	7.5	--	1450	479	350	240
DEC										
02...	1315	4.4	590	8.2	1.0	15.4	--	--	--	280
02...	1350	--	--	--	--	--	1350	468	35	--
JAN										
13...	1300	1.0	610	--	.5	--	4500	13	278	400
FEB										
15...	1045	23	340	7.8	.5	13.6	108000	186	11600	160
MAR										
03...	1200	34	550	7.0	2.5	13.2	1400	86	511	220
04...	1330	1100	--	--	6.5	--	--	--	--	--
APR										
06...	1600	45	475	8.2	9.0	13.3	3840	143	2400	200
MAY										
05...	1515	1020	--	--	--	--	--	--	--	--
05...	1545	811	120	7.8	19.5	9.0	35000	8440	17100	90
JUN										
02...	1730	.80	470	7.5	25.0	--	10900	186	589	190
28...	1245	49	400	8.1	24.0	8.7	53000	7850	19000	150
AUG										
04...	1015	.01	460	7.9	24.5	--	840	243	1060	180
SEP										
13...	1245	.07	485	7.9	21.0	8.8	5400	--	400	200

DATE	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	ALKA- LITY AS CACO3 (MG/L)
NOV										
03...	70	75	12	12	10	.3	5.5	203	0	167
DEC										
02...	73	88	17	19	12	.5	4.4	258	0	212
02...	--	--	--	--	--	--	--	--	--	--
JAN										
13...	120	120	24	41	18	.9	5.7	335	--	275
FEB										
15...	54	49	8.0	9.0	11	.3	6.3	124	0	102
MAR										
03...	73	70	12	12	10	.3	3.0	184	0	151
04...	--	--	--	--	--	--	--	--	--	--
APR										
06...	47	63	11	9.8	9	.3	2.4	190	0	160
MAY										
05...	--	--	--	--	--	--	--	--	--	--
05...	29	28	4.8	3.7	8	.2	3.6	74	0	61
JUN										
02...	46	56	11	13	13	.4	2.7	170	0	140
28...	30	49	7.4	6.8	9	.2	3.3	150	0	120
AUG										
04...	39	50	13	14	14	.5	4.0	170	0	140
SEP										
13...	64	60	11	16	15	.5	4.5	160	0	130

03276700 SOUTH HOGAN CREEK NEAR DILLSBORO, IN--Continued
(Hydrologic bench-mark station)

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	CARBON DIOXIDE (CO ₂) (MG/L)	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 100 C) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	TOTAL PHOS- PHORUS (P) (MG/L)
NOV 03...	2.6	71	10	.2	6.5	313	292	.43	4.82	.13
DEC 02...	2.6	86	27	.2	2.0	385	369	.52	4.57	.08
02...	--	--	--	--	--	--	--	--	--	--
JAN 13...	--	120	64	.2	.9	576	541	.78	1.63	.05
FEB 15...	3.1	48	20	.2	5.1	252	207	.34	15.7	.27
MAR 03...	29	64	20	.2	6.2	298	278	.41	27.4	.09
04...	--	--	--	--	--	--	--	--	--	--
APR 06...	1.9	54	15	.2	5.0	261	254	.35	31.7	.07
MAY 05...	--	--	--	--	--	--	--	--	--	--
05...	1.9	21	6.9	.1	4.9	135	109	.18	296	.54
JUN 02...	8.6	50	17	.1	2.7	237	236	.32	.51	.05
28...	1.9	35	4.9	.2	6.6	230	191	.31	30.4	.22
AUG 04...	3.4	50	20	.2	6.3	270	241	.37	.01	.04
SEPT 13...	3.2	57	14	.2	5.7	265	252	.36	.05	.05

HOGAN CREEK BASIN

03276700 SOUTH HOGAN CREEK NEAR DILLSBORO, IN--Continued
(Hydrologic bench-mark station)

WATER QUALITY DATA, WATER YEAR OCTOBER 1974 TO SEPTEMBER 1977

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	TEMPERATURE (DEG C)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DISCHARGE (T/DAY)	SUSPENDED SEDIMENT FALL DIAM. % FINER THAN .002 MM	SUSPENDED SEDIMENT FALL DIAM. % FINER THAN .004 MM
MAR 04...	1330	1100	6.5	286	849	75	41
MAY 05...	1515	1020	--	442	1220	--	--

DATE	SUSPENDED SEDIMENT FALL DIAM. % FINER THAN .008 MM	SUSPENDED SEDIMENT FALL DIAM. % FINER THAN .016 MM	SUSPENDED SEDIMENT FALL DIAM. % FINER THAN .031 MM	SUSPENDED SEDIMENT SIEVE FALL DIAM. % FINER THAN .062 MM	SUSPENDED SEDIMENT SIEVE FALL DIAM. % FINER THAN .125 MM	SUSPENDED SEDIMENT SIEVE FALL DIAM. % FINER THAN .250 MM	SUSPENDED SEDIMENT SIEVE FALL DIAM. % FINER THAN .500 MM
MAR 04...	86	90	93	94	96	99	100
MAY 05...	--	--	--	--	--	--	--

DATE	TIME	TOTAL PCB (UG/L)	PCB IN BOTTOM MATERIAL (UG/KG)	TOTAL ALDRIN (UG/L)	ALDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL CHLOR-DANE (UG/L)	CHLOR-DANE IN BOTTOM MATERIAL (UG/KG)	TOTAL DDD (UG/L)	DDD IN BOTTOM MATERIAL (UG/KG)	TOTAL DDE (UG/L)	DDE IN BOTTOM MATERIAL (UG/KG)	TOTAL DDT (UG/L)
NOV 03...	1645	.0	0	.00	.0	.0	0	.00	.1	.00	.0	.00

DATE	DDT IN BOTTOM MATERIAL (UG/KG)	TOTAL DDT (UG/L)	TOTAL DI-ELDRIN (UG/L)	DI-ELDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL ENDRIN (UG/L)	ENDRIN IN BOTTOM MATERIAL (UG/KG)	TOTAL ETHION (UG/L)	TOTAL HEPTA-CHLOR (UG/L)	HEPTA-CHLOR IN BOTTOM MATERIAL (UG/KG)	TOTAL HEPTA-CHLOR EPOXIDE (UG/L)	HEPTA-CHLOR EPOXIDE IN BOTTOM MATERIAL (UG/KG)	TOTAL LINDANE (UG/L)
NOV 03...	.4	.00	.00	.0	.00	.0	.00	.00	.0	.00	.0	.00

DATE	LINDANE IN BOTTOM MATERIAL (UG/KG)	TOTAL MALATHION (UG/L)	TOTAL METHYL PARATHION (UG/L)	TOTAL METHYL TRI-THION (UG/L)	TOTAL PARA-THION (UG/L)	TOTAL TOX-APHENE (UG/L)	TOX-APHENE IN BOTTOM MATERIAL (UG/KG)	TOTAL TRI-THION (UG/L)	TOTAL 2,4-D (UG/L)	TOTAL 2,4,5-T (UG/L)	TOTAL SILVEX (UG/L)
NOV 03...	.0	.00	.00	.00	.00	0	0	.00	.03	.16	.00

INDIAN-KENTUCK CREEK BASIN

49

33291780 INDIAN-KENTUCK CREEK NEAR CANAAN, IN

LOCATION.--Lat 36°52'41", long 85°15'26", in SW¼ sec.15, T.5 N., R.11 E., Jefferson County, Hydrologic Unit 05140101, on downstream end of left pier of bridge on State Highway 62, 1,500 ft (457 m) upstream from Wilson Fork, 2.0 miles (3.2 km) north-east of Canaan, and at mile 16.7 (26.9 km).

DRAINAGE AREA.--27.5 mi² (71.2 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 590 ft (180 m), from topographic map.

REMARKS.--Records good except those for periods of no gage-height record, Oct. 1 to Dec. 12 and Dec 21 to Feb. 18 which are poor.

AVERAGE DISCHARGE.--8 years, 28.7 ft³/s (0.813 m³/s), 14.1 in/yr (360 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,220 ft³/s (91.2 m³/s) Feb. 23, 1975, gage height, 7.42 ft (2.262 m), from rating curve extended above 600 ft³/s (17.0 m³/s); maximum gage height, 11.02 ft (3.359 m) Feb. 22, 1971; no flow for many days in 1970, 1972, and 1975.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 1,000 ft³/s (28.3 m³/s) (revised) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)	
Feb. 23	2300	1520	43.0	6.07	1.850
Mar. 03	2300	2450	69.4	6.89	2.100
Apr. 02	1530	1050	29.7	6.41	1.954
July 10	0945	*2990	84.7	*9.27	2.825

Minimum daily discharge, 0.12 ft³/s (0.003 m³/s) Sept. 12-13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.8	33	6.8	.75	.46	38	21	36	.49	186	1.3	.71
2	4.5	20	6.4	.83	.50	74	178	50	.40	27	.92	.54
3	3.0	12	4.4	.90	.60	402	95	31	.27	15	.71	.44
4	2.4	10	4.6	1.0	.80	715	60	207	.21	7.8	.64	.31
5	2.0	8.5	4.2	.83	.80	141	70	186	.21	4.2	.54	.27
6	10	6.8	4.5	.70	.69	68	66	84	.21	2.9	.49	.27
7	8.0	6.1	6.6	.70	.60	45	64	59	.16	2.0	13	.24
8	5.6	5.4	6.0	.70	.60	33	42	40	.24	7.0	5.2	.21
9	4.5	5.0	5.1	.70	.70	26	32	28	15	2.9	2.0	.18
10	3.7	4.5	4.8	.60	1.0	22	28	23	1.7	310	74	.16
11	3.0	4.0	6.2	.50	2.0	19	24	19	.92	108	80	.14
12	2.8	3.8	6.8	.55	10	347	20	15	.64	46	280	.12
13	2.5	3.5	5.2	.60	80	142	14	13	.54	26	54	.12
14	2.3	3.3	5.2	.60	25	59	14	8.4	.49	19	29	.14
15	2.2	3.1	5.2	.55	12	41	14	6.6	.40	13	18	.21
16	2.1	2.9	5.2	.48	9.0	29	12	4.8	.31	7.8	11	24
17	2.0	2.8	5.2	.40	7.5	25	9.0	3.6	.24	5.2	27	4.5
18	2.0	2.8	4.7	.42	6.0	184	7.8	2.9	.21	3.9	12	42
19	2.0	3.0	4.7	.45	4.9	58	7.2	2.5	8.4	3.6	4.8	61
20	4.0	2.9	5.7	.48	5.4	49	6.6	2.0	1.7	13	3.1	19
21	7.0	2.7	3.3	.51	4.5	38	5.2	1.5	.84	2.9	3.1	7.8
22	9.0	2.7	2.2	.54	4.5	47	13	1.4	1.5	2.3	29	4.5
23	7.0	2.5	1.4	.56	282	33	19	1.3	2.0	1.5	6.6	3.1
24	80	2.6	1.0	.59	402	27	13	1.1	41	1.2	18	2.7
25	35	2.6	1.3	.60	81	24	9.0	.92	85	1.1	4.8	2.3
26	20	8.0	1.1	.60	49	21	7.2	.77	21	1.2	2.5	2.0
27	12	40	.84	.52	92	20	5.7	.64	19	1.0	1.8	1.5
28	8.0	20	.92	.45	47	137	17	.64	88	.77	1.4	1.3
29	6.0	11	1.0	.45	---	56	33	.84	57	28	1.0	1.1
30	30	7.6	1.0	.45	---	35	18	1.0	60	5.7	1.0	1.0
31	100	---	.70	.45	---	25	---	.64	---	2.1	.84	---
TOTAL	389.4	243.1	122.46	18.46	1130.55	2942	930.7	832.55	408.08	853.07	687.74	181.86
MEAN	12.6	8.10	3.95	.60	40.4	94.9	31.0	26.9	13.6	27.5	22.2	6.06
MAX	100	40	6.8	1.0	402	715	178	207	88	310	280	61
MIN	2.0	2.5	.70	.40	.46	19	5.2	.64	.16	.77	.49	.12
CFSM	.46	.30	.14	.02	1.47	3.45	1.13	.98	.50	1.00	.81	.22
IN.	.53	.33	.17	.02	1.53	3.98	1.26	1.13	.55	1.15	.93	.25
CAL YR 1976	TOTAL	6709.53	MEAN	18.3	MAX	613	MIN	.02	CFSM	.67	IN	9.08
WTR YR 1977	TOTAL	8739.97	MEAN	23.9	MAX	715	MIN	.12	CFSM	.87	IN	11.82

SILVER CREEK BASIN

03294000 SILVER CREEK NEAR SELLERSBURG, IN

LOCATION.--Lat 38°22'15", long 85°43'35", in SW¼SW¼ lot 68, Clark Military Grant, Clark County, Hydrologic Unit 05150101, on upstream side of Straws Mill bridge on Watson Road, 0.3 mile (0.5 km) downstream from Pleasant Run, 2.4 miles (3.9 km) south-east of Sellersburg, and 12.2 miles (19.6 km) upstream from mouth.

DRAINAGE AREA.--189 mi² (490 km²).

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

REVISED RECORDS.--WSP 1705: 1955-58. WRD Ind. 1972: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 429.78 ft (130.997 m) above mean sea level (levels by State of Indiana, Department of Natural Resources). Prior to Oct. 6, 1976, nonrecording gage and crest-stage gage at same site and datum.

REMARKS.--Records good. Some regulation by Deam Lake.

AVERAGE DISCHARGE.--23 years, 212 ft³/s (6.004 m³/s), 15.23 in/yr (387 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 19,600 ft³/s (555 m³/s) Jan. 22, 1959, gage height, 30.89 ft (9.415 m), from floodmarks, from rating curve extended above 6,300 ft³/s (178 m³/s) on basis of contracted-opening measurements of peak flow, at site 5.2 miles (8.4 km) upstream, drainage area, 165 mi² (427 km²), adjusted to gage site; no flow at times in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 2,500 ft³/s (70.8 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)	
Mar. 04	1800	*3720	105	*17.50	5.334
Mar. 13	0300	3100	87.8	15.72	4.791

Minimum daily discharge, 3.5 ft³/s (0.099 m³/s) Oct. 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	102	20	7.3	4.7	166	169	72	18	320	9.7	20
2	10	57	19	6.8	4.8	143	292	58	13	141	9.0	16
3	9.8	42	18	6.8	5.4	243	794	48	8.9	72	15	15
4	7.3	30	17	6.5	9.8	3300	281	94	7.8	50	10	12
5	5.6	21	17	6.1	11	2070	529	858	7.5	36	8.2	36
6	7.0	18	16	6.1	8.1	589	407	665	12	24	7.3	49
7	18	16	15	6.0	7.3	367	286	780	16	20	5.1	26
8	12	14	15	5.8	6.8	266	225	392	11	17	4.6	20
9	8.6	14	14	5.7	7.8	209	174	218	9.5	16	6.4	15
10	6.5	14	14	5.4	8.6	164	152	150	9.8	14	7.0	12
11	5.4	12	15	5.2	5.8	137	128	119	9.5	80	7.4	9.7
12	4.4	11	20	4.5	294	1260	109	96	7.8	42	128	8.3
13	4.8	10	20	5.0	416	2000	95	79	6.5	29	468	8.0
14	5.2	11	17	6.3	254	559	85	66	6.1	485	401	8.4
15	5.6	11	14	6.0	141	347	77	54	5.4	85	171	15
16	4.6	11	14	5.0	89	247	70	44	5.4	42	88	82
17	3.7	12	14	4.5	70	189	62	39	6.5	32	73	35
18	3.5	10	13	5.0	62	713	55	33	5.4	32	58	21
19	4.4	11	13	5.0	78	553	50	27	4.6	20	44	30
20	15	12	13	5.0	164	424	51	23	6.3	17	28	26
21	18	12	12	5.0	130	348	50	21	6.3	14	23	16
22	12	9.2	13	5.0	97	360	60	18	8.3	14	158	13
23	8.6	8.9	11	5.0	270	294	172	17	15	16	99	11
24	88	8.6	10	5.2	1420	244	137	16	150	23	147	9.9
25	87	8.6	8.3	5.2	482	213	105	18	149	144	98	11
26	43	8.6	8.1	5.5	248	190	78	25	60	67	51	12
27	29	37	8.3	5.1	267	174	61	21	58	30	38	10
28	20	137	8.6	4.7	219	950	58	15	512	18	30	8.1
29	12	59	8.6	4.5	---	762	161	15	574	15	24	6.9
30	39	32	8.0	4.5	---	343	101	72	130	14	23	6.7
31	305	---	7.0	4.6	---	188	---	31	---	11	23	---
TOTAL	816.0	759.9	420.9	168.3	4833.3	18012	5074	4184	1839.6	1940	2262.7	569.0
MEAN	26.3	25.3	13.6	5.43	173	581	169	135	61.3	62.6	73.0	19.0
MAX	305	137	20	7.3	1420	3300	794	858	574	485	468	82
MIN	3.5	8.6	7.0	4.5	4.7	137	50	15	4.6	11	4.6	6.7
CFSM	.14	.13	.07	.03	.92	3.07	.89	.71	.32	.33	.39	.10
IN.	.16	.15	.08	.03	.95	3.55	1.00	.82	.36	.38	.45	.11
CAL YR 1976	TOTAL	72245.0	MEAN 197	MAX 4050	MIN 2.5	CFSM 1.04	IN 14.22					
WTR YR 1977	TOTAL	40879.7	MEAN 112	MAX 3300	MIN 3.5	CFSM .59	IN 8.05					

03302220 BUCK CREEK NEAR NEW MIDDLETOWN, IN

LOCATION.--Lat 38°07'13", long 86°05'16", in SE¼NE¼ sec.32, T.4 S., R.4 E., Harrison County, Hydrologic Unit 05140104, at downstream end of pier of bridge on State Highway 337, 0.6 mile (1.0 km) downstream from South Fork Buck Creek, 3.6 miles (5.8 km) southwest of New Middletown, and 14.4 miles (23.2 km) upstream from mouth.

DRAINAGE AREA.--65.2 mi² (168.9 km²), of which 28.1 mi² (72.8 km²) does not contribute directly to surface runoff.

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

REVISED RECORDS.--WRD Ind. 1972: 1971(P).

GAGE.--Water-stage recorder. Datum of gage is 501.63 ft (152.897 m) above mean sea level (levels by State of Indiana, Department of Natural Resources).

REMARKS.--Records good except those for periods of no gage-height record, Dec. 13 to Feb. 17, which are poor.

AVERAGE DISCHARGE.--8 years, 80.3 ft³/s (2.274 m³/s), 16.72 in/yr (425 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,700 ft³/s (360 m³/s) Apr. 2, 1970, gage height, 14.40 ft (4.389 m); minimum daily, 0.90 ft³/s (0.03 m³/s) Sept. 13, 1972.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 1,000 ft³/s (28.3 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)	
Mar. 03	2400	*2030	57.5	*7.40	2.256
Mar. 12	1300	1550	43.9	6.69	2.039
Apr. 02	2000	1400	39.6	6.44	1.963

Minimum daily discharge, 1.2 ft³/s (0.03 m³/s) Oct. 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.3	41	9.2	3.6	2.5	57	51	76	6.2	75	3.5	12
2	2.3	23	7.4	3.4	2.6	44	268	57	5.6	32	2.9	9.9
3	1.7	20	7.2	3.3	2.8	199	244	47	5.3	19	2.5	8.3
4	1.4	16	6.5	3.2	3.2	1300	164	45	5.0	14	2.3	8.0
5	1.2	13	6.3	3.1	3.8	356	229	167	5.0	11	2.3	19
6	6.4	11	6.0	3.0	3.8	189	175	82	5.0	9.5	2.1	21
7	9.4	9.5	7.4	2.9	3.6	132	135	79	4.4	8.2	2.0	10
8	4.9	8.5	7.6	2.8	3.0	100	104	63	3.5	6.9	2.5	8.3
9	3.2	8.0	7.6	2.7	3.0	81	83	50	6.6	7.0	23	6.9
10	2.3	7.8	6.5	2.6	4.0	69	71	40	5.6	71	9.4	5.9
11	2.1	7.1	6.9	2.3	14	59	59	33	4.1	41	6.5	4.7
12	1.8	6.3	6.6	2.4	45	502	50	27	3.8	19	16	4.7
13	1.7	5.8	6.8	2.5	135	289	44	24	4.4	13	29	6.2
14	1.7	5.6	7.0	2.6	66	155	41	21	9.1	10	74	34
15	2.1	5.6	6.6	2.5	45	113	36	18	5.3	8.3	30	14
16	2.7	5.2	6.4	2.4	37	86	31	16	3.8	7.1	17	29
17	2.9	4.9	6.4	2.3	33	72	28	14	3.3	6.0	19	27
18	3.3	4.9	6.4	2.5	30	82	25	13	3.3	5.5	13	18
19	4.3	4.9	6.4	2.4	37	49	24	12	18	5.0	10	14
20	8.0	4.7	6.4	2.4	42	69	22	11	17	4.5	7.8	12
21	9.3	4.4	5.4	2.4	32	64	20	9.9	8.3	4.0	6.8	9.9
22	7.4	4.2	5.8	2.4	34	94	30	9.5	15	3.8	133	8.0
23	9.2	3.8	5.4	2.5	76	84	39	8.7	39	3.5	35	7.2
24	107	3.8	5.0	2.5	281	71	35	8.0	132	3.3	231	7.6
25	41	3.8	4.0	2.6	121	61	31	8.0	78	8.3	72	8.0
26	18	6.7	4.0	2.7	81	52	26	8.0	33	12	41	22
27	11	18	4.0	2.5	83	49	23	7.2	21	5.5	28	17
28	7.9	12	4.3	2.3	67	91	86	6.9	17	4.0	19	12
29	6.2	10	4.0	2.3	---	95	235	6.6	19	5.2	15	9.5
30	64	9.9	3.6	2.3	---	74	109	17	15	6.0	13	8.7
31	98	---	3.2	2.4	---	59	---	8.3	---	4.0	11	---
TOTAL	445.7	289.4	186.3	81.8	1291.3	4797	2518	993.1	501.6	432.6	879.6	382.8
MEAN	14.4	9.65	6.01	2.64	46.1	155	83.9	32.0	16.7	14.0	28.4	12.8
MAX	107	41	9.2	3.6	281	1300	268	167	132	75	231	34
MIN	1.2	3.8	3.2	2.3	2.5	44	20	6.6	3.3	3.3	2.0	4.7
CFSM	.22	.15	.09	.04	.71	2.38	1.29	.49	.26	.22	.44	.20
IN.	.25	.17	.11	.05	.74	2.74	1.44	.57	.29	.25	.50	.22

CAL YR 1976	TOTAL	17866.9	MEAN	48.8	MAX	1430	MIN	1.2	CFSM	.75	IN	10.19
WTR YR 1977	TOTAL	12799.2	MEAN	35.1	MAX	1300	MIN	1.2	CFSM	.54	IN	7.30

INDIAN CREEK BASIN

03302300 LITTLE INDIAN CREEK NEAR GALENA, IN

LOCATION.--Lat 38°19'19", long 85°55'53", in NE¼SW¼ sec.23, T.2 S., R.5 E., Floyd County, Hydrologic Unit 05140104, on right bank at downstream side of county road bridge, 2 miles (3 km) south of Galena, 3.6 miles (5.8 km) upstream from mouth, and 7.0 miles (11.3 km) northwest of New Albany.

DRAINAGE AREA.--16.1 mi² (41.7 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 703.00 ft (214.274 m) above mean sea level.

REMARKS.--Records good except those for period of no gage-height record, Jan. 1 to Mar. 3, which is poor.

AVERAGE DISCHARGE.--9 years, 22.6 ft³/s (0.640 m³/s), 19.06 in/yr (484 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,500 ft³/s (156 m³/s) July 21, 1973, gage height, 9.30 ft (2.835 m); from rating curve extended above 3,100 ft³/s (87.8 m³/s) on basis of contracted-opening measurement at 7.34 ft (2.237 m); no flow for many days in 1969, 1975, 1976.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 1,000 ft³/s (28.3 m³/s) (revised) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Mar. 03	2200	1740 49.3	5.92 1.804	July 24	1900	1960 55.5	6.16 1.878
Mar. 12	1015	1930 54.7	6.13 1.868	Aug. 22	Unknown	*2420 68.5	*6.66 2.030
June 28	2030	1390 39.4	5.51 1.679				

Minimum daily discharge, 0.30 ft³/s (0.008 m³/s) Oct. 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.70	8.8	3.4	.80	.36	9.0	12	14	1.1	33	2.2	4.5
2	.57	6.2	3.0	.75	.36	8.0	42	9.8	.90	13	1.9	3.7
3	.46	4.8	3.0	.70	.37	262	39	7.9	.73	8.7	1.7	3.1
4	.36	3.8	2.9	.66	.40	494	40	9.8	.64	6.7	1.6	2.7
5	.30	3.4	2.8	.63	.50	93	69	71	.69	5.3	1.6	20
6	3.7	3.0	2.8	.58	.50	44	57	30	2.2	4.2	1.5	10
7	2.3	2.8	2.7	.55	.47	28	39	27	.86	4.7	1.6	4.5
8	1.5	2.4	2.6	.53	.45	19	28	17	.73	2.9	2.1	3.0
9	1.0	2.4	2.6	.52	.45	14	21	11	2.0	2.7	1.4	2.2
10	.73	2.4	2.6	.50	.60	12	16	8.4	1.0	2.8	2.0	1.7
11	.56	2.2	2.5	.40	3.0	11	13	6.6	.77	2.7	2.2	1.4
12	.50	2.1	2.5	.42	13	441	11	5.5	.72	2.2	21	1.2
13	.56	1.9	2.4	.44	40	90	9.1	4.8	2.9	1.8	30	1.1
14	.45	1.8	2.4	.45	15	39	8.1	4.2	9.8	5.2	32	3.4
15	.50	1.8	2.4	.42	10	25	7.0	3.6	1.5	1.6	10	9.8
16	.40	1.8	2.3	.38	8.0	17	6.2	3.1	1.1	1.2	23	17
17	.38	1.7	2.3	.35	7.0	12	5.4	2.6	.95	1.3	34	6.2
18	.35	1.6	2.2	.37	6.0	32	4.8	2.4	.91	.98	17	4.5
19	.35	1.6	2.2	.37	8.0	21	4.6	2.2	2.4	.77	10	4.5
20	2.6	1.6	2.1	.37	11	30	5.2	2.0	1.8	.63	6.2	3.6
21	2.3	1.6	1.5	.37	8.0	22	4.6	2.0	1.1	.56	5.0	2.8
22	1.8	1.5	1.6	.37	12	30	14	1.8	9.3	8.0	150	2.6
23	4.9	1.4	1.5	.37	30	21	21	1.6	4.9	1.5	33	2.2
24	19	1.4	1.4	.37	80	16	13	1.6	17	131	68	2.2
25	6.8	1.4	1.1	.38	18	13	9.8	1.4	11	20	31	2.2
26	3.9	1.5	1.1	.40	12	10	8.4	2.8	4.2	7.6	20	7.9
27	3.0	6.6	1.1	.38	13	10	7.1	1.6	2.9	4.2	13	3.6
28	2.5	6.3	1.2	.38	11	69	23	8.0	334	3.2	9.2	2.6
29	2.1	4.3	1.0	.37	---	37	37	2.8	72	4.2	7.4	2.2
30	40	3.7	.90	.36	---	24	20	2.9	26	3.3	6.4	2.2
31	22	---	.70	.36	---	15	---	1.5	---	2.6	5.2	---
TOTAL	126.57	87.8	64.80	14.30	309.46	1968.0	595.3	270.9	516.10	288.54	551.2	138.6
MEAN	4.08	2.93	2.09	.46	11.1	63.5	19.8	8.74	17.2	9.31	17.8	4.62
MAX	40	8.8	3.4	.80	80	494	69	71	334	131	150	20
MIN	.30	1.4	.70	.35	.36	8.0	4.6	1.4	.64	.56	1.4	1.1
CFSM	.25	.18	.13	.03	.69	3.94	1.23	.54	1.07	.58	1.11	.29
IN.	.29	.20	.15	.03	.71	4.55	1.38	.63	1.19	.67	1.27	.32

CAL YR 1976 TOTAL 6781.81 MEAN 18.5 MAX 936 MIN .17 CFSM 1.15 IN 15.67
WTR YR 1977 TOTAL 4931.57 MEAN 13.5 MAX 494 MIN .30 CFSM .84 IN 11.39

03302500 INDIAN CREEK NEAR CORYDON, IN

LOCATION.--Lat 38°16'35", long 86°06'35", in SW¼SE¼ sec.6, T.3 S., R.4 E., Harrison County, Hydrologic Unit 05140104, on upstream side of bridge on State Highway 335, 0.6 mile (1.0 km) upstream from Raccoon Branch, 4.5 miles (7.2 km) north of Corydon, and at mile 33.7 (54.2 km).

DRAINAGE AREA.--129 mi² (334 km²), of which 10.6 mi² (27.4 km²) does not contribute directly to surface runoff.

PERIOD OF RECORD.--October 1943 to current year. Prior to October 1961, published as Big Indian Creek near Corydon.

REVISED RECORDS.--WSP 1275: Drainage area. WSP 1385: 1951(M).

GAGE.--Water-stage recorder. Datum of gage is 577.12 ft (175.906 m) above mean sea level. Prior to Dec. 9, 1948, nonrecording gage, and Dec. 9, 1948, to June 12, 1952, recorder records for stages above 6.3 ft (1.920 m) at same site and datum.

REMARKS.--Records good except those for winter periods, which are fair, and those for period of no gage-height record, Feb. 13 to May 4, which is poor.

AVERAGE DISCHARGE.--34 years, 167 ft³/s (4.729 m³/s), 17.58 in/yr (446 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 26,700 ft³/s (756 m³/s) Mar. 5, 1964, gage height, 22.64 ft (6.901 m); no flow at times during 1943-44, 1951-54, 1959, 1965, 1972-73, 1976.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 4,500 ft³/s (127 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Mar. 04	Unknown	*5600 159	Unknown

Minimum daily discharge, 3.7 ft³/s (0.105 m³/s) Oct. 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.0	128	27	8.0	5.6	160	110	110	22	621	29	59
2	7.5	81	26	7.8	5.8	130	330	76	16	287	24	50
3	6.0	62	25	7.6	6.2	1100	300	70	13	160	19	42
4	4.9	46	25	7.4	7.0	3000	320	125	11	102	15	37
5	3.7	41	24	7.1	8.5	650	540	817	10	70	13	151
6	4.6	35	23	6.8	8.5	400	440	468	9.0	55	12	171
7	18	31	23	6.6	8.0	290	310	305	22	43	11	61
8	22	28	25	6.4	7.0	210	240	219	16	35	12	45
9	13	25	22	6.2	7.0	160	190	152	16	34	35	35
10	9.7	25	20	6.0	9.0	130	150	116	18	151	40	29
11	7.5	25	19	5.0	25	110	120	92	16	158	28	24
12	6.6	23	18	5.4	100	2000	100	76	12	58	271	21
13	7.2	22	21	5.6	300	700	86	64	10	39	669	20
14	5.7	21	22	5.8	150	370	76	56	25	33	459	21
15	6.3	20	20	5.6	100	240	68	48	33	34	254	25
16	4.6	19	20	5.3	80	160	60	42	19	24	145	51
17	6.3	19	19	5.0	85	130	54	38	17	35	716	58
18	10	19	17	5.5	85	250	48	34	17	34	237	35
19	7.8	18	21	5.4	100	170	45	33	15	22	130	29
20	10	18	15	5.4	130	250	45	30	29	17	86	26
21	19	18	12	5.4	110	180	45	28	24	14	69	24
22	31	17	13	5.4	120	250	100	26	35	86	1960	21
23	33	16	12	5.5	350	170	170	24	92	50	456	19
24	163	18	11	5.6	700	140	100	22	312	27	918	18
25	132	17	9.0	5.8	350	120	80	29	251	471	421	18
26	69	19	8.8	6.0	230	100	66	41	110	152	264	23
27	44	48	8.8	5.5	250	90	56	34	64	73	181	34
28	33	68	9.5	5.2	200	600	170	24	929	47	128	24
29	27	45	9.0	5.2	---	300	290	23	1270	42	99	19
30	66	33	8.0	5.2	---	200	160	56	363	42	86	16
31	332	---	7.0	5.4	---	150	---	32	---	38	71	---
TOTAL	1119.4	1005	540.1	184.1	3537.6	12910	4869	3310	3796.0	3054	7858	1206
MEAN	36.1	33.5	17.4	5.94	126	416	162	107	127	98.5	253	40.2
MAX	332	128	27	8.0	700	3000	540	817	1270	621	1960	171
MIN	3.7	16	7.0	5.0	5.6	90	45	22	9.0	14	11	16
CFSM	.28	.26	.14	.05	.98	3.23	1.26	.83	.98	.76	1.96	.31
IN.	.32	.29	.16	.05	1.02	3.72	1.40	.95	1.09	.88	2.27	.35

CAL YR 1976	TOTAL	47806.7	MEAN 131	MAX 3470	MIN 1.4	CFSM 1.02	IN 13.79
WTR YR 1977	TOTAL	43389.2	MEAN 119	MAX 3000	MIN 3.7	CFSM .92	IN 12.51

BLUE RIVER BASIN

03302680 WEST FORK BLUE RIVER AT SALEM, IN

LOCATION.--Lat 38°36'19", long 86°05'40", in SW¼SE¼ sec.17, T.2 N., R.4 E., Washington County, Hydrologic Unit 05140104, on left bank at downstream side of bridge on East Market Street, 0.35 mile (0.56 km) east of County Court House in Salem, 6.0 miles (9.6 km) upstream from Hoggatt Branch, and 6.9 miles (11.1 km) upstream from mouth.

DRAINAGE AREA.--19.0 mi² (49.2 km²).

PERIOD OF RECORD.--July 1970 to current year. Prior to December 10, 1970, nonrecording gage at site 0.55 mile (0.88 km) downstream at datum 5.04 ft (1.536 m) lower. Low-flow records not equivalent due to effluent from factory entering stream from right bank between sites.

GAGE.--Water-stage recorder. Datum of gage 713.00 ft (217.322 m) above mean sea level.

REMARKS.--Records good.

AVERAGE DISCHARGE.--7 years, 22.5 ft³/s (0.637 m³/s), 16.08 in/yr (408 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,430 ft³/s (125 m³/s) July 10, 1974, gage height, 12.29 ft (3.746 m); minimum daily, 0.02 ft³/s (0.001 m³/s) Sept. 24, 1970.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 600 ft³/s (17.0 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)	
Mar. 03	2215	770	21.8	6.16	1.878
Apr. 02	1715	*1560	44.2	*8.21	2.502
July 10	0815	636	18.0	5.77	1.759
Aug. 22	Unknown	1350	38.2	7.74	2.359

Minimum daily discharge, 0.30 ft³/s (0.008 m³/s) Oct. 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.79	14	3.2	1.3	.88	31	26	6.0	3.0	38	1.9	10
2	.70	9.7	3.3	1.3	.90	26	281	5.1	2.4	14	1.5	8.0
3	.55	7.0	2.9	1.2	.98	124	123	5.1	2.0	9.7	1.3	6.5
4	.42	5.5	2.7	1.2	1.1	249	80	15	1.6	6.0	.96	5.5
5	.36	4.4	2.6	1.1	1.3	107	56	82	1.5	4.7	.78	7.0
6	.79	4.0	2.5	1.1	1.4	64	38	41	6.0	3.5	.62	9.3
7	1.7	3.8	3.2	1.1	1.3	44	30	40	1.5	3.0	.55	5.5
8	1.3	3.2	2.8	1.0	1.2	32	23	29	1.2	3.0	80	4.2
9	.96	3.0	2.3	1.0	1.2	26	19	22	1.9	4.7	9.1	3.6
10	.78	2.8	2.3	1.0	1.5	22	17	18	1.6	104	5.1	3.0
11	.70	2.6	3.0	.98	12	19	14	14	1.3	94	39	2.7
12	.55	2.5	3.0	.96	86	83	12	11	1.0	32	146	2.3
13	.55	2.3	2.6	.94	104	64	11	9.5	.96	17	49	2.3
14	.55	2.3	2.4	.92	51	40	9.7	8.0	.87	12	91	3.8
15	.48	2.3	2.5	.90	25	31	8.5	7.0	.87	8.5	50	3.5
16	.48	2.2	2.6	.90	23	23	7.0	5.6	.78	6.5	26	3.5
17	.42	2.0	2.6	.88	19	20	6.5	4.7	.70	5.1	32	3.0
18	.30	2.0	2.5	.88	14	75	5.5	4.1	1.0	4.4	21	2.5
19	.36	2.0	2.4	.88	22	44	5.1	3.5	2.8	3.5	14	15
20	.70	1.9	2.5	.88	22	38	5.5	3.0	1.5	2.8	10	5.5
21	1.0	1.8	2.1	.88	17	31	4.7	2.8	.96	19	8.5	4.4
22	1.0	1.7	1.6	.88	47	47	16	2.6	4.0	17	85	3.8
23	1.3	1.6	1.8	.87	74	35	42	2.5	36	4.7	36	3.2
24	39	1.5	1.8	.87	109	29	24	2.3	31	3.2	55	2.8
25	10	1.5	1.8	.87	50	24	18	2.4	14	3.5	32	2.6
26	4.7	5.3	1.7	.86	36	20	14	3.1	8.0	7.0	22	2.5
27	3.2	10	1.6	.86	52	20	11	2.2	9.7	3.8	16	2.3
28	2.5	5.9	1.5	.86	36	214	10	2.0	43	2.8	13	1.9
29	2.2	4.2	1.5	.86	---	90	9.1	2.2	26	2.8	17	1.6
30	30	3.2	1.4	.86	---	52	6.5	15	19	2.5	20	3.2
31	30	---	1.4	.86	---	32	---	7.0	---	2.3	13	---
TOTAL	138.32	116.2	72.1	29.95	810.76	1756	933.1	377.7	226.14	445.0	897.31	135.0
MEAN	4.46	3.87	2.33	.97	29.0	56.6	31.1	12.2	7.54	14.4	28.9	4.50
MAX	39	14	3.3	1.3	109	249	281	82	43	104	146	15
MIN	.30	1.5	1.4	.86	.88	19	4.7	2.0	.70	2.3	.55	1.6
CFSM	.24	.20	.12	.05	1.53	2.98	1.64	.64	.40	.76	1.52	.24
IN.	.27	.23	.14	.06	1.59	3.44	1.83	.74	.44	.87	1.76	.26
CAL YR 1976	TOTAL	4786.47	MEAN	13.1	MAX	460	MIN	.27	CFSM	.69	IN	9.37
WTR YR 1977	TOTAL	5937.58	MEAN	16.3	MAX	281	MIN	.30	CFSM	.86	IN	11.62

03302800 BLUE RIVER AT FREDERICKSBURG, IN

LOCATION.--Lat 38°26'02", long 86°11'31", in NE¼NW¼ sec.16, T.1 S., R.3 E., Washington County, Hydrologic Unit 05140104, to downstream side of bridge on U.S. Highway 150 at Fredericksburg, 0.5 mile (0.8 km) downstream from South Fork Blue River, and at mile 57.1 (91.9 km).

DRAINAGE AREA.--283 mi² (733 km²), of which 76.9 mi² (199.2 km²) does not contribute directly to surface runoff.

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

GAGE.--Water-stage recorder. Datum of gage is 590.00 ft (179.832 m) above mean sea level.

REMARKS.--Records good except those for period of no gage-height record, Dec. 26 to Feb. 10, which is fair.

AVERAGE DISCHARGE.--9 years, 308 ft³/s (8.722 m³/s), 14.77 in/yr (375 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,000 ft³/s (340 m³/s) Apr. 24, 1975, gage height, 22.88 ft (6.974 m); minimum daily, 6.1 ft³/s (0.17 m³/s) Oct. 18, 1968.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Jan. 21, 1959 reached a stage of 29.20 ft (8.900 m), from floodmark, on left upstream wingwall.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 3,000 ft³/s (85.0 m³/s) (revised) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Mar. 03	2200	*5290 150	*14.86 4.529	Aug. 12	2000	3170 89.8	11.15 3.399
Mar. 28	1200	3650 103	12.10 3.688	Aug. 22	0800	3100 87.8	11.01 3.356
Apr. 03	0300	4600 130	13.77 4.197				

Minimum daily discharge, 7.1 ft³/s (0.20 m³/s) Oct. 19.

DISCHARGE IN CUBIC FEET PER SECOND WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	230	46	16	10	357	417	182	67	881	27	196
2	14	131	43	16	11	302	1010	156	52	476	23	157
3	12	92	40	15	12	2240	2380	134	43	300	21	130
4	11	75	37	15	13	3470	957	247	36	215	18	108
5	8.3	62	35	14	16	1290	844	912	32	141	17	121
6	9.3	53	32	13	17	808	681	844	198	126	16	175
7	13	48	34	13	16	591	559	1900	98	100	15	100
8	17	44	36	13	15	461	462	873	52	85	15	83
9	17	39	34	12	14	380	374	548	48	102	372	69
10	15	37	31	12	17	310	325	396	42	207	99	59
11	13	34	31	11	30	274	279	309	35	603	90	49
12	12	32	34	11	155	1760	236	246	31	424	1840	44
13	9.7	32	34	11	794	998	209	203	28	211	1220	45
14	8.8	30	32	11	803	636	187	173	40	161	1790	69
15	8.8	29	30	11	450	485	168	147	27	133	784	60
16	8.4	28	30	11	284	367	149	124	25	91	490	80
17	8.8	27	30	11	191	317	129	107	27	126	617	65
18	8.4	26	29	11	166	940	116	95	23	106	391	56
19	7.1	23	28	11	190	639	110	85	43	65	262	194
20	8.8	22	29	11	261	532	108	77	35	52	191	132
21	11	21	29	11	216	443	103	71	27	44	155	81
22	18	20	28	10	495	558	167	64	41	195	1680	63
23	16	19	24	10	1110	464	1590	57	190	104	679	55
24	136	19	22	10	980	381	644	53	1010	60	1030	50
25	217	19	21	10	541	326	452	51	501	107	622	45
26	98	23	21	10	465	279	338	48	310	80	430	42
27	58	69	20	10	571	265	267	46	355	68	317	40
28	39	110	19	10	418	2370	234	42	537	43	230	37
29	29	75	18	10	---	1300	282	47	1380	36	279	34
30	47	54	17	10	---	787	226	333	529	33	387	32
31	411	---	17	10	---	543	---	111	---	30	257	---
TOTAL	1306.4	1523	911	360	8261	24873	14003	8681	5862	5425	14364	2471
MEAN	42.1	50.8	29.4	11.6	295	802	467	280	195	175	463	82.4
MAX	411	230	46	16	1110	3470	2380	1900	1380	881	1840	196
MIN	7.1	19	17	10	10	265	103	42	23	30	15	32
CFSM	.15	.18	.10	.04	1.04	2.83	1.65	.99	.69	.62	1.64	.29
IN.	.17	.20	.12	.05	1.09	3.27	1.84	1.14	.77	.71	1.89	.32
CAL YR 1976	TOTAL	85367.3	MEAN 233	MAX 6980	MIN 7.1	CFSM .82	IN 11.22					
WTR YR 1977	TOTAL	88040.4	MEAN 241	MAX 3470	MIN 7.1	CFSM .85	IN 11.57					

BLUE RIVER BASIN

03305000 BLUE RIVER NEAR WHITE CLOUD, IN

LOCATION.--Lat 38°14'15", long 86°13'42", in W4SE1, sec.19, T.3 S., R.3 E., Harrison County, Hydrologic Unit 05140104, on left bank 400 ft (122 m) downstream from Spring Creek, 600 ft (183 m) upstream from bridge on Interstate 64, 0.2 mile (0.3 km) upstream from bridge on State Highway 62, 0.8 mile (1.3 km) north of White Cloud, and at mile 14.7 (23.6 km).

DRAINAGE AREA.--476 mi² (1,233 km²), of which 192 mi² (497 km²) does not contribute directly to surface runoff. Also, part of flow from Indian Creek, downstream from Corydon, Ind., enters Blue River via solution channel in Karst area through Harrison Spring.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1930 to current year. Monthly figures only for some periods, published in WSP 1305.

REVISED RECORDS.--WSP 1335: 1921-32, 1933(M), 1935-38(M), 1944. WSP 1385: Drainage area. WSP 1555: 1953. WDR IN-75-1: 1973.

GAGE.--Water-stage recorder. Datum of gage is 434.26 ft (132.362 m) above mean sea level (levels by State of Indiana, Department of Natural Resources from adjusted elevation of U.S. Coast and Geodetic Survey bench mark). Prior to Nov. 16, 1938, nonrecording gage at same site and datum.

REMARKS.--Records good.

AVERAGE DISCHARGE.--47 years, 614 ft³/s (17.39 m³/s), 17.53 in/yr (445 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 28,500 ft³/s (807 m³/s) Jan. 22, 1959, gage height, 23.07 ft (7.032 m); minimum daily, 9.6 ft³/s (0.27 m³/s) Oct. 17, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 7,500 ft³/s (212 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Mar. 04	2100	*7620 216	*11.10 3.383

Minimum daily discharge, 30 ft³/s (0.85 m³/s) Oct. 18.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

SEDIMENT DISCHARGE: July 1968 to September 1974 (partial-record station).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	74	638	177	58	35	812	942	691	209	1050	132	429
2	58	409	149	51	37	685	855	582	147	1050	109	369
3	49	312	137	49	40	897	3110	514	118	606	96	323
4	42	251	127	49	48	5680	1890	633	102	455	83	282
5	39	222	118	48	55	4870	1510	1430	94	376	75	257
6	42	191	114	47	56	2140	1350	1890	87	319	68	260
7	57	162	116	46	53	1400	1160	2000	142	276	63	309
8	55	144	114	44	48	1070	1000	2030	173	239	69	243
9	63	128	111	43	47	869	839	1170	137	218	91	208
10	52	118	108	42	65	733	730	867	112	316	307	179
11	49	110	102	41	194	629	651	695	98	634	199	157
12	47	103	103	41	582	1200	576	585	92	800	977	144
13	43	95	100	40	1350	2900	522	512	85	520	3160	153
14	38	93	101	40	1610	1630	486	459	119	357	2270	145
15	35	91	103	39	952	1140	452	418	123	277	1930	167
16	33	86	99	38	604	899	419	380	121	250	944	211
17	31	83	96	38	451	723	791	344	85	195	1350	219
18	30	81	95	38	391	859	365	310	74	184	1020	214
19	31	78	91	38	415	1440	348	275	93	214	648	188
20	35	74	94	37	514	1050	335	247	106	152	494	254
21	41	72	86	36	543	906	323	222	110	126	443	251
22	41	68	76	35	478	915	693	204	132	130	2520	177
23	56	65	78	35	799	986	4390	186	176	202	1830	148
24	371	63	70	35	2120	845	2140	182	756	246	1130	135
25	416	62	72	35	1740	732	1300	154	1010	1310	1330	126
26	376	73	70	34	1020	645	957	152	556	630	791	155
27	256	227	67	34	950	582	754	164	405	340	609	162
28	189	281	70	34	1020	2600	847	149	1160	265	496	147
29	139	293	65	34	---	3630	1290	135	2420	210	455	122
30	221	227	61	34	---	1780	876	147	1280	174	614	108
31	664	---	58	35	---	1250	---	356	---	155	536	---
TOTAL	3673	4900	3028	1248	16217	46497	31501	18083	10322	12276	24839	6242
MEAN	118	163	97.7	40.3	579	1500	1050	583	344	396	801	208
MAX	664	638	177	58	2120	5680	4390	2030	2420	1310	3160	429
MIN	30	62	58	34	35	582	323	135	74	126	63	108
CFSM	.25	.34	.21	.09	1.22	3.15	2.21	1.23	.72	.83	1.68	.44
IN.	.29	.38	.24	.10	1.27	3.63	2.46	1.41	.81	.96	1.94	.49
CAL YR 1976	TOTAL	187276	MEAN 512	MAX 8510	MIN 30	CFSM 1.08	IN 14.64					
WTR YR 1977	TOTAL	178826	MEAN 490	MAX 5680	MIN 30	CFSM 1.03	IN 13.98					

03303300 MIDDLE FORK ANDERSON RIVER AT BRISTOW, IN

LOCATION.--Lat 38°08'19", long 86°43'16", in SW 1/4 sec. 27, T.4 S., R.3 W., Perry County, Hydrologic Unit 05140201, on left bank at downstream side of bridge on State Highway 145 at Bristow, 2.0 miles (3.2 km) downstream from Coon Branch, 5.8 miles (9.3 km) upstream from Sulphur Fork Creek, and at mile 14.1 (22.7 km).

DRAINAGE AREA.--59.8 mi² (103.1 km²).

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WRD Ind. 1972: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 395.00 ft (120.396 m) above mean sea level.

REMARKS.--Records good. Flow regulated by Soil Conservation Service control structures beginning June 1967.

AVERAGE DISCHARGE.--16 years, 54.2 ft³/s (1.535 m³/s), 18.49 in/yr (470 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,360 ft³/s (180 m³/s) Mar. 9, 1964; maximum gage height, 19.33 ft (5.892 m) Mar. 4, 1964; no flow at times most years.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Jan. 21, 1959, reached a stage of 20.0 ft (6.096 m), from floodmark, discharge, 15,000 ft³/s (425 m³/s), from rating curve extended above 7,000 ft³/s (198 m³/s). This is the maximum flood since 1905, from information by local resident.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 750 ft³/s (21.2 m³/s) Aug. 24, gage height, 13.98 ft (4.261 m); minimum daily, 0.01 ft³/s (0.001 m³/s) Oct. 5.

WATER-QUALITY RECORDS

PERIOD OF RECORD.---

SEDIMENT DISCHARGE: March 1964 to September 1976 (partial-record station).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.50	40	8.8	4.2	4.4	90	68	66	1.2	45	9.1	23
2	.29	33	8.1	4.0	4.7	77	65	45	1.2	28	7.0	19
3	.13	30	7.5	4.6	6.0	149	72	37	1.0	18	6.3	16
4	.03	29	7.0	4.7	5.4	551	69	89	.89	12	6.0	15
5	.01	13	6.4	5.2	4.6	398	75	89	.94	9.2	5.8	31
6	.84	6.1	6.3	5.3	3.9	335	70	95	6.3	7.0	5.7	46
7	1.3	4.9	8.2	5.5	3.1	187	59	155	2.2	34	5.5	20
8	63	4.3	7.4	5.2	3.0	88	50	87	1.4	47	5.6	16
9	78	4.3	6.1	4.7	3.6	66	41	53	2.6	45	11	14
10	64	4.3	6.3	4.2	6.7	60	36	38	1.7	64	10	12
11	61	4.2	7.8	3.4	34	58	31	28	1.3	62	7.5	11
12	62	4.1	8.2	3.0	131	230	27	22	1.1	61	60	10
13	62	3.8	7.5	2.7	166	223	24	17	3.0	45	36	12
14	62	4.0	6.7	3.1	85	132	22	14	6.4	41	42	22
15	62	4.1	6.9	3.6	41	88	20	11	2.0	32	22	45
16	61	4.0	6.5	3.2	25	39	18	8.7	1.1	12	33	111
17	61	4.1	6.0	2.4	20	31	16	7.2	.84	7.8	59	32
18	61	4.1	5.8	2.6	22	105	14	5.9	.75	7.0	22	27
19	62	4.1	5.9	3.0	30	118	13	4.8	.70	8.0	16	82
20	65	4.1	6.4	3.3	32	86	13	4.0	6.6	17	12	39
21	61	4.1	5.8	3.5	24	63	13	3.4	14	8.4	15	26
22	59	4.0	5.2	3.3	28	105	171	2.9	11	16	26	21
23	45	4.2	5.3	3.7	68	83	403	2.6	70	9.5	17	18
24	120	4.2	5.1	4.0	251	61	367	2.5	208	7.4	443	24
25	45	4.3	5.5	4.5	153	48	314	5.1	103	12	70	25
26	32	12	5.9	5.3	100	39	156	4.0	49	10	30	22
27	29	72	5.9	4.4	191	37	69	2.4	30	7.8	28	21
28	27	29	6.1	5.2	133	469	142	2.1	76	6.9	20	19
29	27	15	5.8	4.8	---	359	243	1.8	84	9.2	89	16
30	68	10	5.0	4.6	---	279	112	1.5	46	9.1	71	15
31	74	---	4.6	4.0	---	114	---	1.5	---	10	33	---
TOTAL	1414.10	368.3	200.0	125.2	1579.4	4768	2793	906.4	734.22	708.3	1223.5	810
MEAN	45.6	12.3	6.45	4.04	56.4	154	93.1	29.2	24.5	22.8	39.5	27.0
MAX	120	72	8.8	5.5	251	551	403	155	208	64	443	111
MIN	.01	3.8	4.6	2.4	3.0	31	13	1.5	.70	6.9	5.5	10
CFSM	1.15	.31	.16	.10	1.42	3.87	2.34	.73	.62	.57	.99	.68
IN.	1.32	.34	.19	.12	1.48	4.46	2.61	.85	.69	.66	1.14	.76
CAL YR 1976	TOTAL	14530.11	MEAN	39.7	MAX	585	MIN	.00	CFSM	1.00	IN	13.58
WTR YR 1977	TOTAL	15630.42	MEAN	42.8	MAX	551	MIN	.01	CFSM	1.08	IN	14.61

CROOKED CREEK BASIN

03303400 CROOKED CREEK AT SANTA CLAUS, IN

LOCATION.--Lat 38°07'05", long 86°53'24", in SW¼SE¼ sec.31, T.4 S., R.4 W., Spencer County, Hydrologic Unit 05140201, on right bank at upstream side of bridge on county road, 1.3 miles (2.1 km) east of Santa Claus Post Office, and 1.8 miles (2.9 km) upstream from unnamed right-bank tributary.

DRAINAGE AREA.--7.86 mi² (20.36 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 404.34 ft (123.243 m) above mean sea level.

REMARKS.--Records fair, except those for winter periods and period of no gage-height record, Feb. 13 to Apr. 5, which are poor.

AVERAGE DISCHARGE.--8 years, 12.0 ft³/s (0.340 m³/s), 20.77 in/yr (528 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,100 ft³/s (116 m³/s) Apr. 28, 1970, gage height, 9.74 ft (2.969 m), from rating curve extended above 450 ft³/s (12.7 m³/s) on basis of two indirect measurements of peak flow at site 1.6 miles (2.6 km) downstream, drainage area, 16.0 mi² (41.4 km²), adjusted to gage site; no flow many days each year.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 500 ft³/s (14.2 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)	
Mar. 04	0400	691	19.57	8.91	2.716
Aug. 24	0230	*718	20.33	*8.93	2.722

Minimum daily discharge, no flow Oct. 13-22, Jan. 14-24, Feb. 7, June 6-13, 17, 18, 20, 21, July 17, 18, Aug. 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.11	.91	.74	.10	.01	5.0	1.2	6.8	.06	14	.36	3.9
2	.11	.47	.69	.11	.02	1.6	.80	2.4	.03	1.9	.21	1.7
3	.08	.32	.61	.12	.03	100	20	19	.02	.91	.15	.97
4	.04	.25	.57	.19	.05	500	30	38	.01	.62	.11	.69
5	.04	.21	.50	.30	.02	30	25	14	.01	.45	.05	.52
6	.06	.17	.56	.40	.01	13	4.0	5.9	.00	.33	.03	.54
7	.06	.17	.81	.20	.00	5.0	2.6	18	.00	.25	.01	.37
8	.04	.16	.58	.10	.01	2.3	1.5	10	.00	.21	.00	.26
9	.04	.17	.47	.06	.30	1.5	1.1	4.6	.00	.26	.10	.18
10	.03	.17	.56	.04	1.3	1.0	.87	2.3	.00	.16	.13	.13
11	.03	.14	.78	.03	18	.76	.63	1.4	.00	.27	.07	.06
12	.01	.12	.76	.02	29	180	.52	1.1	.00	.22	37	.04
13	.00	.12	.60	.01	8.0	10	.45	.87	.00	.13	5.6	7.3
14	.00	.12	.55	.00	2.0	5.0	.40	.74	.11	.07	78	12
15	.00	.19	.59	.00	1.0	3.0	.34	.62	.06	.03	8.3	9.8
16	.00	.14	.56	.00	.80	2.0	.28	.52	.02	.01	6.2	4.9
17	.00	.12	.52	.00	.70	1.6	.24	.44	.00	.00	11	1.6
18	.00	.16	.49	.00	1.5	20	.20	.38	.00	.00	2.3	31
19	.00	.16	.51	.00	3.0	10	.24	.35	.01	12	.97	26
20	.00	.12	.59	.00	4.0	3.5	.26	.30	.00	1.5	.63	11
21	.00	.12	.61	.00	2.0	1.3	.23	.28	.00	.24	49	3.6
22	.00	.12	.35	.00	4.0	13	18	.23	.01	11	72	1.6
23	13	.08	.39	.00	30	6.0	57	.21	25	.34	19	1.1
24	27	.08	.34	.00	100	3.0	26	.19	15	.17	205	16
25	1.3	.11	.40	.01	10	1.5	14	.17	2.0	14	29	10
26	.38	6.3	.39	.02	50	1.0	7.2	.19	1.3	7.0	16	6.1
27	.25	16	.38	.02	300	50	3.0	.16	5.7	.45	8.5	7.1
28	.23	3.2	.42	.03	40	200	57	.14	56	.25	4.2	2.8
29	.21	1.1	.33	.01	---	50	56	.12	19	1.4	19	1.6
30	19	.72	.12	.01	---	13	14	.12	11	.46	19	1.2
31	7.9	---	.10	.01	---	6.2	---	.11	---	.66	9.4	---
TOTAL	69.92	32.22	15.67	1.79	605.75	1240.26	422.26	129.64	135.34	69.29	601.32	164.06
MEAN	2.26	1.07	.51	.058	21.6	40.0	14.1	4.18	4.51	2.24	19.4	5.47
MAX	27	16	.81	.40	300	500	80	38	56	14	205	31
MIN	.00	.08	.10	.00	.00	.76	.20	.11	.00	.00	.00	.04
CFSM	.29	.14	.07	.007	2.75	5.09	1.79	.53	.57	.29	2.47	.70
IN.	.33	.15	.07	.01	2.87	5.87	2.00	.61	.64	.33	2.85	.78

CAL YR 1976 TOTAL 2612.48 MEAN 7.14 MAX 246 MIN .00 CFSM .91 IN 12.36
WTR YR 1977 TOTAL 3487.52 MEAN 9.55 MAX 500 MIN .00 CFSM 1.22 IN 16.50

03522100 FIFTH CREEK AT EVANSVILLE, IN

LOCATION.--Lat 38°00'14", long 87°32'19", in NE1/4 sec.16, T.6 S., R.10 W., Vanderburgh County, Hydrologic Unit 05140202, on left bank in the median strip of Old U.S. 41, between two steel truss bridges at Evansville, and at mile 6.0 (9.6 km).

DRAINAGE AREA.--323 mi² (837 km²).

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

REVISED RECORDS.--WSP 2109: 1960. WRD Ind. 1972: 1971.

GAGE.--Water-stage recorder. Datum of gage is 352.24 ft (107.363 m) above mean sea level. Nonrecording auxiliary gage at site 1.2 miles (1.9 km) upstream at same datum. Prior to October 1, 1968, water-stage recorder, and October 1, 1968, to September 30, 1971, nonrecording gage at site 1.2 miles (1.9 km) upstream, was used as base gage, and present base gage was used as auxiliary gage.

REMARKS.--Records good except those for periods of no gage-height record, May 24 to July 27, and periods of backwater from the Ohio River, which are poor.

AVERAGE DISCHARGE.--17 years, 325 ft³/s (9.204 m³/s), 13.67 in/yr (347 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,100 ft³/s (343 m³/s) May 10, 1961, gage height, 27.94 ft (8.52 m); minimum daily (unaffected by backwater), 1.0 ft³/s (0.028 m³/s) Aug. 30 to Sept. 1, Oct. 11, 12, 21, 22, 26, 1964; zero or reverse flow occurs at times due to extreme stages on the Ohio River.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,480 ft³/s (98.6 m³/s) Mar. 31, gage height, 11.77 ft (3.588 m); maximum gage height, 16.00 ft (4.877 m) Apr. 12 (backwater from Ohio River); minimum daily discharge (unaffected by backwater), 4.5 ft³/s (0.13 m³/s), Jan. 17; minimum daily discharge (affected by backwater), no flow Oct. 13, 14 and Mar. 16, 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	221	24	6.7	10	150	3000	155	28	230	85	168
2	8.4	94	20	5.6	14	125	2050	140	23	165	46	145
3	8.4	58	18	5.0	18	430	1180	377	21	130	32	124
4	9.6	39	16	5.0	20	2170	1030	1510	19	100	26	86
5	10	32	18	6.2	18	1330	1080	1440	18	83	21	88
6	16	29	21	7.2	12	1210	700	1330	16	70	19	328
7	12	26	21	9.0	12	1170	490	1200	15	60	18	320
8	12	24	19	10	14	578	380	824	15	170	17	138
9	11	21	18	11	21	280	300	363	16	540	360	89
10	8.4	19	18	11	38	262	240	186	17	290	454	67
11	9.0	15	22	10	62	273	200	127	16	175	168	51
12	9.0	12	20	9.6	258	930	165	99	15	115	903	44
13	.00	7.8	22	8.0	756	1040	140	80	31	81	827	85
14	.00	9.0	21	6.5	759	957	120	62	60	60	494	237
15	20	10	18	5.5	576	279	105	53	26	47	798	375
16	100	11	17	4.7	272	.00	94	45	15	37	597	472
17	9.6	12	18	4.5	143	.00	84	36	11	31	247	262
18	7.2	12	17	5.5	110	385	77	35	10	26	104	145
19	9.0	10	16	8.0	110	513	70	31	9.8	22	58	110
20	18	8.4	17	10	124	316	66	26	9.1	25	39	165
21	9.6	7.2	15	13	110	250	76	25	13	22	61	109
22	8.4	8.4	12	16	104	189	300	22	20	99	486	80
23	82	13	9.6	19	185	134	980	258	70	37	955	70
24	630	14	7.8	20	440	132	1020	175	150	23	2850	212
25	527	13	7.2	20	250	127	810	125	300	380	1920	522
26	181	34	7.2	20	170	87	720	91	700	165	1490	372
27	84	56	9.0	19	350	176	285	71	1200	80	1410	266
28	54	84	9.6	18	195	2900	300	55	2550	48	811	229
29	37	53	11	14	---	2730	230	44	1200	719	394	151
30	90	35	12	11	---	3010	185	37	600	679	472	107
31	331	---	9.0	9.0	---	3430	---	31	---	239	296	---
TOTAL	2324.60	987.8	490.4	328.0	5151	25563.00	16477	9053	7193.9	4948	16458	5617
MEAN	75.0	32.9	15.8	10.6	184	825	549	292	240	160	531	187
MAX	630	221	24	20	759	3430	3000	1510	2550	719	2850	522
MIN	.00	7.2	7.2	4.5	10	.00	66	22	9.1	22	17	44
CFSM	.23	.10	.05	.03	.57	2.55	1.70	.90	.74	.50	1.64	.58
IN.	.27	.11	.06	.04	.59	2.94	1.90	1.04	.83	.57	1.90	.65
CAL YR 1976	TOTAL	74885.60	MEAN 205	MAX 2870	MIN .00	CFSM .64	IN 8.62					
WTR YR 1977	TOTAL	94591.70	MEAN 259	MAX 3430	MIN .00	CFSM .80	IN 10.89					

WARASH RIVER BASIN

03322500 WARASH RIVER NEAR NEW CORYDON, IN

LOCATION.--Lat 40°33'50", long 84°48'10", in NE1/4 sec. 3, T.24 N., R.15 E., Jay County, Hydrologic Unit 05120101, on left bank, 10 ft (3 m) downstream from county bridge on Indiana-Ohio State line road, 2 miles (3 km) east of New Corydon, 2.8 miles (4.5 km) downstream from Beaver Creek, and at mile 466.0 (749.8 km) (revised).

DRAINAGE AREA.--262 mi² (678 km²).

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WSP 1555: 1957(P). WSP 1909: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 830.10 ft (253.014 m) above mean sea level. Prior to June 24, 1953, nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter periods, which are fair. Occasional regulation by Grand Lake, diversion from or into St. Marys River basin, and into Miami and Erie Canal.

AVERAGE DISCHARGE.--26 years, 191 ft³/s (5.409 m³/s), 9.90 in/yr (251 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,720 ft³/s (247 m³/s) Jan. 22, 1959, gage height, 20.47 ft (6.239 m), from floodmarks; minimum daily, 0.8 ft³/s (0.023 m³/s) Dec. 22, 23, 1963.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 2,500 ft³/s (70.8 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Feb. 27	2000	*1890 53.5	*15.69 4.782

Minimum daily discharge, 3.2 ft³/s (0.091 m³/s) Jan. 16, 17.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

CHEMICAL ANALYSES: July 1969 to June 1973.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.6	13	4.8	4.2	3.5	323	90	25	8.2	36	5.9	7.0
2	7.3	10	5.3	4.3	3.6	159	144	24	8.5	18	5.7	7.0
3	7.7	8.5	4.6	4.3	3.7	108	659	28	8.5	11	5.7	10
4	7.4	7.7	5.1	4.0	3.5	879	707	111	8.7	8.7	5.5	8.0
5	6.4	7.7	5.1	3.9	3.6	651	168	218	8.7	7.8	5.9	7.0
6	8.3	8.2	5.1	3.8	3.7	260	107	124	8.5	7.1	6.5	6.0
7	18	7.6	5.3	3.8	3.9	143	76	100	8.2	6.9	12	5.0
8	12	7.0	5.7	3.7	4.0	97	67	72	8.7	11	16	4.6
9	9.0	6.7	5.9	3.7	4.5	80	51	50	15	10	12	4.3
10	8.8	6.5	5.7	3.6	5.0	71	45	39	16	8.0	13	4.1
11	7.7	6.3	6.1	3.5	6.0	61	42	30	10	7.3	13	4.0
12	7.0	6.5	6.5	3.5	13	56	37	25	9.7	6.7	73	4.5
13	6.7	6.9	6.1	3.5	170	70	34	22	9.2	6.9	41	12
14	6.5	7.1	5.5	3.7	200	68	32	19	8.5	7.3	22	157
15	6.5	6.5	5.7	3.5	100	53	30	18	8.5	7.6	16	72
16	6.9	6.3	6.1	3.2	70	45	29	15	8.2	7.3	16	411
17	7.2	6.3	6.3	3.2	62	38	27	14	8.7	8.7	21	387
18	7.2	6.3	6.3	3.3	44	399	26	14	8.2	18	22	116
19	7.8	6.5	6.3	3.4	37	462	24	12	7.8	15	15	48
20	11	6.7	6.9	3.5	33	206	24	12	7.6	10	12	39
21	14	6.7	5.7	3.5	31	161	24	12	7.3	8.0	9.5	24
22	11	6.5	5.4	3.5	34	188	25	11	7.3	7.8	8.5	18
23	9.0	5.5	5.2	3.5	208	508	54	10	7.6	7.1	7.6	15
24	13	5.3	5.0	3.5	752	290	59	10	8.0	6.3	7.0	13
25	19	6.5	5.0	3.5	477	163	42	13	8.0	6.3	9.0	11
26	11	7.1	4.6	3.5	236	113	34	12	9.2	5.9	7.0	10
27	9.4	8.2	4.4	3.5	1490	90	29	10	9.2	5.7	6.0	8.8
28	7.9	8.2	4.3	3.5	1060	545	26	9.7	7.8	6.1	6.0	8.0
29	7.3	6.1	4.1	3.5	---	583	29	9.7	72	6.3	6.0	7.6
30	8.2	5.1	4.1	3.5	---	239	30	9.5	71	6.3	11	7.0
31	10	---	4.0	3.5	---	131	---	8.4	---	6.3	9.0	---
TOTAL	286.8	213.5	166.2	112.1	5062.0	7240	2371	1087.3	392.8	291.4	425.8	1435.9
MEAN	9.25	7.12	5.36	3.62	181	234	79.0	35.1	13.1	9.40	13.7	47.9
MAX	19	13	6.9	4.3	1490	879	659	218	72	36	73	411
MIN	6.4	5.1	4.0	3.2	3.5	38	24	8.4	7.3	5.7	5.5	4.0
CFSM	.04	.03	.02	.01	.69	.89	.30	.13	.05	.04	.05	.18
IN.	.04	.03	.02	.02	.72	1.03	.34	.15	.06	.04	.06	.20
CAL YR 1976	TOTAL	53723.2	MEAN	147	MAX	4140	MIN	4.0	CFSM	.56	IN	7.63
WTR YR 1977	TOTAL	19084.8	MEAN	52.3	MAX	1490	MIN	3.2	CFSM	.20	IN	2.71

03322900 WABASH RIVER AT LINN GROVE, IN

LOCATION.--Lat 40°39'22", long 85°01'58", in SE1/4 sec.34, T.26 N., R.13 E., Adams County, Hydrologic Unit 05120101, on right bank 10 ft (3 m) downstream from bridge on State Highway 218, 800 ft (244 m) downstream from Shoemaker ditch, 0.8 mile (1.3 km) north of Linn Grove, and 2.2 miles (3.5 km) upstream from Rice ditch.

DRAINAGE AREA.--453 mi² (1,173 km²).

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WSP 219: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 808.00 ft (246.278 m) above mean sea level.

REMARKS.--Records good except those for period of no gage-height record, Jan. 6 to Mar. 2, which are poor. Occasional regulation of Grand Lake, diversion from or into St. Marys River basin, and into Miami and Erie Canal.

AVERAGE DISCHARGE.--13 years, 357 ft³/s (10.11 m³/s), 10.70 in/yr (272 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,620 ft³/s (187 m³/s) Dec. 11, 1966, gage height, 13.01 ft (3.965 m); minimum daily, 5.1 ft³/s (0.14 m³/s) Oct. 8, 1964.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in April 1964 reached a stage of 13.13 ft (4.002 m), from floodmark, discharge, 6,900 ft³/s (195 m³/s).

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 1,900 ft³/s (53.8 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Feb. 28	Unknown	*3700 105	Unknown

Minimum daily discharge, 5.5 ft³/s (0.16 m³/s) Jan. 16, 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	23	8.2	7.2	6.0	900	202	65	19	113	8.2	17
2	9.7	20	8.2	7.3	6.2	500	637	70	17	58	8.2	13
3	7.8	19	8.6	7.4	6.2	328	1110	106	16	36	8.2	11
4	7.5	16	8.2	6.8	6.0	1450	952	463	16	22	7.8	9.5
5	7.5	13	9.3	6.6	6.0	1520	498	863	16	16	7.8	12
6	25	12	9.7	6.5	6.4	1470	280	552	16	12	8.2	11
7	41	11	9.3	6.5	6.6	826	187	375	16	22	9.4	9.1
8	22	11	9.3	6.4	7.0	386	140	254	20	107	11	8.0
9	22	10	10	6.3	8.0	234	116	164	27	95	25	7.5
10	15	9.6	11	6.2	9.0	189	97	116	25	43	22	7.2
11	11	9.2	11	6.0	10	156	87	91	33	21	30	6.8
12	11	9.1	10	5.9	30	134	77	76	23	18	58	7.2
13	10	9.2	10	5.9	400	130	69	65	19	15	131	22
14	9.2	9.6	10	6.4	450	136	64	54	18	13	86	132
15	8.1	9.7	10	6.0	230	117	59	51	17	12	40	363
16	7.6	9.2	10	5.5	160	94	55	44	15	13	26	285
17	8.1	8.8	10	5.5	130	79	51	39	14	12	33	645
18	8.0	8.9	11	5.7	100	648	48	36	14	12	52	486
19	9.1	8.9	11	5.9	84	1130	46	34	14	125	39	197
20	12	8.9	12	6.0	76	804	44	32	13	75	22	93
21	13	8.9	11	6.0	72	450	43	30	12	27	16	65
22	14	8.9	9.6	6.0	80	353	48	28	12	16	15	43
23	17	8.9	8.6	6.0	500	757	289	27	12	12	13	29
24	20	8.6	8.4	6.0	1700	696	370	25	12	11	12	23
25	24	12	8.2	6.0	1400	378	206	24	12	9.7	11	19
26	27	12	8.0	6.0	540	240	133	24	12	8.6	11	17
27	26	12	7.7	6.0	3500	187	99	27	13	8.6	12	16
28	18	11	7.4	6.0	2500	690	80	24	17	8.2	10	14
29	14	10	7.2	6.0	---	1100	72	21	22	8.2	10	13
30	13	8.9	7.0	6.0	---	837	72	21	102	8.2	10	12
31	22	---	7.0	6.0	---	358	---	21	---	8.6	12	---
TOTAL	471.6	337.3	286.9	192.0	12029.4	17277	6231	3822	594	966.1	764.8	2593.3
MEAN	15.2	11.2	9.25	6.19	430	557	208	123	19.8	31.2	24.7	86.4
MAX	41	23	12	7.4	3500	1520	1110	863	102	125	131	645
MIN	7.5	8.6	7.0	5.5	6.0	79	43	21	12	8.2	7.8	6.8
CFSM	.03	.03	.02	.01	.95	1.23	.46	.27	.04	.07	.06	.19
IN.	.04	.03	.02	.02	.99	1.42	.51	.31	.05	.08	.06	.21
CAL YR 1976	TOTAL	114229.0	MEAN	312	MAX	5630	MIN	7.0	CFSM	.69	IN	9.38
WTR YR 1977	TOTAL	45565.4	MEAN	125	MAX	3500	MIN	5.5	CFSM	.28	IN	3.74

03322900 WABASH RIVER AT LINN GROVE, IN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

SEDIMENT DISCHARGE: July 1971 to current year (partial-record station).

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	SUS- PENDE SEDI- MENT (MG/L)	SUS- PENDE SEDI- MENT DIS- CHARGE (T/DAY)	DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	SUS- PENDE SEDI- MENT (MG/L)	SUS- PENDE SEDI- MENT DIS- CHARGE (T/DAY)
OCT						JUN					
09...	1130	23	13.0	48	3.0	06...	1845	16	--	81	3.5
NOV						JUL					
09...	1500	10	12.0	3	.02	12...	1515	17	28.0	80	3.7
DEC						AUG					
16...	1345	9.5	.0	5	.02	17...	1730	39	25.0	95	10
MAR						SEP					
04...	1715	1440	11.0	598	2330	22...	1530	41	19.0	96	10
31...	1145	377	12.0	105	107						
MAY											
05...	1600	875	--	103	243						

03323450 HUNTINGTON LAKE NEAR HUNTINGTON, IN

LOCATION.--Lat 40°50'43", long 85°28'06", in SW¼SW¼ sec.25, T.28 N., R.9 E., Huntington County, Hydrologic Unit 05120101, on right bank of reservoir on Wabash River at upstream side of State Highway 5, 1.5 miles (2.4 km) southeast of Huntington, and at mile 411.4 (661.9 km).

DRAINAGE AREA.--717 mi² (1,857 km²).

PERIOD OF RECORD.--January 1969 to current year. Prior to September 1970, published as Huntington "Reservoir".

GAGE.--Water-stage recorder. Datum of gage is 700.00 ft (213.360 m) above mean sea level (levels by Corps of Engineers).

REMARKS.--Reservoir is formed by concrete and rolled-earth fill dam which is State Highway 5. Releases normally controlled by six sluices, 6.0 ft (1.83 m) wide and 6.0 ft (1.83 m) high and by spillway, crest elevation, 765 ft (233.2 m), with three taintor gates, 45 ft (13.7 m) by 36.5 ft (11.13 m) setting atop spillway. Minimum design capacity is 4,100 acre-ft (5.06 hm³), elevation, 737 ft (224.6 m). Seasonal pool capacity is 12,500 acre-ft (15.4 hm³), elevation, 749 ft (228.3 m). Capacity at flood control pool is 153,100 acre-ft (189 hm³), elevation, 798 ft (243.2 m). Reservoir is used for flood control and recreation. Reservoir put into operation on Jan. 9, 1969.

COOPERATION.--Water-stage recorder graph and capacity tables furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 87,615 acre-ft (108 hm³) Feb. 22, 1976, elevation, 786.60 ft (239.756 m); minimum, 1,760 acre-ft (2.17 hm³) Nov. 18, 1974, elevation, 731.27 ft (222.891 m), lowered reservoir for repairs.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 16,220 acre-ft (20.0 hm³) May 6, elevation, 752.84 ft (229.466 m); minimum, 3,260 acre-ft (4.02 hm³) Apr. 8, elevation, 735.19 ft (224.086 m).

MONTHEND ELEVATION AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	746.32	10,180	
Oct. 31.....	742.68	7,470	-2,710
Nov. 30.....	737.23	4,240	-3,230
Dec. 31.....	737.16	4,200	-40
CAL YR 1976.....			-230
Jan. 31.....	737.08	4,160	-40
Feb. 28.....	746.72	10,510	+6,350
Mar. 31.....	741.30	6,560	-3,950
Apr. 30.....	748.98	12,460	+5,900
May 31.....	749.17	12,630	+170
June 30.....	749.03	12,510	-120
July 31.....	749.34	12,790	+280
Aug. 31.....	749.50	12,940	+150
Sept. 30.....	738.22	4,760	-8,180
WTR YR 1977.....			-5,420

03323500 WABASH RIVER AT HUNTINGTON, IN

LOCATION.--Lat 40°51'20", long 85°29'53", in SW¼NE¼ sec.27, T.28 N., R.9 E., Huntington County, Hydrologic Unit 05120101, on right bank at the Huntington Water and Light Plant, 2 miles (3 km) south of Huntington, 2.4 miles (3.9 km) downstream from Huntington Lake, 3.2 miles (5.1 km) upstream from Little River, and at mile 409.0 (658.1 km).

DRAINAGE AREA.--721 mi² (1,867 km²).

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WSP 1909: 1959. WSP 2109: Drainage area.

GAGE.--None. Datum of gage was 700.04 ft (213.372 m) above mean sea level (levels by State of Indiana, Department of Natural Resources). July 6, 1951 to Sept. 30, 1974 water-stage recorder at site described in "LOCATION" paragraph. Prior to July 5, 1951, nonrecording gage at same site and datum.

REMARKS.--Flow regulated by Huntington Lake (See sta 03323450). Daily discharge computed from relation between discharge, head, and gate openings for Huntington Lake beginning Oct. 1, 1974.

COOPERATION.--Records of daily discharge furnished by Corps of Engineers beginning Oct. 1, 1976.

AVERAGE DISCHARGE.--26 years, 604 ft³/s (17.11 m³/s), 11.37 in/yr (289 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,900 ft³/s (422 m³/s) Feb. 10, 1959; maximum gage height, 23.20 ft (7.071 m) Feb. 10, 1959 (backwater from ice); minimum daily discharge, 2.4 ft³/s (0.068 m³/s) Oct. 28, 29, 1964.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of 22.7 ft (6.92 m), from high-water mark by Corps of Engineers.

EXTREMES FOR 1975 WATER YEAR.--Maximum daily discharge, 3,920 ft³/s (111 m³/s) Mar. 3, 1975; minimum daily discharge, 26 ft³/s (0.74 m³/s) Sept. 24-30, 1975.

EXTREMES FOR 1976 WATER YEAR.--Maximum daily discharge, 4,520 ft³/s (128 m³/s) Feb. 28, 1976; minimum daily discharge, 22 ft³/s (0.62 m³/s) May 12-27, 1976.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 3,750 ft³/s (106 m³/s) Mar. 1; minimum daily discharge, 15 ft³/s (0.42 m³/s) Jan. 11-16.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	64	81	132	1520	2560	3720	2950	1810	133	84	45	348
2	81	81	132	1860	2950	3840	2670	1150	242	58	34	301
3	77	80	106	1890	2760	3920	1500	874	666	77	39	197
4	82	91	94	1260	1110	3770	917	715	783	78	45	104
5	84	532	60	1150	882	2260	815	550	451	78	126	116
6	84	616	80	883	875	1280	590	301	384	78	95	440
7	87	580	96	675	1120	985	591	291	318	78	64	473
8	93	595	346	1160	1490	911	588	290	313	78	63	219
9	106	414	1150	2080	926	1020	549	265	292	78	68	151
10	112	180	1700	2610	437	1350	465	175	203	64	87	148
11	102	194	1820	2190	588	1120	386	149	566	46	144	117
12	87	429	1600	2680	965	769	296	148	1350	45	167	159
13	81	520	1620	3540	703	1000	257	292	613	45	157	440
14	80	518	2000	3460	427	1530	255	274	351	89	131	440
15	90	668	2370	2890	716	1490	111	108	1500	81	392	438
16	90	900	2630	1010	732	913	41	79	2390	46	572	243
17	89	866	2670	321	896	844	32	78	1870	45	208	151
18	89	326	2860	623	1560	1200	29	89	706	45	36	76
19	88	217	2960	593	2460	1860	31	145	308	45	122	327
20	88	113	1740	542	2810	2330	35	120	291	45	167	652
21	88	34	743	438	2790	2550	37	98	290	45	138	373
22	99	34	680	472	2430	2620	39	1550	196	45	61	40
23	104	38	627	468	2060	2580	40	2420	348	100	64	27
24	104	41	1020	424	2130	1630	234	1060	752	165	126	26
25	103	43	2270	645	3010	1080	1390	463	524	94	308	26
26	119	123	2940	1200	3710	832	1770	438	463	47	380	26
27	115	131	2960	1380	3870	712	1120	437	669	45	537	26
28	101	132	2560	958	3910	634	1040	206	446	45	323	26
29	100	132	1180	1570	---	1140	1630	151	246	45	207	26
30	88	132	814	2420	---	1980	1980	216	164	45	288	26
31	82	---	912	2530	---	2720	---	137	---	45	197	---
TOTAL	2857	8841	42872	45442	50877	54590	22388	15079	17828	2004	5391	6162
MEAN	92.2	295	1383	1466	1817	1761	746	486	594	64.6	174	205
MAX	119	900	2960	3540	3910	3920	2950	2420	2390	165	572	652
MIN	64	34	60	321	427	634	29	78	133	45	34	26
CAL YR 1974	TOTAL	318683.2	MEAN	873	MAX	4580	MIN	3.4				
WTR YR 1975	TOTAL	274331.0	MEAN	752	MAX	3920	MIN	26				

03323500 WABASH RIVER AT HUNTINGTON, IN--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	134	1330	1320	1620	4280	216	42	205	220	78	29
2	57	136	1740	1760	584	3250	237	42	1010	362	66	29
3	82	224	1690	1710	391	2490	360	42	1400	438	35	29
4	127	179	865	1230	502	2510	381	42	671	386	29	28
5	153	133	355	1000	427	2620	309	42	358	244	29	28
6	88	128	306	671	384	2860	355	42	356	152	29	28
7	58	128	552	616	233	3320	360	42	242	126	29	28
8	57	220	633	469	303	3740	72	43	91	87	29	28
9	107	265	543	387	381	3580	35	43	72	86	29	28
10	117	266	366	383	481	3740	35	43	71	86	35	28
11	79	529	444	383	1350	3310	51	32	63	59	45	28
12	77	392	424	383	2250	2750	70	22	63	47	45	29
13	77	270	470	383	2600	2610	129	22	63	76	45	29
14	77	264	817	709	3200	2030	98	22	63	78	129	28
15	77	188	1470	1280	2700	837	40	22	63	78	49	28
16	81	180	2280	1710	2430	411	39	22	73	77	45	29
17	97	198	2530	1150	2010	395	40	22	87	57	45	327
18	131	155	2530	915	2380	482	40	22	179	45	45	641
19	142	135	2500	416	3270	580	41	22	137	45	45	374
20	320	134	2390	385	3310	649	42	22	65	45	45	40
21	827	134	1360	384	2430	654	42	22	62	45	45	27
22	963	175	377	384	3320	736	43	22	106	45	45	26
23	812	164	429	337	3880	862	44	22	165	66	45	26
24	461	134	423	305	3660	1110	45	22	161	78	43	26
25	274	115	384	381	3990	1250	45	22	796	90	45	26
26	128	106	329	1210	4190	853	47	22	950	97	45	26
27	203	139	341	2240	4360	643	46	22	541	97	45	26
28	180	180	381	2300	4520	489	41	91	266	97	45	26
29	90	193	383	2360	4470	388	41	210	180	97	45	26
30	64	588	383	2610	---	383	42	127	218	90	45	26
31	110	---	780	2820	---	296	---	33	---	78	34	---
TOTAL	6141	6186	29805	32591	65626	54108	3386	1268	8777	3674	1408	2097
MEAN	198	206	961	1051	2263	1745	113	40.9	293	119	45.4	69.9
MAX	963	588	2530	2820	4520	4280	381	210	1400	438	129	641
MIN	25	106	306	305	233	296	35	22	62	45	29	26
CAL YR 1975	TOTAL	261893	MEAN 718	MAX 3920	MIN 25							
WTR YR 1976	TOTAL	215067	MEAN 588	MAX 4520	MIN 22							

WABASH RIVER BASIN

03323500 WABASH RIVER AT HUNTINGTON, IN--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	94	29	28	16	3750	1930	160	37	23	37	38
2	21	92	28	25	16	3610	826	160	37	23	30	63
3	21	91	28	24	16	3270	1320	216	37	23	23	101
4	21	86	25	21	16	3240	2300	368	34	32	23	114
5	21	76	28	19	16	3490	2500	1020	30	28	23	114
6	40	70	29	19	16	3420	1570	1740	30	23	23	207
7	50	69	29	19	16	3310	900	1950	26	23	23	253
8	62	82	28	19	16	1560	410	1360	23	148	24	251
9	68	87	25	19	16	742	245	607	23	541	23	248
10	84	86	21	17	16	800	313	251	28	428	23	246
11	101	86	19	15	16	498	289	160	90	260	23	244
12	90	86	21	15	16	330	65	193	101	162	45	242
13	84	84	24	15	16	417	38	209	76	149	143	256
14	94	84	24	15	16	319	53	160	56	71	56	307
15	99	81	24	15	27	288	63	160	40	56	180	312
16	98	80	24	15	44	266	64	160	36	56	240	316
17	98	78	21	16	51	166	44	107	48	55	403	319
18	102	77	19	16	57	853	26	80	48	46	562	322
19	105	76	19	16	64	2210	24	80	48	37	280	386
20	99	75	19	16	65	2310	24	80	48	28	161	579
21	94	74	19	16	65	1830	21	80	37	23	131	643
22	72	73	19	16	65	1130	20	78	32	50	114	633
23	62	73	20	16	68	802	23	34	32	76	213	620
24	82	73	20	16	74	1290	71	23	32	76	150	606
25	91	71	20	16	325	1840	368	23	32	90	50	590
26	90	70	20	16	985	1010	475	23	32	97	37	577
27	95	69	23	16	1280	620	475	32	26	70	37	564
28	96	66	26	16	2290	1180	366	37	22	56	37	380
29	95	64	29	16	---	1380	210	37	23	46	37	460
30	95	46	29	16	---	1790	160	37	23	37	38	522
31	95	---	29	16	---	2280	---	37	---	37	38	---
TOTAL	2346	2319	738	540	5684	50001	15193	9662	1187	2870	3227	10513
MEAN	75.7	77.3	23.8	17.4	203	1613	506	312	39.6	92.6	104	350
MAX	105	94	29	28	2290	3750	2500	1950	101	541	562	643
MIN	21	46	19	15	16	166	20	23	22	23	23	38
CAL YR 1976	TOTAL	178338	MEAN 487	MAX 4520	MIN 19							
WTR YR 1977	TOTAL	104280	MEAN 286	MAX 3750	MIN 15							

03323500 WABASH RIVER AT HUNTINGTON, IN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

WATER TEMPERATURE: October 1963 to current year.

INSTRUMENTATION.--Temperature recorder.

EXTREMES FOR PERIOD OF RECORD.--

Maximum, 32.0°C July 27, 1964; minimum, freezing point on many days during most winter periods.

EXTREMES FOR CURRENT YEAR.--Occurred during periods of missing record.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	17.0	15.5	6.5	5.5	3.0	3.0	1.5	1.5	---	---	---	---
2	17.0	15.5	6.5	5.5	3.0	3.0	1.5	1.5	---	---	---	---
3	17.0	15.5	6.0	5.5	3.0	2.0	1.5	1.5	---	---	---	---
4	18.0	15.5	6.0	5.5	3.0	2.0	1.5	1.5	---	---	---	---
5	18.0	16.5	6.0	5.5	3.5	2.0	2.0	2.0	---	---	---	---
6	18.0	15.0	5.5	5.0	3.5	2.0	2.0	2.0	---	---	---	---
7	15.0	14.0	5.0	4.5	3.5	2.0	2.0	2.0	---	---	---	---
8	14.0	14.0	4.5	4.0	3.0	2.0	2.0	2.0	---	---	---	---
9	14.5	14.0	4.5	4.0	3.0	3.0	2.0	2.0	---	---	---	---
10	14.0	13.0	4.5	4.5	3.0	3.0	2.0	2.0	---	---	---	---
11	14.5	13.5	4.5	4.5	3.5	3.0	2.0	2.0	---	---	---	---
12	15.5	13.5	4.5	4.5	3.5	2.0	2.0	2.0	---	---	---	---
13	15.0	13.5	4.5	4.0	3.0	2.0	2.0	2.0	---	---	---	---
14	14.0	12.0	4.5	4.0	3.0	3.0	2.0	2.0	---	---	11.5	11.5
15	14.0	13.5	4.0	3.5	3.0	3.0	2.0	2.0	---	---	12.0	11.5
16	13.5	11.5	4.0	3.5	3.0	3.0	2.0	2.0	---	---	13.5	12.0
17	12.0	11.0	4.0	3.5	3.0	3.0	2.0	2.0	---	---	12.0	11.0
18	11.5	10.0	4.0	3.5	3.5	3.0	2.0	2.0	---	---	11.0	10.0
19	11.0	10.5	4.0	4.0	3.5	3.5	2.0	2.0	---	---	10.0	9.0
20	10.5	10.0	4.0	3.5	3.5	2.0	2.0	2.0	---	---	9.0	9.0
21	10.0	9.5	3.5	3.5	2.0	1.5	2.0	2.0	---	---	9.5	9.0
22	9.5	8.0	4.0	3.5	2.0	1.5	2.0	2.0	---	---	9.5	8.5
23	9.0	8.0	3.5	3.5	1.5	1.5	2.0	2.0	---	---	10.5	9.5
24	8.5	8.0	3.5	3.5	1.5	1.5	2.0	2.0	---	---	9.5	9.5
25	8.5	8.0	4.0	3.5	3.0	1.5	2.0	2.0	---	---	9.5	9.0
26	8.0	7.0	4.0	3.5	3.0	2.0	2.0	1.5	---	---	11.5	9.5
27	8.0	6.5	4.5	4.0	2.0	1.5	1.5	1.5	---	---	11.0	10.5
28	8.0	6.5	4.5	4.0	2.0	2.0	1.5	1.5	---	---	12.0	11.0
29	8.0	6.0	4.0	3.0	1.5	1.5	---	---	---	---	13.5	11.0
30	6.5	6.0	3.0	3.0	1.5	1.5	---	---	---	---	14.5	12.0
31	6.0	6.0	---	---	1.5	1.5	---	---	---	---	14.0	14.0
MONTH	18.0	6.0	6.5	3.0	3.5	1.5	2.0	1.5	---	---	14.5	8.5

WABASH RIVER BASIN

03323500 WABASH RIVER AT HUNTINGTON, IN--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	14.0	14.0	17.0	13.0	23.5	19.0						
2	14.5	14.5	16.0	14.0	24.0	18.0						
3	15.5	14.5	16.0	14.0	25.0	18.0						
4	15.0	15.0	16.0	14.5	25.5	19.0						
5	14.5	13.0	17.0	15.0	24.5	20.5						
6	12.0	11.5	17.0	16.0	23.0	20.5						
7	12.0	11.0	19.0	17.5	22.5	17.5						
8	13.5	11.5	18.5	17.0	21.5	18.5						
9	13.5	11.5	19.0	16.0	23.5	17.5						
10	14.5	12.0	20.5	15.0	23.0	19.0						
11	16.0	14.5	21.0	15.0	23.0	18.5						
12	18.0	15.0	20.5	15.0	22.0	20.0						
13	19.0	16.5	20.5	16.0	---	---						
14	19.5	18.5	20.5	16.0	---	---						
15	20.0	17.0	22.0	16.0	---	---						
16	21.0	18.0	22.0	16.5	---	---						
17	20.5	18.5	22.0	17.0	---	---						
18	20.0	19.5	24.0	17.5	---	---						
19	20.0	19.0	24.0	17.5	---	---						
20	22.0	18.5	24.5	17.5	---	---						
21	21.5	19.5	24.0	17.5	---	---						
22	19.5	19.0	23.0	18.0	---	---						
23	20.0	18.5	22.5	18.5	---	---						
24	19.5	18.0	24.5	21.0	---	---						
25	18.5	16.5	24.5	20.5	---	---						
26	17.0	19.0	25.0	20.0	---	---						
27	16.5	14.0	25.5	19.5	---	---						
28	14.5	13.5	25.0	19.0	---	---						
29	18.0	13.0	24.0	20.0	---	---						
30	17.5	12.5	25.5	19.0	---	---						
31	---	---	25.0	19.5	---	---						
MONTH	22.0	11.0	25.5	13.0	25.5	17.5						

03324000 LITTLE RIVER NEAR HUNTINGTON, IN

LOCATION.--Lat 40°54'14", long 85°24'22", in NE1/4 sec. 9, T.28 N., R.10 E., Huntington County, Hydrologic Unit 05120101, on right bank on upstream side of highway bridge, 5 miles (8 km) east of Huntington, and at mile 7.5 (12.1 km).

DRAINAGE AREA.--263 mi² (681 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1943 to current year. Prior to January 1944 monthly discharge only, published in WSP 1305. Published as Little River at Huntington, January 1944 to September 1948, Little River near Huntington, October 1948 to September 1956, and Little Wabash River near Huntington, October 1956 to September 1961.

REVISED RECORDS.--WSP 1109: Drainage area.

GAGE.--Datum of gage is 728.10 ft (221.925 m) above mean sea level. Prior to Oct. 1, 1948, nonrecording gage 4 miles (6 km) downstream at datum 8.79 ft (2.679 m) lower, and Oct. 1, 1948, to Sept. 5, 1950, nonrecording gage at present site and datum.

REMARKS.--Records good. During periods of extreme highwater in St. Marys River, water leaves the St. Marys River basin through Junk ditch and flows into Little River basin via Graham McCulloch ditch.

AVERAGE DISCHARGE.--34 years, 221 ft³/s (6.259 m³/s), 11.41 in/yr (290 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,990 ft³/s (170 m³/s) Jan. 4, 1950; maximum gage height, 18.43 ft (5.61 m) Feb. 11, 1959; minimum daily discharge, 1.1 ft³/s (0.031 m³/s) Oct. 8, 1946, site and datum then in use.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 2,800 ft³/s (79.3 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Mar. 04	1500	*2750 77.9	*12.92 3.938

Minimum daily discharge, 5.2 ft³/s (0.147 m³/s) Jan. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.3	40	12	5.7	6.8	500	264	122	26	686	20	31
2	7.6	30	12	5.2	6.8	344	538	143	25	294	19	35
3	8.2	27	13	5.7	6.8	625	615	204	25	132	18	93
4	8.8	24	13	6.1	6.8	2550	346	453	22	78	17	69
5	10	21	14	6.6	6.9	1740	385	665	22	54	46	45
6	25	20	14	7.0	7.0	707	295	432	25	39	122	35
7	40	18	15	6.5	7.5	435	220	256	25	34	127	30
8	25	15	16	6.0	11	288	177	175	27	38	58	26
9	16	15	16	6.4	15	262	142	132	55	71	43	23
10	14	18	15	6.4	21	227	126	109	45	47	302	23
11	13	17	17	6.1	35	181	110	93	36	39	727	20
12	13	16	16	6.0	77	199	96	79	35	101	1230	19
13	14	14	15	6.0	150	218	90	70	32	59	432	409
14	14	13	14	6.0	262	164	86	63	29	36	212	1290
15	9.4	11	14	6.0	204	142	78	55	28	29	116	642
16	9.7	10	13	6.0	170	116	72	50	26	25	119	630
17	12	14	13	6.0	156	97	68	49	24	27	429	341
18	13	20	12	6.0	145	984	62	47	25	32	208	216
19	15	18	12	6.1	136	1000	57	43	26	66	108	171
20	23	20	11	6.2	142	488	57	41	24	32	86	150
21	33	18	11	6.2	155	375	56	37	21	79	63	116
22	26	14	10	6.3	204	283	62	34	21	191	55	89
23	22	12	9.3	6.4	899	259	1230	32	21	60	45	74
24	26	17	8.4	6.5	1310	421	1110	32	20	36	41	67
25	28	21	7.7	6.5	671	449	520	34	20	30	34	63
26	23	22	8.2	6.6	400	516	315	41	20	28	30	55
27	24	27	7.6	6.6	854	427	221	33	19	28	28	51
28	29	24	7.2	6.7	866	1710	176	30	20	23	25	46
29	27	16	6.7	6.7	---	1900	184	28	27	20	30	40
30	31	14	6.4	6.7	---	792	146	26	37	20	52	38
31	52	---	6.0	6.7	---	407	---	25	---	19	40	---
TOTAL	620.0	566	365.5	193.9	6931.6	18806	7904	3633	808	2453	4882	4937
MEAN	20.0	18.9	11.8	6.25	248	607	263	117	26.9	79.1	157	165
MAX	52	40	17	7.0	1310	2550	1230	665	55	686	1230	1290
MIN	7.6	10	6.0	5.2	6.8	97	56	25	19	19	17	19
CFSM	.08	.07	.05	.02	.94	2.31	1.00	.45	.10	.30	.60	.63
IN.	.09	.08	.05	.03	.98	2.66	1.12	.51	.11	.35	.69	.70
CAL YR 1976	TOTAL	59928.6	MEAN 164	MAX 2710	MIN 4.8	CFSM .62	IN 8.48					
WTR YR 1977	TOTAL	52100.0	MEAN 143	MAX 2550	MIN 5.2	CFSM .54	IN 7.37					

WABASH RIVER BASIN

03324000 LITTLE RIVER NEAR HUNTINGTON, IN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

SEDIMENT DISCHARGE: October 1969 to current year (partial-record station).

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	SUS- PENDE SEDI- MENT (MG/L)	SUS- PENDE SEDI- MENT DIS- CHARGE (T/DAY)	DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	SUS- PENDE SEDI- MENT (MG/L)	SUS- PENDE SEDI- MENT DIS- CHARGE (T/DAY)
OCT 12...	1730	12	15.0	30	1.0	APR 18...	1425	60	--	20	6.8
NOV 08...	1730	15	3.0	38	1.5	MAY 24...	0935	33	22.0	31	2.7
MAR 14...	1650	160	9.0	102	31	SFP 07...	0915	30	20.0	66	5.3

03324200 SALAMONIE RIVER AT PORTLAND, IN

LOCATION.--Lat 40°25'40", long 85°02'20", in NE¼SE¼ sec.23, T.23 N., R.13 E., Jay County, Hydrologic Unit 05120102, on right bank at downstream side of county road bridge, 2.3 miles (3.7 km) downstream from Butternut Creek, 3.2 miles (5.1 km) west of Portland, 3.7 miles (6.0 km) downstream from Little Salamonie River, and at mile 70.5 (113.4 km).

DRAINAGE AREA.--85.6 mi² (221.7 km²).

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

REVISED RECORDS.--WSP 2109: Drainage. WRD Ind. 1972: 1971.

GAGE.--Water-stage recorder. Datum of gage is 877.59 ft (267.489 m) above mean sea level (levels by State of Indiana, Department of Natural Resources). Prior to Oct. 1, 1960, nonrecording gage at site 1.4 miles (2.3 km) upstream at datum 6.43 ft (1.960 m) higher.

REMARKS.--Records good except for winter periods which are fair. Natural flow partially affected by sewage effluent.

AVERAGE DISCHARGE.--18 years, 69.5 ft³/s (1.968 m³/s), 11.03 in/yr (280 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,460 ft³/s (98.0 m³/s) Mar. 5, 1963, gage height, 16.96 ft (5.169 m); minimum daily, 0.4 ft³/s (0.01 m³/s) Sept. 27, 1965.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 1,400 ft³/s (39.6 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Feb 27	1000	*1490 42.2	*10.78 3.286

Minimum daily discharge, 1.3 ft³/s (0.037 m³/s) June 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.2	3.6	2.6	1.9	2.0	96	31	8.1	2.5	13	2.5	3.5
2	2.0	3.6	2.7	1.8	2.0	48	103	11	2.4	6.1	1.7	2.3
3	1.5	3.2	2.7	1.7	2.0	45	148	11	2.5	3.6	1.9	1.9
4	1.4	2.9	2.8	1.9	2.0	627	64	178	2.6	2.6	1.9	1.6
5	2.5	2.9	2.9	2.0	2.0	273	49	165	2.5	2.7	1.9	1.4
6	13	2.8	3.0	2.0	2.0	96	34	95	2.5	3.0	6.9	1.5
7	4.4	2.4	3.2	1.9	2.4	56	26	83	2.7	3.4	9.7	1.8
8	2.2	2.6	3.3	1.8	3.0	37	21	47	3.7	7.3	2.6	2.0
9	2.0	3.2	3.4	1.8	3.5	29	16	28	8.4	3.1	3.1	1.8
10	1.7	3.2	3.2	1.8	4.0	25	14	19	5.0	2.1	11	2.0
11	1.5	3.2	3.4	1.8	10	20	14	15	3.3	2.2	17	1.6
12	2.6	3.2	3.7	1.8	20	20	12	12	3.3	2.9	45	1.6
13	3.2	2.7	3.6	1.7	38	21	11	10	4.1	18	14	21
14	4.5	2.2	3.5	1.7	40	19	10	8.9	4.1	9.9	4.8	115
15	3.7	2.5	3.4	1.7	31	15	9.3	7.5	4.0	4.3	3.9	63
16	3.9	3.1	3.2	1.7	25	12	8.2	6.3	3.9	3.0	11	147
17	3.1	3.0	3.1	1.8	22	10	6.9	5.5	3.9	3.0	27	110
18	2.5	3.1	3.0	1.8	19	210	7.2	5.4	2.9	2.7	9.3	29
19	4.8	3.0	3.0	1.8	17	137	6.9	4.9	1.9	5.7	4.2	14
20	10	2.6	2.8	1.8	16	81	7.0	3.9	1.6	3.1	2.7	9.0
21	3.0	2.1	2.5	1.8	15	64	6.9	3.7	3.0	2.8	3.5	6.3
22	3.0	2.2	2.6	1.8	50	95	11	2.9	3.6	2.8	2.1	4.7
23	2.8	3.2	2.7	1.8	157	178	23	2.7	3.6	2.4	2.4	3.8
24	13	3.0	2.5	1.8	294	83	23	4.6	3.1	1.9	6.4	2.9
25	4.1	2.8	2.3	1.9	122	50	16	5.3	3.6	2.0	3.0	2.3
26	3.2	4.1	2.2	1.9	82	36	14	3.1	3.1	2.5	2.3	2.0
27	3.2	3.7	2.2	1.9	1160	32	11	2.6	1.3	2.1	1.9	3.0
28	2.9	2.6	2.1	1.9	241	359	12	2.4	58	2.2	1.5	3.0
29	2.6	2.6	2.1	1.9	---	210	11	2.2	76	2.6	16	2.6
30	3.5	2.6	2.0	1.9	---	81	9.3	3.3	28	3.4	11	2.5
31	9.3	---	2.0	2.0	---	47	---	2.7	---	1.9	4.8	---
TOTAL	123.3	87.9	87.7	56.8	2383.9	3112	735.7	760.0	251.1	128.3	237.0	564.1
MEAN	3.98	2.93	2.83	1.83	85.1	100	24.5	24.5	8.37	4.14	7.65	18.8
MAX	13	4.1	3.7	2.0	1160	627	148	178	76	18	45	147
MIN	1.4	2.1	2.0	1.7	2.0	10	6.9	2.2	1.3	1.9	1.5	1.4
CFSM	.05	.03	.03	.02	.99	1.17	.29	.29	.10	.05	.09	.22
IN.	.05	.04	.04	.02	1.04	1.35	.32	.33	.11	.06	.10	.25
CAL YR 1976	TOTAL	22635.7	MEAN 61.8	MAX 2230	MIN 1.3	CFSM .72	IN 9.84					
WTR YR 1977	TOTAL	8527.8	MEAN 23.4	MAX 1160	MIN 1.3	CFSM .27	IN 3.71					

WABASH RIVER BASIN

03324300 SALAMONIE RIVER NEAR WARREN, IN

LOCATION.--Lat 40°42'45", long 85°27'13", in SE¼SE¼ sec.12, T.26 N., R.9 E., Huntington County, Hydrologic Unit 05120102, on right bank at downstream side of bridge on County Road 800 South, 0.4 mile (0.6 km) downstream from Detamore ditch, 0.4 mile (0.6 km) downstream from Interstate 69, 0.8 mile (1.3 km) upstream from concrete and stone dam, 2.4 miles northwest of Warren, and at mile 30.0 (48.3 km).

DRAINAGE AREA.--425 mi² (1,101 km²).

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WSP 2109: Drainage area.

GAGE.--Water-stage recorder and concrete dam. Datum of gage is 784.65 ft (239.161 m) above mean sea level (levels by State of Indiana, Department of Natural Resources). Prior to July 28, 1960, nonrecording gage at same site and datum.

REMARKS.--Records good.

AVERAGE DISCHARGE.--20 years, 376 ft³/s (10.65 m³/s), 12.01 in/yr (305 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,200 ft³/s (374 m³/s) Feb. 10, 1959, gage height, 17.05 ft (5.197 m); minimum daily, 5.1 ft³/s (0.14 m³/s) Jan. 2, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 3,000 ft³/s (84.96 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Mar. 01	1600	Ice Jam	*11.71 3.569
Mar. 05	0100	*3170 89.8	9.91 3.021

Minimum daily discharge, 5.1 ft³/s (0.14 m³/s) Jan. 2.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

SEDIMENT DISCHARGE: October 1963 to September 1976 (partial-record station).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	25	12	5.7	6.7	2400	233	96	33	70	17	27
2	12	24	12	5.1	6.7	1400	741	124	28	40	13	28
3	11	24	12	5.4	6.7	653	2170	215	25	25	14	22
4	9.8	28	12	6.0	6.7	2600	869	817	25	21	15	21
5	9.6	23	13	6.8	6.7	2920	489	1380	26	18	15	20
6	17	19	13	6.8	6.9	1310	321	787	30	14	32	19
7	14	16	14	6.4	11	547	223	574	29	31	55	16
8	10	14	15	6.0	14	356	175	395	28	354	19	15
9	12	14	15	6.1	21	274	136	227	29	160	43	14
10	20	13	14	6.1	33	226	115	150	28	66	66	12
11	17	12	15	5.9	56	183	101	112	29	43	93	11
12	14	12	16	5.9	94	160	87	85	37	45	151	12
13	12	11	16	5.9	181	161	79	72	35	33	198	37
14	11	11	15	5.9	247	140	74	62	30	22	124	270
15	9.1	13	14	5.9	221	119	68	52	25	15	75	512
16	8.7	14	13	5.9	180	102	65	47	23	22	60	371
17	8.8	16	13	6.0	169	89	62	40	20	28	116	352
18	8.6	16	12	6.0	135	883	59	38	18	21	289	276
19	11	13	12	6.0	121	1460	57	36	19	16	141	147
20	18	12	11	6.1	114	693	58	41	17	14	69	99
21	18	12	11	6.1	106	475	59	36	21	17	45	74
22	16	13	9.4	6.2	120	356	86	32	19	31	37	58
23	20	14	9.0	6.2	256	613	615	31	18	21	28	50
24	30	14	7.9	6.2	724	694	755	30	17	19	27	51
25	25	14	7.2	6.3	919	409	374	29	19	22	21	52
26	23	14	7.7	6.3	501	297	240	28	15	17	19	51
27	27	15	7.5	6.4	1230	247	173	30	16	16	20	46
28	29	11	7.1	6.4	2750	1100	137	33	17	17	19	40
29	23	11	6.7	6.5	---	1810	118	30	15	19	25	35
30	23	11	6.4	6.6	---	759	110	35	35	21	22	37
31	28	---	6.0	6.6	---	367	---	37	---	15	22	---
TOTAL	508.6	459	354.9	189.7	8243.4	23803	8849	5701	726	1273	1890	2775
MEAN	16.4	15.3	11.4	6.12	294	768	295	184	24.2	41.1	61.0	92.5
MAX	30	28	16	6.8	2750	2920	2170	1380	37	354	289	512
MIN	8.6	11	6.0	5.1	6.7	89	57	28	15	14	13	11
CFSM	.04	.04	.03	.01	.69	1.81	.69	.43	.06	.10	.14	.22
IN.	.04	.04	.03	.02	.72	2.08	.77	.50	.06	.11	.17	.24
CAL YR 1976	TOTAL	105212.8	MEAN	287	MAX	7760	MIN	6.0	CFSM	.68	IN	9.21
WTR YR 1977	TOTAL	54772.6	MEAN	150	MAX	2920	MIN	5.1	CFSM	.35	IN	4.79

03324450 SALAMONIE LAKE AT DORA, IN

LOCATION.--Lat 40°48'25", long 85°40'38", in SW¼ sec. 7, T. 27 N., R. 8 E., Wabash County, Hydrologic Unit 05120102, in discharge tower of reservoir on Salamonie River, 1.1 miles (1.8 km) northwest of Dora, and 3.4 miles (5.5 km) upstream from mouth.

DRAINAGE AREA.--553 mi² (1,432 km²).

PERIOD OF RECORD.--April 1967 to current year. Prior to September 1970, published as Salamonie "Reservoir".

GAGE.--Water-stage recorder. Datum of gage is 700.00 ft (213.360 m) above mean sea level (levels by Corps of Engineers).

REMARKS.--Reservoir is formed by earth-fill dam. Releases normally controlled by three gates, 4.75 ft (1.45 m) wide and 16.0 ft (4.88 m) high, in semi-elliptical conduit through dam. Minimum design capacity is 13,100 acre-ft (16.2 hm³), elevation, 730 ft (222.5 m). Seasonal pool capacity is 60,700 acre-ft (74.8 hm³), elevation, 755 ft (230.1 m). Capacity at uncontrolled spillway elevation, 793 ft (241.7 m) is 263,600 acre-ft (325 hm³). Reservoir is used for flood control and recreation. Reservoir put in operation on Apr. 17, 1967.

COOPERATION.--Water-stage recorder graph and capacity tables furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 157,740 acre-ft (194 hm³) Apr. 26, 1972, elevation, 778.43 ft (237.265 m); minimum, 10,000 acre-ft (12.3 hm³) Mar. 11, 1969, elevation, 726.44 ft (221.419 m).

EXTREMES FOR CURRENT YEAR.--Maximum contents, 68,330 acre-ft (84.3 hm³) Sept. 19, elevation, 757.56 ft (230.904 m); minimum, 13,190 acre-ft (16.3 hm³) Dec. 6, elevation, 730.09 ft (222.531 m).

MONTHEND ELEVATION AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	744.04	34,320	
Oct. 31.....	731.53	14,670	-19,650
Nov. 30.....	730.21	13,310	-1,360
Dec. 31.....	730.27	13,370	+60
CAL YR 1976.....			-400
Jan. 31.....	730.22	13,320	-50
Feb. 28.....	740.00	26,640	+13,320
Mar. 31.....	749.87	47,230	+20,590
Apr. 30.....	752.92	54,960	+7,730
May 31.....	755.02	60,750	+5,790
June 30.....	754.75	59,980	-770
July 31.....	755.18	61,210	+1,230
Aug. 31.....	755.69	62,690	+1,480
Sept. 30.....	755.33	61,640	-1,050
WTR YR 1977.....			+27,320

03324500 SALAMONIE RIVER AT DORA, IN

LOCATION.--Lat 40°48'42", long 85°41'02", in NE¼NE¼ sec.12, T.27 N., R.7 E., Wabash County, Hydrologic Unit 05120102, on right bank, 0.4 mile (0.6 km) downstream from Salamonie Lake, 1.5 miles (2.4 km) northwest of Dora, and 3.0 miles (4.8 km) upstream from mouth.

DRAINAGE AREA.--557 mi² (1,443 km²).

PERIOD OF RECORD.--November 1923 to current year. Monthly discharge only for some periods, published in WSP 1305.

REVISED RECORDS.--WSP 1275: 1931(M), 1932, 1933(M), 1935-36(M), 1938-40(M), 1941-42, 1945, 1952. WSP 1335: 1934(M). WSP 1555: 1952, 1955-56(M), 1957. WSP 2109: Drainage area.

GAGE (revised).--None. Datum of gage was 673.96 ft (205.423 m) above mean sea level (levels by State of Indiana, Department of Natural Resources). Oct. 9, 1961, to Sept. 30, 1974, water-stage recorder at site described in "LOCATION" paragraph. Prior to Oct. 1, 1951, nonrecording gage at site 1.5 miles (2.4 km) upstream at datum 688.59 ft (209.882 m) above mean sea level (levels by Corps of Engineers) and Oct. 1, 1951, to Oct. 8, 1961, water-stage recorder located on left bank 2,000 ft (610 m) upstream at datum 679.77 ft (207.194 m) above mean sea level (levels by Corps of Engineers).

REMARKS.--Flow regulated by Salamonie Lake (See sta 03324450). Daily discharge computed from relation between discharge, head, and gate openings for Salamonie Lake beginning Oct. 1, 1974.

COOPERATION.--Records of daily discharge furnished by Corps of Engineers beginning Oct. 1, 1976.

AVERAGE DISCHARGE.--53 years (1924 to current year), 504 ft³/s (14.27 m³/s), 12.29 in/yr (312 mm/yr).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	68	650	249	759	595	893	234	26	152	183	57	453
2	28	646	119	1060	575	890	236	26	354	84	28	458
3	41	642	140	973	609	1650	237	27	522	52	43	342
4	65	639	259	957	2040	2120	238	27	709	50	72	125
5	82	662	329	943	3160	2100	239	27	662	42	73	83
6	108	1090	104	652	2530	3490	239	148	466	28	73	141
7	124	1190	146	423	1470	3430	239	32	400	27	73	255
8	124	893	309	741	931	2990	128	27	470	27	73	260
9	124	743	1240	790	445	3520	104	27	286	27	56	260
10	124	663	1860	235	347	3370	47	27	114	27	28	259
11	124	639	1490	226	217	3150	45	27	519	27	58	348
12	89	676	714	234	276	1670	45	27	1150	43	72	499
13	90	626	1490	239	317	567	33	43	1180	50	73	505
14	666	626	1710	241	260	602	24	90	631	50	73	250
15	1190	760	1640	891	235	602	24	81	277	50	73	199
16	771	894	1330	1690	267	597	24	73	265	50	73	512
17	661	891	1370	556	577	482	24	73	266	62	53	649
18	546	881	1340	403	1260	455	24	73	485	56	15	535
19	548	869	1370	1210	1530	996	24	73	771	28	80	499
20	561	816	1340	764	2000	1240	24	73	1770	43	105	480
21	576	667	1620	290	2370	1220	25	73	2570	72	74	431
22	581	619	1490	316	1940	1430	25	634	2410	73	73	378
23	579	611	683	302	996	1510	25	645	1710	73	73	353
24	576	646	1060	242	768	825	25	908	555	73	73	362
25	573	670	1310	282	819	399	25	687	507	57	73	394
26	590	696	1170	760	864	353	25	264	271	28	152	410
27	597	674	1180	990	890	232	25	247	464	27	189	422
28	595	627	1170	466	894	192	25	246	613	58	238	428
29	613	615	1700	1290	---	194	26	156	618	72	259	429
30	646	603	1940	1230	---	211	26	77	505	73	260	411
31	653	---	1390	616	---	227	---	83	---	73	340	---
TOTAL	12713	21924	33302	20771	29182	41607	2484	5047	21672	1685	3055	11130
MEAN	410	731	1074	670	1042	1342	82.8	163	722	54.4	98.5	371
MAX	1190	1190	1940	1690	3160	3520	239	908	2570	183	340	649
MIN	28	603	104	226	217	192	24	26	114	27	15	83
CAL YR 1974	TOTAL	289207	MEAN 792	MAX 6460	MIN 11							
WTR YR 1975	TOTAL	204572	MEAN 560	MAX 3520	MIN 15							

03324500 SALAMONIE RIVER AT DORA, IN--Continued

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,500 ft³/s (467 m³/s) May 18, 1943, gage height, 14.75 ft (4.496 m), from graph based on gage readings, site and datum then in use; minimum daily, 0.70 ft³/s (0.020 m³/s) Oct. 30, 1968, result of abnormal regulation.

EXTREMES FOR 1975 WATER YEAR.--Maximum daily discharge, 3,520 ft³/s (99.7 m³/s) Mar. 9, 1975; minimum daily discharge, 15 ft³/s (0.42 m³/s) Aug. 18, 1975.

EXTREMES FOR 1976 WATER YEAR.--Maximum daily discharge, 5,650 ft³/s (160 m³/s) Mar. 15, 1976; minimum daily discharge, 24 ft³/s (0.68 m³/s) June 1, 2, 1976.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 2,650 ft³/s (75.0 m³/s) Aug. 23; minimum daily, 18 ft³/s (0.51 m³/s) Dec. 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	416	1680	1320	937	594	3170	268	41	24	25	25	25
2	432	2240	1480	1130	478	3060	268	41	24	25	25	25
3	432	2250	1670	849	297	2910	268	41	25	25	25	25
4	431	2240	1020	782	259	1820	241	41	25	25	25	25
5	429	2230	322	615	284	647	193	41	25	25	25	25
6	428	2210	278	234	242	921	87	41	25	25	25	25
7	427	2200	505	277	211	1530	40	41	25	25	25	355
8	426	2310	490	304	191	2230	40	41	25	25	25	518
9	485	1240	360	253	190	3310	40	41	25	25	25	523
10	496	639	356	225	190	3890	40	41	25	25	25	522
11	468	835	277	222	205	4080	40	41	25	25	25	376
12	450	774	284	200	230	4660	40	41	25	25	25	130
13	421	628	308	212	243	4890	40	41	25	25	25	119
14	419	556	542	274	253	4810	40	41	25	25	25	119
15	433	483	513	705	258	5650	40	41	25	25	25	119
16	459	477	288	1110	261	5540	40	42	25	25	25	247
17	459	474	290	626	266	4950	40	42	25	25	25	506
18	1540	471	1420	281	274	5230	40	42	25	25	25	516
19	948	468	2150	286	279	5100	40	42	25	25	25	515
20	816	465	2600	286	282	4940	40	42	25	25	25	513
21	1220	462	2910	263	283	4760	40	42	25	25	25	512
22	758	529	1940	224	284	4600	40	42	25	25	25	510
23	644	508	669	222	1120	4420	40	42	25	25	25	509
24	632	449	556	210	1700	2580	40	42	25	25	25	507
25	595	442	366	214	1720	869	40	42	25	25	25	506
26	528	449	272	364	1720	403	40	42	25	25	25	504
27	488	465	158	1050	1710	490	40	42	25	25	25	503
28	1720	461	154	1830	2320	546	40	64	25	25	25	501
29	1650	479	189	2080	2690	434	41	138	25	25	25	499
30	529	713	292	2050	---	323	41	88	25	25	25	461
31	480	---	411	1120	---	270	---	27	---	25	25	---
TOTAL	20059	29827	24390	19435	19034	93033	2287	1436	748	775	775	10240
MEAN	647	994	787	627	656	3001	76.2	46.3	24.9	25.0	25.0	341
MAX	1720	2310	2910	2080	2690	5650	268	138	25	25	25	523
MIN	416	442	154	200	190	270	40	27	24	25	25	25
CAL YR 1975	TOTAL	210909	MEAN	578	MAX	3520	MIN	15				
WTR YR 1976	TOTAL	222039	MEAN	607	MAX	5650	MIN	24				

WARASH RIVER BASIN

03324500 SALAMONIE RIVER AT DORA, IN--Continued

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	566	268	52	35	35	42	1160	25	26	26	26	48
2	644	220	52	35	35	441	1480	25	26	26	26	48
3	639	186	52	35	35	1460	1480	25	26	26	26	199
4	634	186	52	35	35	1280	1070	26	26	26	26	249
5	630	185	52	35	35	992	707	65	26	26	26	82
6	626	185	38	35	35	2110	539	372	26	26	26	120
7	667	184	18	35	35	2080	304	625	26	26	26	152
8	684	122	25	35	35	2030	304	625	26	26	26	152
9	774	91	35	35	35	1970	304	784	26	26	26	151
10	926	65	35	35	35	1680	105	837	26	26	26	151
11	915	52	35	35	35	790	24	515	26	26	26	151
12	903	52	48	35	35	361	24	246	26	26	26	151
13	892	52	52	35	35	420	24	120	26	26	26	224
14	880	52	52	35	36	220	24	120	26	26	26	250
15	459	52	44	35	36	66	24	95	26	26	26	250
16	294	52	35	35	36	22	24	70	26	26	74	186
17	293	52	35	35	36	22	24	70	26	26	220	122
18	292	52	35	35	36	65	24	37	26	26	172	122
19	290	52	35	35	36	547	24	26	26	26	172	306
20	289	52	35	35	36	789	24	26	26	26	319	398
21	287	52	35	35	36	790	24	26	26	26	318	397
22	285	52	35	35	37	597	24	26	26	26	2090	410
23	284	52	35	35	37	366	24	26	26	26	2650	408
24	282	52	35	35	38	443	25	26	26	26	91	408
25	280	52	35	35	38	426	25	26	26	26	46	407
26	278	52	35	35	40	249	25	26	26	26	26	406
27	277	52	35	35	40	160	25	26	26	26	26	404
28	275	52	35	35	42	255	25	26	26	26	26	404
29	274	52	35	35	---	114	25	26	26	26	26	402
30	272	52	35	35	---	368	25	26	26	26	35	402
31	270	---	35	35	---	742	---	26	---	26	48	---
TOTAL	15361	2732	1202	1085	1015	21897	7940	5020	780	806	6729	7560
MEAN	496	91.1	38.8	35.0	36.3	706	265	162	26.0	26.0	217	252
MAX	926	268	52	35	42	2110	1480	837	26	26	2650	410
MIN	270	52	18	35	35	22	24	25	26	26	26	48
CAL YR 1976	TOTAL	167058	MEAN	456	MAX	5650	MIN	18				
WTR YR 1977	TOTAL	72127	MEAN	198	MAX	2650	MIN	18				

03325000 WABASH RIVER AT WABASH, IN

LOCATION.--Lat 40°47'25", long 85°49'13", in SE¼NW¼ sec.14, T.27 N., R.6 E., Wabash County, Hydrologic Unit 05120101, on right bank on upstream side of Wabash Street bridge in Wabash, 7.1 miles (11.4 km) downstream from Salamonie River, and at mile 387.2 (623.0 km).

DRAINAGE AREA.--1,768 mi² (4,579 km²).

PERIOD OF RECORD.--August 1923 to current year. Monthly discharge only for some periods, published in WSP 1305.

REVISED RECORDS.--WSP 1275: 1931-37(M), 1938-39, 1940(M). WSP 1385: 1942. WSP 1505: 1955. WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 642.66 ft (195.883 m) above mean sea level. Prior to Sept. 30, 1954, nonrecording gage at same site and datum.

REMARKS.--Records good except winter periods, which are fair. Flow regulated by Huntington Lake (See sta 03323450) and Salamonie Lake (See sta 03324450).

AVERAGE DISCHARGE.--54 years, 1,477 ft³/s (41.83 m³/s), 11.34 in/yr (288 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 49,600 ft³/s (1,400 m³/s) May 18, 1943; maximum gage height, 24.44 ft (7.499 m) Feb. 11, 1959 (ice jam); minimum daily discharge, 19 ft³/s (0.54 m³/s) July 21, 1936.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, 28.7 ft (8.748 m) Mar. 26, 1913, from floodmark, determined by Corps of Engineers, discharge, 90,000 ft³/s (2,550 m³/s), from rating curve extended above 49,000 ft³/s (1,390 m³/s).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 8,910 ft³/s (252 m³/s) Mar. 4, gage height, 13.01 ft (3.965 m); minimum daily discharge, 65 ft³/s (1.84 m³/s) Jan. 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	406	365	142	77	72	3330	3540	413	138	491	102	162
2	537	348	114	78	72	3940	3400	424	139	851	98	178
3	537	223	121	82	72	4460	3440	502	139	397	97	342
4	532	216	116	85	71	7880	3610	847	134	253	86	482
5	530	211	109	85	70	7570	3830	1770	137	192	125	365
6	559	199	108	83	70	6800	2910	2430	138	162	193	240
7	595	191	94	80	70	5860	1680	2830	128	139	306	380
8	657	185	86	79	70	4960	1220	2560	125	154	244	396
9	648	169	92	77	70	3170	826	1670	279	272	169	396
10	671	177	97	75	70	3320	706	1530	221	724	1040	387
11	674	158	92	73	71	2000	623	932	199	449	1210	381
12	676	170	92	71	216	1030	458	675	321	364	2080	380
13	664	173	101	71	316	1140	311	493	257	333	1220	1440
14	650	169	102	73	369	1080	278	458	197	254	682	3720
15	514	166	105	74	377	683	273	413	172	182	392	2100
16	336	158	93	73	315	579	266	360	149	148	461	1890
17	329	149	90	72	272	461	257	350	138	137	1180	1250
18	325	148	88	71	259	1660	235	279	137	135	1380	962
19	346	153	85	70	243	4020	205	225	130	139	902	939
20	384	152	82	68	235	3730	189	221	127	151	664	1120
21	356	153	80	66	234	3420	186	212	124	163	571	1230
22	328	152	80	66	259	2350	207	203	117	234	606	1200
23	323	147	81	65	867	1740	791	194	109	272	911	1160
24	315	148	82	66	1690	1970	1820	163	107	196	410	1130
25	320	155	81	67	1280	2760	1140	143	107	187	273	1100
26	327	171	78	68	1140	2630	1020	163	104	172	163	1080
27	324	180	76	68	1800	1630	863	157	102	168	132	1040
28	330	182	77	68	2430	4120	781	148	102	150	125	980
29	334	170	78	68	---	5500	637	155	110	126	139	831
30	340	142	78	69	---	3460	465	154	117	122	138	932
31	345	---	77	70	---	3340	---	143	---	109	172	---
TOTAL	14212	5480	2877	2258	13080	100593	36167	21217	4504	7826	16271	28193
MEAN	458	183	92.8	72.8	467	3245	1206	684	150	252	525	940
MAX	676	365	142	85	2430	7880	3830	2830	321	851	2080	3720
MIN	315	142	76	65	70	461	186	143	102	109	86	162
CFSM	.26	.10	.05	.04	.26	1.84	.68	.39	.09	.14	.30	.53
IN.	.30	.12	.06	.05	.28	2.12	.76	.45	.09	.16	.34	.59
CAL YR 1976	TOTAL	431999	MEAN	1180	MAX	8460	MIN	67	CFSM	.67	IN	9.09
WTR YR 1977	TOTAL	252678	MEAN	692	MAX	7880	MIN	65	CFSM	.39	IN	5.32

03325500 MISSISSINAWA RIVER NEAR RIDGEVILLE, IN

LOCATION.--Lat 40°16'49", long 84°59'44", in SE4SE4 sec.7, T.21 N., R.14 E., Randolph County, Hydrologic Unit 05120103, on right bank 10 ft (3 m) downstream from highway bridge, 0.8 mile (1.3 km) downstream from Mud Creek, 2 miles (3 km) east of Ridgeville, and at mile 99.5 (160.0 km).

DRAINAGE AREA.--133 mi² (344 km²).

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WSP 1235: 1948. WSP 1335: 1953. WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 965.28 ft (294.217 m) above mean sea level (levels by State of Indiana, Department of Natural Resources). Prior to Oct. 5, 1950, nonrecording gage at same site and datum.

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

AVERAGE DISCHARGE.--31 years, 121 ft³/s (3.427 m³/s), 12.35 in/yr (314 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,900 ft³/s (394 m³/s) June 10, 1958, gage height, 16.25 ft (4.953 m); from rating curve extended above 5,000 ft³/s (142 m³/s) on basis of contracted-opening measurement of peak flow; minimum daily, 0.1 ft³/s (0.003 m³/s) Oct. 24, 1946.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 2,400 ft³/s (68.0 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Feb. 27	0700	*1180 33.4	*8.01 2.441

Minimum daily discharge, 2.1 ft³/s (0.059 m³/s) July 25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.6	6.6	3.4	2.9	3.6	90	56	23	7.8	9.0	3.1	4.6
2	3.5	4.2	4.0	3.1	3.6	59	555	26	7.3	6.4	3.0	4.5
3	3.2	4.4	3.4	3.2	3.5	56	612	35	7.4	5.0	3.7	4.2
4	2.3	4.4	3.6	3.3	3.5	522	245	380	7.1	4.3	3.5	3.3
5	2.2	4.4	3.4	3.3	3.3	263	158	239	7.2	3.9	3.4	3.0
6	4.9	4.3	2.3	3.1	3.3	111	101	132	8.1	3.8	4.9	2.9
7	7.3	3.7	4.0	3.0	3.3	75	78	113	8.0	4.1	16	3.3
8	3.0	3.3	4.8	3.0	3.5	52	63	79	7.4	5.7	6.8	3.9
9	3.0	3.3	4.2	3.0	3.8	45	50	58	8.3	4.7	5.2	3.6
10	3.1	4.9	4.6	3.0	5.0	36	46	45	7.2	4.0	6.2	4.1
11	2.7	5.0	4.8	3.0	8.0	26	38	36	7.2	3.7	19	4.2
12	2.3	5.2	4.4	3.1	15	29	33	29	7.2	4.6	59	3.5
13	3.3	4.9	3.6	3.3	37	42	31	26	6.1	3.8	14	9.5
14	3.5	4.3	3.4	3.4	37	25	29	23	6.3	3.6	8.1	66
15	3.8	3.4	4.2	3.4	15	20	26	21	6.2	3.5	6.7	17
16	4.0	3.3	4.6	3.3	9.0	16	23	18	5.7	3.6	7.7	188
17	3.5	4.2	4.6	3.3	7.4	14	22	17	5.4	5.8	11	78
18	3.3	4.8	4.4	3.3	6.4	172	20	16	5.2	3.0	5.6	25
19	4.9	5.1	4.0	3.3	6.0	121	20	15	4.9	2.5	4.6	17
20	8.3	4.7	4.8	3.2	5.8	86	19	13	4.3	2.9	4.4	15
21	6.1	4.1	3.6	3.2	5.4	65	19	12	4.7	3.0	4.3	9.7
22	4.5	3.4	3.1	3.3	21	150	21	11	4.5	3.8	4.2	7.8
23	4.6	3.1	2.9	3.4	164	219	33	10	4.7	2.9	5.2	6.7
24	7.0	3.3	2.9	3.5	454	120	29	10	4.8	2.6	5.5	6.2
25	9.0	3.6	2.9	3.5	191	80	24	13	6.6	2.1	5.9	6.1
26	4.8	4.1	2.9	3.5	137	62	22	11	12	3.8	4.6	5.5
27	4.7	7.2	2.8	3.4	777	55	19	9.4	17	2.4	4.5	4.9
28	4.3	6.0	2.8	3.3	179	326	21	8.9	40	2.4	4.2	5.2
29	4.2	4.2	2.7	3.2	---	230	35	8.4	62	2.6	5.0	5.0
30	4.5	2.9	2.7	3.4	---	115	26	11	11	4.2	7.9	5.1
31	6.1	---	2.8	3.5	---	76	---	8.7	---	3.4	5.2	---
TOTAL	135.5	130.3	112.6	100.7	211.4	3358	2474	1457.4	301.6	121.1	252.4	522.8
MEAN	4.37	4.34	3.63	3.25	75.4	108	82.5	47.0	10.1	3.91	8.14	17.4
MAX	9.0	7.2	4.8	3.5	777	522	612	380	62	9.0	59	188
MIN	2.2	2.9	2.3	2.9	3.3	14	19	8.4	4.3	2.1	3.0	2.9
CFSM	.03	.03	.03	.02	.57	.81	.62	.35	.08	.03	.06	.13
IN.	.04	.04	.03	.03	.59	.94	.69	.41	.08	.03	.07	.15
CAL YR 1976 TOTAL	30137.1		MEAN 82.3	MAX 3150	MIN 2.1	CFSM .62	IN 8.43					
WTR YR 1977 TOTAL	11077.8		MEAN 30.4	MAX 777	MIN 2.1	CFSM .23	IN 3.10					

03325500 MISSISSINewa RIVER NEAR RIDGEVILLE, IN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

SEDIMENT DISCHARGE: March 1975 to current year (partial-record station).

WATER QUALITY DATA: WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	SUS- PENDE SEDI- MENT (MG/L)	SUS- PENDE SEDI- MENT DIS- CHARGE (T/DAY)	DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	SUS- PENDE SEDI- MENT (MG/L)	SUS- PENDE SEDI- MENT DIS- CHARGE (T/DAY)
OCT						APR					
21...	1050	6.2	6.5	3	.05	11...	1645	--	18.5	9	.85
NOV						MAY					
22...	1445	3.3	2.0	2	.01	17...	1515	17	--	7	.32
DEC						JUN					
27...	1505	2.8	.5	32	.02	22...	1605	4.3	18.0	14	.16
FER						JUL					
07...	1540	3.3	.0	3	2.7	25...	1725	2.2	26.0	19	.11
MAR						AUG					
08...	1630	45	--	9	1.0	29...	1750	6.1	22.0	64	1.0

WABASH RIVER BASIN

03326070 BIG LICK CREEK NEAR HARTFORD CITY, IN

LOCATION.--Lat 40°25'20", long 85°21'04", in SE¼SE¼ sec.23, T.23 N., R.10 E., Blackford County, Hydrologic Unit 05120103, on right bank, 6 ft (2 m) downstream from bridge on County Road 100 East and 2.0 miles (3.2 km) southeast of Hartford City.

DRAINAGE AREA.--29.2 mi² (75.6 km²).

PERIOD OF RECORD.--July 1971 to current year.

GAGE.--Water-stage recorder. Datum of gage is 865.00 ft (263.652 m) above mean sea level.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--6 years, 26.2 ft³/s (0.742 m³/s), 12.18 in/yr (309 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 792 ft³/s (22.4 m³/s) Feb. 10, 1976, gage height, 13.70 ft (4.176 m); maximum gage height, 13.98 ft (4.261 m) Feb. 23, 1975; minimum daily, 0.38 ft³/s (0.011 m³/s) Sept. 25, 1971.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 275 ft³/s (7.79 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Feb. 27	0700	*539 15.3	*11.57 3.527

Minimum daily discharge, 0.54 ft³/s (0.02 m³/s) Aug. 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.0	1.4	1.9	.90	.64	57	10	6.4	1.6	2.0	1.0	4.3
2	1.0	.86	2.0	.90	.66	27	33	7.6	1.9	1.2	1.1	2.6
3	1.0	.79	1.7	.90	.66	27	27	7.6	2.1	1.2	.88	4.7
4	.97	.74	1.9	.90	.64	238	15	64	1.7	.97	.90	2.3
5	.95	.89	1.9	.90	.63	108	12	58	1.7	1.1	.96	1.9
6	2.9	1.0	2.2	.93	.60	39	8.9	53	2.9	1.2	1.8	1.8
7	3.3	1.3	2.4	.96	.59	23	7.5	64	2.3	1.0	7.0	1.8
8	.87	1.0	2.0	.88	.58	15	6.1	21	2.2	1.5	3.9	2.1
9	.59	.86	1.8	.84	.63	12	5.3	11	2.8	1.2	1.9	2.0
10	.56	1.3	1.9	.80	.69	10	5.1	8.1	2.0	.87	4.0	1.9
11	1.1	1.3	2.0	.78	1.5	8.9	4.6	6.4	1.9	.76	6.7	2.1
12	1.7	1.3	2.0	.76	6.0	8.8	4.2	5.2	1.8	.96	12	2.0
13	1.9	1.3	1.8	.75	15	9.0	3.9	4.7	1.8	.90	2.8	21
14	1.7	1.2	1.9	.76	8.0	7.0	4.1	4.2	2.0	.91	1.5	77
15	2.0	1.2	2.1	.77	4.0	6.0	3.7	4.0	1.8	.86	1.1	19
16	1.9	1.2	2.1	.80	4.0	5.2	3.4	3.4	1.5	.87	2.1	18
17	2.0	1.2	2.0	.76	2.5	4.7	3.3	3.3	1.6	.90	9.5	7.4
18	1.8	1.2	1.6	.73	1.7	101	3.2	3.1	1.6	.91	2.6	4.4
19	1.9	1.1	1.8	.70	1.5	52	3.1	3.0	1.4	1.3	.93	3.4
20	3.4	1.1	2.1	.70	1.3	30	3.4	2.6	1.5	.83	.71	2.8
21	1.8	1.1	1.3	.70	1.2	19	3.0	2.5	1.4	1.1	.68	2.5
22	1.4	1.0	1.1	.67	9.3	43	4.7	2.0	1.4	2.9	.58	2.3
23	1.5	.99	1.1	.66	74	64	95	2.1	1.4	1.3	.54	2.5
24	4.0	1.0	1.1	.66	100	26	50	2.0	1.3	.89	1.8	2.6
25	2.4	1.1	1.1	.67	41	15	20	3.3	1.3	.88	1.2	3.4
26	1.1	1.3	1.0	.68	35	12	15	2.0	2.1	.91	.63	2.9
27	.92	2.7	1.0	.68	404	11	10	1.5	1.5	.84	.57	2.9
28	1.0	2.5	1.0	.67	124	138	8.4	1.5	1.7	.90	.62	3.1
29	.92	1.9	.95	.65	---	72	10	2.2	1.4	.97	1.4	3.1
30	1.1	1.9	.93	.63	---	26	7.5	2.8	1.4	1.3	2.9	3.3
31	2.4	---	.90	.62	---	14	---	1.7	---	1.1	1.7	---
TOTAL	51.08	37.73	50.58	23.71	840.32	1228.6	390.4	364.2	53.0	34.53	76.00	211.1
MEAN	1.65	1.26	1.63	.76	30.0	39.6	13.0	11.7	1.77	1.11	2.45	7.04
MAX	4.0	2.7	2.4	.96	404	238	95	64	2.9	2.9	12	77
MIN	.56	.74	.90	.62	.58	4.7	3.0	1.5	1.3	.76	.54	1.8
CFSM	.06	.04	.06	.03	1.03	1.36	.45	.40	.06	.04	.08	.24
IN.	.07	.05	.06	.03	1.07	1.57	.50	.46	.07	.04	.10	.27
CAL YR 1976	TOTAL	6903.53	MEAN	18.9	MAX	546	MIN	.44	CFSM	.65	IN	8.79
WTR YR 1977	TOTAL	3361.25	MEAN	9.21	MAX	404	MIN	.54	CFSM	.32	IN	4.28

03326500 MISSISSINAWA RIVER AT MARION, IN

LOCATION.--Lat 40°34'34", long 85°39'34", in SE¼NE¼ sec.31, T.25 N., R.8 E., Grant County, Hydrologic Unit 05120103, on left bank 12 ft (4 m) downstream from Highland Avenue bridge in Marion, 0.1 mile (0.2 km) downstream from old mill dam, 1.0 mile (2.0 km) upstream from Hummel Creek, 4.6 miles (7.4 km) downstream from Lugar Creek, and at mile 35.8 (57.6 km).

DRAINAGE AREA.--682 mi² (1,766 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 1923 to current year. Monthly discharge only for some periods, published in WSP 1305.

REVISED RECORDS.--WSP 1335: 1927(M). WSP 1385: 1948. WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 774.56 ft (236.086 m) above mean sea level. Prior to Dec. 9, 1933, nonrecording gage at same site and datum.

REMARKS.--Records good except those for period of no gage-height record, Feb. 23-28, which are poor. Flow periodically regulated by dam above station.

AVERAGE DISCHARGE.--54 years, 624 ft³/s (17.67 m³/s), 12.42 in/yr (315 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 25,000 ft³/s (708 m³/s) Mar. 21, 1927, gage height, 17.40 ft (5.305 m) from graph based on gage readings, from rating curve extended above 18,000 ft³/s (510 m³/s); minimum daily, 3.4 ft³/s (0.096 m³/s) Oct. 25, 1968.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of 19.20 ft (5.852 m) from information by State of Indiana, Department of Natural Resources.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 5,600 ft³/s (158 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Feb. 28	Unknown	*4100 116	Unknown

Minimum daily discharge, 7.3 ft³/s (0.207 m³/s) July 14.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

CHEMICAL ANALYSES: November 1975 to September 1976.

WATER TEMPERATURE: November 1975 to September 1976.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	39	55	48	34	40	2550	482	218	63	73	30	67
2	40	54	49	35	40	803	1250	291	11	100	28	64
3	42	50	48	36	40	578	2150	359	49	82	30	61
4	44	44	49	37	40	2020	1840	1440	68	61	29	57
5	59	42	46	37	39	2620	1240	1790	97	49	44	56
6	83	38	47	36	38	1700	807	1480	157	43	126	56
7	48	37	51	35	40	882	552	1330	200	146	108	52
8	221	38	50	35	38	559	409	955	213	249	121	49
9	51	41	49	35	40	422	330	619	142	57	116	46
10	47	45	50	35	45	349	284	434	116	48	316	44
11	44	48	49	35	50	292	251	339	151	55	203	42
12	40	49	50	37	80	281	225	278	118	33	1470	42
13	41	49	49	38	250	276	202	162	96	7.6	719	415
14	44	45	50	38	230	241	184	147	86	7.3	432	754
15	42	46	52	38	130	216	171	180	80	9.4	308	663
16	40	45	53	37	79	183	160	161	75	9.7	287	443
17	40	47	53	38	72	270	150	145	54	34	857	367
18	40	49	51	38	68	1080	140	132	64	31	500	289
19	42	53	49	38	64	1360	133	121	62	31	262	304
20	54	53	48	38	62	1040	127	113	56	32	172	98
21	51	55	38	38	60	711	121	108	72	92	201	93
22	28	51	35	38	73	592	208	102	52	81	138	116
23	9.7	52	34	38	170	813	879	94	46	65	116	103
24	10	50	33	38	800	964	925	94	51	50	104	103
25	37	53	33	38	1500	647	436	89	32	50	91	91
26	70	56	33	38	1000	445	397	86	42	36	84	82
27	61	61	33	38	700	382	307	83	68	31	79	73
28	53	54	32	38	3500	1230	263	75	55	30	72	67
29	50	54	32	38	---	1790	233	77	50	31	109	63
30	58	47	31	38	---	1350	222	79	62	43	79	61
31	61	---	32	39	---	759	---	270	---	35	70	---
TOTAL	1589.7	1461	1357	1149	9288	27405	15078	11851	2488	1702.0	7301	4821
MEAN	51.3	48.7	43.8	37.1	332	884	503	382	82.9	54.9	236	161
MAX	221	61	53	39	3500	2620	2150	1790	213	249	1470	754
MIN	9.7	37	31	34	38	183	121	75	11	7.3	28	42
CFSM	.08	.07	.06	.05	.49	1.30	.74	.56	.12	.08	.35	.24
IN.	.09	.08	.07	.06	.51	1.49	.82	.65	.14	.09	.40	.26

CAL YR 1976	TOTAL	167198.4	MEAN	457	MAX	12200	MIN	8.8	CFSM	.67	IN	9.12
WTR YR 1977	TOTAL	85490.7	MEAN	234	MAX	3500	MIN	7.3	CFSM	.34	IN	4.66

WARASH RIVER BASIN

03326950 MISSISSINewa LAKE AT PEORIA, IN

LOCATION.--Lat 40°42'52", long 85°57'27", in NW¼SW¼ sec.10, T.26 N., R.5 E., Miami County, Hydrologic Unit 05120103, in discharge tower of reservoir on Mississinewa River at Peoria, 6.8 miles (10.9 km) southeast of Peru, and 7.3 miles (11.7 km) above mouth.

DRAINAGE AREA.--807 mi² (2,090 km²).

PERIOD OF RECORD.--April 1968 to current year. Prior to September 1970, published as Mississinewa "Reservoir".

GAGE.--Water-stage recorder. Datum of gage is 700.00 ft (213.360 m) above mean sea level (levels by Corps of Engineers).

REMARKS.--Reservoir is formed by earth-fill dam. Releases normally controlled by three gates, 4.75 ft (1.45 m) wide and 16.0 ft (4.88 m) high, in semi-elliptical conduit through dam. Minimum design capacity is 23,300 acre-ft (28.7 hm³), elevation, 712 ft (217.0 m). Seasonal pool capacity is 75,200 acre-ft (92.7 hm³), elevation, 737 ft (224.6 m). Capacity at uncontrolled spillway elevation, 779 ft (237.4 m) is 368,400 acre-ft (454 hm³). Reservoir is used for flood control and recreation. Reservoir put in operation on April 23, 1968.

COOPERATION.--Water-stage recorder graph and capacity tables furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 172,440 acre-ft (213 hm³) Feb 23, 1976, elevation, 757.80 ft (230.977 m); minimum, 22,890 acre-ft (28.2 hm³) Dec. 11, 1974, elevation, 711.69 ft (216.923 m).

EXTREMES FOR CURRENT YEAR.--Maximum contents, 82,780 acre-ft (102 hm³) Sept. 19, elevation, 739.28 ft (225.333 m); minimum, 23,380 acre-ft (28.8 hm³) Jan. 4, elevation, 712.07 ft (217.039 m).

MONTHEND ELEVATION AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	736.13	72,460	
Oct. 31.....	729.05	53,500	-18,960
Nov. 30.....	712.37	23,770	-29,730
Dec. 31.....	712.12	23,440	-330
CAL YR 1976.....			-520
Jan. 31.....	712.23	23,590	+150
Feb. 28.....	723.32	41,240	+17,650
Mar. 31.....	731.02	58,290	+17,050
Apr. 30.....	735.54	70,680	+12,390
May 31.....	737.37	76,370	+5,690
June 30.....	737.96	78,300	+1,930
July 31.....	737.75	77,610	-690
Aug. 31.....	738.06	78,630	+1,020
Sept. 30.....	737.11	75,540	-3,090
WTR YR 1977.....			+3,080

03327000 MISSISSINewa RIVER AT PEORIA, IN

LOCATION (revised).--Lat 40°43'24", long 85°57'27", in SW¼SW¼ sec.3, T.26 N., R.5 E., Miami County, Hydrologic Unit 05120103, on right bank at Peoria, 0.6 mile (1.0 km) downstream from Mississinewa Lake, 6.5 miles (10.4 km) southeast of Peru, and 6.7 miles (10.8 km) upstream from mouth.

DRAINAGE AREA.--808 mi² (2,092 km²).

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

REVISED RECORDS.--WSP 1335: 1953. WSP 2109: Drainage area.

GAGE (revised).--None. Datum of gage was 660.00 ft (201.168 m) above mean sea level. Oct. 1, 1962 to Sept. 30, 1974, water-stage recorder at site described in "LOCATION" paragraph. Prior to Oct. 7, 1954, nonrecording gage and crest-stage gage on highway bridge 2,500 ft (762 m) upstream, and Oct. 7, 1954, to Sept. 30, 1962, water-stage recorder on right bank at site 2,500 ft (762 m) upstream at same datum.

REMARKS.--Flow regulated by Mississinewa Lake (See sta 03326950). Daily discharge computed from relation between discharge, head, and gate openings for Mississinewa Lake beginning Oct. 1, 1974.

COOPERATION.--Records of daily discharge furnished by Corps of Engineers beginning Oct. 1, 1976.

AVERAGE DISCHARGE.--25 years, 689 ft³/s (19.51 m³/s), 11.58 in/yr (294 mm/yr).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	215	644	375	1340	691	389	1050	1180	402	334	72	912
2	188	641	262	2240	1810	390	1060	1060	931	250	72	604
3	160	639	162	1970	3820	2320	1050	1090	1280	187	156	352
4	159	636	158	1130	4030	3800	1050	1090	1070	159	219	243
5	159	634	141	1040	2980	3810	928	812	696	172	207	203
6	159	709	131	825	1660	5030	485	570	571	180	182	202
7	159	751	131	633	1820	5940	311	458	462	181	181	202
8	159	750	453	797	1580	6010	144	406	575	181	155	317
9	159	747	1450	1010	831	5930	61	357	475	181	139	385
10	159	743	1900	1030	394	5820	58	340	315	181	138	388
11	159	740	1040	1050	408	5640	58	325	468	181	164	387
12	199	698	637	1110	534	3510	58	302	786	168	236	387
13	222	634	1470	1830	569	1650	38	1220	847	145	274	387
14	260	608	2110	2790	483	1800	34	2170	686	138	275	311
15	452	679	2130	3200	387	1770	41	955	588	138	410	317
16	583	718	2480	3440	396	1230	41	369	598	138	568	511
17	608	715	2900	3380	656	906	41	257	607	138	385	727
18	607	832	2050	2790	1490	781	42	228	1180	138	34	590
19	606	822	1200	1790	3020	1420	42	227	2160	138	350	497
20	604	696	994	782	3620	1890	43	218	2590	138	421	467
21	602	639	640	443	2750	2360	43	213	2880	138	144	419
22	600	633	517	429	1970	1690	44	686	2870	138	53	416
23	598	629	460	428	1000	938	44	654	2460	138	219	415
24	597	625	619	354	374	736	45	416	1650	138	361	436
25	595	704	2300	366	369	614	80	365	837	138	388	449
26	593	748	3240	596	380	580	132	408	407	122	497	470
27	591	697	2610	1210	386	456	351	357	917	94	768	483
28	589	630	1430	1200	388	409	717	291	1180	85	707	504
29	627	604	1020	660	---	801	1510	260	923	72	582	517
30	648	458	777	657	---	1020	1800	263	630	72	778	497
31	646	---	632	677	---	1050	---	287	---	72	907	---
TOTAL	12662	20403	36419	41197	38796	70690	11301	17834	32041	4673	10042	12995
MEAN	408	680	1175	1329	1386	2280	377	575	1068	151	324	433
MAX	648	832	3240	3440	4030	6010	1800	2170	2880	334	907	912
MIN	159	458	131	354	369	389	34	213	315	72	34	202
CAL YR 1974	TOTAL	364279	MEAN 998	MAX 6600	MIN 35							
WTR YR 1975	TOTAL	309053	MEAN 847	MAX 6010	MIN 34							

03327000 MISSISSINEWA RIVER AT PEORIA, IN--Continued

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 28,000 ft³/s (793 m³/s) June 11, 1958, gage height, 19.26 ft (5.870 m), site then in use; minimum daily, 6.1 ft³/s (0.17 m³/s) (corrected) Oct. 3, 1969.

EXTREMES FOR 1975 WATER YEAR.--Maximum daily discharge, 6,010 ft³/s (170 m³/s) Mar. 8, 1975; minimum daily discharge, 34 ft³/s (0.96 m³/s) Apr. 14, and Aug. 18, 1975.

EXTREMES FOR 1976 WATER YEAR.--Maximum daily discharge, 5,060 ft³/s (143 m³/s) Feb. 26, 27, 1976; minimum daily discharge, 35 ft³/s (0.99 m³/s) May 12-27, 1976.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 2,730 ft³/s (77.3 m³/s) Mar. 9; minimum daily, 43 ft³/s (1.22 m³/s) Apr. 13-19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	471	431	1240	1170	1590	4940	2500	67	36	463	161	49
2	477	478	1110	1540	1360	3620	1930	67	36	728	105	49
3	476	498	1840	1560	847	1390	855	67	36	868	81	49
4	498	496	1660	1350	578	797	588	67	36	710	72	49
5	509	494	631	989	532	784	535	66	36	437	64	49
6	508	528	539	519	389	797	384	67	36	307	113	49
7	506	548	532	421	307	803	713	67	36	229	160	49
8	505	547	583	498	269	1530	184	67	36	201	148	49
9	563	584	466	339	244	2110	87	67	36	200	112	49
10	560	636	374	200	244	2130	83	68	36	176	94	49
11	469	657	340	293	256	2130	83	48	37	162	93	49
12	443	655	305	411	278	2120	84	35	37	357	81	49
13	427	722	335	524	290	2540	84	35	37	464	72	49
14	425	623	493	584	297	2860	84	35	37	322	96	49
15	424	531	589	835	301	3210	84	35	37	207	127	122
16	423	524	614	1580	305	3240	85	35	37	164	138	183
17	443	521	635	1260	314	3750	85	35	37	185	114	255
18	455	491	1290	553	324	4000	85	35	37	200	94	277
19	475	472	2050	374	330	3970	85	35	37	200	93	191
20	694	469	2870	333	333	3930	85	35	37	200	79	162
21	831	466	3310	332	335	3900	85	35	37	177	72	160
22	833	419	3260	290	337	3860	85	35	37	162	72	146
23	676	389	1550	216	1340	3830	85	35	94	162	72	123
24	582	386	410	255	2830	3780	86	35	318	161	72	114
25	576	437	362	302	4400	3730	86	35	1300	135	64	113
26	574	499	360	718	5060	2140	77	35	1400	108	71	130
27	572	521	360	2030	5060	599	67	35	580	94	72	190
28	533	518	339	3400	5020	535	66	36	466	93	72	213
29	487	516	305	2010	4980	1050	67	36	462	142	56	201
30	450	761	303	1950	---	1940	67	36	462	198	49	152
31	503	---	654	1760	---	2500	---	36	---	200	49	---
TOTAL	16368	15817	29709	28596	38750	78515	9074	1422	5886	8412	2818	3418
MEAN	528	527	958	922	1336	2533	307	45.9	196	271	90.9	114
MAX	833	761	3310	7400	5060	4940	2500	68	1400	868	161	277
MIN	423	386	303	200	244	535	66	35	36	93	49	49
CAL YR 1975 TOTAL	301463		MEAN 826	MAX 6010	MIN 34							
WTR YR 1976 TOTAL	238785		MEAN 652	MAX 5060	MIN 35							

03327000 MISSISSINAWA RIVER AT PEORIA, IN--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	152	775	174	64	56	1720	2100	46	68	69	69	90
2	152	772	84	64	55	2090	1850	46	68	69	69	90
3	152	769	76	64	56	747	1850	46	68	69	69	120
4	152	766	76	56	56	686	1690	514	68	69	69	134
5	152	726	76	50	56	701	1100	573	68	69	69	134
6	208	700	76	50	56	367	856	849	69	69	69	151
7	196	676	77	54	56	682	390	1310	69	69	97	156
8	151	664	77	55	56	2100	159	1310	69	289	146	156
9	196	661	77	56	56	2730	101	1300	69	449	195	156
10	218	657	76	62	56	2270	101	1300	69	142	505	149
11	194	623	77	65	56	1180	76	858	69	69	376	145
12	149	604	76	64	56	678	50	472	69	69	672	145
13	129	601	76	64	57	497	43	339	69	69	470	178
14	158	598	76	60	58	389	43	189	69	69	135	196
15	436	615	76	55	58	295	43	110	69	69	425	198
16	532	622	76	55	59	128	43	110	69	69	883	198
17	519	618	76	55	60	57	43	110	69	69	664	199
18	507	614	76	55	56	553	43	153	69	69	555	199
19	494	619	76	55	55	1050	43	174	69	69	408	252
20	482	618	77	55	56	982	44	174	69	69	261	368
21	603	613	76	55	56	600	44	174	69	69	226	446
22	709	608	76	55	56	308	44	174	69	69	192	445
23	717	616	76	55	57	158	44	174	69	69	157	444
24	702	617	71	55	58	56	44	120	69	69	157	443
25	686	612	64	55	60	58	45	68	69	69	140	442
26	753	606	64	55	62	59	45	68	69	69	117	440
27	789	601	64	55	64	60	45	68	69	69	97	439
28	786	596	64	55	67	188	45	68	69	69	76	438
29	783	558	64	56	---	770	45	68	69	69	112	436
30	780	441	64	56	---	1260	45	68	69	69	119	435
31	778	---	64	56	---	1900	---	68	---	69	97	---
TOTAL	13415	19166	2378	1766	1610	25319	11114	11101	2065	2812	7696	7822
MEAN	433	639	76.7	57.0	57.5	817	370	358	68.8	90.7	248	261
MAX	789	775	174	65	67	2730	2100	1310	69	449	883	446
MIN	129	441	64	50	55	56	43	46	68	69	69	90
CAL YR 1976	TOTAL	211850	MEAN 579	MAX 5060	MIN 35							
WTR YR 1977	TOTAL	106264	MEAN 291	MAX 2730	MIN 43							

03327500 WABASH RIVER AT PERU, IN

LOCATION.--Lat 40°44'35", long 86°05'45", in SE¼NE¼ sec.32, T.27 N., R.4 E., Miami County, Hydrologic Unit 05120101, on right bank at upstream side of bridge on U.S. Highway 31, 0.5 mile (0.8 km) southwest of Peru, 4.4 miles (7.1 km) downstream from Mississinewa River, and at mile 370.5 (596.1 km).

DRAINAGE AREA.--2,686 mi² (6,956 km²).

PERIOD OF RECORD.--August 1943 to current year.

REVISED RECORDS.--WSP 2109: Drainage area. WRD Ind. 1974: 1973.

GAGE.--Water-stage recorder. Datum of gage is 617.94 ft (188.348 m) above mean sea level (levels by Corps of Engineers). Prior to June 20, 1961, nonrecording gage at same site and datum.

REMARKS.--Records good except winter periods, which are fair. Flow regulated by Huntington Lake (See sta 03323450), Salamonie Lake (See sta 03324450), and Mississinewa Lake (See sta 03326950).

AVERAGE DISCHARGE.--34 years, 2,327 ft³/s (65.90 m³/s), 11.76 in/yr (299 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 68,000 ft³/s (1,930 m³/s) May 18, 1943, gage height, 24.46 ft (7.455 m), from floodmark; minimum daily, 72 ft³/s (2.04 m³/s) Oct. 5, 1946.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 26, 1913, reached a stage of 28.1 ft (8.56 m), discharge, 115,000 ft³/s (3,260 m³/s), from rating curve extended above 63,000 ft³/s (1,780 m³/s).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 9,970 ft³/s (282 m³/s) Mar. 4, gage height, 9.76 ft (2.975 m); minimum daily, 152 ft³/s (4.30 m³/s) Jan. 21-23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	549	952	502	181	164	4020	5780	492	241	254	213	335
2	667	972	273	187	164	6280	5750	497	241	935	204	350
3	713	895	247	190	162	5050	5420	525	237	656	203	366
4	706	826	234	200	160	8410	5800	957	237	424	208	649
5	714	819	237	196	159	8670	5020	2390	241	320	248	649
6	818	816	220	185	159	7520	4360	2890	272	277	364	476
7	856	816	223	185	159	6240	2670	4100	241	250	403	508
8	821	837	197	182	160	7160	1750	3910	233	259	506	625
9	851	823	206	179	160	6100	1180	3150	237	732	473	606
10	914	810	208	171	160	5820	1010	3000	400	745	1590	625
11	930	781	207	168	160	3890	824	2130	327	751	1890	594
12	885	738	204	162	170	1900	725	1350	355	547	2220	596
13	839	738	206	168	296	1810	497	971	413	429	2220	1120
14	821	738	209	171	356	1620	414	797	342	404	938	4400
15	1010	742	209	171	380	1220	398	582	305	320	612	3110
16	995	751	207	170	380	845	385	536	277	268	1500	2510
17	938	748	204	168	335	629	366	508	254	241	1860	2010
18	929	740	192	164	296	1620	356	503	271	233	2390	1510
19	929	739	189	160	282	4910	328	460	255	228	1810	1340
20	963	745	184	155	268	4950	305	445	248	228	1250	1640
21	986	745	180	152	264	4240	290	445	233	248	986	1880
22	1010	745	181	152	272	3090	319	429	233	365	935	1960
23	945	743	184	152	624	2210	449	417	228	383	1090	1910
24	942	751	190	155	1760	1910	1850	390	224	319	914	1890
25	934	751	185	158	1710	2790	1330	280	224	330	649	1890
26	928	761	180	156	1200	2990	1110	255	212	275	455	1900
27	928	783	180	154	1700	1910	949	264	212	265	356	1870
28	928	771	180	154	2350	3780	858	264	208	259	305	1760
29	928	783	180	155	---	6860	725	250	208	240	325	1610
30	940	730	180	156	---	5000	594	250	233	228	361	1660
31	952	---	180	160	---	5230	---	250	---	225	335	---
TOTAL	27269	23589	6558	5217	14410	128674	51812	33687	7842	11638	27813	42349
MEAN	880	786	212	168	515	4151	1727	1087	261	375	897	1412
MAX	1010	972	502	200	2350	8670	5800	4100	413	935	2390	4400
MIN	549	730	180	152	159	629	290	250	208	225	203	335
CFSM	.33	.29	.08	.06	.19	1.55	.64	.41	.10	.14	.33	.53
IN.	.38	.33	.09	.07	.20	1.78	.72	.47	.11	.16	.39	.59

CAL YR 1976 TOTAL 675118 MEAN 1845 MAX 12700 MIN 82 CFSM .69 IN 9.35
WTR YR 1977 TOTAL 380858 MEAN 1043 MAX 8670 MIN 152 CFSM .39 IN 5.27

03327520 PIPE CREEK NEAR BUNKER HILL, IN

LOCATION.--Lat 40°40'06", long 86°05'44", in NE¼SE¼ sec.29, T.26 N., R.4 E., Miami County, Hydrologic Unit 05120101, on right bank 150 ft (46 m) downstream from bridge on County Road 125 West, 0.5 mile (0.8 km) northeast of Bunker Hill, and at mile 11.4 (18.3 km).

DRAINAGE AREA.--159 mi² (412 km²).

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1960-67; May 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 736.00 ft (224.333 m) above mean sea level.

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

AVERAGE DISCHARGE.--9 years, 139 ft³/s (3.936 m³/s), 11.87 in/yr (301 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,960 ft³/s (112 m³/s) Jan. 21, 1974, gage height, 14.93 ft (4.551 m); minimum daily, 3.3 ft³/s (0.093 m³/s) Feb. 1, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 1,000 ft³/s (28.3 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Mar. 04	1500	*1110 31.4	*7.97 2.429

Minimum daily discharge, 3.3 ft³/s (0.093 m³/s) Feb. 1.

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.6	12	6.9	3.4	3.3	129	223	64	26	14	9.3	17
2	5.4	11	6.6	3.6	3.4	100	272	104	24	11	8.9	16
3	4.9	11	6.8	3.8	3.5	131	386	191	25	9.9	8.4	16
4	5.2	10	7.0	4.0	3.5	942	323	364	23	9.5	8.1	15
5	4.6	9.7	7.2	4.2	3.6	984	271	612	22	8.8	11	14
6	9.7	9.3	7.5	4.2	3.7	583	205	419	36	8.4	18	13
7	11	9.1	7.9	4.1	3.8	344	159	310	38	9.1	29	13
8	7.5	9.2	8.2	4.1	3.8	242	137	243	38	54	39	12
9	5.8	9.2	8.6	4.1	4.0	203	111	186	38	24	37	12
10	4.9	9.4	8.0	4.3	5.0	181	102	145	27	15	448	11
11	4.7	9.4	8.6	3.9	8.0	144	92	117	26	29	227	10
12	4.7	9.2	8.6	3.6	54	133	86	96	25	27	181	11
13	6.1	9.0	8.2	3.6	125	137	79	86	22	18	116	91
14	6.4	8.8	9.0	3.6	74	118	74	77	21	13	74	301
15	5.9	8.8	8.2	3.5	40	97	68	71	20	11	52	270
16	5.6	9.0	8.0	3.5	27	81	65	62	19	11	40	205
17	6.1	8.9	7.4	3.5	22	72	61	56	17	11	50	140
18	6.6	9.3	7.0	3.5	20	376	57	52	17	9.3	115	98
19	7.3	9.7	7.8	3.6	25	473	54	49	15	9.3	77	78
20	12	9.7	9.0	3.6	29	313	53	48	14	8.8	52	61
21	10	9.4	6.0	3.6	25	242	48	45	13	8.9	62	48
22	8.1	9.4	4.5	3.6	39	210	57	41	12	9.1	49	41
23	7.9	9.1	4.3	3.6	141	207	184	40	13	8.6	37	36
24	9.1	9.0	4.2	3.6	264	307	257	38	12	7.7	30	35
25	13	9.0	4.1	3.6	148	266	186	37	12	19	24	33
26	11	9.9	4.8	3.6	87	224	138	38	12	18	21	29
27	9.4	11	4.3	3.5	157	197	106	35	14	11	19	26
28	8.8	11	4.0	3.5	185	603	93	31	12	10	17	24
29	8.4	9.5	3.9	3.5	---	881	79	31	12	9.8	22	23
30	9.0	7.8	3.7	3.5	---	537	68	41	13	9.4	23	22
31	10	---	3.5	3.5	---	325	---	30	---	9.7	19	---
TOTAL	234.7	286.8	203.8	114.8	1507.6	9782	4094	3759	618	432.3	1923.7	1721
MEAN	7.57	9.56	6.57	3.70	53.8	316	136	121	20.6	13.9	62.1	57.4
MAX	13	12	9.0	4.3	264	984	386	612	38	54	448	301
MIN	4.6	7.8	3.5	3.4	3.3	72	48	30	12	7.7	8.1	10
CFSM	.05	.06	.04	.02	.34	1.99	.86	.76	.13	.09	.39	.36
IN.	.05	.07	.05	.03	.35	2.29	.96	.88	.14	.10	.45	.40

CAL YR 1976	TOTAL	44734.0	MEAN	122	MAX	1970	MIN	3.5	CFSM	.77	IN	10.47
WTR YR 1977	TOTAL	24677.7	MEAN	67.6	MAX	984	MIN	3.3	CFSM	.43	IN	5.77

03328000 EEL RIVER AT NORTH MANCHESTER, IN

LOCATION.--Lat 40°59'55", long 85°45'50", in NE¼NE¼ sec.5, T.29 N., R.7 E., Wabash County, Hydrologic Unit 05120104, on right bank 200 ft (61 m) downstream from Main Street bridge in North Manchester, 1.3 miles (2.1 km) upstream from Pony Creek, and at mile 52.7 (84.8 km). Records include flow of Pony Creek.

DRAINAGE AREA.--417 mi² (1,080 km²), includes that of Pony Creek.

PERIOD OF RECORD.--October 1929 to current year. Prior to April 1930, monthly discharge only, published in WSP 1305. Gage-height records since November 20, 1923 are available in the district office.

REVISED RECORDS.--WSP 1275: 1930-37, 1939, 1940(M), 1942, 1948. WSP 1909: 1957. WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 738.00 ft (224.942 m) above mean sea level. Prior to July 24, 1953, nonrecording gage on downstream side of Second Street bridge, 700 ft (213 m) upstream at same datum.

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

AVERAGE DISCHARGE.--48 years, 351 ft³/s (9.940 m³/s), 11.43 in/yr (290 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,940 ft³/s (225 m³/s) Dec. 22, 1967, gage height, 13.55 ft (4.130 m); maximum gage height, 14.00 ft (4.267 m) Feb. 27, 1936; minimum daily discharge, 16 ft³/s (0.45 m³/s) Oct. 19, 1956.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 2,200 ft³/s (62.3 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)	
Mar. 04	2400	*2840	80.4	*8.31	2.533
Mar. 29	0600	2590	73.3	7.72	2.353

Minimum daily discharge, 35 ft³/s (0.99 m³/s) Jan. 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	68	69	75	43	42	396	865	229	90	1830	71	100
2	69	69	70	42	44	302	1300	221	91	1340	71	293
3	68	66	68	44	46	293	1620	259	93	776	72	255
4	68	65	66	46	46	2230	1050	271	93	452	73	154
5	69	63	67	48	43	2630	1030	281	92	303	76	125
6	112	62	68	49	41	2020	908	306	91	228	465	112
7	112	61	72	50	40	1510	728	290	90	192	359	101
8	99	58	70	51	48	946	603	240	89	172	211	91
9	92	58	65	50	64	748	488	210	113	155	163	87
10	84	59	65	47	73	645	720	191	101	139	437	83
11	77	58	65	46	89	533	370	179	104	134	493	80
12	75	58	64	48	121	485	328	167	107	150	710	83
13	70	58	64	49	184	548	297	157	100	139	357	201
14	70	58	65	47	296	485	276	150	97	127	234	1160
15	70	56	68	43	263	415	255	142	93	115	172	717
16	70	56	67	39	213	361	237	134	89	109	144	778
17	69	62	66	35	183	320	226	130	86	125	378	792
18	70	61	65	36	157	716	218	125	90	116	204	1520
19	69	59	62	37	148	1120	209	121	94	104	142	1670
20	79	59	54	38	152	1010	204	118	89	98	125	1170
21	77	61	50	39	146	981	199	115	83	106	119	725
22	75	61	49	40	208	728	206	112	82	165	122	504
23	76	58	49	41	960	621	366	110	82	121	138	383
24	79	55	52	42	1740	728	668	106	80	103	121	325
25	76	58	55	44	1300	728	523	104	78	87	109	311
26	72	83	59	46	738	688	388	107	76	80	100	273
27	68	124	64	44	574	597	314	103	75	75	97	238
28	68	118	63	39	547	1600	282	101	80	74	96	214
29	65	98	61	36	---	2500	280	101	125	73	109	195
30	68	82	52	39	---	2020	252	121	264	72	104	181
31	76	---	46	40	---	1460	---	94	---	72	97	---
TOTAL	2360	2013	1926	1338	8506	30364	15410	5095	2917	7832	6169	12921
MEAN	76.1	67.1	62.1	43.2	304	979	514	164	97.2	253	199	431
MAX	112	124	75	51	1740	2630	1620	306	264	1830	710	1670
MIN	65	55	46	35	40	293	199	94	75	72	71	80
CFSM	.18	.16	.15	.10	.73	2.35	1.23	.39	.23	.61	.48	1.03
IN.	.21	.18	.17	.12	.76	2.71	1.37	.45	.26	.70	.55	1.15

CAL YR 1976	TOTAL	107833	MEAN 295	MAX 3650	MIN 46	CFSM .71	IN 9.62
WTR YR 1977	TOTAL	96851	MEAN 265	MAX 2630	MIN 35	CFSM .64	IN 8.64

03328430 WEESAU CREEK NEAR DEEDSVILLE, IN

LOCATION.--Lat 40°54'34", long 86°07'36", in NW¼NW¼ sec.6, T.28 N., R.4 E., Miami County, Hydrologic Unit 05120104, on left bank 100 ft (30 m) downstream from bridge on County Road 1000 North, and 1.5 miles (2.4 km) west of Deedsville.

DRAINAGE AREA.--8.87 mi² (22.97 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 785.00 ft (239.268 m) above mean sea level.

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

AVERAGE DISCHARGE.--7 years, 9.32 ft³/s (0.264 m³/s), 14.27 in/yr (362 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 283 ft³/s (8.01 m³/s) Feb. 4, 1971, gage height, 5.83 ft (1.777 m); minimum daily, 0.26 ft³/s (0.007 m³/s) Feb. 1, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 75 ft³/s (2.12 m³/s) (revised) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)	
Mar. 04	1500	119	3.37	4.11	1.253
Mar. 28	1600	*145	4.11	*4.44	1.353
Aug. 10	1100	121	3.43	4.06	1.237

Minimum daily discharge, 0.26 ft³/s (0.007 m³/s) Feb. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.62	1.1	1.0	.30	.26	9.6	12	3.8	1.4	23	.47	1.2
2	.62	1.0	.90	.31	.27	7.3	46	4.6	1.4	8.9	.47	5.1
3	.60	.94	.84	.32	.27	19	29	5.3	1.4	3.8	.47	6.8
4	.61	.97	.80	.34	.27	98	16	6.2	1.4	2.2	.47	2.8
5	.81	.93	.80	.34	.28	57	15	7.5	1.7	1.7	2.4	1.8
6	3.5	.88	.83	.34	.28	26	12	8.6	8.5	1.3	30	1.5
7	1.8	.83	.86	.33	.29	15	10	7.8	3.9	1.1	13	1.4
8	1.2	.79	.80	.32	.30	12	9.0	5.9	2.8	1.0	5.7	1.2
9	1.0	.79	.83	.32	.31	11	7.7	4.7	2.4	.97	3.4	1.0
10	.79	1.0	.71	.33	.99	10	7.1	4.1	2.1	.89	68	.94
11	.79	.83	.72	.30	3.0	8.9	6.2	3.6	2.3	1.1	55	.90
12	.79	.79	.66	.29	10	11	5.6	3.2	2.1	1.1	28	.96
13	.70	.71	.64	.29	7.0	14	5.1	3.0	2.0	.92	15	8.5
14	.77	.70	.62	.29	5.0	12	4.8	2.8	1.9	.84	8.6	27
15	.70	.69	.60	.29	3.2	9.7	4.4	2.5	1.7	.82	6.2	19
16	.70	.65	.63	.29	2.4	7.6	4.3	2.4	1.6	.87	4.1	19
17	.78	.67	.63	.29	1.9	6.5	4.1	2.4	1.5	.87	2.9	11
18	1.2	.70	.67	.29	1.7	47	3.8	2.4	2.4	.84	2.1	7.9
19	1.7	.69	.66	.29	3.4	31	3.7	2.2	2.3	.80	1.7	8.3
20	2.1	.68	.84	.29	5.8	20	3.6	2.2	1.8	.72	1.5	6.2
21	1.6	.70	.50	.29	6.6	16	3.4	1.8	1.5	.75	1.4	4.6
22	1.2	.70	.33	.29	14	13	5.0	1.8	1.4	.70	1.3	3.7
23	1.3	.65	.36	.28	50	14	7.9	1.6	1.4	.63	1.1	3.0
24	1.8	.64	.32	.28	61	19	6.9	1.6	1.4	.63	1.0	3.0
25	1.5	.81	.36	.28	34	17	5.8	1.5	1.2	.63	.94	2.8
26	1.3	1.6	.39	.28	17	15	5.1	1.5	1.1	.56	.88	2.5
27	1.1	2.8	.35	.28	17	15	4.5	1.5	1.0	.52	.88	2.1
28	1.1	1.9	.32	.28	13	87	4.5	1.5	1.1	.52	.79	1.9
29	.98	1.4	.31	.28	---	68	4.3	1.4	1.2	.52	2.3	1.8
30	1.2	1.1	.30	.28	---	30	4.1	1.4	14	.52	2.0	1.8
31	1.3	---	.30	.27	---	17	---	1.4	---	.52	1.4	---
TOTAL	36.16	28.64	18.88	9.25	259.52	743.6	260.9	102.2	71.9	60.24	263.47	159.70
MEAN	1.17	.95	.61	.30	9.27	24.0	8.70	3.30	2.40	1.94	8.50	5.32
MAX	3.5	2.8	1.0	.34	.61	98	46	8.6	14	23	68	27
MIN	.60	.64	.30	.27	.26	6.5	3.4	1.4	1.0	.52	.47	.90
CFSM	.13	.11	.07	.03	1.05	2.71	.98	.37	.27	.22	.96	.60
IN.	.15	.12	.08	.04	1.09	3.12	1.09	.43	.30	.25	1.10	.67

CAL YR 1976 TOTAL 2433.64 MEAN 6.65 MAX 117 MIN .30 CFSM .75 IN 10.21
WTR YR 1977 TOTAL 2014.46 MEAN 5.52 MAX 98 MIN .26 CFSM .62 IN 8.45

03328500 FEL RIVER NEAR LOGANSPOET, IN

LOCATION.--Lat 40°46'55", long 86°15'50", in NE¼SE¼ sec.14, T.27 N., R.2 E., Cass County, Hydrologic Unit 05120105, on right bank at downstream side of bridge on Adamsboro Road, 5.5 miles (8.8 km) northeast of Logansport, and 7.4 miles (11.9 km) upstream from mouth.

DRAINAGE AREA.--789 mi² (2,044 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1943 to current year. Monthly discharge only for some periods, published in WSP 1305.

REVISED RECORDS.--WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 621.50 ft (189.433 m) above mean sea level. Prior to Aug. 16, 1956, nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter periods and period of no gage-height record, Jan. 5 to Feb. 9, which are poor.

AVERAGE DISCHARGE.--34 years, 724 ft³/s (20.50 m³/s), 12.46 in/yr (316 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,200 ft³/s (402 m³/s) Dec. 9, 1966, gage height, 12.20 ft (3.719 m); minimum daily, 70 ft³/s (1.98 m³/s) Mar. 15, 1960, result of freezeup.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of May 18, 1943, reached a stage of 13.2 ft (4.02 m), from floodmark, discharge, 17,000 ft³/s (481 m³/s).

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 5,000 ft³/s (142 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Mar. 05	0800	*5610 159	*8.03 2.448	Mar. 29	1300	5400 153	7.92 2.414

Minimum daily discharge, 82 ft³/s (2.32 m³/s) Jan. 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	161	183	178	98	97	882	1840	494	238	1570	199	276
2	160	184	174	95	105	658	2060	508	221	2610	193	448
3	156	175	172	101	112	603	3250	527	215	1780	192	1090
4	154	170	166	105	111	3190	2260	602	210	1150	192	804
5	154	166	163	108	107	5480	1760	711	221	758	204	502
6	195	157	167	114	98	3900	1690	796	245	527	520	404
7	207	150	173	118	96	2690	1360	753	243	418	1590	368
8	209	144	173	122	100	1910	1150	660	231	369	947	325
9	191	144	171	121	123	1370	979	558	255	331	634	293
10	181	144	169	112	139	1180	848	490	462	301	1080	280
11	175	144	168	107	150	1020	752	448	315	296	2370	264
12	169	144	167	113	187	930	673	419	340	302	1850	257
13	166	142	164	120	270	1020	609	396	342	317	1360	837
14	163	142	162	118	430	1010	566	376	283	302	913	3090
15	159	140	164	100	560	864	540	356	257	273	697	2740
16	159	140	163	87	445	733	514	336	238	260	552	2370
17	158	141	160	82	370	642	489	320	225	251	465	1770
18	160	142	158	84	320	1470	471	309	255	267	678	1820
19	166	142	159	88	280	2410	454	301	240	264	503	2640
20	174	142	149	90	288	1860	442	295	216	245	390	2370
21	175	143	138	92	274	1750	428	293	209	233	355	1670
22	177	144	131	93	292	1480	448	282	200	302	330	1220
23	175	142	126	94	710	1230	552	270	196	437	321	960
24	179	141	124	98	3110	1350	857	262	195	334	322	801
25	181	142	135	106	2940	1450	1000	283	193	325	299	708
26	183	157	148	110	1700	1410	823	256	191	264	280	659
27	179	188	156	107	1180	1290	673	248	189	229	264	585
28	175	218	160	95	1120	2790	585	243	190	210	251	514
29	172	209	154	85	---	5200	556	233	193	202	292	460
30	174	182	129	88	---	3990	532	230	226	201	309	426
31	179	---	106	93	---	2750	---	244	---	201	302	---
TOTAL	5366	4702	4827	3144	15714	58512	29161	12499	7234	15529	18854	30951
MEAN	173	157	156	101	561	1887	972	403	241	501	608	1032
MAX	209	218	178	122	3110	5480	3250	796	462	2610	2370	3090
MIN	154	140	106	82	96	603	428	230	189	201	192	257
CFSM	.22	.20	.20	.13	.71	2.39	1.23	.51	.31	.64	.77	1.31
IN.	.25	.22	.23	.15	.74	2.76	1.37	.59	.34	.73	.89	1.46
CAL YR 1976	TOTAL	226175	MEAN 618	MAX 6760	MIN 106	CFSM .78	IN 10.66					
WTR YR 1977	TOTAL	206493	MEAN 566	MAX 5480	MIN 82	CFSM .72	IN 9.74					

03328500 EEL RIVER NEAR LOGANSPOET, IN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

WATER TEMPERATURE: October 1969 to current year.

SEDIMENT DISCHARGE: August 1969 to current year.

EXTREMES FOR PERIOD OF RECORD.--

WATER TEMPERATURE: Maximum, 30.0°C June 29, 1971, July 15, 19, 21, 1977; minimum, freezing point on many days during winter periods.

SEDIMENT CONCENTRATION: Maximum daily, 1,790 mg/L June 15, 1975; minimum daily, 5 mg/L Jan. 17 to Feb. 7, 20, 21, 1977.

SEDIMENT DISCHARGE: Maximum daily, 26,400 tons (23,900 tonnes) June 15, 1975; minimum daily, 0.68 tons (0.62 tonnes) Nov. 6, 1975.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 30.0°C July 15, 19, 21; minimum, 0.0°C during winter period.

SEDIMENT CONCENTRATION: Maximum daily, 972 mg/L July 2; minimum daily, 5 mg/L Jan. 17 to Feb. 7, 20, 21, 1977.

SEDIMENT DISCHARGE: Maximum daily, 8,550 tons (7,760 tonnes) Mar. 5; minimum daily, 1.1 tons (1.0 tonnes) Jan. 17, 18.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	8.0	1.0		---	3.0	12.0	17.0	22.0	23.0	---	---
2	18.0	---	---		---	3.0	14.0	---	---	22.0	24.0	25.0
3	---	---	1.0		---	3.0	12.0	17.0	22.0	23.0	---	24.0
4	17.0	---	---		---	4.0	12.0	---	---	24.0	25.0	24.0
5	---	7.0	1.0		---	3.0	9.0	21.0	24.0	28.0	---	---
6	15.0	---	---		---	3.0	8.0	19.0	---	---	24.0	24.0
7	---	5.0	1.0		---	4.0	9.0	21.0	20.0	28.0	23.0	---
8	14.0	---	---		---	4.0	10.0	18.0	---	---	23.0	24.0
9	---	5.0	1.0		---	8.0	11.0	---	21.0	28.0	22.0	---
10	13.0	---	---		0.0	10.0	15.0	19.0	---	---	24.0	22.0
11	---	5.0	2.0		---	11.0	12.0	---	21.0	26.0	23.0	---
12	16.0	4.0	---		1.0	11.0	18.0	20.0	---	---	23.0	20.0
13	---	---	1.0		---	10.0	20.0	---	19.0	28.0	22.0	18.0
14	15.0	---	---		1.0	11.0	---	22.0	---	---	23.0	19.0
15	---	3.0	2.0		1.0	13.0	18.0	---	24.0	30.0	25.0	19.0
16	11.0	---	---		1.0	10.0	---	24.0	---	---	25.0	19.0
17	---	4.0	0.0		---	9.0	21.0	---	---	29.0	---	20.0
18	11.0	---	---		1.0	11.0	---	26.0	---	---	23.0	22.0
19	---	5.0	---		---	10.0	20.0	---	26.0	30.0	---	22.0
20	9.0	---	1.0		1.0	10.0	---	27.0	---	---	21.0	19.0
21	---	3.0	1.0		---	12.0	18.0	---	26.0	30.0	---	18.0
22	8.0	---	---		2.0	10.0	---	26.0	---	---	22.0	19.0
23	---	3.0	---		4.0	6.0	11.0	---	23.0	27.0	---	20.0
24	8.0	---	1.0		2.0	7.0	12.0	27.0	---	---	---	19.0
25	---	5.0	---		3.0	8.0	12.0	---	26.0	26.0	20.0	20.0
26	8.0	---	---		0.0	9.0	15.0	26.0	---	---	---	20.0
27	---	7.0	---		2.0	10.0	17.0	---	25.0	25.0	25.0	20.0
28	7.0	---	2.0		3.0	12.0	14.0	26.0	---	---	---	---
29	---	1.0	---		---	12.0	16.0	---	24.0	25.0	25.0	18.0
30	7.0	---	---		---	14.0	---	27.0	---	---	---	---
31	---	---	---		---	11.0	---	---	---	27.0	26.0	---
MAX	18.0	8.0	2.0		4.0	14.0	21.0	27.0	26.0	30.0	26.0	25.0
MIN	7.0	1.0	0.0		0.0	3.0	8.0	17.0	19.0	22.0	20.0	18.0

WATER-QUALITY RECORDS

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)
OCTOBER			NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	42	18	64	32	53	25	23	6.1	5	1.3	32	76
2	42	18	62	31	50	23	18	4.6	5	1.4	22	39
3	43	18	59	28	48	22	18	4.9	5	1.5	20	33
4	45	19	55	25	46	21	18	5.1	5	1.5	354	3050
5	43	18	51	23	44	19	18	5.2	5	1.4	578	4550
6	47	25	47	20	43	19	18	5.5	5	1.3	223	2350
7	55	31	42	17	40	19	18	5.7	5	1.3	138	1000
8	64	36	41	16	36	17	18	5.9	6	1.6	93	480
9	54	28	40	16	32	15	17	5.6	8	2.7	63	233
10	50	24	39	15	29	13	16	4.8	10	3.8	48	153
11	47	22	38	15	26	12	15	4.3	11	4.5	41	113
12	45	21	37	14	23	10	15	4.6	12	6.1	48	121
13	43	19	37	14	20	8.9	15	4.9	13	9.5	49	135
14	42	18	36	14	32	14	13	4.1	19	22	44	120
15	40	17	35	13	53	23	9	2.4	23	35	40	93
16	39	17	35	13	58	26	7	1.6	13	16	36	71
17	38	16	35	13	57	25	5	1.1	10	10	33	57
18	37	16	37	14	54	23	5	1.1	8	6.9	147	583
19	38	17	39	15	50	21	5	1.2	7	5.3	214	1390
20	45	21	39	15	45	18	5	1.2	5	3.9	73	367
21	47	22	38	15	27	10	5	1.2	5	3.7	54	255
22	46	22	37	14	18	6.4	5	1.3	17	13	45	180
23	46	22	36	14	19	6.5	5	1.3	174	334	27	90
24	61	29	35	13	24	8.0	5	1.3	394	3310	26	95
25	66	32	35	13	30	11	5	1.4	380	3020	32	125
26	63	31	42	18	34	14	5	1.5	153	702	32	122
27	58	28	52	26	37	16	5	1.4	62	198	38	132
28	54	26	64	38	40	17	5	1.3	41	124	305	2300
29	49	23	68	38	38	16	5	1.1	---	---	508	7130
30	48	23	59	29	34	12	5	1.2	---	---	318	3430
31	57	28	---	---	28	8.0	5	1.3	---	---	179	1330
TOTAL	---	705	---	581	---	498.8	---	94.2	---	7841.7	---	34203
APRIL			MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	104	517	23	31	60	39	673	2850	71	38	44	33
2	183	1020	37	51	52	31	972	6850	67	35	116	140
3	353	3100	40	57	56	33	416	2000	67	35	176	518
4	154	940	42	68	58	33	229	711	68	35	85	185
5	88	418	43	83	69	41	150	307	71	39	57	77
6	112	511	67	144	80	53	107	152	126	177	49	53
7	64	235	47	96	68	45	82	93	205	880	47	47
8	41	127	50	89	63	39	66	66	124	317	52	46
9	39	103	52	78	78	54	57	51	95	163	58	46
10	43	98	52	69	144	180	53	43	232	677	55	42
11	47	95	51	62	76	65	57	46	289	1850	52	37
12	46	84	49	55	110	101	54	44	168	839	49	34
13	44	72	48	51	96	89	63	54	170	624	139	314
14	42	64	47	48	75	57	58	47	95	234	324	2700
15	40	58	45	43	70	49	50	37	73	137	229	1690
16	39	54	44	40	69	44	46	32	60	89	123	787
17	37	49	43	37	67	41	51	35	53	67	108	516
18	35	45	42	35	65	45	64	46	92	168	134	658
19	34	42	40	33	63	41	56	40	59	80	231	1650
20	34	41	37	29	60	35	47	31	61	64	140	896
21	34	39	35	28	55	31	44	28	64	61	108	487
22	33	40	33	25	51	28	70	57	65	58	87	287
23	42	63	32	23	47	25	126	149	65	56	72	187
24	53	123	31	22	44	23	77	69	75	65	56	121
25	43	116	49	37	42	22	117	103	78	63	49	94
26	19	42	42	29	41	21	79	56	69	52	52	93*
27	17	31	34	23	40	20	61	38	60	43	51	81
28	15	24	30	20	39	20	61	35	52	35	49	68
29	19	29	28	18	38	20	65	35	43	34	47	58
30	22	32	27	17	50	31	66	36	43	36	45	52
31	---	---	53	35	---	---	69	37	47	38	---	---
TOTAL	---	8212	---	1476	---	1356	---	14178	---	7089	---	11997
TOTAL LOAD FOR YEAR:			88231.7 TONS.									

TOTAL LOAD FOR YEAR: 88231.7 TONS.

03329000 WABASH RIVER AT LOGANSPOET, IN

LOCATION.--Lat 40°44'47", long 86°22'39", in SW¼NE¼ sec.35, T.27 N., R.1 E., Cass County, Hydrologic Unit 05120105, on left bank 150 ft (46 m) downstream from Cicott Street bridge in Logansport, 1,000 ft (305 m) downstream from Fel River, and at mile 353.7 (569.1 km).

DRAINAGE AREA.--3,779 mi² (9,788 km²).

PERIOD OF RECORD.--April to September, November and December 1903, March to November 1904, March 1905 to July 1906, May 1923 to current year. January, February, and December 1904, January and February 1905 (gage heights only). Gage-height records collected at same site December 1910 to December 1916, and since January 1926 are contained in reports of National Weather Service.

REVISED RECORDS.--WSP 783: 1934. WSP 1335: 1904, 1925(M), 1926-30, 1931(M), 1932-35, 1937-39, 1948. WSP 1385: 1903, 1905-6, 1923-25. WSP 1505: 1906(M). WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 573.28 ft (174.736 m) above mean sea level (levels by Corps of Engineers). See WSP 1705 for history of changes prior to Oct. 1, 1927.

REMARKS.--Records excellent except those for winter periods, which are fair. Flow partially regulated by Huntington Lake (See sta 03323450), Salamonie Lake (See sta 03324450), and Mississinewa Lake (See sta 03326950).

AVERAGE DISCHARGE.--54 years (1923 to current year), 3,267 ft³/s (92.5 m³/s), 11.74 in/yr (298 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 89,800 ft³/s (2,540 m³/s) May 18, 1943, gage height, 21.32 ft (6.500 m); minimum daily, 135 ft³/s (3.82 m³/s) Sept. 26, 1941.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, 25.3 ft (7.711 m) Mar. 26, 1913, from floodmarks, discharge, 140,000 ft³/s (3,960 m³/s).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 16,700 ft³/s (473 m³/s) Mar. 5, gage height, 9.12 ft (2.780 m); minimum daily, 310 ft³/s (8.78 m³/s) Jan. 20-23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	775	1180	936	380	340	4090	7970	1100	502	1400	376	587
2	762	1200	625	390	340	7170	8370	1170	477	2900	354	720
3	810	1180	971	400	340	5880	9130	1290	470	2360	346	1140
4	853	1070	892	410	330	12200	8660	1510	467	1410	351	1190
5	872	1050	536	420	320	15600	7070	3680	487	982	448	1120
6	948	1050	493	400	320	12700	6470	3870	516	753	794	930
7	1020	1030	452	380	320	9450	4420	5180	543	629	1650	770
8	1060	1060	437	370	320	9510	3100	4930	490	562	1410	850
9	1070	1050	406	360	320	8020	2320	4120	532	776	1140	841
10	1070	1030	432	350	320	7400	1920	3680	756	915	2730	826
11	1090	1030	433	340	330	5480	1660	3060	687	1080	5220	802
12	1100	971	413	330	350	3230	1500	1970	620	989	4100	799
13	1070	962	435	340	1050	3040	1230	1530	750	865	4700	2060
14	1040	964	415	350	1330	2770	1080	1290	674	712	2450	7630
15	1020	957	431	350	1310	2290	1010	1050	571	616	1580	6500
16	1110	979	404	350	1190	1730	962	941	523	535	1750	5040
17	1130	972	394	340	1100	1400	925	874	488	496	2170	4030
18	1100	963	391	330	999	2850	882	849	523	469	2800	3340
19	1120	958	393	320	982	7590	843	816	490	470	2510	3860
20	1160	977	404	310	1000	7470	803	774	450	445	1660	3780
21	1180	975	400	310	988	6500	769	761	435	459	1310	3420
22	1240	980	390	310	1020	5130	819	732	417	595	1180	3070
23	1180	970	410	310	2130	3780	1020	713	411	733	1150	2770
24	1180	986	420	320	5070	3590	2500	686	403	683	1270	2570
25	1160	985	420	320	5400	4390	2770	641	398	711	911	2450
26	1160	1040	420	320	3350	4640	2130	542	386	583	755	2370
27	1150	1090	410	320	2920	3620	1800	534	378	481	613	2260
28	1140	1090	400	320	3550	6370	1570	535	398	452	535	2110
29	1150	1080	390	320	---	13400	1440	516	389	432	613	1910
30	1170	1080	380	320	---	10000	1270	512	433	404	631	1870
31	1190	---	370	330	---	8350	---	527	---	386	614	---
TOTAL	33080	30909	14703	10720	37339	199640	86413	50383	15064	25283	48121	71615
MEAN	1067	1030	474	346	1334	6440	2880	1625	502	816	1552	2387
MAX	1240	1200	971	420	5400	15600	9130	5180	756	2900	5220	7630
MIN	762	957	370	310	320	1400	769	512	378	386	346	587
CFSM	.28	.27	.13	.09	.35	1.70	.76	.43	.13	.22	.41	.63
IN.	.33	.30	.14	.11	.37	1.97	.85	.50	.15	.25	.47	.70
CAL YR 1976	TOTAL	997613	MEAN	2726	MAX	20900	MIN	294	CFSM	.72	IN	9.82
WTR YR 1977	TOTAL	623270	MEAN	1708	MAX	15600	MIN	310	CFSM	.45	IN	6.14

WABASH RIVER BASIN

03329400 RATTLESNAKE CREEK NEAR PATTON, IN

LOCATION.--Lat 40°42'46", long 86°41'49", in NW¼SW¼ sec.7, T.26 N., R.2 W., Carroll County, Hydrologic Unit 05120105, on left bank 5 ft (2 m) downstream from bridge on County Road 900 West, and 2.5 miles (4.0 km) northeast of Patton.

DRAINAGE AREA.--6.83 mi² (17.69 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 645.97 ft (196.892 m) above mean sea level.

REMARKS.--Records good except those for no gage-height record, Apr. 13 to May 17, and winter periods, which are fair.

AVERAGE DISCHARGE.--9 years, 7.20 ft³/s (0.204 m³/s), 14.32 in/yr (364 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 224 ft³/s (6.34 m³/s) June 14, 1975, gage height, 4.30 ft (1.311 m); minimum daily discharge, 0.14 ft³/s (0.004 m³/s) Sept. 23, 1974.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 65 ft³/s (1.84 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Aug. 10	0900	138 3.91	3.71 1.13
Sept. 13	1800	*152 4.30	*3.84 1.17

Minimum daily discharge, 0.06 ft³/s (0.002 m³/s) Jan 14-31, Feb. 1, 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.18	.40	.14	.10	.06	2.5	3.7	2.0	.92	.92	.21	2.2
2	.21	.36	.14	.09	.06	2.2	1.6	6.6	.96	.64	.24	3.5
3	.21	.40	.13	.09	.07	4.2	9.2	6.4	.88	.64	.24	38
4	.28	.44	.13	.09	.07	14	7.0	8.6	.87	.55	.24	19
5	.24	.44	.12	.09	.08	8.4	5.7	11	1.2	.51	.53	11
6	.98	.44	.12	.08	.09	4.4	4.4	16	1.1	.51	19	7.6
7	.36	.48	.12	.08	.15	3.4	4.3	17	.91	.49	6.7	5.9
8	.28	.40	.12	.08	.35	3.1	3.5	8.0	.99	.49	7.6	4.5
9	.25	.44	.11	.07	.70	3.0	3.3	5.4	.93	.54	5.4	3.8
10	.28	.48	.11	.07	2.3	2.7	3.1	4.0	.89	.44	76	3.1
11	.28	.44	.11	.07	8.8	2.4	2.8	3.4	.94	.56	68	2.7
12	.28	.40	.11	.07	6.0	2.7	2.5	2.7	.91	.80	54	2.9
13	.28	.40	.11	.07	4.5	2.2	2.3	2.4	.89	.58	33	124
14	.28	.40	.11	.06	2.8	1.9	2.2	2.3	.85	.45	22	73
15	.32	.36	.12	.06	2.6	1.7	2.1	2.1	.80	.41	17	54
16	.40	.36	.12	.06	2.0	1.5	2.0	1.8	.77	.60	14	43
17	.44	.40	.11	.06	2.0	1.6	1.9	1.6	.78	.48	16	32
18	.40	.40	.11	.06	1.9	9.4	1.8	1.7	2.8	.39	9.4	37
19	.58	.40	.10	.06	2.0	4.6	2.1	1.6	1.2	.37	6.5	33
20	.48	.36	.09	.06	1.9	4.0	1.9	1.5	.96	.34	5.2	25
21	.48	.40	.09	.06	1.7	3.4	1.8	1.4	.80	.40	4.7	21
22	.48	.36	.09	.06	2.4	3.3	1.7	1.3	.80	.34	4.2	18
23	.40	.36	.09	.06	4.8	4.6	1.7	1.1	.80	.29	3.5	15
24	.48	.40	.09	.06	4.9	6.2	1.6	1.1	.74	.29	3.0	14
25	.40	.44	.10	.06	3.5	5.2	1.5	1.1	.68	.48	2.6	12
26	.36	.53	.12	.06	3.3	4.3	1.5	.95	.68	.24	2.4	10
27	.32	.40	.11	.06	2.9	4.1	1.4	.93	.68	.24	2.3	9.1
28	.32	.28	.11	.06	3.1	15	1.4	.93	.80	.24	2.3	7.3
29	.40	.18	.11	.06	---	13	1.4	.93	.68	.24	8.6	6.7
30	.48	.15	.10	.06	---	6.8	1.5	.87	.80	.24	6.2	6.1
31	.53	---	.10	.06	---	4.4	---	.82	---	.24	4.2	---
TOTAL	11.66	11.70	3.44	2.13	65.03	150.2	97.3	117.53	28.01	13.95	405.26	644.4
MEAN	.38	.39	.11	.069	2.32	4.85	3.24	3.79	.93	.45	13.1	21.5
MAX	.98	.53	.14	.10	8.8	15	16	17	2.8	.92	76	124
MIN	.18	.15	.09	.06	.06	1.5	1.4	.82	.68	.24	.21	2.2
CFSM	.06	.06	.02	.01	.34	.71	.47	.56	.14	.07	1.92	3.15
IN.	.06	.06	.02	.01	.35	.82	.53	.64	.15	.08	2.21	3.51
CAL YR 1976	TOTAL	1361.56	MEAN	3.72	MAX	68	MIN	.09	CFSM	.55	IN	7.41
WTR YR 1977	TOTAL	1550.61	MEAN	4.25	MAX	124	MIN	.06	CFSM	.62	IN	8.44

03329700 DEER CREEK NEAR DELPHI, IN

LOCATION.--Lat 40°35'25", long 86°37'15", in NE¼NE¼ sec.27, T.25 N., R.2 W., Carroll County, Hydrologic Unit 05120105, on downstream side of left wingwall of highway bridge, 2.6 miles (4.2 km) northeast of Delphi Post Office, and 4.8 miles (7.7 km) upstream from mouth.

DRAINAGE AREA.--274 mi² (710 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1943 to current year. Prior to March 1944 monthly discharge only, published in WSP 1305.

REVISED RECORDS.--WSP 1275: 1944, 1947-48. WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 553.81 ft (168.801 m) above mean sea level (Corps of Engineers bench mark, levels by State of Indiana, Department of Natural Resources).

REMARKS.--Records good except those for periods of no gage-height record, Dec. 22 to Feb. 8, and July 27 to Aug. 30, which are poor.

AVERAGE DISCHARGE.--34 years, 237 ft³/s (6.712 m³/s), 11.75 in/yr (298 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,400 ft³/s (408 m³/s) June 10, 1958, gage height, 18.26 ft (5.566 m); minimum daily, 6.2 ft³/s (0.18 m³/s) Sept. 25-28, 1954.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in May 1943 reached a stage of 19.8 ft (6.035 m), from floodmarks, discharge, 18,000 ft³/s (510 m³/s), from rating curve extended above 8,000 ft³/s (227 m³/s).

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 2,000 ft³/s (56.6 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Mar. 04	1600	*1260 35.7	*5.60 1.707

Minimum daily discharge, 15 ft³/s (0.42 m³/s) July 30, 31, Aug. 1-4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	30	27	19	18	173	298	73	35	30	15	35
2	22	31	25	19	19	131	377	108	33	24	15	34
3	21	29	24	19	20	150	465	238	32	22	15	30
4	19	28	26	20	21	960	369	408	31	20	15	28
5	21	28	24	20	21	920	345	404	35	18	20	28
6	42	28	25	19	21	494	285	380	37	17	35	28
7	46	27	27	19	21	311	227	311	35	16	48	27
8	33	26	27	18	21	228	198	257	36	20	74	26
9	29	27	27	18	24	190	167	212	37	18	70	25
10	26	27	28	17	129	165	154	175	36	20	400	24
11	24	26	27	17	177	140	142	149	37	35	450	22
12	22	26	28	17	342	134	128	130	34	44	350	25
13	21	26	25	16	451	143	117	116	33	45	250	272
14	21	26	28	16	397	136	113	105	33	34	150	719
15	21	26	28	16	303	117	106	96	31	28	100	476
16	21	26	27	16	240	99	98	86	29	25	78	410
17	21	27	27	16	207	87	92	77	27	22	100	286
18	22	27	27	16	186	403	88	71	49	19	220	215
19	24	28	28	17	179	535	83	67	34	19	150	177
20	28	27	29	17	171	380	81	76	28	18	100	138
21	27	27	35	17	157	309	77	72	25	25	120	110
22	27	27	30	18	160	274	84	61	25	25	90	91
23	28	27	25	18	226	274	104	56	25	23	72	80
24	33	26	23	19	509	367	133	53	25	20	58	76
25	31	27	22	18	270	337	134	50	24	20	48	75
26	31	32	22	18	183	282	119	47	23	17	39	74
27	31	38	22	17	179	249	101	45	22	17	36	65
28	28	33	22	17	220	523	91	43	23	16	32	59
29	28	32	21	17	---	1050	85	42	23	16	42	55
30	30	31	21	17	---	641	76	40	24	15	45	53
31	31	---	20	17	---	416	---	37	---	15	38	---
TOTAL	832	846	797	545	4872	10618	4937	4085	921	703	3275	3763
MEAN	26.8	28.2	25.7	17.6	174	343	165	132	30.7	22.7	106	125
MAX	46	38	35	20	509	1050	465	408	49	45	450	719
MIN	19	26	20	16	18	87	76	37	22	15	15	22
CFSM	.10	.10	.09	.06	.64	1.25	.60	.48	.11	.08	.39	.46
IN.	.11	.11	.11	.07	.66	1.44	.67	.55	.13	.10	.44	.51
CAL YR 1976	TOTAL	74044	MEAN	202	MAX	3510	MIN	19	CFSM	.74	IN	10.05
WTR YR 1977	TOTAL	36194	MEAN	99.2	MAX	1050	MIN	15	CFSM	.36	IN	4.91

WABASH RIVER BASIN
03329700 DEER CREEK NEAR DELPHI, IN

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

SEDIMENT DISCHARGE: August 1969 to current year (partial-record station).

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	SUS- PENDE SEDI- MENT (MG/L)	SUS- PENDE SEDI- MENT DIS- CHARGE (T/DAY)	DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	SUS- PENDE SEDI- MENT (MG/L)	SUS- PENDE SEDI- MENT DIS- CHARGE (T/DAY)
DEC 21...	1520	35	.0	14	1.3	JUN 22...	1330	25	--	35	2.3
MAR 08...	1600	221	8.0	23	13	JUL 27...	1000	16	24.0	25	1.1
APR 13...	1500	119	--	38	12	AUG 31...	1100	38	23.5	41	4.2
MAY 18...	0900	76	--	14	2.8	SEP 29...	1100	57	22.0	14	2.1

03330500 TIPPECANOE RIVER AT OSWEGO, IN

LOCATION.--Lat 41°19'14", long 85°47'21", in NE¼NE¼ sec.14, T.33 N., R.6 E., Kosciusko County, Hydrologic Unit 05120106, on left bank 10 ft (3 m) downstream from dam at Tippecanoe Lake Outlet in Oswego, 3 miles (5 km) east of Leesburg, and at mile 158.9 (255.7 km).

DRAINAGE AREA.--113 mi² (293 km²).

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

REVISED RECORDS.--WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 830.00 ft (252.984 m) above mean sea level. Prior to Aug. 12, 1953, nonrecording gage at same site and datum.

REMARKS.--Records good. Occasional regulation by flashboards at lake outlet.

AVERAGE DISCHARGE.--28 years, 97.8 ft³/s (2.770 m³/s), 11.76 in/yr (299 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 700 ft³/s (19.8 m³/s) Oct. 17, 1954, gage height, 8.64 ft (2.633 m); minimum daily, 0.08 ft³/s (0.002 m³/s) Aug. 4, 5, 1967.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 306 ft³/s (8.67 m³/s) Apr. 6, gage height, 7.66 ft (2.335 m); minimum daily, 8.1 ft³/s (0.23 m³/s) Oct. 24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	37	40	47	32	145	282	113	24	58	18	91
2	14	36	74	45	31	167	292	108	24	96	17	95
3	14	36	74	44	32	173	297	105	24	100	17	95
4	14	36	74	43	32	189	299	102	24	115	17	94
5	14	36	72	43	32	203	299	102	24	129	18	95
6	17	36	70	42	31	218	302	104	24	132	19	92
7	18	35	70	42	31	231	299	103	23	136	19	88
8	22	35	68	41	31	243	292	101	23	144	46	83
9	23	34	66	40	32	252	284	84	24	147	65	68
10	47	34	65	41	33	260	274	28	24	136	81	18
11	61	23	48	40	34	262	256	31	24	125	97	19
12	61	9.9	17	39	36	268	235	33	24	117	109	19
13	63	10	17	38	46	271	218	35	25	102	117	57
14	62	10	17	38	70	270	208	36	24	62	119	79
15	57	10	17	38	66	266	197	41	24	36	120	99
16	55	11	17	38	62	255	186	71	24	56	117	102
17	49	11	17	36	59	249	177	67	24	64	113	108
18	46	11	18	36	56	259	168	63	25	63	108	131
19	43	10	18	36	54	253	158	59	25	53	103	157
20	41	11	18	36	51	249	146	46	25	26	87	173
21	33	12	18	36	49	246	135	25	25	27	58	188
22	35	12	19	35	43	249	132	24	25	27	58	197
23	18	13	19	35	32	245	128	24	24	26	57	203
24	8.1	14	19	34	36	240	94	24	25	26	56	210
25	8.2	16	19	34	40	235	33	24	25	25	54	213
26	8.6	47	33	34	46	229	45	24	25	25	54	213
27	8.7	93	56	34	74	225	75	24	25	24	55	211
28	8.9	90	54	34	127	244	104	24	25	21	57	206
29	8.7	85	52	33	---	256	123	24	25	18	75	195
30	9.2	82	50	32	---	265	120	24	31	18	92	183
31	20	---	49	32	---	274	---	24	---	18	90	---
TOTAL	901.4	935.9	1311	1176	1298	7391	5858	1697	737	2152	2113	3782
MEAN	29.1	31.2	42.3	37.9	46.4	238	195	54.7	24.6	69.4	68.2	126
MAX	63	93	80	47	127	274	302	113	31	147	120	213
MIN	8.1	9.9	17	32	31	145	33	24	23	18	17	18
CFSM	.26	.28	.37	.34	.41	2.11	1.73	.48	.22	.61	.60	1.12
IN.	.30	.31	.43	.39	.43	2.43	1.93	.56	.24	.71	.70	1.25
CAL YR 1976	TOTAL	28296.3	MEAN 77.3	MAX 439	MIN 8.1	CFSM .68	IN 9.32					
WTR YR 1977	TOTAL	29352.3	MEAN 80.4	MAX 302	MIN 8.1	CFSM .71	IN 9.66					

WABASH RIVER BASIN

03331110 WALNUT CREEK NEAR WARSAW, IN

LOCATION.--Lat 41°12'17", long 85°52'11", in NW¼NE¼ sec.30, T.32 N., R.6 E., Kosciusko County, Hydrologic Unit 05120106, on left bank 10 ft (3 m) upstream from bridge on County Road 200 South, 0.3 mile (0.5 km) downstream from small right-bank tributary, and 2.5 miles (4.0 km) south of court house in Warsaw.

DRAINAGE AREA.--19.6 mi² (50.8 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 823.00 ft (250.850 m) above mean sea level.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--8 years, 15.8 ft³/s (0.447 m³/s), 10.95 in/yr (278 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 141 ft³/s (3.99 m³/s) Apr. 21, 1970, gage height (0.920 m); maximum gage height, 3.40 ft (1.04 m) Feb. 17, 1977; minimum daily discharge, 0.55 ft³/s (0.016 m³/s) Sept. 24, 1976.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 75 ft³/s (2.12 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Mar. 29	1400	75 2.12	2.64 0.805

Minimum daily discharge, 0.63 ft³/s (0.018 m³/s) Oct. 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.74	1.3	1.9	1.1	.77	34	39	11	2.0	37	.79	8.2
2	.74	2.1	1.9	1.1	.76	27	45	11	2.1	37	.77	14
3	.75	2.6	1.8	1.0	.76	21	48	14	2.0	30	.71	15
4	.68	2.4	1.8	1.0	.76	33	43	14	2.0	22	.65	13
5	.63	3.5	1.8	1.0	.76	49	39	15	2.3	16	1.6	11
6	1.3	6.6	1.7	1.0	.76	69	36	15	2.5	12	7.6	7.9
7	1.3	5.6	1.7	1.0	.76	48	31	14	2.2	8.9	18	5.6
8	1.3	6.2	1.6	.99	.76	37	26	12	2.3	7.0	27	4.0
9	1.2	4.8	1.6	.98	.78	31	23	10	2.7	5.6	27	2.9
10	1.2	3.6	1.6	.97	.80	28	21	8.9	2.5	4.5	21	2.0
11	1.1	2.9	1.5	.96	1.1	25	19	7.9	2.9	3.9	20	1.5
12	1.0	2.5	1.5	.95	1.7	27	18	7.1	2.8	3.9	20	1.3
13	.91	1.9	1.5	.94	2.5	32	16	6.6	2.7	3.9	15	7.6
14	.87	1.7	1.4	.93	4.0	32	15	6.1	2.4	4.0	10	10
15	.85	2.1	1.4	.92	3.6	29	14	5.7	2.2	4.1	8.2	17
16	.82	2.2	1.4	.91	3.2	26	13	5.2	2.1	4.0	7.3	28
17	.84	1.5	1.4	.90	2.8	23	12	5.0	2.8	3.6	24	45
18	.81	1.5	1.3	.89	2.5	30	12	4.7	3.4	4.0	24	50
19	.83	1.5	1.3	.88	3.5	42	11	4.5	2.1	2.0	20	46
20	1.0	1.4	1.3	.86	5.0	44	11	4.2	1.6	1.7	18	41
21	1.0	1.4	1.3	.86	7.2	42	10	3.7	1.4	1.8	14	37
22	1.1	1.5	1.2	.85	11	38	12	3.5	1.2	2.2	10	33
23	1.1	1.6	1.2	.84	15	34	16	3.4	1.1	2.4	7.6	30
24	1.4	2.5	1.2	.83	24	32	16	3.0	1.1	2.0	5.6	26
25	1.3	1.2	1.2	.82	33	31	16	2.8	1.1	1.6	4.0	26
26	1.3	1.6	1.2	.81	49	30	15	2.6	1.0	1.3	2.9	22
27	1.2	2.0	1.2	.80	50	28	13	2.2	.91	1.1	2.3	18
28	1.1	2.1	1.1	.80	45	51	13	2.0	1.1	1.0	1.7	15
29	1.1	2.0	1.1	.79	---	73	13	2.1	2.2	1.0	6.7	12
30	1.3	2.0	1.1	.78	---	67	12	2.3	18	.93	9.2	10
31	1.4	---	1.1	.78	---	51	---	2.2	---	.88	7.6	---
TOTAL	32.17	75.8	44.3	28.24	271.77	1164	628	211.7	76.71	231.31	343.22	560.0
MEAN	1.04	2.53	1.43	.91	9.71	37.5	20.9	6.83	2.56	7.46	11.1	18.7
MAX	1.4	6.6	1.9	1.1	50	73	48	15	18	37	27	50
MIN	.63	1.2	1.1	.78	.76	21	10	2.0	.91	.88	.65	1.3
CFSM	.05	.13	.07	.05	.50	1.91	1.07	.35	.13	.38	.57	.95
IN.	.06	.14	.08	.05	.52	2.21	1.19	.40	.15	.44	.65	1.06

CAL YR 1976	TOTAL	4300.45	MEAN 11.7	MAX 122	MIN .55	CFSM .60	IN 8.16
WTR YR 1977	TOTAL	3667.22	MEAN 10.0	MAX 73	MIN .63	CFSM .51	IN 6.96

03331500 TIPPECANOE RIVER NEAR ORA, IN

LOCATION.--Lat 41°09'26", long 86°33'49", in SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 6, T.31 N., R.1 W., Pulaski County, Hydrologic Unit 05120106, on right bank at downstream side of highway bridge, 1.0 mile (1.6 km) upstream from Bartee ditch, 1.3 miles (2.1 km) southwest of Ora, and at mile 78.5 (126.3 km).

DRAINAGE AREA.--856 mi² (2,217 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 1943 to current year. Monthly discharge only for some periods, published in WSP 1305.

REVISED RECORDS.--WSP 1335: 1944(M). WSP 1505: 1949-50(P). WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 694 ft (212 m) (by barometer). Prior to July 30, 1956, nonrecording gage on upstream side of old highway bridge, 120 ft (37 m) downstream from present gage. July 30, 1956 to Dec. 20, 1964, water-stage recorder on right bank at downstream side of old highway bridge, and Dec. 21, 1964, to Aug. 19, 1965, nonrecording gage on right bank 500 ft (152 m) downstream from present site. All gages at same datum.

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

AVERAGE DISCHARGE.--34 years, 804 ft³/s (22.77 m³/s), 12.75 in/yr (324 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,800 ft³/s (221 m³/s) Apr. 5, 1950, gage height, 14.40 ft (4.389 m) site then in use; minimum daily, 87 ft³/s (2.46 m³/s) Sept. 13, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 2,300 ft³/s (65.1 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Feb. 26	0300	3150 89.2	10.98 3.347	Apr. 04	0300	2980 84.4	10.44 3.182
Mar. 30	1700	*3680 104	*11.11 3.386				

Minimum daily discharge, 184 ft³/s (5.21 m³/s) Aug. 4, 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	224	268	270	232	212	1100	2370	639	291	922	202	365
2	212	270	250	234	210	963	2100	660	287	1380	194	398
3	205	267	240	236	215	887	2130	724	281	1210	188	445
4	201	283	255	240	210	1140	2230	752	273	997	184	457
5	200	303	260	235	210	1730	2030	802	275	898	184	467
6	240	289	260	230	210	1830	1870	909	304	813	225	464
7	278	283	260	225	210	1610	1760	947	304	693	400	417
8	301	278	256	222	210	1500	1640	894	291	577	436	384
9	308	274	256	220	210	1440	1530	849	324	509	481	366
10	289	267	250	220	220	1360	1440	799	303	461	551	347
11	265	262	250	220	240	1250	1340	719	307	432	739	327
12	249	259	245	220	280	1210	1260	644	327	425	797	313
13	237	255	240	225	315	1280	1190	570	327	412	792	326
14	243	251	240	230	340	1300	1140	525	318	392	712	530
15	241	245	235	230	320	1240	1090	496	302	372	636	731
16	238	235	235	230	280	1150	1030	468	291	357	552	848
17	238	233	240	230	290	1070	978	445	284	339	498	1020
18	237	233	250	230	305	1130	937	432	299	322	457	1190
19	236	232	255	230	330	1380	880	428	325	315	436	1230
20	242	232	240	230	360	1410	847	422	333	306	421	1220
21	243	230	235	230	400	1420	827	417	310	294	407	1210
22	246	232	232	230	490	1440	829	403	286	299	396	1210
23	248	228	232	228	900	1430	862	384	269	275	383	1210
24	254	225	230	225	1650	1450	864	358	257	253	372	1180
25	252	228	240	223	2360	1470	835	350	248	245	349	1120
26	252	239	230	220	2470	1450	816	334	240	235	326	1030
27	243	284	230	220	1490	1420	775	322	234	225	306	931
28	235	308	230	220	1250	1680	712	315	230	216	291	854
29	235	308	230	218	---	2330	674	304	242	211	327	802
30	244	290	230	215	---	2800	649	302	298	213	344	767
31	263	---	230	214	---	2710	---	295	---	208	345	---
TOTAL	7599	7791	7536	7012	16187	45580	37630	16908	8660	14806	12931	22159
MEAN	245	260	243	226	578	1470	1254	545	289	478	417	739
MAX	308	308	270	240	2470	2800	2370	947	333	1380	797	1230
MIN	200	225	230	214	210	887	649	295	230	208	184	313
CFSM	.29	.30	.28	.26	.68	1.72	1.47	.64	.34	.56	.49	.86
IN.	.33	.34	.33	.30	.70	1.98	1.64	.73	.38	.64	.56	.96

CAL YR 1976	TOTAL	284813	MEAN 778	MAX 4990	MIN 181	CFSM .91	IN 12.38
WTR YR 1977	TOTAL	204799	MEAN 561	MAX 2800	MIN 184	CFSM .66	IN 8.90

WARASH RIVER BASIN

03332500 TIPPECANOE RIVER NEAR MONTICELLO, IN

LOCATION.--Lat 40°46'48", long 86°45'36", in NW¼NE¼ sec.21, T.27 N., R.3 W., White County, Hydrologic Unit 05120106, at Norway plant of Northern Indiana Public Service Co., 2 miles (3 km) north of Monticello, and at mile 32.0 (51.5 km).

DRAINAGE AREA.--1,732 mi² (4,486 km²).

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

REVISED RECORDS.--WSP 2109: Drainage area.

REMARKS.--Discharge computed on basis of records of operation of powerplant and flow over dam.

COOPERATION.--Records of daily discharges furnished by Northern Indiana Public Service Co.

AVERAGE DISCHARGE.--46 years, 1,491 ft³/s (42.23 m³/s), 11.69 in/yr (297 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 16,800 ft³/s (476 m³/s) June 13, 1958; minimum daily, 103 ft³/s (2.92 m³/s) July 27, 1934.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 6,130 ft³/s (174 m³/s) Mar. 29; minimum daily, 190 ft³/s (5.38 m³/s) Nov. 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	450	300	246	260	280	1890	3800	979	520	929	281	668
2	450	300	300	260	280	1600	4280	1220	520	1300	347	1440
3	450	300	300	260	338	1500	4340	1430	433	1520	347	1450
4	350	257	300	347	330	2340	3580	1430	499	1430	260	2140
5	350	190	300	433	280	3190	3640	1910	597	985	390	1190
6	500	200	300	380	280	2740	3180	2310	685	1130	896	1020
7	500	200	300	380	395	2700	2880	2310	553	915	1320	915
8	500	200	429	380	348	2380	2540	2000	553	915	1150	750
9	500	200	520	380	380	2310	2410	1520	520	750	1110	734
10	450	200	520	380	380	2310	2310	1650	619	619	2510	652
11	450	200	520	380	285	2040	2060	1300	619	668	3460	635
12	400	200	390	380	479	1980	2040	1410	668	652	2370	520
13	400	200	475	275	520	2250	1910	1110	635	685	1960	2330
14	400	200	306	275	520	2080	1700	1110	569	520	1590	3760
15	350	200	250	380	586	2000	1750	915	619	619	1270	3530
16	200	200	250	380	520	1910	1640	915	520	635	1170	3370
17	200	200	350	380	520	1640	1470	915	520	602	1190	2820
18	350	200	400	433	563	2360	1490	791	685	520	915	2710
19	350	200	400	350	615	2640	1430	897	685	520	767	3060
20	400	200	400	350	615	2460	1390	1570	586	520	718	2610
21	400	200	400	350	615	2620	1320	767	520	433	750	2310
22	400	200	400	350	654	2440	1430	832	520	433	783	1960
23	400	200	294	350	1150	2550	1280	768	520	433	586	2000
24	400	200	250	411	2050	2840	1430	707	433	390	669	1810
25	400	200	361	380	2370	2700	1260	767	520	520	520	1910
26	400	200	416	380	2230	2650	1410	553	412	433	635	1640
27	400	200	361	380	2610	2570	1190	767	368	347	520	1520
28	300	200	399	380	2370	4090	1220	520	433	347	569	1530
29	300	200	303	380	---	6130	1130	619	368	325	767	1280
30	300	200	260	326	---	4680	1130	652	520	347	833	1280
31	300	---	260	280	---	4290	---	520	---	347	668	---
TOTAL	12000	6347	10960	11010	22563	81880	62640	35164	16218	20789	31321	53544
MEAN	387	212	354	355	806	2641	2088	1134	541	671	1010	1785
MAX	500	300	520	433	2610	6130	4340	2310	685	1520	3460	3760
MIN	200	190	246	260	280	1500	1130	520	368	325	260	520
CFSM	.22	.12	.20	.21	.47	1.53	1.21	.66	.31	.39	.58	1.03
IN.	.26	.14	.24	.24	.48	1.76	1.35	.76	.35	.45	.67	1.15
CAL YR 1976	TOTAL	485646	MEAN	1327	MAX	11800	MIN 190	CFSM .77	IN 10.43			
WTR YR 1977	TOTAL	364436	MEAN	998	MAX	6130	MIN 190	CFSM .58	IN 7.83			

03333000 TIPPECANOE RIVER NEAR DELPHI, IN

LOCATION.--Lat 40°37'02", long 86°45'39", in NW¼NE¼ sec.16, T.25 N., R.3 W., Carroll County, Hydrologic Unit 05120106, on right bank 2 miles (3 km) northeast of Springboro, 1.7 miles (2.7 km) downstream from Big Creek, 5 miles (8 km) northwest of Delphi, and at mile 15.1 (24.3 km).

DRAINAGE AREA.--1,865 mi² (4,830 km²).

PERIOD OF RECORD.--March to December 1903, March to December 1904, March 1905 to July 1906, November and December 1908, July 1939 to current year. Published as "at Springboro" 1903.

REVISED RECORDS.--WSP 973: 1942. WSP 1335: 1905-6. WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 552.01 ft (168.253 m) above mean sea level (levels by Corps of Engineers). Mar. 14, 1903 to July 20, 1906, and Nov. 2 to Dec. 31, 1908, nonrecording gage at site 5.5 miles (8.8 km) downstream at different datum.

REMARKS.--Records good except those for winter periods, which are fair. Flow regulated by upstream reservoirs.

AVERAGE DISCHARGE.--38 years (1939 to current year), 1,623 ft³/s (45.96 m³/s), 11.82 in/yr (300 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 22,600 ft³/s (640 m³/s) Feb. 10, 1959, gage height, 15.10 ft (4.602 m); minimum daily, 1.0 ft³/s (0.028 m³/s) Nov. 2, 3, 1954, caused by repair work at Oakdale Dam, 6.5 miles (10.5 km) upstream.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 7,530 ft³/s (213 m³/s) Sept. 13, gage height, 8.48 ft (2.585 m); minimum daily, 130 ft³/s (3.68 m³/s) Nov. 30, Dec. 1-18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	435	484	130	433	300	2010	4080	1030	596	845	322	732
2	442	486	130	300	300	1640	4540	1610	474	1380	454	1600
3	445	489	130	443	334	1600	4740	1440	484	1590	379	2990
4	449	431	130	450	340	2550	4000	1820	570	1410	322	1680
5	452	214	130	439	300	3410	3800	2150	763	1200	526	1420
6	474	211	130	426	300	2980	3500	2680	845	1110	1360	1110
7	482	211	130	426	400	2910	3300	2860	559	983	1600	1060
8	492	208	130	422	390	2800	3100	2190	651	828	1280	702
9	502	205	130	424	420	2600	2900	1650	630	845	1300	976
10	512	203	130	423	473	2400	2800	1560	610	596	3940	687
11	519	202	130	436	391	2400	2500	1540	680	747	4620	637
12	524	199	130	420	575	2300	2300	1320	724	724	3480	637
13	526	196	130	417	577	2200	1950	1190	651	672	2500	4830
14	528	193	130	413	570	2400	1930	1160	610	603	1890	6000
15	453	193	130	413	591	2200	1950	1170	672	576	1550	4890
16	363	187	130	420	718	2100	1880	932	570	702	1280	4390
17	363	165	130	390	581	2000	1720	914	553	610	1460	3570
18	521	157	130	360	576	2540	1480	932	870	521	976	3540
19	679	134	133	329	576	2880	1650	976	763	537	845	3830
20	558	134	450	291	796	2750	1590	2160	596	531	779	3270
21	510	134	500	286	577	2840	1420	771	559	474	906	2920
22	510	132	350	303	811	2870	1630	888	515	474	879	2280
23	514	132	364	290	1370	2640	1240	853	521	531	732	2410
24	518	132	320	399	2450	2980	1610	811	526	479	709	2060
25	521	132	359	538	2350	3030	1260	771	521	570	454	2140
26	445	132	458	492	2530	2810	1520	672	505	505	717	2140
27	372	132	455	433	2770	3070	1250	879	450	440	521	1670
28	380	132	456	430	2700	4000	1380	717	450	331	644	1680
29	426	199	443	430	---	5920	1220	732	450	331	1030	1320
30	486	130	457	350	---	5020	1230	740	548	445	1040	1300
31	484	---	459	300	---	4460	---	637	---	440	672	---
TOTAL	14885	6289	7544	12326	25066	88310	69470	39755	17916	22030	39167	68471
MEAN	480	210	243	398	895	2849	2316	1282	597	711	1263	2282
MAX	679	489	500	538	2770	5920	4740	2860	870	1590	4620	6000
MIN	363	130	130	286	300	1600	1220	637	450	331	322	637
CFSM	.26	.11	.13	.21	.48	1.53	1.24	.69	.32	.38	.68	1.22
IN.	.30	.13	.15	.25	.50	1.76	1.39	.79	.36	.44	.78	1.37

CAL YR 1976 TOTAL 528961 MEAN 1445 MAX 11900 MIN 130 CFSM .78 IN 10.55
WTR YR 1977 TOTAL 411229 MEAN 1127 MAX 6000 MIN 130 CFSM .60 IN 8.20

WABASH RIVER BASIN

03333450 WILDCAT CREEK NEAR JEROME, IN

LOCATION.--Lat 40°26'29", long 85°55'08", in NE¼SF¼ sec.14, T.23 N., R.5 E., Howard County, Hydrologic Unit 05120107, on right bank at downstream side of bridge on County Road 1100 East, 0.5 mile (0.8 km) downstream from Mud Creek, 1.5 miles (2.4 km) southeast of Jerome, and at mile 79.9 (128.6 km).

DRAINAGE AREA.--146 mi² (378 km²).

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

REVISED RECORDS.--WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 820.04 ft (249.948 m) above mean sea level.

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

AVERAGE DISCHARGE.--16 years, 124 ft³/s (3.512 m³/s), 11.53 in/yr (293 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,160 ft³/s (118 m³/s) Apr. 20, 1964; maximum gage height, 11.98 ft (3.652 m) Jan. 26, 1962; minimum daily discharge, 0.89 ft³/s (0.025 m³/s) Jan. 24-26, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of about 18 ft (5.5 m), from information by local residents.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 1,200 ft³/s (34.0 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Apr. 03	0600	*1260 35.7	*6.94 2.115

Minimum daily discharge, 0.89 ft³/s (0.025 m³/s) Jan. 24-26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.4	3.0	2.8	1.3	.90	116	189	58	19	9.8	3.6	21
2	2.0	4.0	2.8	1.3	.90	81	448	76	19	11	3.4	18
3	1.5	3.6	2.4	1.3	.90	91	1130	138	17	7.8	3.4	17
4	1.5	3.4	2.6	1.3	.90	730	684	454	15	6.4	3.6	15
5	1.5	3.3	2.5	1.3	.91	817	467	512	15	6.2	5.6	14
6	4.0	3.2	2.6	1.2	.92	415	314	361	18	5.7	14	12
7	3.8	3.1	3.3	1.2	.93	240	235	400	17	13	19	11
8	3.7	3.0	3.3	1.1	.95	167	177	300	16	107	27	10
9	3.4	3.0	2.9	1.2	.98	138	137	210	31	56	29	9.4
10	3.1	3.0	3.1	1.2	1.0	117	120	150	30	24	74	8.5
11	2.0	3.0	3.3	1.1	1.5	91	103	118	21	15	124	8.1
12	2.4	3.1	3.4	1.0	3.0	86	89	95	19	12	275	7.9
13	2.2	3.2	3.1	.94	5.6	95	82	84	17	9.6	182	52
14	2.4	3.0	2.7	.92	11	87	78	77	15	8.1	95	603
15	3.1	2.9	3.0	.90	10	74	70	67	13	7.1	56	451
16	3.2	2.7	3.0	.90	7.0	63	62	58	11	6.3	110	319
17	3.1	2.5	2.9	.90	4.9	54	58	53	11	6.1	350	211
18	3.0	2.4	2.8	.90	3.5	441	54	49	9.6	5.8	181	142
19	2.9	2.2	2.9	.90	3.3	585	51	47	8.2	5.6	92	106
20	3.9	1.8	3.4	.90	3.8	359	49	47	7.5	5.5	60	82
21	3.3	1.5	2.4	.90	4.1	263	45	47	7.0	5.3	45	64
22	3.2	2.2	1.7	.90	5.0	231	58	47	6.7	5.2	35	53
23	3.3	2.3	1.6	.90	23	280	310	46	6.8	4.3	27	46
24	6.3	2.4	1.6	.89	79	235	257	45	7.1	4.3	38	42
25	6.0	2.4	1.6	.89	56	171	177	44	7.3	4.4	42	40
26	4.6	3.2	1.6	.89	45	135	128	36	7.5	4.1	30	35
27	3.2	4.5	1.8	.90	78	119	100	25	6.8	3.9	22	31
28	2.4	4.1	1.7	.90	166	342	87	24	6.8	3.7	17	27
29	1.8	3.6	1.6	.90	---	716	73	28	6.6	3.7	20	24
30	2.0	3.0	1.5	.90	---	467	61	27	6.8	3.8	25	23
31	2.5	---	1.4	.90	---	282	---	22	---	3.7	23	---
TOTAL	93.7	88.6	77.3	31.63	518.99	8088	5893	3745	398.7	374.4	2031.6	2502.9
MEAN	3.02	2.95	2.49	1.02	18.5	261	196	121	13.3	12.1	65.5	83.4
MAX	6.3	4.5	3.4	1.3	166	817	1130	512	31	107	350	603
MIN	1.5	1.5	1.4	.89	.90	54	45	22	6.6	3.7	3.4	7.9
CFSM	.02	.02	.02	.007	.13	1.79	1.34	.83	.09	.08	.45	.57
IN.	.02	.02	.02	.01	.13	2.06	1.50	.95	.10	.10	.52	.64
CAL YR 1976	TOTAL	38326.40	MEAN	105	MAX	3340	MIN	1.4	CFSM	.72	IN	9.77
WTR YR 1977	TOTAL	23843.82	MEAN	65.3	MAX	1130	MIN	.89	CFSM	.45	IN	6.08

03333600 KOKOMO CREEK NEAR KOKOMO, IN

LOCATION.--Lat 40°26'28", long 86°05'20", in NW¼SW¼ sec.16, T.23 N., R.4 E., Howard County, Hydrologic Unit 05120107, on left bank at upstream side of bridge on County Road 200 East, 2.6 miles (4.2 km) southeast of intersection of U.S. Highways 31 and 35 in Kokomo, and 4.2 miles (6.8 km) upstream from mouth.

DRAINAGE AREA.--24.7 mi² (64.0 km²).

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

REVISED RECORDS.--WSP 2109: Drainage area. WRD Ind. 1972: 1970-71(P).

GAGE.--Water-stage recorder. Datum of gage is 807.68 ft (246.181 m) above mean sea level (unadjusted).

REMARKS.--Records good.

AVERAGE DISCHARGE.--18 years, 20.3 ft³/s (0.575 m³/s), 11.16 in/yr (283 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,040 ft³/s (29.4 m³/s) Apr. 20, 1964, gage height, 9.88 ft (3.011 m); minimum daily, 0.08 ft³/s (0.002 m³/s) Aug. 20, 1975.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 260 ft³/s (7.36 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Sept. 14	0300	*290 8.21	*4.79 1.460

Minimum daily discharge, 0.31 ft³/s (0.009 m³/s) Dec. 30, 31, Jan. 12-20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.88	.95	.43	.32	.34	17	42	8.9	2.9	3.8	.49	3.4
2	.68	.89	.42	.33	.35	13	73	14	3.1	3.0	.50	4.6
3	.66	.80	.41	.34	.35	31	83	19	2.8	2.0	.57	4.0
4	.69	.77	.41	.35	.35	164	66	57	2.4	1.5	.59	3.5
5	.88	.74	.34	.36	.35	106	54	66	2.9	1.0	.97	3.7
6	2.1	.69	.35	.37	.36	53	41	52	3.5	1.4	6.1	3.6
7	.81	.62	.36	.35	.37	34	36	51	2.9	2.0	7.2	3.5
8	.49	.56	.40	.34	.38	23	29	43	2.8	20	10	2.9
9	.42	.55	.45	.34	.39	20	26	33	3.1	14	12	1.8
10	.37	.58	.55	.38	.50	17	28	26	4.0	10	39	1.5
11	.42	.47	.54	.32	1.0	12	24	21	3.3	9.0	45	1.3
12	.44	.44	.55	.31	5.8	12	21	17	2.9	7.7	56	1.4
13	.50	.42	.51	.31	12	15	20	15	2.8	5.5	31	50
14	1.1	.42	.51	.31	7.2	11	19	13	2.8	3.5	16	229
15	1.8	.43	.56	.31	5.3	9.2	17	11	2.4	2.3	9.4	114
16	1.9	.43	.55	.31	3.8	6.5	12	9.4	2.1	1.8	25	89
17	1.8	.47	.55	.31	3.1	5.6	9.2	8.0	2.0	2.3	68	62
18	1.7	.46	.50	.31	2.9	91	8.1	7.2	2.1	1.7	38	47
19	2.1	.46	.50	.31	3.1	68	7.6	6.2	2.0	.45	20	37
20	3.0	.42	.78	.31	3.3	49	7.3	5.6	1.8	.41	13	29
21	2.4	.52	.42	.32	2.8	38	6.7	5.0	1.7	.41	9.3	22
22	2.1	.50	.34	.32	5.3	37	9.2	4.5	1.7	.49	7.3	19
23	2.2	.47	.38	.32	14	50	25	4.0	2.0	.40	5.7	15
24	2.4	.47	.34	.32	17	50	28	3.8	2.0	.38	6.5	14
25	1.5	.49	.38	.32	22	38	22	3.5	2.4	.52	8.1	13
26	1.2	.61	.42	.33	8.9	32	18	3.1	2.4	.53	6.4	12
27	.97	.85	.37	.33	24	29	14	2.9	2.4	.44	4.8	11
28	.87	.75	.35	.33	21	104	13	2.8	2.8	.42	3.8	9.7
29	.86	.57	.33	.33	---	120	10	2.9	2.8	.41	4.4	8.5
30	.92	.45	.31	.34	---	79	8.8	7.2	3.2	.43	4.0	8.0
31	1.3	---	.31	.34	---	56	---	3.5	---	.45	3.6	---
TOTAL	39.46	17.25	13.62	10.19	166.24	1390.3	777.9	526.5	78.0	98.24	462.72	824.4
MEAN	1.27	.58	.44	.33	5.94	44.8	25.9	17.0	2.60	3.17	14.9	27.5
MAX	3.0	.95	.78	.38	24	164	83	66	4.0	20	68	229
MIN	.37	.42	.31	.31	.34	5.6	6.7	2.8	1.7	.38	.49	1.3
CFSM	.05	.02	.02	.01	.24	1.81	1.05	.69	.11	.13	.60	1.11
IN.	.06	.03	.02	.02	.25	2.09	1.17	.79	.12	.15	.70	1.24
CAL YR 1976	TOTAL	6690.23	MEAN	18.3	MAX	703	MIN	.31	CFSM	.74	IN	10.08
WTR YR 1977	TOTAL	4404.82	MEAN	12.1	MAX	229	MIN	.31	CFSM	.49	IN	6.63

WARASH RIVER BASIN

03333700 WILDCAT CREEK AT KOKOMO, IN

LOCATION.--Lat 40°28'24", long 86°09'26", in NE¼NW¼ sec.2, T.23 N., R.3 E., Howard County, Hydrologic Unit 05120107, on right bank on property of Penn-Dixie Steel Corporation in Kokomo, 0.5 mile (0.8 km) downstream from Kokomo Creek, 0.4 mile (0.6 km) upstream from Dixon Road bridge, and at mile 62.5 (100.6 km).

DRAINAGE AREA.--242 mi² (627 km²).

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

REVISED RECORDS.--WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 775.62 ft (236.409 m) above mean sea level (levels by State of Indiana, Department of Natural Resources).

REMARKS.--Records good. Some regulation for municipal water supply by regulation of Kokomo Reservoirs No. 1 and No. 2, combined capacity, 4,170 acre-ft (5,140,000 m³), and by Kokomo Sewage Treatment Plant.

AVERAGE DISCHARGE.--22 years, 220 ft³/s (6.230 m³/s), 12.35 in/yr (314 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,100 ft³/s (229 m³/s) Feb. 10, 1959; maximum gage height, 11.77 ft (3.587 m) Apr. 21, 1964; minimum daily discharge, 7.2 ft³/s (0.20 m³/s) Sept. 30, 1956.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 2,100 ft³/s (59.5 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Apr. 03	1600	*1400 39.7	*4.95 1.509

Minimum daily discharge, 15 ft³/s (0.42 m³/s) Dec. 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	22	27	17	24	50	340	99	106	34	22	61
2	24	24	26	17	24	43	449	175	46	27	26	60
3	20	24	24	21	24	100	1210	187	39	23	28	50
4	23	24	23	25	19	564	970	464	31	23	27	46
5	43	22	20	19	19	1160	653	715	41	27	43	43
6	76	21	24	21	18	669	476	571	35	28	158	40
7	29	17	26	19	21	374	345	505	35	51	91	48
8	27	21	25	20	20	258	293	435	39	55	111	47
9	23	24	27	17	23	210	221	336	37	38	68	47
10	24	24	24	16	39	183	191	258	36	26	233	41
11	26	24	21	23	50	151	180	210	37	77	194	39
12	26	24	18	19	52	158	166	175	29	39	208	51
13	28	23	25	21	33	127	145	150	37	37	298	200
14	25	18	26	20	26	131	148	135	40	34	183	598
15	26	23	25	21	24	113	134	119	38	33	127	789
16	21	29	26	19	22	94	111	105	38	25	278	560
17	21	28	25	23	22	113	103	94	35	35	619	382
18	28	28	22	24	24	535	102	86	38	32	394	275
19	39	23	19	25	21	821	103	82	27	32	217	213
20	36	19	36	21	17	551	100	76	32	30	136	170
21	28	16	27	16	19	417	95	69	31	32	96	138
22	25	22	25	22	25	362	141	61	32	28	85	111
23	32	25	22	29	45	382	260	59	32	23	80	97
24	38	22	18	24	65	405	351	62	34	19	77	91
25	26	18	17	26	44	302	281	59	33	33	75	78
26	26	19	15	25	47	235	224	54	25	24	76	73
27	27	30	18	20	82	234	172	50	31	26	66	68
28	26	20	18	19	62	586	180	44	32	25	57	65
29	24	24	17	19	---	1040	136	40	32	23	111	59
30	32	26	19	22	---	765	107	48	43	20	65	59
31	24	---	18	25	---	493	---	64	---	18	65	---
TOTAL	902	684	703	655	911	11626	8387	5587	1121	977	4314	4599
MEAN	29.1	22.8	22.7	21.1	32.5	375	280	180	37.4	31.5	139	153
MAX	76	30	36	29	82	1160	1210	715	106	77	619	789
MIN	20	16	15	16	17	43	95	40	25	18	22	39
CFSM	.12	.09	.09	.09	.13	1.55	1.16	.74	.16	.13	.57	.63
IN.	.14	.11	.11	.10	.14	1.79	1.29	.86	.17	.15	.66	.71

CAL YR 1976	TOTAL	68182	MEAN 186	MAX 4770	MIN 15	CFSM .77	IN 10.48
WTR YR 1977	TOTAL	40466	MEAN 111	MAX 1210	MIN 15	CFSM .46	IN 6.22

03334500 SOUTH FORK WILDCAT CREEK NEAR LAFAYETTE, IN

LOCATION.--Lat 40°25'04", long 86°46'05", in SW¼SW¼ sec.21, T.23 N., R.3 W., Tippecanoe County, Hydrologic Unit 05120107, on right bank 40 ft (12 m) upstream from bridge on State Highway 26, 0.5 mile (0.8 km) upstream from Middle Fork, 4.4 miles (7.1 km) upstream from mouth, and 5 miles (8 km) east of Lafayette.

DRAINAGE AREA.--243 mi² (629 km²).

PERIOD OF RECORD.--October 1943 to current year. Prior to March 1944 monthly discharge only, published in WSP 1305.

REVISED RECORDS.--WSP 1335: 1948(M). WSP 1505: 1947. WSP 1725: 1951-53(M), 1955(M). WSP 1909: 1955(P). WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 566.60 ft (172.700 m) above mean sea level (Indiana State Highway Commission bench mark). Prior to July 29, 1954, nonrecording gage at site 40 ft (12 m) downstream at same datum.

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

AVERAGE DISCHARGE.--34 years, 236 ft³/s (6.684 m³/s), 13.19 in/yr (335 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,600 ft³/s (357 m³/s) June 10, 1958, gage height, 15.28 ft (4.657 m), from rating curve extended above 6,000 ft³/s (170 m³/s) on basis of contracted-opening measurement at 16.8 ft (5.121 m); minimum daily, 15 ft³/s (0.42 m³/s) Sept. 19, 22, 1944, Aug. 30, 31, Sept. 1, 14, 15, 1969.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in May 1943 reached a stage of 16.8 ft (5.12 m), from floodmarks, discharge, 17,900 ft³/s (507 m³/s) by contracted-opening measurement).

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 3,000 ft³/s (85.0 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Aug. 11	2300	*1740 49.3	*6.43 1.960

Minimum daily discharge, 18 ft³/s (0.51 m³/s) Dec. 31.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35	39	37	19	20	134	242	97	48	32	21	105
2	35	36	38	19	21	101	274	109	44	31	21	98
3	33	34	38	20	21	89	427	114	43	29	19	90
4	33	34	38	20	21	448	337	112	41	28	19	82
5	35	34	37	21	22	605	304	127	43	27	23	73
6	59	34	36	20	22	316	252	149	54	26	77	67
7	68	33	36	20	22	206	208	208	50	26	153	56
8	50	32	37	19	22	166	188	219	47	27	91	55
9	44	32	38	19	24	142	167	184	55	33	52	52
10	39	33	37	19	31	126	156	152	54	29	48	49
11	36	33	36	19	53	114	147	132	47	27	411	47
12	31	33	35	19	80	110	138	119	43	31	1050	47
13	29	33	35	19	200	118	131	107	41	30	426	59
14	29	33	34	20	210	111	129	101	40	29	228	630
15	29	32	37	20	144	101	126	96	39	26	167	441
16	30	32	37	20	90	91	117	89	38	24	162	315
17	30	33	37	19	75	85	112	84	36	23	389	231
18	30	33	37	19	56	318	109	81	38	23	290	185
19	33	33	38	19	54	510	106	77	43	27	175	152
20	34	33	40	19	53	332	105	76	37	28	132	126
21	37	33	28	19	50	257	99	80	34	25	115	106
22	35	32	24	19	49	238	110	71	34	32	115	93
23	36	31	23	19	68	259	205	66	35	31	110	85
24	39	31	22	19	177	286	211	63	36	24	100	87
25	49	32	21	20	181	249	168	60	35	23	93	96
26	41	34	20	20	117	215	146	59	34	21	92	83
27	37	37	21	20	148	193	128	56	33	21	87	75
28	36	36	22	20	165	270	117	54	32	20	81	71
29	34	35	20	19	---	538	112	52	33	20	92	67
30	36	36	19	19	---	507	101	52	32	20	136	62
31	37	---	18	20	---	328	---	48	---	20	119	---
TOTAL	1159	1006	976	603	2196	7563	5172	3094	1219	813	5094	3785
MEAN	37.4	33.5	31.5	19.5	78.4	244	172	99.8	40.6	26.2	164	126
MAX	68	39	40	21	210	605	427	219	55	33	1050	630
MIN	29	31	18	19	20	85	99	48	32	20	19	47
CFSM	.15	.14	.13	.08	.32	1.00	.71	.41	.17	.11	.68	.52
IN.	.18	.15	.15	.09	.34	1.16	.79	.47	.19	.12	.78	.58

CAL YR 1976	TOTAL	66806	MEAN	183	MAX	3970	MIN	18	CFSM	.75	IN	10.23
WTR YR 1977	TOTAL	32680	MEAN	89.5	MAX	1050	MIN	18	CFSM	.37	IN	5.00

03335000 WILDCAT CREEK NEAR LAFAYETTE, IN

LOCATION.--Lat 40°26'26", long 86°49'45", in SW¼NW¼ sec.13, T.23 N., R.4 W., Tippecanoe County, Hydrologic Unit 05120107, on right bank about 200 ft (60 m) downstream of bridge on County Road 2A East, 2.8 miles (4.5 km) downstream from South Fork Wildcat Creek, 3.7 miles (6.0 km) northeast of courthouse in Lafayette, and 4.8 miles (7.7 km) upstream from mouth.

DRAINAGE AREA.--794 mi² (2,056 km²).

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WSP 1555: 1955, 1957(M). WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 527.66 ft (160.831 m) above mean sea level (Indiana Flood Control and Water Resources Commission bench mark). Non-recording gage prior to June 13, 1957, and August 31, 1974, to May 20, 1976, at present site and datum.

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

AVERAGE DISCHARGE.--23 years, 738 ft³/s (20.90 m³/s), 12.62 in/yr (321 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 25,000 ft³/s (708 m³/s) June 10, 1958, gage height, 21.52 ft (6.559 m), from rating curve extended above 18,000 ft³/s (510 m³/s); minimum daily, 46 ft³/s (1.30 m³/s) Sept. 28, 29, 1954.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of March 1913 reached a stage of about 25.4 ft (7.74 m), from profile by State of Indiana, Department of Natural Resources.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 6,300 ft³/s (178 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Mar. 29	1400	*2720 77.0	*7.32 2.231

Minimum daily discharge, 53 ft³/s (1.50 m³/s) Aug. 3, 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	116	124	118	59	66	415	1060	328	129	86	60	254
2	112	135	95	60	66	338	976	348	143	84	59	215
3	108	119	105	62	66	296	1400	442	170	80	53	186
4	110	114	105	65	66	1200	1820	533	131	78	53	188
5	106	114	96	66	66	2090	1670	808	146	76	75	175
6	161	114	110	66	67	1810	1220	1090	191	74	267	152
7	227	114	115	65	68	1120	933	1070	170	72	486	143
8	192	114	104	64	69	742	763	1040	164	72	424	135
9	131	112	105	62	76	581	658	886	185	85	353	131
10	117	110	106	61	103	501	574	712	171	105	443	127
11	112	110	120	60	200	447	523	584	160	124	1010	120
12	105	110	125	60	450	409	480	501	149	130	2270	119
13	101	110	107	61	620	419	437	437	140	152	1240	238
14	94	110	120	63	560	397	403	392	135	120	843	1780
15	93	110	110	64	370	359	388	360	126	99	578	1770
16	93	110	111	62	270	336	371	328	124	89	503	1710
17	93	108	112	61	210	296	339	298	120	86	1370	1210
18	95	108	110	60	190	764	319	279	126	79	1280	888
19	99	114	105	60	170	1680	308	227	134	77	607	678
20	99	114	105	60	170	1520	303	195	119	85	640	548
21	117	114	90	60	160	1100	292	256	106	79	495	454
22	143	114	78	60	160	922	302	199	101	87	385	388
23	123	111	70	60	237	906	565	171	101	95	343	341
24	127	105	67	60	478	1000	715	163	106	78	283	325
25	141	105	66	61	533	941	719	153	101	71	251	329
26	168	114	66	62	390	755	604	154	101	64	251	297
27	139	128	67	62	376	647	515	156	90	56	219	263
28	126	126	70	61	494	973	445	168	88	60	190	240
29	120	108	63	60	---	2510	405	151	86	59	216	223
30	120	102	60	61	---	2260	376	141	86	60	316	205
31	124	---	58	63	---	1560	---	129	---	60	381	---
TOTAL	3812	3401	2939	1911	6751	29294	19883	12699	3899	2617	15944	13832
MEAN	123	113	94.8	61.6	241	945	663	410	130	84.4	514	461
MAX	227	135	125	66	620	2510	1820	1090	191	152	2270	1780
MIN	93	102	58	59	66	296	292	129	86	56	53	119
CFSM	.16	.14	.12	.08	.30	1.19	.84	.52	.16	.11	.65	.58
IN.	.18	.16	.14	.09	.32	1.37	.93	.59	.18	.12	.75	.65
CAL YR 1976	TOTAL	238261	MEAN 651	MAX 9340	MIN 58	CFSM .82	IN 11.16					
WTR YR 1977	TOTAL	116982	MEAN 320	MAX 2510	MIN 53	CFSM .40	IN 5.48					

03335000 WILDCAT CREEK NEAR LAFAYETTE, IN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

CHEMICAL ANALYSES: December 1970 to August 1974.

WATER TEMPERATURE: December 1970 to August 1974.

SEDIMENT DISCHARGE: July 1968 to current year (partial-record station).

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	SUS- PENDE SEDI- MENT (MG/L)	SUS- PENDE SEDI- MENT DIS- CHARGE (T/DAY)	DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	SUS- PENDE SEDI- MENT (MG/L)	SUS- PENDE SEDI- MENT DIS- CHARGE (T/DAY)
DEC 22...	1015	77	.0	9	1.9	JUN 23...	1300	99	20.0	52	14
MAR 10...	1030	493	8.5	28	37	JUL 28...	1500	62	--	51	8.5
APR 13...	1105	441	--	26	31	SEP 01...	0900	259	24.5	37	25
MAY 19...	0900	252	--	29	19	29...	1600	217	--	15	8.7

WABASH RIVER BASIN

0335500 WABASH RIVER AT LAFAYETTE, IN

LOCATION.--Lat 40°25'19", long 86°53'49", in NE¼SW¼ sec.20, T.23 N., R.4 W., Tippecanoe County, Hydrologic Unit 05120108, on right bank 20 ft (6 m) downstream from Brown Street in Lafayette, 0.2 mile (0.3 km) upstream from Main Street bridge, 0.3 mile (0.5 km) downstream from Harrison Memorial Bridge, 5.1 miles (8.2 km) downstream from Wildcat Creek, and at mile 311.9 (501.8 km).

DRAINAGE AREA.--7,267 mi² (18,822 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--February 1901 to January 1902, March to December 1902, January to May 1903 (gage heights only), October 1923 to current year. Monthly discharge only for some periods, published in WSP 1305. Gage-height records collected at present site since October 1913 are contained in reports of National Weather Service.

REVISED RECORDS.--WSP 1335: 1929, 1932-33, 1936. WSP 1505: 1950. WSP 1555: 1928(M). WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 504.14 ft (153.662 m) above mean sea level. Prior to May 2, 1903, nonrecording gage 0.5 mile (0.8 km) upstream at different datum. Oct. 7, 1923, to Nov. 20, 1933, nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter periods, which are fair. Flow partially regulated by upstream reservoirs and power development.

AVERAGE DISCHARGE.--54 years (1923 to current year), 6,358 ft³/s (180.0 m³/s), 11.88 in/yr (302 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 131,000 ft³/s (3,710 m³/s) May 19, 1943, gage height, 28.47 ft (8.678 m); minimum daily, 399 ft³/s (11.3 m³/s) Sept. 26, 1941.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 26, 1913, reached a stage of 32.9 ft (10.03 m), from floodmark, determined by National Weather Service, discharge, 190,000 ft³/s (5,380 m³/s).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 23,600 ft³/s (668 m³/s) Mar. 30, gage height, 13.30 ft (4.054 m); minimum daily, 660 ft³/s (18.7 m³/s) Jan. 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1510	1970	1320	780	780	6510	14600	3310	1500	1240	966	2080
2	1480	1990	1420	800	770	7670	13900	3210	1440	2830	887	2200
3	1450	1990	1350	830	750	8690	16100	3910	1330	4430	966	4000
4	1530	1990	1190	860	700	10600	15900	4570	1270	3930	977	4270
5	1580	1930	1060	850	700	20200	14700	5510	1320	3000	1000	3490
6	1800	1780	1040	780	710	20900	12900	7700	1650	2550	2300	3000
7	1950	1640	995	740	710	16300	10900	8550	1710	2000	3400	2740
8	1990	1560	988	730	680	13200	8670	9260	1680	1930	4050	2310
9	1960	1560	973	720	720	12600	6850	8310	1610	1760	3820	2150
10	1920	1570	950	690	800	10800	5910	6900	1500	1860	7130	2180
11	1910	1560	926	660	1000	10100	5590	6360	1750	1830	13800	1940
12	1920	1550	923	700	1610	8140	4930	5400	1740	2220	12800	1960
13	1930	1530	884	720	1920	6150	4680	4430	1650	2150	10200	5160
14	1890	1510	887	740	2240	6120	4230	3720	1740	2030	7980	18100
15	1850	1500	889	730	2100	5680	3810	3360	1670	1560	5440	18300
16	1780	1500	896	710	2000	5040	3830	2960	1580	1480	4360	15000
17	1790	1500	896	700	1900	4520	3780	2590	1430	1530	5090	12200
18	1770	1500	895	700	1800	4720	3170	2510	1490	1400	5350	9370
19	1810	1490	896	700	1700	9210	3150	2370	1730	1210	5060	9540
20	1960	1470	894	690	1600	12500	3160	2470	1620	1240	4290	9000
21	2000	1450	860	680	1600	11900	3040	2790	1270	1210	3460	7990
22	2000	1430	750	690	1600	10900	3200	2230	1260	1190	3240	6900
23	2030	1420	800	720	1700	9060	3270	2140	1220	1250	2940	6110
24	2060	1400	860	730	2840	8270	3660	2060	1210	1480	2670	6020
25	2070	1400	860	730	8030	8330	5230	1900	1220	1420	2600	5530
26	2060	1430	840	730	7750	8720	4920	1830	1170	1560	2050	5410
27	2030	1520	830	730	6780	8570	4520	1720	1120	1290	2090	4940
28	1970	1560	810	720	6410	8480	3950	1740	1060	1060	1760	4660
29	1940	1530	780	700	---	18000	3810	1660	1070	920	2640	4360
30	1920	1400	760	740	---	22300	3520	1610	1100	905	2530	4200
31	1950	---	760	770	---	17300	---	1590	---	1010	2360	---
TOTAL	57810	47630	29182	22770	61900	331480	199880	118670	43110	55475	128206	185110
MEAN	1865	1588	941	735	2211	10690	6663	3828	1437	1790	4136	6170
MAX	2070	1990	1420	860	8030	22300	16100	9260	1750	4430	13800	18300
MIN	1450	1400	750	660	680	4520	3040	1590	1060	905	887	1940
CFSM	.26	.22	.13	.10	.30	1.47	.92	.53	.20	.25	.57	.85
IN.	.30	.24	.15	.12	.32	1.70	1.02	.61	.22	.28	.66	.95
CAL YR 1976	TOTAL	2030092	MEAN	5547	MAX	43400	MIN	750	CFSM	.76	IN	10.39
WTR YR 1977	TOTAL	1281223	MEAN	3510	MAX	22300	MIN	660	CFSM	.48	IN	6.56

03335500 WABASH RIVER AT LAFAYETTE, IN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

WATER TEMPERATURE: July 1954 to September 1964, August 1967 to September 1975.

SEDIMENT DISCHARGE: February 1965 to June 1968, October 1974 to current year (partial-record station).

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	INSTAN- TANFOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	SUS- PENDE SEDI- MENT (MG/L)	SUS- PENDE SEDI- MENT DIS- CHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM
DEC 22...	1550	805	--	6	13	--	--	--
MAR 08...	1100	12500	--	128	4320	53	61	71
APR 11...	1410	5750	--	42	652	--	--	--
MAY 17...	1100	2680	--	44	318	--	--	--
JUN 21...	1200	1240	23.0	37	124	--	--	--
JUL 26...	0900	1570	25.0	32	136	--	--	--
AUG 30...	1100	2300	--	65	404	--	--	--
SEP 28...	1100	4470	--	50	603	--	--	--

DATE	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM	SUS. SED. SIEVE DIAM. % FINER THAN .500 MM	SUS. SED. SIEVE DIAM. % FINER THAN 1.00 MM
DEC 22...	--	--	--	--	--	--	--
MAR 08...	84	90	94	96	98	99	100
APR 11...	--	--	--	--	--	--	--
MAY 17...	--	--	--	--	--	--	--
JUN 21...	--	--	--	--	--	--	--
JUL 26...	--	--	--	--	--	--	--
AUG 30...	--	--	--	--	--	--	--
SEP 28...	--	--	--	--	--	--	--

WARASH RIVER BASIN

03335690 MUD PINE CREEK NEAR OXFORD, IN

LOCATION.--Lat 40°31'24", long 87°20'30", in NE¼SE¼ sec.17, T.24 N., R.8 W., Benton County, Hydrologic Unit 05120108, on right bank 5 ft (2 m) downstream from county road bridge, 0.3 mile (0.5 km) north of Chase, 2 miles (3 km) east of Boswell, and 5 miles (8 km) west of Oxford.

DRAINAGE AREA.--39.4 mi² (102.0 km²).

PERIOD OF RECORD.--June 1971 to current year.

GAGE.--Water-stage recorder. Datum of gage is 718.00 ft (218.846 m) above mean sea level.

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

AVERAGE DISCHARGE.--6 years (1972 to current year), 37.0 ft³/s (1.048 m³/s), 12.76 in/yr (324 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,650 ft³/s (46.7 m³/s) June 15, 1974, gage height, 9.72 ft (2.963 m); minimum daily, 0.25 ft³/s (0.007 m³/s) Sept. 24, 1971.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 250 ft³/s (7.08 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)	
Aug. 10	1400	669	18.9	7.65	2.332
Sept. 13	1600	*867	24.6	*8.41	2.563

Minimum daily discharge, 0.28 ft³/s (0.008 m³/s) Jan. 18, 28, 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.70	1.2	.74	.42	.49	6.2	21	5.8	5.3	1.5	.82	7.0
2	.70	.82	.58	.52	.42	5.4	106	22	5.0	.95	.59	8.6
3	.70	.82	.52	.62	1.2	6.6	54	27	4.0	.70	.59	9.0
4	.59	.70	.70	.78	1.2	19	42	25	4.0	.70	.59	6.7
5	.82	.70	.62	.95	.78	22	53	45	4.8	.49	4.3	6.1
6	6.4	.70	.54	.54	.46	15	21	76	6.1	.49	55	5.0
7	2.0	.70	1.0	.45	.44	12	18	106	3.3	.59	18	4.8
8	.95	.59	.62	.37	.45	9.9	15	70	5.6	1.1	15	4.0
9	.70	.59	.53	.53	.66	8.2	14	47	10	1.7	13	4.0
10	.70	.82	1.6	.41	1.3	6.4	14	35	4.5	1.2	285	3.5
11	.59	.70	.88	.35	2.7	4.3	13	28	4.0	.95	178	2.8
12	.49	.70	.64	.32	5.3	7.9	11	23	4.0	1.4	103	3.3
13	.49	.70	.64	.42	10	6.1	10	21	3.3	2.6	50	640
14	.40	.70	.64	.56	5.8	4.0	9.3	20	3.0	1.9	27	477
15	.32	.70	1.7	.68	3.3	3.3	9.0	18	2.4	.82	20	309
16	.49	.70	2.1	.30	1.6	2.8	8.3	15	2.2	1.2	16	249
17	.49	.82	1.4	.29	1.2	3.0	8.0	14	2.0	1.9	28	180
18	.40	.70	1.3	.28	1.1	34	7.6	15	4.0	.82	14	170
19	.49	.70	2.0	.54	1.0	18	7.3	27	2.8	.82	9.0	158
20	.82	.70	2.3	.50	1.0	15	8.6	14	1.9	.70	7.6	117
21	.95	.59	1.2	.36	1.0	13	7.6	12	1.4	.70	7.0	87
22	.70	.59	.90	.37	1.0	14	7.3	12	1.5	.70	21	72
23	.70	.59	.69	.49	1.0	21	7.0	9.3	1.7	.59	8.3	60
24	1.2	.49	.72	.64	12	24	6.7	9.3	2.0	.49	6.1	55
25	1.2	.70	.86	.86	13	19	6.7	9.0	1.7	.59	4.3	47
26	.95	1.4	1.2	.47	11	16	6.1	8.6	1.2	.70	3.8	38
27	.82	3.3	.89	.34	8.8	15	6.1	8.0	1.1	.40	3.3	32
28	.82	1.5	.62	.28	7.2	76	5.8	7.6	1.4	.40	3.5	27
29	.70	.70	.98	.28	---	71	5.6	6.7	1.2	.59	30	25
30	.82	.54	.71	.36	---	41	5.6	6.1	1.1	.82	15	23
31	1.7	---	.51	.42	---	25	---	6.1	---	1.1	9.0	---
TOTAL	29.80	25.16	30.33	14.70	95.40	544.1	514.6	748.5	96.5	29.61	956.79	2830.8
MEAN	.96	.84	.98	.47	3.41	17.6	17.2	24.1	3.22	.96	30.9	94.4
MAX	6.4	3.3	2.3	.95	13	76	106	106	10	2.6	285	640
MIN	.32	.49	.51	.28	.42	2.8	5.6	5.8	1.1	.40	.59	2.8
CFSM	.02	.02	.03	.01	.09	.45	.44	.61	.08	.02	.78	2.40
IN.	.03	.02	.03	.01	.09	.51	.49	.71	.09	.03	.90	2.67
CAL YR 1976	TOTAL	8539.59	MEAN 23.3	MAX 500	MIN .26	CFSM .59	IN 8.06					
WTR YR 1977	TOTAL	5916.29	MEAN 16.2	MAX 640	MIN .28	CFSM .41	IN 5.59					

03335700 BIG PINE CREEK NEAR WILLIAMSPORT, IN

LOCATION.--Lat 40°19'03", long 87°17'26", in SW¼SE¼ sec. 26, T.22 N., R.8 W., Warren County, Hydrologic Unit 05120108, on downstream side of county road bridge, 1.6 miles (2.6 km) north of city limits of Williamsport, and 3.7 miles (6.0 km) upstream from mouth.

DRAINAGE AREA.--323 mi² (837 km²).

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 511.68 ft (155.960 m) above mean sea level (levels by State of Indiana, Department of Natural Resources). Prior to May 19, 1967, nonrecording gage and crest-stage gage at same site and datum.

REMARKS.--Records good except those for period of no gage-height record, Dec. 29 to Feb. 18, which is poor.

AVERAGE DISCHARGE.--22 years, 255 ft³/s (7.222 m³/s), 10.72 in/yr (272 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,600 ft³/s (357 m³/s) Feb. 10, 1959, from rating curve extended above 6,000 ft³/s (170 m³/s) on basis of contracted-opening measurement, gage height, 16.00 ft (4.877 m), from floodmark; minimum daily, 6.5 ft³/s (0.18 m³/s) Oct. 6-8, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 2,800 ft³/s (79.3 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Sept. 13	2000	*6720 190	*12.25 3.734

Minimum daily discharge, 7.7 ft³/s (0.218 m³/s) Aug. 4.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

CHEMICAL ANALYSES: July 1970 to September 1976.

WATER TEMPERATURE: November 1970 to September 1975.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	20	20	13	14	54	174	47	39	18	7.9	151
2	17	23	19	12	14	43	374	85	36	18	7.9	154
3	17	18	18	12	14	55	451	166	36	16	7.9	197
4	16	16	17	12	13	196	310	211	33	15	7.7	157
5	16	16	16	13	12	227	256	324	32	15	11	124
6	35	16	16	14	12	134	191	427	38	14	526	100
7	33	15	15	14	12	105	154	562	39	14	969	85
8	28	16	16	13	12	84	137	579	36	62	283	75
9	19	16	15	12	13	76	120	381	34	57	200	67
10	18	16	15	12	14	75	114	273	40	26	580	60
11	16	16	16	12	25	68	107	217	34	19	1120	53
12	15	17	16	12	57	71	95	180	31	18	1110	50
13	15	16	16	12	95	85	87	156	30	16	707	2430
14	16	17	15	14	45	78	84	144	29	15	387	4320
15	16	17	15	13	35	61	85	129	27	27	338	2930
16	16	17	15	12	26	53	78	116	24	24	559	2170
17	15	17	15	12	23	48	73	105	24	21	449	1650
18	16	16	16	12	20	283	70	99	23	17	315	1250
19	15	16	16	12	18	205	67	107	23	16	194	1120
20	17	16	16	12	15	151	65	105	24	17	174	1050
21	17	16	15	13	14	118	67	87	21	15	293	783
22	22	16	15	13	13	118	68	80	20	17	189	588
23	17	16	15	13	28	132	64	71	20	11	202	487
24	19	16	16	13	111	172	61	67	20	10	137	443
25	20	15	17	13	127	166	58	68	21	9.9	98	405
26	18	18	17	12	107	141	57	107	23	9.8	76	358
27	18	29	16	12	78	132	53	67	19	9.1	66	313
28	17	26	17	12	62	374	52	57	19	8.6	59	275
29	16	23	17	11	---	541	49	53	18	8.4	354	242
30	17	22	16	12	---	359	48	49	17	8.3	350	251
31	21	---	15	13	---	233	---	43	---	7.9	232	---
TOTAL	575	534	499	387	1029	4638	3669	5162	830	560.0	10009.4	22338
MEAN	18.5	17.8	16.1	12.5	36.8	150	122	167	27.7	18.1	323	745
MAX	35	29	20	14	127	541	451	579	40	62	1120	4320
MIN	15	15	15	11	12	43	48	43	17	7.9	7.7	50
CFSM	.06	.06	.05	.04	.11	.46	.38	.52	.09	.06	1.00	2.31
IN.	.07	.06	.06	.04	.12	.53	.42	.59	.10	.06	1.15	2.57
CAL YR 1976	TOTAL	73828.0	MEAN 202	MAX 2870	MIN 14	CFSM .63	IN 8.50					
WTR YR 1977	TOTAL	50230.4	MEAN 138	MAX 4320	MIN 7.7	CFSM .43	IN 5.79					

03336000 WARASH RIVER AT COVINGTON, IN

LOCATION.--Lat 40°08'24", long 87°24'20", in NE1/4 sec.35, T.20 N., R.9 W., on Fountain-Warren county line, Hydrologic Unit 05120108, near center of span on downstream side of bridge on U.S. Highway 136 at Covington, 2.9 miles (4.7 km) downstream from Oppossum Run, 3.6 miles (5.8 km) upstream from Spring Creek, and at mile 271.1 (436.2 km).

DRAINAGE AREA.--8,218 mi² (21,285 km²).

PERIOD OF RECORD.--October 1939 to current year. Gage-height records collected at site 0.4 mile (0.6 km) downstream January 1927 to December 1930, and at present site since December 1930, are contained in reports of National Weather Service.

REVISED RECORDS.--WSP 1275: Drainage area. WRD Ind. 1973: Drainage area.

GAGE.--Nonrecording gage. Datum of gage is 473.97 ft (144.466 m) above mean sea level.

REMARKS.--Records good except those for winter periods, which are fair. Flow partially regulated by upstream reservoirs and power development.

AVERAGE DISCHARGE.--38 years, 7,199 ft³/s (204 m³/s), 11.89 in/yr (302 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 147,000 ft³/s (4,160 m³/s) May 20, 1943, gage height, 32.44 ft (9.888 m); minimum daily, 487 ft³/s (13.8 m³/s) Sept. 29, 1941.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of 35.1 ft (10.70 m), from floodmark determined by National Weather Service, discharge, 200,000 ft³/s (5,600 m³/s).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 20,900 ft³/s (592 m³/s) Sept. 15, gage height, 16.49 ft (5.026 m); minimum daily, 760 ft³/s (21.5 m³/s) Jan. 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1800	2130	1310	1120	860	6660	16600	3520	1890	1480	1350	2870
2	1880	2110	1620	1130	860	7340	14700	3440	1780	1780	1280	2540
3	1830	2110	1850	1140	860	8520	15200	3660	1700	3150	1230	3040
4	1850	2110	1510	1170	840	9890	16100	4440	1630	4030	1300	4270
5	1960	2040	1210	1190	820	14200	15400	5410	1620	3590	1360	4320
6	2040	1870	1190	1140	810	18900	13800	7080	1850	2970	2280	3680
7	2300	1750	1210	1010	800	18100	12100	9040	2040	2680	5310	3260
8	2330	1740	1130	910	810	14900	9900	9950	1980	3020	5660	2890
9	2290	1740	1180	840	820	13100	8150	9470	1910	2260	4860	2640
10	2240	1760	1290	780	900	12100	6780	8170	1970	2100	4860	2470
11	2210	1730	1310	760	1070	10800	6120	7090	1940	2080	10900	2440
12	2220	1720	1210	800	1500	9810	5670	6500	2000	2170	14900	2300
13	2210	1700	1150	840	2900	7830	5130	5430	2040	2370	13400	4580
14	2150	1680	1190	860	3100	6960	4780	4670	2020	2360	10400	14400
15	2070	1670	1200	860	2900	6810	4350	4110	2020	2150	7960	20300
16	2020	1670	1160	840	2600	6160	4040	3820	1940	1870	6320	20200
17	1960	1680	1120	830	2500	5630	3900	3390	1850	1810	6170	17300
18	2040	1690	1090	820	2400	6090	3720	3190	1740	1810	5960	14200
19	2050	1670	1040	820	2300	8490	3410	3190	1660	1680	5750	11300
20	2240	1630	1070	820	2200	12000	3450	3100	1630	1550	5360	10900
21	2250	1580	1040	840	2200	12700	3360	3280	1820	1560	4630	9860
22	2210	1580	960	840	2200	11700	3270	3110	1650	1600	3960	8610
23	2220	1580	1030	840	2400	10600	3450	2660	1600	1510	3680	7320
24	2280	1580	1140	840	3570	9270	3480	2560	1560	1510	3350	6990
25	2250	1580	1200	840	6200	9050	4110	2460	1580	1940	3060	6660
26	2220	1610	1320	820	7890	8990	5010	2310	1560	1700	2860	6280
27	2160	1730	1320	810	6800	9060	4700	2280	1510	1750	2520	5900
28	2050	1740	1390	800	6450	9750	4270	2110	1480	1530	2570	5410
29	2010	1690	1340	800	---	12700	3900	2120	1440	1390	2870	5080
30	2020	1530	1270	820	---	19000	3720	2030	1430	1290	3530	4800
31	2100	---	1130	840	---	19800	---	1970	---	1310	3240	---
TOTAL	65460	52400	38180	27770	69560	336910	212570	135560	52840	64000	152880	216810
MEAN	2112	1747	1232	896	2484	10870	7086	4373	1761	2065	4932	7227
MAX	2330	2130	1850	1190	7890	19800	16600	9950	2040	4030	14900	20300
MIN	1800	1530	960	760	800	5630	3270	1970	1430	1290	1230	2300
CFSM	.26	.21	.15	.11	.30	1.32	.86	.53	.21	.25	.60	.88
IN.	.30	.24	.17	.13	.31	1.53	.96	.61	.24	.29	.69	.98
CAL YR 1976	TOTAL	2211530	MEAN	6042	MAX	42000	MIN	960	CFSM	.74	IN	10.01
WTR YR 1977	TOTAL	1424940	MEAN	3904	MAX	20300	MIN	760	CFSM	.48	IN	6.45

03339000 VERMILION RIVER NEAR DANVILLE, IL

LOCATION.--Lat 40°05'53", long 87°35'37", in SE¼NW¼ sec.22, T.19 N., R.11 W., Vermilion County, Hydrologic Unit 05120109, on left bank 1.5 mi (2.4 km) upstream from Stony Creek and 2.5 mi (4.0 km) southeast of Danville.

DRAINAGE AREA.--1,290 mi² (3,341 km²).

PERIOD OF RECORD.--October 1914 to September 1921, June 1928 to current year. Monthly discharge only for some periods, published in WSP 1305.

REVISED RECORDS.--WSP 853: 1936(M). WSP 973: 1939. WSP 1305: 1915-16, 1920, 1929. WSP 1335: 1934(m). WSP 1909: 1960. WDR IL-75: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 503.33 ft (153.415 m) above mean sea level (levels by Corps of Engineers). Prior to Jan. 9, 1935, nonrecording gage at site 0.3 mi (0.5 km) upstream at same datum.

REMARKS.--Records good except those for winter periods, which are poor. Flow regulated at times by storage at Lake Vermilion on North Fork Vermilion River, 4.5 mi (7.2 km) above station, usable capacity, 7,440 acre-ft (9.17 km³), and by Danville sewage-disposal plant. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--56 years, 923 ft³/s (26.14 m³/s), 9.72 in/yr (247 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 48,700 ft³/s (1,380 m³/s) Mar. 13, 1939, gage height, 28.59 ft (8.714 m); minimum daily, 2 ft³/s (0.057 m³/s) Oct. 9-14, 1920, Aug. 10, 1930.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 6,000 ft³/s (170 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Aug. 11	2330	7640 216	12.37 3.770	Sept. 14	1030	*9370 265	*14.10 4.298

Minimum daily discharge, 27 ft³/s (0.76 m³/s) Jan. 16 to Feb. 2, Feb. 7, 8, 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	57	64	56	32	27	197	1190	229	223	101	63	713
2	59	93	47	31	27	161	1270	263	187	104	57	807
3	58	74	48	30	45	194	2210	465	175	92	57	858
4	52	61	54	29	42	295	1650	688	175	75	63	548
5	55	60	50	28	35	507	1290	1180	121	64	74	461
6	102	64	51	28	28	389	1130	4050	142	59	405	393
7	198	64	51	28	27	275	919	5130	134	55	3940	401
8	175	60	47	28	27	227	665	4770	200	191	6530	354
9	104	62	46	28	27	210	579	2980	213	183	6120	319
10	80	61	46	28	30	215	515	1920	206	268	5000	294
11	72	55	49	28	35	227	495	1460	192	184	6110	271
12	65	56	52	28	120	302	458	1110	166	134	7020	256
13	59	57	45	28	200	441	431	837	155	95	5060	1050
14	55	50	48	28	150	491	418	723	151	86	2190	8690
15	59	47	47	28	120	336	435	703	138	80	2150	7620
16	57	51	46	27	100	245	411	767	139	76	2500	6770
17	54	56	50	27	84	206	380	781	125	77	4740	4890
18	52	57	53	27	74	816	360	550	121	195	2400	3100
19	57	60	56	27	66	1370	353	477	114	184	1230	2990
20	57	56	59	27	60	924	349	477	105	132	1250	2790
21	56	56	45	27	56	593	344	477	98	133	1150	2110
22	61	53	55	27	56	578	343	457	98	153	833	1450
23	76	52	53	27	100	820	327	374	100	143	1100	1300
24	75	52	48	27	200	1130	310	307	107	148	1020	1290
25	65	57	49	27	424	1110	289	331	112	130	909	1520
26	77	63	50	27	402	1000	276	340	135	101	584	1550
27	72	78	47	27	271	863	264	299	144	231	406	1160
28	62	67	49	27	240	1860	254	269	109	156	343	903
29	59	67	44	27	---	3990	245	233	107	99	801	801
30	72	64	41	27	---	3370	231	226	113	83	1690	824
31	70	---	39	27	---	1800	---	226	---	75	1240	---
TOTAL	2272	1817	1521	862	3073	25142	18391	33099	4305	3887	67035	56483
MEAN	73.3	60.6	49.1	27.8	110	811	613	1068	144	125	2162	1883
MAX	198	93	59	32	424	3990	2210	5130	223	268	7020	8690
MIN	52	47	39	27	27	161	231	226	98	55	57	256
CFSM	.06	.05	.04	.02	.09	.63	.48	.83	.11	.10	1.68	1.46
IN.	.07	.05	.04	.02	.09	.73	.53	.95	.12	.11	1.93	1.63
CAL YR 1976 TOTAL	244372			MEAN 668	MAX 11000	MIN 39	CFSM .52	IN 7.05				
WTR YR 1977 TOTAL	217887			MEAN 597	MAX 8690	MIN 27	CFSM .46	IN 6.28				

WARASH RIVER BASIN

03339108 EAST FORK COAL CREEK NEAR HILLSBORO, IN

LOCATION.--Lat 40°06'06", long 87°07'54", in NW¼SW¼ sec.8, T.19 N., R.6 W., Fountain County, Hydrologic Unit 05120108, at center pier on downstream side of bridge on County Road 700 East, 1.5 miles (2.4 km) east of Hillsboro, 3.7 miles (6.0 km) northwest of Waynetown, and 9.6 miles (15.4 km) upstream from mouth.

DRAINAGE AREA.--33.4 mi² (86.5 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 673.76 ft (205.362 m) above mean sea level.

REMARKS.--Records good except those for winter periods and period of no gage-height record, Jan. 8 to Feb. 22, which are poor.

AVERAGE DISCHARGE.--9 years, 36.1 ft³/s (1.022 m³/s), 14.68 in/yr (373 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,180 ft³/s (61.7 m³/s) June 13, 1972, gage height, 9.69 ft (2.954 m); minimum daily, 3.5 ft³/s (0.099 m³/s) Jan. 16, 17, Feb. 6, 7, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 700 ft³/s (19.8 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
July 07	2215	*1360 38.5	*7.67 2.338
Aug. 07	1100	763 21.6	5.78 1.762
Aug. 11	1545	728 20.6	5.66 1.725

Minimum daily discharge, 3.5 ft³/s (0.099 m³/s) Jan. 16, 17, Feb. 6, 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.4	8.2	6.2	4.0	4.5	22	28	9.7	4.8	24	4.1	9.8
2	5.1	7.6	6.2	4.0	5.0	18	52	12	4.7	8.3	3.9	13
3	5.1	7.2	6.7	4.0	5.0	34	39	10	4.7	5.9	4.2	13
4	4.9	7.0	5.8	4.1	4.0	93	34	10	4.7	4.8	4.5	10
5	5.6	6.8	6.7	4.2	3.6	52	35	15	4.9	4.4	5.5	9.7
6	32	6.6	5.8	4.4	3.5	31	27	30	8.4	4.1	90	8.6
7	9.5	6.5	6.2	4.5	3.5	23	24	31	6.2	192	371	8.5
8	7.4	6.2	5.8	4.3	3.6	20	21	21	5.5	255	102	7.8
9	6.9	6.3	6.2	4.1	4.3	17	19	16	6.0	38	77	7.6
10	6.0	6.4	6.2	3.8	6.0	15	18	13	5.1	19	56	6.8
11	5.6	5.8	6.7	3.7	15	14	16	12	5.4	21	249	6.5
12	5.4	5.6	5.8	3.7	35	24	16	11	5.4	16	124	7.5
13	5.5	5.5	6.0	3.9	25	23	15	10	5.4	9.1	78	15
14	5.6	6.2	6.2	4.1	19	17	15	9.5	5.4	7.4	55	45
15	5.8	5.4	5.4	3.8	13	15	14	8.9	4.9	6.2	39	30
16	5.9	5.6	5.4	3.5	11	13	13	8.3	4.7	5.4	31	20
17	6.2	5.4	5.1	3.5	10	13	13	7.9	4.7	6.2	27	16
18	5.8	5.6	5.4	3.6	9.0	107	12	7.8	4.4	5.8	24	14
19	7.0	5.4	5.1	3.7	8.0	50	12	7.4	4.2	7.9	21	13
20	8.0	5.4	5.8	3.9	7.6	40	12	7.0	4.2	6.2	18	12
21	6.9	5.4	5.6	4.1	7.2	31	12	7.0	3.8	5.4	17	12
22	6.5	5.4	5.6	4.3	7.4	35	16	6.6	4.1	6.7	16	11
23	7.6	5.2	5.6	4.5	30	49	15	6.2	4.7	5.1	14	11
24	9.8	5.7	6.0	4.7	33	40	13	6.4	4.7	4.7	14	15
25	8.3	6.2	7.0	4.7	20	30	12	6.8	4.6	9.1	26	18
26	7.1	7.4	7.2	4.5	19	24	11	6.5	4.3	6.0	22	14
27	6.4	9.6	6.8	4.1	40	30	11	5.8	9.9	4.8	16	12
28	6.1	7.9	6.2	3.9	23	148	11	5.8	16	4.4	14	11
29	6.2	7.0	5.8	3.8	---	89	10	5.8	6.7	4.2	20	10
30	7.7	6.0	5.0	3.8	---	52	9.1	5.4	25	4.1	17	14
31	9.8	---	4.2	3.9	---	34	---	5.4	---	4.1	11	---
TOTAL	231.1	190.5	183.7	125.1	375.2	1203	555.1	325.2	187.5	705.3	1571.2	401.8
MEAN	7.45	6.35	5.93	4.04	13.4	38.8	18.5	10.5	6.25	22.8	50.7	13.4
MAX	32	9.6	7.2	4.7	40	148	52	31	25	255	371	45
MIN	4.9	5.2	4.2	3.5	3.5	13	9.1	5.4	3.8	4.1	3.9	6.5
CFSM	.22	.19	.18	.12	.40	1.16	.55	.31	.19	.68	1.52	.40
IN.	.26	.21	.20	.14	.42	1.34	.62	.36	.21	.79	1.75	.45
CAL YR 1976	TOTAL	9984.0	MEAN	27.3	MAX	491	MIN	4.2	CFSM	.82	IN	11.12
WTR YR 1977	TOTAL	6054.7	MEAN	16.6	MAX	371	MIN	3.5	CFSM	.50	IN	6.74

03339500 SUGAR CREEK AT CRAWFORDSVILLE, IN

LOCATION.--Lat 40°02'56", long 86°53'58", in SW¼NW¼ sec.32, T.19 N., R.4 W., Montgomery County, Hydrologic Unit 05120110, on left bank 327 ft (100 m) upstream from Crawfordsville Electric Light and Power Co.'s dam at Crawfordsville, 0.5 mile (0.8 km) upstream from bridge on State Highway 43, 1.0 mile (1.6 km) downstream from Walnut Fork Sugar Creek, and at mile 40.4 (65.0 km).

DRAINAGE AREA.--509 mi² (1,318 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1938 to current year.

REVISED RECORDS.--WSP 973: 1939(M). WSP 1275: Drainage area. WSP 1335: 1949.

GAGE.--Water-stage recorder. Datum of gage is 657.77 ft (200.488 m) above mean sea level.

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

AVERAGE DISCHARGE.--39 years, 476 ft³/s (13.48 m³/s), 12.70 in/yr (323 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 26,300 ft³/s (745 m³/s) June 28, 1957, gage height, 14.48 ft (4.414 m); minimum daily, 2.4 ft³/s (0.068 m³/s) Sept. 24-27, 1941.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913, reached a stage of 17.3 ft (5.27 m) from information by local resident, discharge, about 36,000 ft³/s (1,020 m³/s).

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 4,000 ft³/s (113 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
July 08	0200	*5290 150	*5.39 1.643

Minimum daily discharge, 14 ft³/s (0.40 m³/s) Aug. 4, 5.

 DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	39	28	17	19	245	438	120	59	203	17	100
2	23	34	23	17	22	182	1010	125	48	93	15	80
3	21	32	25	17	22	185	2160	128	43	50	15	65
4	19	32	25	18	17	725	1180	123	39	40	14	54
5	21	30	23	18	15	994	900	151	40	31	14	48
6	32	30	25	19	15	487	642	236	49	25	186	44
7	44	30	28	19	15	316	483	585	49	198	1060	41
8	39	28	25	18	15	249	398	492	46	2510	512	39
9	32	25	25	17	18	212	319	346	66	506	229	37
10	28	28	25	16	18	190	289	274	57	248	187	37
11	25	30	28	16	36	168	266	231	47	189	506	36
12	25	30	30	16	140	164	236	200	44	162	1460	36
13	21	28	25	16	291	186	217	176	40	102	640	100
14	19	28	28	18	210	172	207	161	40	71	342	900
15	19	30	28	16	123	152	196	149	37	57	220	650
16	21	28	28	15	100	128	180	134	35	48	191	450
17	21	28	28	15	88	116	167	117	31	45	212	276
18	21	30	25	15	79	346	158	106	30	39	141	216
19	23	30	28	16	73	570	154	99	28	37	105	179
20	28	30	30	16	70	368	149	112	26	34	95	145
21	28	30	26	17	66	297	138	123	23	46	89	123
22	30	30	25	18	69	280	175	106	23	80	83	105
23	30	28	26	19	128	329	241	88	27	55	83	98
24	34	28	27	20	273	327	239	78	30	35	80	152
25	46	28	32	20	270	267	222	74	31	27	65	191
26	39	30	25	19	192	229	198	67	38	23	59	148
27	32	34	25	17	314	217	176	61	49	20	54	119
28	30	32	28	16	305	926	159	58	56	18	52	102
29	28	28	25	16	---	1940	151	56	50	18	350	92
30	30	25	21	16	---	1140	135	56	112	18	230	126
31	37	---	18	17	---	667	---	63	---	17	150	---
TOTAL	871	893	808	530	3003	12774	11583	4895	1293	5045	7456	4789
MEAN	28.1	29.8	26.1	17.1	107	412	386	158	43.1	163	241	160
MAX	46	39	32	20	314	1940	2160	585	112	2510	1460	900
MIN	19	25	18	15	15	116	135	56	23	17	14	36
CFSM	.06	.06	.05	.03	.21	.81	.76	.31	.09	.32	.47	.31
IN.	.06	.07	.06	.04	.22	.93	.85	.36	.09	.37	.54	.35

CAL YR 1976 TOTAL 129309 MEAN 353 MAX 7390 MIN 18 CFSM .69 IN 9.45
 WTR YR 1977 TOTAL 53940 MEAN 148 MAX 2510 MIN 14 CFSM .29 IN 3.94

WABASH RIVER BASIN

03339500 SUGAR CREEK AT CRAWFORDSVILLE, IN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

SEDIMENT DISCHARGE: February 1972 to current year (partial-record station).

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	SUS- PENDE SEDI- MENT (MG/L)	SUS- PENDE SEDI- MENT DIS- CHARGE (T/DAY)	DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	SUS- PENDE SEDI- MENT (MG/L)	SUS- PENDE SEDI- MENT DIS- CHARGE (T/DAY)
OCT 29...	1030	27	11.0	111	8.3	MAY 26...	1045	69	23.0	120	2.2
MAR 15...	1250	143	10.0	16	6.2	SEP 16...	1035	412	19.0	44	48
APR 12...	1320	239	15.0	52	33						

03340500 WABASH RIVER AT MONTEZUMA, IN

LOCATION.--Lat 39°47'33", long 87°22'26", in SE¼NE¼ sec.35, T.16 N., R.9 W., Parke County, Hydrologic Unit 05120108, on downstream side of first pier from left bank of bridge on U.S. Highway 36 at Montezuma, 2.0 miles (3.2 km) upstream from Raccoon Creek, 4.9 miles (7.9 km) downstream from Sugar Creek, and at mile 240.0 (386.0 km).

DRAINAGE AREA.--11,118 mi² (28,796 km²).

REVISED RECORDS.--WSP 1335: 1929, 1931(M). WSP 1505: 1954. WSP 1915: 1954(m). WSP 2109: Drainage area. WRD Ind. 1974: 1973.

GAGE.--Water-stage recorder. Datum of gage is 457.75 ft (139.522 m) above mean sea level (levels by Corps of Engineers). Oct. 1, 1927, to July 12, 1950, nonrecording gage at same site and datum.

REMARKS.--Records good except those for period of no gage-height record, Dec. 29 to Feb. 23, which is fair. Flow partially regulated by upstream reservoirs.

AVERAGE DISCHARGE.--50 years, 9,520 ft³/s (270 m³/s), 11.63 in/yr (295 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 184,000 ft³/s (5,210 m³/s) May 20, 1943, gage height, 32.83 ft (10.007 m); minimum daily, 571 ft³/s (16.2 m³/s) Sept. 24, 1941.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 27, 1913, reached a stage of 34.0 ft (10.36 m), from floodmarks, discharge, 230,000 ft³/s (6,510 m³/s).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 27,100 ft³/s (767 m³/s) Sept. 16, gage height, 15.75 ft (4.801 m); minimum daily, 900 ft³/s (25.5 m³/s) Jan. 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1850	2440	1740	1200	1160	7510	22600	4520	2520	2960	1210	5050
2	1860	2440	1500	1250	1180	7570	19600	4360	2400	2400	1190	4030
3	1830	2420	1400	1290	1200	8250	20900	4310	2300	2470	1130	3990
4	1800	2400	1720	1290	1220	10000	21800	5080	2160	3860	1070	4600
5	1830	2370	1630	1290	1210	13500	20700	6430	2070	4220	1220	5440
6	2050	2290	1550	1240	1190	18500	19000	10200	2150	3640	2490	4850
7	2240	2060	1390	1170	1170	19600	16700	17300	2250	3050	19800	4200
8	2420	1950	1390	1090	1160	17400	14300	18600	2400	5140	17700	3780
9	2480	1930	1330	1030	1180	14500	11900	17000	2830	5400	14300	3410
10	2400	1920	1510	980	1220	13300	9870	13800	2600	3350	11300	3010
11	2300	1950	1400	960	1400	11900	8610	11300	2460	3050	13900	2960
12	2240	1920	1480	980	1900	11300	7910	9880	2370	2950	23400	2820
13	2240	1910	1330	1000	3100	9910	7200	8440	2430	2710	23300	2820
14	2230	1900	1320	1030	3250	8170	6680	7050	2390	2730	18400	14600
15	2190	1880	1390	1050	3200	7620	6270	6160	2340	2550	13600	27000
16	2120	1870	1420	980	2900	6980	5800	5620	2330	2350	10900	27000
17	2080	1870	1390	900	2700	6220	5520	5270	2230	2160	10800	26400
18	2020	1880	1410	960	2600	6910	5310	4610	2130	2030	11200	22400
19	2100	1880	1400	1030	2520	9250	4910	4310	1970	2020	9170	18300
20	2170	1880	1400	1100	2470	12400	4660	4270	2110	1930	7680	16300
21	2420	1850	1300	1130	2400	14300	4640	4160	2100	1820	7140	14700
22	2370	1820	1130	1140	2500	13700	4570	4330	1980	1940	6590	12700
23	2380	1800	1150	1160	2890	13100	4530	3890	1870	1860	5550	10800
24	2520	1820	1340	1180	3700	12100	4610	3580	1810	1710	5420	9660
25	2540	1840	1290	1160	5500	11400	4710	3340	1790	1780	4910	9420
26	2440	1880	1430	1140	8600	11100	7430	3230	1770	2020	4380	9160
27	2430	1980	1400	1120	8910	11200	6040	3030	1780	1710	3690	8580
28	2380	2060	1420	1110	7670	13700	5640	2890	2020	1700	3300	7610
29	2240	2010	1430	1100	---	20400	5100	2800	2080	1510	3690	6940
30	2250	1870	1310	1120	---	24200	4800	2740	1930	1320	5590	6460
31	2340	---	1200	1130	---	25100	---	2650	---	1250	6220	---
TOTAL	68760	60090	43500	34310	80100	391090	292310	205150	65570	79590	270240	298990
MEAN	2218	2003	1403	1107	2861	12620	9744	6618	2186	2567	8717	9966
MAX	2540	2440	1740	1290	8910	25100	22600	18600	2830	5400	23400	27000
MIN	1800	1800	1130	900	1160	6220	4530	2650	1770	1250	1070	2820
CFSM	.20	.18	.13	.10	.26	1.14	.88	.60	.20	.23	.78	.90
IN.	.23	.20	.15	.11	.27	1.31	.98	.69	.22	.27	.90	1.00
CAL YR 1976 TOTAL	2968430			MEAN 8110	MAX 58400	MIN 1130	CFSM .73	IN 9.93				
WTR YR 1977 TOTAL	1889700			MEAN 5177	MAX 27000	MIN 900	CFSM .47	IN 6.32				

03340800 BIG RACCOON CREEK NEAR FINCASTLE, IN

LOCATION.--Lat 39°48'45", long 86°57'14", in NW¼SW¼ sec.22, T.16 N., R.5 W., Putnam County, Hydrologic Unit 05120108, on left bank at downstream side of county road bridge, 1.6 miles (2.6 km) upstream from Ramp Creek, 3.1 miles (5.0 km) west of Fincastle, and at mile 48.8 (78.5 km).

DRAINAGE AREA.--139 mi² (360 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1957 to current year. Prior to October 1963, published as Raccoon Creek near Fincastle.

REVISED RECORDS.--WSP 1909: 1958. WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 686.03 ft (209.102 m) above mean sea level.

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

AVERAGE DISCHARGE.--20 years, 137 ft³/s (3.880 m³/s), 13.38 in/yr (340 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,100 ft³/s (428 m³/s) Jan. 26, 1962; maximum gage height, 15.68 ft (4.779 m) Jan. 26, 1962 (ice jam); minimum daily discharge, 1.8 ft³/s (0.051 m³/s) Sept. 16, 17, and Oct. 5, 6, 1964.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 28, 1957, reached a stage of 19.10 ft (5.822 m), discharge, 39,900 ft³/s (1,130 m³/s), from slope-area measurement.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 1,900 ft³/s (53.8 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Aug. 07	0700	*1830 51.8	*8.37 2.551

Minimum daily discharge, 3.9 ft³/s (0.110 m³/s) Jan. 16, 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.4	11	5.2	4.6	4.4	162	158	37	14	232	6.1	51
2	5.2	9.3	5.0	4.4	4.6	111	335	38	12	61	5.8	37
3	4.8	8.7	5.0	4.3	4.7	97	569	37	10	34	5.5	30
4	4.6	8.1	4.9	4.9	4.8	366	292	38	10	24	5.8	25
5	4.9	7.8	4.8	6.4	4.8	431	241	65	11	19	6.6	22
6	7.1	7.5	5.1	8.0	4.8	219	186	121	15	16	41	20
7	7.5	7.1	5.8	7.6	4.7	148	152	343	25	14	1150	20
8	8.8	6.9	5.6	6.6	4.6	113	127	227	161	961	363	18
9	8.0	6.9	5.5	5.2	5.9	95	104	139	272	234	133	17
10	7.2	6.7	5.5	4.5	9.2	82	94	98	53	81	83	15
11	6.7	6.6	5.9	4.3	30	71	84	79	32	61	71	14
12	6.5	6.7	6.1	4.4	180	73	74	66	25	49	105	13
13	6.2	6.7	5.9	5.0	115	101	69	57	21	33	80	32
14	5.9	6.7	5.7	4.2	84	86	65	53	19	26	61	101
15	6.0	6.7	5.6	4.0	56	71	62	48	17	21	59	58
16	6.1	6.7	5.8	3.9	43	61	58	43	15	18	40	44
17	6.3	6.7	5.8	3.9	34	52	53	38	15	17	32	35
18	6.2	7.1	5.6	4.0	27	87	50	34	13	15	25	29
19	6.7	7.0	6.0	4.1	26	116	50	32	12	13	21	73
20	8.8	7.4	6.7	4.1	29	99	48	29	11	12	18	34
21	8.5	7.3	6.2	4.2	26	92	44	30	9.7	16	17	27
22	8.1	7.4	5.6	4.3	26	102	52	29	13	40	16	22
23	9.8	7.1	5.2	4.4	83	166	65	26	15	27	16	20
24	19	7.1	5.0	4.5	150	140	68	23	13	17	121	27
25	20	7.4	5.1	4.5	100	105	64	21	46	13	64	31
26	11	8.3	5.2	4.4	74	87	57	19	126	10	32	29
27	9.0	9.0	5.3	4.3	444	80	51	18	33	8.6	23	24
28	7.7	8.1	5.3	4.1	190	649	46	17	48	7.8	19	20
29	6.5	7.0	5.9	4.0	---	812	45	15	40	7.3	327	18
30	8.3	6.1	5.2	4.0	---	389	40	15	84	7.0	206	19
31	11	---	4.9	4.2	---	227	---	14	---	6.6	85	---
TOTAL	247.8	223.1	170.4	145.3	1769.5	5490	3403	1849	1190.7	2101.3	3237.8	925
MEAN	7.99	7.44	5.50	4.69	63.2	177	113	59.6	39.7	67.8	104	30.8
MAX	20	11	6.7	8.0	444	812	569	343	272	961	1150	101
MIN	4.6	6.1	4.8	3.9	4.4	52	40	14	9.7	6.6	5.5	13
CFSM	.06	.05	.04	.03	.46	1.27	.81	.43	.29	.49	.75	.22
IN.	.07	.06	.05	.04	.47	1.47	.91	.49	.32	.56	.87	.25
CAL YR 1976	TOTAL	38404.8	MEAN	105	MAX	3440	MIN	4.6	CFSM	.76	IN	10.28
WTR YR 1977	TOTAL	20752.9	MEAN	56.9	MAX	1150	MIN	3.9	CFSM	.41	IN	5.55

03340800 BIG RACCOON CREEK NEAR FINCASTLE, IN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

CHEMICAL ANALYSES: October 1975 to current year.

WATER TEMPERATURE: July 1965 to current year. Prior to October 1975 fragmentary instantaneous observations.

SEDIMENT DISCHARGE: August 1959 to September 1971, October 1973 to current year (partial-record station, October 1971 to September 1973).

INSTRUMENTATION.--Multi-parameter monitor.

REMARKS.--Conductance, temperature and sediment discharge records poor.

EXTREMES FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 720 micromhos May 19, 1976; minimum, 260 micromhos June 30, 1976.

WATER TEMPERATURE: Maximum observed, 31°C July 16, 1966; minimum, freezing point on many days during winter period of most years.

SEDIMENT CONCENTRATION: Maximum daily, 27,900 mg/L Jan. 29, 1970; minimum daily, 1 mg/L Apr. 13-15, 1970.

SEDIMENT DISCHARGE: Maximum daily, 295,000 tons (268,000 tonnes) Dec. 22, 1967; minimum daily, 0.03 ton (0.027 tonne) Sept. 15, 1964.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATION: Maximum daily, 2,500 mg/L June 9; minimum daily, 6 mg/L Jan. 13 to Feb. 21.

SEDIMENT DISCHARGE: Maximum daily, 7,640 tons (6,930 tonnes) Aug. 7; minimum daily, 0.06 ton (0.05 tonne) Jan. 15-18, 29, 30.

TEMPERATURE (DEG. C) OF WATER. WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	17.5	11.0	---	---	1.0	.5						
2	17.5	12.0	---	---	.5	.0						
3	16.5	13.0	---	---	.5	.0						
4	16.0	13.0	---	---	1.0	.0						
5	13.0	11.5	---	---	1.0	.0						
6	13.0	11.5	---	---	1.0	.0						
7	12.5	9.0	---	---	.0	.0						
8	12.0	9.0	---	---	.5	.0						
9	---	---	6.0	3.5	1.0	.0						
10	---	---	6.0	4.5	1.0	.0						
11	---	---	4.5	2.0	1.0	.0						
12	---	---	4.5	.5	1.0	.5						
13	---	---	4.0	.5	---	---						
14	---	---	3.0	.5	---	---						
15	---	---	3.5	1.0	---	---						
16	---	---	3.5	.5	---	---						
17	---	---	4.0	1.0	---	---						
18	---	---	4.5	1.5	---	---						
19	---	---	5.0	2.5	---	---						
20	---	---	5.0	3.0	---	---						
21	---	---	3.5	2.0	.0	.0						
22	---	---	2.5	1.0	.0	.0						
23	---	---	2.0	.5	.0	.0						
24	---	---	3.0	1.5	.0	.0						
25	---	---	5.5	1.5	.5	.0						
26	---	---	7.5	6.0	.5	.0						
27	---	---	7.5	4.5	---	---						
28	---	---	4.0	.5	---	---						
29	---	---	.5	.0	---	---						
30	---	---	.5	.0	---	---						
31	---	---	---	---	---	---						
MONTH	17.5	9.0	7.5	.0	1.0	.0						

03340800 BIG RACCOON CREEK NEAR FINCASTLE, IN--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

[illegible]

WABASH RIVER BASIN

03340800 BIG RACCOON CREEK NEAR FINCASTLE, IN--Continued

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	MEAN CONCN- TRATION		MEAN CONCN- TRATION		MEAN CONCN- TRATION		MEAN CONCN- TRATION		MEAN CONCN- TRATION		MEAN CONCN- TRATION	
	(MG/L)	LOADS (T/DAY)	(MG/L)	LOADS (T/DAY)	(MG/L)	LOADS (T/DAY)	(MG/L)	LOADS (T/DAY)	(MG/L)	LOADS (T/DAY)	(MG/L)	LOADS (T/DAY)
OCTOBER												
1	34	.50	80	2.4	27	.38	16	.20	6	.07	41	18
2	34	.48	70	1.8	27	.36	13	.15	6	.07	35	10
3	35	.45	60	1.4	28	.38	10	.12	6	.08	34	8.9
4	35	.43	50	1.1	28	.37	9	.12	6	.08	189	187
5	34	.45	40	.84	28	.36	8	.14	6	.08	102	119
6	33	.63	33	.67	28	.39	12	.26	6	.08	35	21
7	36	.73	28	.54	28	.44	10	.21	6	.08	21	8.4
8	39	.93	26	.48	28	.42	10	.18	6	.07	17	5.2
9	39	.84	26	.48	28	.42	9	.13	6	.10	15	3.8
10	39	.76	26	.47	27	.40	8	.10	6	.15	12	2.7
11	38	.69	26	.46	27	.43	7	.08	6	.49	11	2.1
12	38	.67	28	.51	27	.44	7	.08	6	2.9	16	3.2
13	38	.64	28	.51	26	.41	6	.08	6	1.9	41	11
14	38	.61	27	.49	25	.38	6	.07	6	1.4	33	7.7
15	42	.68	27	.49	25	.38	6	.06	6	.91	35	6.7
16	44	.72	26	.47	25	.39	6	.06	6	.70	41	6.8
17	42	.71	26	.47	25	.39	6	.06	6	.55	38	5.3
18	38	.64	28	.54	25	.38	6	.06	6	.44	62	15
19	50	.90	29	.55	30	.49	6	.07	6	.42	75	23
20	70	1.7	33	.66	39	.71	6	.07	6	.47	67	18
21	60	1.4	30	.59	39	.65	6	.07	6	.42	63	16
22	50	1.1	31	.62	38	.57	6	.07	17	1.2	66	18
23	80	2.1	30	.58	38	.53	6	.07	19	4.3	139	62
24	100	5.1	29	.56	34	.46	6	.07	52	21	104	39
25	80	4.3	28	.56	30	.41	6	.07	54	15	86	24
26	75	2.2	27	.61	28	.39	6	.07	66	13	79	19
27	70	1.7	27	.66	27	.39	6	.07	376	451	78	17
28	65	1.4	27	.59	26	.37	6	.07	54	28	1470	2580
29	60	1.1	27	.51	25	.40	6	.06	---	---	312	684
30	70	1.6	27	.44	22	.31	6	.06	---	---	93	98
31	90	2.7	---	---	19	.25	6	.07	---	---	73	45
TOTAL	---	38.86	---	21.05	---	13.05	---	3.05	---	544.96	---	4084.8
APRIL												
MAY												
JUNE												
JULY												
AUGUST												
SEPTEMBER												
1	65	28	55	5.5	40	1.5	646	405	16	.26	80	11
2	265	240	52	5.3	39	1.3	152	25	15	.23	68	6.8
3	188	289	48	4.8	38	1.0	99	9.1	13	.19	61	4.9
4	102	80	46	4.7	37	1.0	78	5.1	12	.19	52	3.5
5	85	55	60	11	36	1.1	67	3.4	11	.20	42	2.5
6	83	42	115	38	56	2.3	62	2.7	27	3.0	32	1.7
7	81	33	1030	954	69	4.7	61	2.3	2460	7640	32	1.7
8	79	27	92	56	781	340	1450	3760	446	437	32	1.6
9	73	20	70	26	2500	1840	306	193	111	40	31	1.4
10	74	19	64	17	229	33	73	16	77	17	31	1.3
11	77	17	60	13	51	4.4	73	12	81	16	30	1.1
12	79	16	57	10	48	3.2	61	8.1	119	34	29	1.0
13	78	15	54	8.3	48	2.7	44	3.9	90	19	46	4.0
14	77	14	50	7.2	46	2.4	36	2.5	85	14	123	34
15	76	13	47	6.1	45	2.1	33	1.9	78	12	88	14
16	75	12	43	5.0	44	1.8	31	1.5	46	5.0	73	8.7
17	73	10	43	4.4	43	1.7	29	1.3	40	3.5	64	6.0
18	71	9.6	45	4.1	43	1.5	28	1.1	41	2.8	59	4.6
19	68	9.2	43	3.7	42	1.4	27	.95	43	2.4	98	19
20	66	8.6	43	3.4	41	1.2	26	.84	44	2.1	55	5.0
21	62	7.4	40	3.2	40	1.0	30	1.3	44	2.0	51	3.7
22	70	9.8	43	3.4	53	1.9	52	5.6	43	1.9	48	2.9
23	68	12	45	3.2	61	2.5	36	2.6	41	1.8	44	2.4
24	76	14	45	2.8	54	1.9	27	1.2	121	40	52	3.8
25	70	12	47	2.7	74	9.2	23	.81	69	12	47	3.9
26	64	9.8	45	2.3	190	65	22	.59	52	4.5	34	2.7
27	62	8.5	45	2.2	60	5.3	20	.46	47	2.9	29	1.9
28	61	7.6	44	2.0	72	9.3	19	.40	45	2.3	27	1.5
29	60	7.3	43	1.7	54	5.8	18	.35	898	793	27	1.3
30	58	6.3	42	1.7	295	67	17	.32	190	106	28	1.4
31	---	---	41	1.5	---	---	17	.30	99	23	---	---
TOTAL	---	1052.1	---	1214.2	---	2417.2	---	4469.62	---	9238.27	---	159.3
TOTAL LOAD FOR YEAR: 23256.46 TONS.												

03340870 CECIL M. HARDEN LAKE AT FERNDALE, IN
(Formerly published as Mansfield Lake at Ferndale)

LOCATION.--Lat 39°43'02", long 87°04'20", in SE¼NE¼ sec.28, T.15 N., R.6 W., Parke County, Hydrologic Unit 05120108, in discharge tower of reservoir on Big Raccoon Creek at Ferndale, 4.4 miles (7.1 km) upstream from Rocky Fork Creek, 6.1 miles (9.8 km) northeast of Mansfield, and at mile 33.8 (54.4 km).

DRAINAGE AREA.--216 mi² (559 km²).

PERIOD OF RECORD.--December 1960 to current year. Published as "Mansfield Reservoir" prior to October 1970 and as "Mansfield Lake" October 1970 to September 1974.

GAGE.--Water-stage recorder. Datum of gage is 600.00 ft (182.880 m) above mean sea level (levels by Corps of Engineers).

REMARKS.--Reservoir is formed by earth-fill dam. Releases normally controlled by three gates, 4 ft (1.22 m) wide and 8 ft (2.44 m) high, in semi-elliptical concrete conduit through dam. Minimum design capacity is 16,180 acre-ft (19.9 hm³), elevation, 640 ft (195.1 m). Seasonal pool capacity is 49,300 acre-ft (60.8 hm³), elevation, 661 ft (201.5 m). Capacity at uncontrolled spillway elevation, 690 ft (210.3 m) is 133,000 acre-ft (164 hm³). Reservoir is used for flood control and recreation. Reservoir put in operation on Dec. 6, 1960.

COOPERATION.--Water-stage recorder graph and capacity tables furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 87,510 acre-ft (107 hm³) May 4, 1964, elevation, 676.52 ft (206.203 m); minimum, 16,080 acre-ft (19.8 hm³), many times, elevation, 639.9 ft (195.04 m).

EXTREMES FOR CURRENT YEAR.--Maximum contents, 52,590 acre-ft (64.8 hm³) July 9, elevation, 662.59 ft (201.967 m); minimum, 15,940 acre-ft (19.7 hm³) Feb. 10, elevation, 639.78 ft (195.005 m).

MONTHEND ELEVATION AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	659.59	46,410	
Oct. 31.....	654.16	36,270	-10,140
Nov. 30.....	640.35	16,570	-19,700
Dec. 31.....	640.02	16,210	-360
CAL YR 1976.....			-630
Jan. 31.....	639.86	16,030	-180
Feb. 28.....	645.36	22,710	+6,680
Mar. 31.....	655.11	37,960	+15,250
Apr. 30.....	659.54	46,310	+8,350
May 31.....	660.77	48,770	+2,460
June 30.....	662.26	51,890	+3,120
July 31.....	661.21	49,690	-2,200
Aug. 31.....	661.83	50,990	+1,300
Sept. 30.....	660.95	49,140	-1,850
WTR YR 1977.....			+2,730

03340900 BIG RACCOON CREEK AT FERNDAL, IN

LOCATION (revised).--Lat 39°41'44", long 87°05'01", in SE¼SW¼ sec.33, T.15 N., R.6 W., Parke County, Hydrologic unit 05120108, on right bank 1.1 miles (1.8 km) southwest of Ferndale, 1.8 miles (2.9 km) northeast of Mansfield, 2.0 miles (3.2 km) upstream from Rocky Fork Creek, 2.2 miles (3.5 km) downstream from Cecil M. Harden Lake, and at mile 31.6 (50.8 km).

DRAINAGE AREA.--222 mi² (575 km²).

PERIOD OF RECORD.--October 1956 to current year. Prior to October 1963, published as Raccoon Creek at Ferndale.

REVISED RECORDS.--WSP 2109: Drainage area.

GAGE (revised).--None. Datum of gage was 582.36 ft (177.503 m) above mean sea level (Corps of Engineers bench mark). Prior to Oct. 1, 1974, water-stage recorder at site described in "LOCATION" paragraph.

REMARKS.--Flow regulated by Cecil M. Harden Lake (See sta 03340870). Daily discharge computed from relation between discharge, head, and gate openings for Cecil M. Harden Lake beginning Oct. 1, 1974.

COOPERATION.--Records of daily discharge furnished by Corps of Engineers beginning Oct. 1, 1976.

AVERAGE DISCHARGE.--21 years, 221 ft³/s (6.259 m³/s), 13.52 in/yr (343 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 40,500 ft³/s (1,150 m³/s) June 28, 1957, gage height, 19.87 ft (6.056 m), from rating curve extended above 5,000 ft³/s (142 m³/s) on basis of records for station at Big Raccoon Creek at Mansfield; minimum daily, 2.7 ft³/s (0.076 m³/s) Oct. 11, 1956; no flow Aug. 23, 24, 1977, due to regulation.

EXTREMES FOR 1975 WATER YEAR.--Maximum daily discharge, 1,230 ft³/s (34.8 m³/s) Mar. 9, 1975; minimum daily discharge, 27 ft³/s (0.76 m³/s) Apr. 14-20, 1975.

EXTREMES FOR 1976 WATER YEAR.--Maximum daily discharge, 943 ft³/s (26.7 m³/s) Mar. 17, 1976; minimum daily discharge, 34 ft³/s (0.96 m³/s) May 5 to June 28, 1976.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 679 ft³/s (19.2 m³/s) July 2; no flow, Aug. 23, 24.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	138	441	291	483	101	112	110	923	181	132	30	264
2	143	439	119	617	103	113	111	933	165	169	30	266
3	143	212	53	538	523	113	112	929	177	110	30	143
4	143	52	60	410	889	552	112	925	169	55	82	80
5	143	45	84	332	897	928	113	598	170	51	117	77
6	143	45	97	258	892	1060	113	217	170	51	119	77
7	143	45	141	255	957	870	113	199	170	51	108	68
8	119	126	262	328	1080	1020	76	199	113	51	89	69
9	100	496	436	403	1070	1230	46	199	86	51	81	68
10	100	598	442	211	1050	1220	45	146	85	51	60	68
11	99	599	441	95	1030	1200	45	133	85	51	47	68
12	99	595	439	94	1010	481	46	132	85	34	77	97
13	99	592	439	96	451	115	34	132	85	36	98	124
14	99	654	439	96	167	99	27	132	95	50	99	129
15	257	712	439	97	185	527	27	132	118	35	79	129
16	367	710	498	97	186	865	27	482	102	30	54	129
17	370	705	553	372	393	872	27	827	99	30	43	128
18	369	699	479	705	639	868	27	836	99	30	43	101
19	368	693	326	714	612	868	27	832	99	30	43	93
20	367	687	270	793	410	872	27	382	68	30	35	93
21	365	680	255	898	322	868	28	112	32	123	30	93
22	375	674	254	890	248	861	28	417	30	169	30	93
23	379	667	254	879	99	446	28	888	61	171	30	93
24	404	660	255	867	103	283	29	905	98	171	30	93
25	415	652	397	858	107	276	30	902	99	131	30	93
26	414	644	510	853	109	241	67	625	99	120	30	93
27	412	483	560	846	111	209	101	432	99	76	196	93
28	411	406	436	836	112	125	103	356	99	60	1180	93
29	409	318	263	343	---	104	104	214	99	46	163	93
30	433	295	254	106	---	107	592	207	99	43	120	93
31	443	---	254	98	---	109	---	207	---	33	206	---
TOTAL	8269	14624	10000	14468	13856	17614	2375	14553	3236	2271	3409	3201
MEAN	267	487	323	467	495	568	79.2	469	108	73.3	110	107
MAX	443	712	560	898	1080	1230	592	933	181	171	1180	266
MIN	99	45	53	94	99	99	27	112	30	30	30	68
CAL YR 1974 TOTAL	149558.5			MEAN 410	MAX 2020	MIN 6.5						
WTR YR 1975 TOTAL	107876.0			MEAN 296	MAX 1230	MIN 27						

03340900 BIG RACCOON CREEK AT FERNDAL, IN--Continued

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	92	379	275	233	115	162	497	48	34	36	217	50
2	78	377	366	237	67	162	496	48	34	36	111	49
3	71	375	455	279	51	162	494	48	34	36	53	49
4	70	373	614	307	51	164	493	43	34	36	51	49
5	70	371	443	140	51	167	491	34	34	62	51	48
6	70	369	177	94	52	169	296	34	34	107	51	48
7	70	407	125	107	244	170	167	34	34	142	346	48
8	70	437	169	107	387	170	102	34	34	351	494	48
9	70	435	171	77	300	169	81	34	34	326	208	48
10	70	432	150	51	405	165	55	34	34	165	57	48
11	70	429	88	51	228	171	48	34	34	79	51	48
12	70	426	85	86	144	171	47	34	34	75	46	48
13	70	423	85	73	141	171	47	34	34	72	51	48
14	70	419	80	251	142	172	47	34	34	52	284	48
15	70	416	127	253	142	524	47	34	34	51	464	48
16	70	412	196	138	143	856	47	34	34	51	360	48
17	216	409	98	118	148	943	47	34	34	51	102	48
18	316	405	88	94	153	942	47	34	34	51	53	48
19	322	401	87	85	155	937	47	34	34	51	51	48
20	353	398	88	85	156	932	48	34	34	51	51	48
21	397	394	318	85	155	927	48	34	34	51	51	48
22	397	391	623	61	152	923	48	34	34	51	51	48
23	395	387	627	51	160	918	48	34	34	51	51	48
24	394	383	419	72	161	663	48	34	34	51	51	48
25	392	379	99	140	161	515	48	34	34	51	48	48
26	390	375	86	180	162	505	48	34	34	51	50	48
27	388	371	85	454	162	503	48	34	34	51	51	48
28	387	367	85	772	162	502	48	34	34	71	51	48
29	385	185	85	921	162	501	48	34	35	137	51	48
30	383	104	85	637	---	500	48	34	35	166	51	48
31	380	---	135	183	---	499	---	34	---	200	50	---
TOTAL	6646	11429	6614	6422	4712	14435	4124	1105	1022	2812	3708	1445
MEAN	214	381	213	207	162	466	137	35.6	34.1	90.7	120	48.2
MAX	397	437	627	921	405	943	497	48	35	351	494	50
MIN	70	104	80	51	51	162	47	34	34	36	46	48
CAL YR 1975	TOTAL	99672	MEAN 273	MAX	1230	MIN 27						
WTR YR 1976	TOTAL	64474	MEAN 176	MAX	943	MIN 34						

03340900 BIG RACCOON CREEK AT FERNDALF, IN--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	48	437	282	17	17	21	26	28	38	387	28	392
2	48	434	272	17	17	21	26	28	28	679	28	141
3	48	432	262	17	17	21	27	28	28	318	28	95
4	48	429	260	17	17	22	27	28	28	48	28	94
5	48	426	17	17	17	22	27	28	28	48	28	94
6	48	423	17	17	17	22	27	28	28	35	28	94
7	48	395	17	17	17	22	27	63	28	28	28	94
8	47	374	17	17	17	22	27	98	28	254	363	77
9	47	371	17	17	17	22	27	131	28	456	574	38
10	47	360	17	17	17	22	27	248	28	576	232	28
11	47	344	17	17	17	23	27	268	28	415	82	28
12	47	342	17	17	17	23	27	163	28	187	82	28
13	47	340	17	17	18	23	27	127	28	95	82	28
14	47	338	17	17	18	23	27	109	28	49	194	28
15	134	336	17	17	18	23	28	90	28	49	128	71
16	233	333	17	17	18	23	28	81	28	49	82	85
17	232	331	17	17	18	23	28	59	28	49	82	85
18	280	329	17	17	19	23	28	48	28	49	82	85
19	308	327	17	17	19	23	28	48	28	49	82	85
20	307	324	17	17	19	23	23	48	28	48	82	85
21	306	352	17	17	19	23	28	48	28	48	82	85
22	304	378	17	17	19	23	28	48	28	48	27	85
23	303	374	17	17	19	23	28	48	28	48	.00	85
24	193	364	17	17	19	24	28	48	28	48	.00	85
25	106	328	17	17	20	24	28	48	28	48	48	85
26	310	308	17	17	20	24	28	48	28	48	95	85
27	450	306	17	17	20	24	28	48	28	48	95	85
28	447	303	17	17	21	24	28	48	28	48	95	85
29	444	300	17	17	---	25	28	48	28	43	95	85
30	442	297	17	17	---	26	28	48	28	32	268	85
31	440	---	17	17	---	26	---	48	---	28	536	---
TOTAL	5904	10735	1535	527	508	713	819	2277	850	4355	3684.00	2605
MEAN	190	358	49.5	17.0	18.1	23.0	27.3	73.5	28.3	140	119	86.8
MAX	450	437	282	17	21	26	28	268	38	679	574	392
MIN	47	297	17	17	17	21	23	28	28	28	.00	28
CAL YR 1976	TOTAL	57959.00	MEAN	158	MAX	943	MIN	17				
WTR YR 1977	TOTAL	34512.00	MEAN	94.6	MAX	679	MIN	.00				

03341300 BIG RACCOON CREEK AT COXVILLE, IN

LOCATION.--Lat 39°39'09", long 87°17'37", in SW¼SW¼ sec.15, T.14 N., R.8 W., Parke County, Hydrologic Unit 05120108, on right bank at downstream side of covered bridge on county road at Coxville, 0.8 mile (1.3 km) upstream from Rock Run, 1.5 miles (2.4 km) downstream from Little Raccoon Creek, 2.1 miles (3.4 km) northwest of Rosedale, and at mile 13.1 (21.1 km).

DRAINAGE AREA.--448 mi² (1,160 km²).

PERIOD OF RECORD.--October 1956 to current year. Prior to October 1963, published as Raccoon Creek at Coxville.

REVISED RECORDS.--WSP 2109: Drainage area. WRD Ind. 1974: 1973.

GAGE.--Water-stage recorder. Datum of gage is 494.00 ft (150.571 m) above mean sea level (Indiana Flood Control and Water Resources Commission bench mark).

REMARKS.--Records good except those for winter periods, which are fair. Flow regulated by Cecil M. Harden Lake (See sta 03340870).

AVERAGE DISCHARGE.--21 years, 469 ft³/s (13.28 m³/s), 14.21 in/yr (361 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 108,000 ft³/s (3,060 m³/s) June 28, 1957, gage height, 21.23 ft (6.471 m), from rating curve extended above 35,000 ft³/s (991 m³/s) on basis of an estimate made by slope-area study; minimum daily, 6.5 ft³/s (0.18 m³/s) Oct. 10, 1956.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,270 ft³/s (64.3 m³/s) May 6, gage height, 9.57 ft (2.917 m); minimum daily, 16 ft³/s (0.45 m³/s) Jan. 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	70	447	302	30	35	227	254	88	87	685	52	580
2	68	443	146	25	34	178	470	88	81	690	48	320
3	67	439	104	27	32	164	648	86	74	620	47	201
4	66	435	88	30	30	287	413	88	71	224	46	177
5	69	430	75	35	28	360	354	323	74	149	45	166
6	91	429	70	32	27	240	296	1020	98	123	47	181
7	83	424	67	30	25	190	265	1110	80	101	360	156
8	76	384	59	28	24	167	240	587	78	257	437	147
9	73	380	65	25	22	156	216	419	202	561	636	123
10	72	377	56	24	21	156	201	364	214	596	557	94
11	70	358	53	22	20	146	187	443	159	596	214	80
12	70	350	56	20	450	184	172	332	125	374	209	75
13	68	348	50	19	350	210	165	285	107	281	178	81
14	74	345	53	20	270	174	165	242	97	180	169	172
15	79	342	51	20	210	156	152	222	89	145	311	158
16	192	339	49	19	150	140	140	195	83	128	215	157
17	239	337	49	18	115	132	132	182	81	140	240	145
18	249	337	46	17	100	142	126	156	78	119	154	135
19	299	339	49	16	94	133	122	143	74	106	134	188
20	313	337	55	17	86	127	134	133	70	99	121	204
21	315	335	35	17	74	120	112	126	66	95	126	173
22	318	376	35	18	112	133	127	120	72	95	236	152
23	325	381	37	19	183	162	142	115	75	85	105	140
24	358	380	38	24	265	154	123	110	73	82	233	144
25	203	363	39	32	199	139	111	105	85	80	158	163
26	180	331	40	43	188	125	104	102	73	76	130	157
27	403	328	42	40	719	130	99	98	71	73	138	144
28	426	321	43	37	285	1200	95	95	74	71	129	134
29	430	310	40	35	---	1030	95	92	73	69	360	127
30	443	307	38	33	---	507	91	94	200	62	351	124
31	455	---	37	32	---	325	---	90	---	57	509	---
TOTAL	6244	11052	1967	804	4148	7689	5951	7653	2884	7019	6695	4998
MEAN	201	368	63.5	25.9	148	248	198	247	96.1	226	216	167
MAX	455	447	302	43	719	1200	648	1110	214	690	636	580
MIN	66	307	35	16	20	120	91	86	66	57	45	75
CFSM	.45	.82	.14	.06	.33	.55	.44	.55	.22	.50	.48	.37
IN.	.52	.92	.16	.07	.34	.64	.49	.64	.24	.58	.56	.42
CAL YR 1976	TOTAL	107507	MEAN 294	MAX 2440	MIN 35	CFSM .66	IN 8.93					
WTR YR 1977	TOTAL	67104	MEAN 184	MAX 1200	MIN 16	CFSM .41	IN 5.57					

WABASH RIVER BASIN

03341500 WABASH RIVER AT TERRE HAUTE, IN

LOCATION.--Lat 39°28'00", long 87°25'08", in NE¼SW¼ sec.21, T.12 N., R.9 W., Vigo County, Hydrologic Unit 05120111, on left bank at upstream side of Wabash Avenue bridge at Terre Haute, 2.4 miles (3.9 km) upstream from Sugar Creek, 4.2 miles (6.8 km) downstream from Lost Creek, and at mile 214.4 (345.0 km).

DRAINAGE AREA.--12,265 mi² (31,766 km²).

PERIOD OF RECORD.--August 1902 to December 1903 (gage height only), February 1905 to July 1906, October 1927 to current year. Gage-height records collected at site 3,300 ft (1,010 m) upstream June 1891 to June 1897 and since December 1904 are contained in reports of National Weather Service.

REVISED RECORDS.--WSP 205: 1905. WSP 1335: 1944. WRD Ind. 1973: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 442.90 ft (134.996 m) above mean sea level. See WSP 1725 for history of changes prior to Oct. 27, 1928.

REMARKS.--Records good. Flow partially regulated by upstream reservoirs.

AVERAGE DISCHARGE.--50 years, 10,550 ft³/s (298.7 m³/s), 11.68 in/yr (297 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 189,000 ft³/s (5,350 m³/s) May 20, 1943, gage height, 30.50 ft (9.296 m); minimum daily, 701 ft³/s (19.9 m³/s) Aug. 3, 1934.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 27, 1913, reached a stage of 31.1 ft (9.48 m), present site and datum, discharge, 245,000 ft³/s (6,940 m³/s).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 27,100 ft³/s (767 m³/s) Sept. 17, gage height, 15.84 ft (4.828 m); minimum daily, 1,000 ft³/s (28.3 m³/s) Jan. 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MFAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2210	2660	2090	1150	1150	7860	25600	5690	2390	3890	1490	5360
2	2210	2690	1900	1160	1200	7870	22800	5410	2300	3290	1470	4360
3	2160	2670	1630	1180	1300	7950	21900	5380	2220	2800	1440	3840
4	2100	2650	1670	1250	1400	9740	23100	5510	2130	3400	1370	3940
5	2080	2640	1850	1310	1350	12100	22900	6940	2000	4080	1380	4710
6	2260	2590	1680	1280	1400	16700	21300	10400	1980	3820	1510	5130
7	2380	2470	1640	1330	1470	19700	19100	19000	2090	3260	11400	4260
8	2520	2320	1500	1330	1450	19200	16400	22400	2110	3340	18800	3750
9	2580	2270	1440	1300	1450	16400	14100	19200	2630	5990	15300	3440
10	2490	2240	1430	1200	1460	14500	12000	16600	2860	4180	12500	3090
11	2400	2240	1550	1130	1510	13200	10400	14100	2430	3510	11300	2870
12	2350	2210	1450	1100	2120	12300	9520	11900	2210	3490	19200	2830
13	2360	2200	1520	1100	3790	11500	9500	9900	2130	3010	23900	2750
14	2340	2190	1380	1190	4010	9560	8940	8010	2150	3010	20800	6080
15	2300	2160	1360	1300	3670	8350	8010	6850	2110	2810	15300	20400
16	2230	2150	1440	1200	3410	7790	7370	6070	2110	2640	11700	25800
17	2280	2150	1430	1100	3120	6980	6850	5380	2100	2620	10100	27000
18	2250	2150	1440	1000	3000	6670	6470	4850	2030	2320	10800	25200
19	2330	2160	1450	1100	2920	8640	6000	4520	2190	2180	9550	20400
20	2360	2160	1460	1200	2780	11200	5870	4510	2360	2130	7650	17100
21	2630	2160	1440	1250	2800	14100	5780	4010	1930	1980	6860	15200
22	2590	2110	1330	1280	2760	14500	5780	4140	1920	2040	6760	13200
23	2580	2110	1190	1300	3020	13900	5780	3880	1870	2090	5650	11200
24	2720	2110	1290	1300	3780	13200	5780	3430	1810	1890	5170	9700
25	2730	2120	1340	1300	4580	12300	5800	3390	1840	1880	4860	8980
26	2600	2160	1370	1300	7400	11800	6290	3340	1870	2130	4340	8720
27	2530	2210	1440	1280	9870	11800	8330	3030	1930	2050	3830	8330
28	2650	2260	1400	1250	8810	14200	6960	2780	1930	1990	3340	7600
29	2560	2290	1440	1220	---	20600	6310	2560	2300	1910	3540	6760
30	2580	2200	1330	1200	---	23800	5880	2440	1990	1710	4690	6300
31	2600	---	1150	1100	---	26100	---	2400	---	1570	5680	---
TOTAL	74960	68700	46030	37690	86980	404510	340820	228020	63920	87010	261680	288300
MEAN	2418	2290	1485	1216	3106	13050	11360	7355	2131	2807	8441	9610
MAX	2730	2690	2090	1330	9870	26100	25600	22400	2860	5990	23900	27000
MIN	2080	2110	1150	1000	1150	6670	5780	2400	1810	1570	1370	2750
CFSM	.20	.19	.12	.10	.25	1.06	.93	.60	.17	.23	.69	.78
IN.	.23	.21	.14	.11	.26	1.23	1.03	.69	.19	.26	.79	.87
CAL YR 1976	TOTAL	3228570	MEAN	8821	MAX	56300	MIN	1150	CFSM	.72	IN	9.79
WTR YR 1977	TOTAL	1988620	MEAN	5448	MAX	27000	MIN	1000	CFSM	.44	IN	6.03

03342000 WABASH RIVER AT RIVERTON, IN

LOCATION.--Lat 39°01'13", long 87°34'07", in NE¼SW¼ sec.30, T,7 N., R,10 W., Sullivan County, Hydrologic Unit 05120111, on left bank at downstream side of Illinois Central Railroad bridge at Riverton, 0.5 mile (0.8 km) downstream from Turtle Creek, and at mile 162.0 (260.7 km).

DRAINAGE AREA.--13,161 mi² (34,087 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1938 to current year. Prior to April 1939 monthly discharge only, published in WSP 1305. June 1911 to December 1914 (gage heights only) available in the Corps of Engineers office, Louisville, Ky.

REVISED RECORDS.--WSP 1335: 1939, 1950. WRD Ind. 1973: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 414.65 ft (126.385 m) above mean sea level. Prior to July 17, 1951, nonrecording gage at same site and datum.

REMARKS.--Records good except those for period of no gage-height record, Dec. 5 to Feb. 13, which is poor. Flow partially regulated by upstream reservoirs.

AVERAGE DISCHARGE.--39 years, 11,426 ft³/s (323.6 m³/s), 11.77 in/yr (299 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 201,000 ft³/s (5,690 m³/s) May 21, 1943, gage height, 29.36 ft (8.949 m); minimum daily, 858 ft³/s (24.3 m³/s) Sept. 27-30, 1941.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 28, 1913, reached a stage of 26.4 ft (8.05 m), from graph based on once-daily readings by Illinois Central Railroad Co., discharge, 250,000 ft³/s (7,080 m³/s).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 24,900 ft³/s (705 m³/s) Apr. 1, gage height, 14.47 ft (4.410 m); minimum daily, 1,100 ft³/s (31.1 m³/s) Jan. 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2280	3200	2440	1290	1310	8530	24700	5280	3160	2870	1780	6230
2	2320	3200	2330	1290	1330	7700	24300	5040	3010	4090	1670	5930
3	2320	3150	2160	1280	1400	7650	22800	4860	2870	3600	1580	5010
4	2300	3000	1940	1380	1440	8630	21800	4790	2740	3110	1550	4440
5	2290	3050	2100	1400	1440	10200	21900	5170	2630	3630	1550	4500
6	2300	3030	1950	1390	1400	12400	21400	7140	2530	4230	1600	5190
7	2380	2980	1900	1380	1350	15900	19900	13300	2610	4010	9500	5550
8	2450	2860	1750	1360	1300	17700	17700	18800	2670	3500	12800	4810
9	2600	2720	1620	1340	1290	17000	15400	19900	2780	3940	15900	4280
10	2900	2640	1590	1280	1380	14700	13200	18100	2940	5810	13900	3920
11	2850	2610	1700	1210	1700	13200	11200	15200	3160	4500	12000	3560
12	2750	2610	1600	1250	2900	12600	9770	12800	2920	3860	13100	3330
13	2700	2580	1720	1300	4000	12500	8880	11100	2760	3740	18300	3270
14	2700	2550	1580	1310	3900	11100	8220	9740	2720	3330	20400	3200
15	2600	2540	1550	1300	3840	9290	7600	8370	2720	3240	18300	8180
16	2500	2500	1550	1300	3490	8210	7150	7320	2630	3070	14400	18800
17	2500	2490	1550	1250	3200	7600	6680	6590	2590	2860	11900	22400
18	2610	2480	1540	1100	2930	6950	6270	6100	2560	2860	10700	23500
19	2650	2480	1530	1200	2830	6900	6010	5570	2460	2550	10800	23400
20	2700	2470	1520	1280	2770	8690	5710	5090	2330	2370	9710	19700
21	2800	2470	1530	1320	2670	11100	5350	4940	2290	2310	8270	16500
22	2950	2440	1490	1330	2690	13200	5360	4780	2440	2170	7730	14600
23	3100	2400	1400	1350	2690	13400	5570	4930	2410	2180	7480	12900
24	3250	2400	1440	1380	3160	13000	5360	4660	2290	2230	6420	11300
25	3400	2410	1500	1390	3800	12300	5260	4200	2250	2070	5890	10200
26	3400	2430	1500	1390	4910	11600	5220	3960	2260	2000	5500	9550
27	3300	2420	1580	1390	9830	11300	5750	3840	2220	2170	4970	9200
28	3150	2440	1520	1380	10200	17800	6320	3660	2190	2160	4420	8740
29	3100	2490	1600	1370	---	22200	6110	3510	2290	2090	4600	8030
30	3110	2500	1500	1350	---	22600	5640	3360	2610	2020	4850	7320
31	3170	---	1400	1320	---	23600	---	3290	---	1850	5430	---
TOTAL	85430	79540	52080	40860	85150	389550	336530	235390	78040	94420	267000	287540
MEAN	2756	2651	1680	1318	3041	12570	11220	7593	2601	3046	8613	9585
MAX	3400	3200	2440	1400	10200	23600	24700	19900	3160	5810	20400	23500
MIN	2280	2400	1400	1100	1290	6900	5220	3290	2190	1850	1550	3200
CFSM	.21	.20	.13	.10	.23	.96	.85	.58	.20	.23	.65	.73
IN.	.24	.22	.15	.12	.24	1.10	.95	.67	.22	.27	.75	.81

CAL YR 1976 TOTAL 3466480 MEAN 9471 MAX 66900 MIN 1400 CFSM .72 IN 9.80
WTR YR 1977 TOTAL 2031530 MEAN 5566 MAX 24700 MIN 1100 CFSM .42 IN 5.74

WABASH RIVER BASIN

03342000 WABASH RIVER AT RIVERTON, IN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

WATER TEMPERATURE: July 1954 to September 1961, October 1962 to September 1965, October 1967 to current year.

INSTRUMENTATION.--

WATER TEMPERATURE: Temperature recorder.

EXTREMES FOR PERIOD OF RECORD.--

WATER TEMPERATURE: Maximum, 34.5°C July 16, 18, 19, 1977; minimum, freezing point on many days during most winter periods.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 34.5°C July 16, 18, 19; minimum, 0.0°C Jan. 10-13, 16-24, 30, 31, Feb. 1, 6.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	20.0	18.5	12.0	11.0	5.0	4.5	2.0	.5	1.5	.0	3.5	2.5
2	20.5	19.0	12.5	11.5	5.5	4.0	2.5	.5	2.5	.5	3.5	3.0
3	22.0	20.5	13.0	12.0	5.0	2.5	3.5	2.0	2.5	1.0	4.5	3.5
4	23.0	21.0	12.0	11.5	3.5	2.5	5.0	3.0	2.5	1.0	5.0	4.5
5	23.0	21.5	11.5	10.0	4.0	3.0	4.5	4.0	3.0	1.0	5.0	4.0
6	22.0	20.5	10.0	9.5	5.0	4.0	4.0	2.0	1.0	.0	4.5	3.5
7	20.5	19.0	10.0	9.0	5.5	4.5	4.5	3.5	3.5	2.5	4.5	3.5
8	19.0	18.0	9.0	8.5	6.5	5.5	4.5	3.5	5.5	1.0	4.5	3.0
9	18.0	17.5	10.0	9.0	6.0	5.0	4.0	2.0	7.0	5.5	5.5	4.0
10	17.5	16.0	10.0	9.0	6.0	5.0	2.0	.0	7.5	6.0	7.0	5.5
11	17.0	15.5	9.5	8.5	5.5	3.5	.0	.0	10.0	7.5	8.0	7.0
12	17.0	15.5	8.5	7.5	4.5	3.5	.0	.0	9.5	8.0	10.0	8.0
13	17.5	16.0	8.0	7.0	4.0	2.5	.5	.0	8.0	7.0	10.0	9.5
14	17.0	16.0	7.5	7.0	4.0	2.5	1.5	.5	7.0	5.0	10.5	9.5
15	16.5	15.5	7.5	6.5	3.5	2.0	2.0	1.5	5.0	2.5	12.0	11.0
16	15.5	15.0	7.5	6.5	4.0	2.5	2.0	.0	3.5	2.5	13.0	12.0
17	15.5	14.0	8.5	7.0	5.0	3.0	.0	.0	4.5	3.5	13.0	12.5
18	14.5	13.5	9.0	8.0	7.0	5.0	.0	.0	7.0	4.5	12.5	12.0
19	15.5	14.0	10.0	8.5	7.0	6.0	.0	.0	7.0	7.0	12.0	12.0
20	15.5	14.0	10.0	9.5	8.0	7.0	.0	.0	7.0	5.5	12.0	11.0
21	15.0	13.5	9.5	9.0	7.5	5.0	.0	.0	7.5	6.0	11.0	10.5
22	14.5	13.5	9.0	8.0	5.0	4.0	.0	.0	8.5	6.5	11.0	10.0
23	13.5	13.0	8.5	8.0	4.5	3.5	.0	.0	9.5	8.5	10.5	10.0
24	14.0	13.5	8.0	7.5	4.0	3.0	2.0	.0	9.5	8.0	10.5	10.0
25	14.5	13.5	9.0	7.5	5.5	4.0	2.5	1.0	8.0	7.5	10.5	10.0
26	13.5	13.0	10.0	9.0	5.0	4.0	3.0	2.0	7.5	5.0	11.5	10.0
27	13.0	12.0	10.0	9.0	5.0	4.0	4.0	3.0	5.0	2.0	11.5	11.0
28	12.0	11.5	9.0	6.0	5.5	4.0	4.0	3.0	2.5	1.5	12.0	11.5
29	12.0	11.0	6.0	5.0	4.0	3.0	3.5	.5	---	---	13.5	12.0
30	11.5	11.5	5.0	4.0	3.0	1.5	.5	.0	---	---	14.5	13.5
31	12.0	11.5	---	---	1.5	1.0	1.0	.0	---	---	14.5	14.0
MONTH	23.0	11.0	13.0	4.0	8.0	1.0	5.0	.0	10.0	.0	14.5	2.5

[illegible]

03342100 BUSSEYON CREEK NEAR HYMERA, IN

LOCATION.--Lat 39°12'54", long 87°18'41", in NW¼NW¼ sec.21, T.9 N., R.8 W., Sullivan County, Hydrologic Unit 05120111, on right bank at downstream side of bridge on County Road 900 North, 1.3 miles (2.1 km) upstream from East Fork Busseyon Creek, 1.9 miles (3.1 km) northwest of Hymera, 4.1 miles (6.6 km) upstream from West Fork Busseyon Creek, and at mile 30.3 (48.8 km).

DRAINAGE AREA.--16.7 mi² (43.3 km²).

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

REVISED RECORDS.--WRD Ind. 1972: 1971.

GAGE.--Water-stage recorder. Concrete control since Sept. 12, 1969. Datum of gage is 480.00 ft (146.304 m) above mean sea level (U.S. Soil Conservation Service bench mark).

REMARKS.--Records poor. Flow affected by U.S. Soil Conservation Service floodwater-retarding structures.

AVERAGE DISCHARGE.--11 years, 18.4 ft³/s (0.521 m³/s), 14.96 in/yr (380 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,890 ft³/s (53.5 m³/s) Sept. 12, 1974, gage height, 18.58 ft (5.663 m); no flow at times most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 814 ft³/s (23.1 m³/s) Mar. 27, gage height, 16.73 ft (5.099 m); minimum daily, no flow Jan. 16 to Feb. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.69	.40	.02	.01	.00	44	39	.89	.09	1.2	.12	5.2
2	.05	.33	.02	.02	.00	29	67	.81	.08	.19	.10	4.6
3	.03	.27	.02	.02	.00	41	44	.55	.08	.08	.08	3.1
4	.03	.19	.02	.02	.00	74	31	.91	.07	.07	.06	2.3
5	.03	.13	.02	.02	.00	40	23	1.4	.07	.06	.22	1.9
6	.28	.15	.02	.01	.00	23	17	15	.06	.04	.59	1.5
7	.07	.16	.02	.01	.00	14	15	19	.06	.04	6.6	1.3
8	.03	.09	.02	.01	.00	9.5	10	10	.06	.06	1.7	1.0
9	.03	.08	.02	.01	.00	6.9	8.0	7.2	.05	.03	30	.80
10	.02	.12	.02	.01	.00	5.2	6.4	5.5	.05	.03	8.0	.58
11	.02	.08	.02	.01	.01	4.5	5.1	4.6	.05	.03	150	.40
12	.03	.06	.02	.01	.50	28	4.2	3.9	.04	.03	80	.58
13	.03	.04	.02	.01	14	17	3.6	3.2	.04	.03	47	.53
14	.02	.04	.02	.01	9.5	12	3.1	2.8	.04	.03	27	.43
15	.02	.06	.02	.01	6.0	8.5	2.9	2.3	.05	.06	14	.53
16	.01	.07	.02	.00	5.0	5.8	2.7	1.7	.05	.60	8.4	.40
17	.01	.07	.02	.00	3.7	4.7	2.5	1.2	.05	8.7	5.0	.35
18	.01	.07	.02	.00	2.8	5.2	2.4	.73	.05	21	2.7	.30
19	.01	.08	.02	.00	2.4	4.5	2.6	.51	.06	39	1.6	77
20	.02	.05	.02	.00	2.8	5.2	2.0	.34	.06	28	1.0	26
21	.02	.04	.02	.00	3.0	4.1	1.7	.25	.04	38	2.2	10
22	.02	.03	.03	.00	2.5	5.2	3.3	.19	.22	43	5.0	5.0
23	.07	.03	.03	.00	2.1	4.0	3.1	.13	.26	25	2.2	3.2
24	.93	.02	.03	.00	6.6	3.3	2.6	.13	.80	14	2.4	3.3
25	.26	.03	.04	.00	2.0	2.9	1.5	.18	2.2	7.8	1.3	2.3
26	.12	.02	.05	.00	98	2.2	1.3	.16	.40	2.9	1.2	1.6
27	.09	.03	.05	.00	101	48	1.1	.12	.18	1.4	1.1	1.0
28	.07	.03	.06	.00	62	241	1.1	.12	.22	.59	1.0	.49
29	.07	.03	.05	.00	---	96	.86	.12	.12	.19	70	.27
30	.93	.03	.03	.00	---	74	.77	.11	.90	.21	13	.22
31	1.1	---	.02	.00	---	55	---	.10	---	.23	7.8	---
TOTAL	5.12	2.83	.81	.19	323.91	917.7	308.83	84.15	6.50	232.60	491.37	156.18
MEAN	.17	.094	.026	.006	11.6	29.6	10.3	2.71	.22	7.50	15.9	5.21
MAX	1.1	.40	.06	.02	101	241	67	.19	2.2	.43	150	77
MIN	.01	.02	.02	.00	.00	2.2	.77	.10	.04	.03	.06	.22
CFSM	.01	.006	.002	.000	.70	1.77	.62	.16	.01	.45	.95	.31
IN.	.01	.01	.00	.00	.72	2.04	.69	.19	.01	.52	1.09	.35
CAL YR 1976	TOTAL	2829.08	MEAN 7.73	MAX 137	MIN .01	CFSM .46	IN 6.30					
WTR YR 1977	TOTAL	2530.19	MEAN 6.93	MAX 241	MIN .00	CFSM .42	IN 5.64					

03342150 WEST FORK BUSSEYON CREEK NEAR HYMERA, IN

LOCATION.--Lat 39°11'10", long 87°19'44", in NW¼NW¼ sec.32, T.9 N., R.8 W., Sullivan County, Hydrologic Unit 05120111, on right bank at downstream side of bridge on State Highway 48, 1.4 miles (2.3 km) upstream from mouth, 1.5 miles (2.4 km) west of Hymera, and 3.7 miles (6.0 km) east of U.S. Highway 41.

DRAINAGE AREA.--14.4 mi² (37.3 km²).

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

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 476.00 ft (145.085 m) above mean sea level (Indiana State Highway Commission bench mark).

REMARKS.--Records poor. No gage-height record Nov. 26 to Feb. 14.

AVERAGE DISCHARGE.--11 years, 13.3 ft³/s (0.377 m³/s), 12.54 in/yr (318 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,930 ft³/s (54.7 m³/s) July 26, 1973, gage height, 13.23 ft (4.033 m); no flow at times most years.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 500 ft³/s (14.2 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Feb. 26	2100	*709 20.1	*11.23 3.423
Mar. 28	1500	577 16.3	11.07 3.374

Minimum daily discharge, 0.02 ft³/s (0.001 m³/s) Aug. 4, 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.44	.45	.27	.09	.10	9.0	11	1.3	.15	3.7	.05	2.6
2	.53	.34	.25	.08	.10	8.0	55	1.2	.19	.98	.05	1.8
3	.32	.27	.22	.09	.09	3.2	24	1.1	.19	.34	.05	1.0
4	.26	.20	.22	.09	.09	5.8	15	1.6	.15	.19	.02	.72
5	.16	.17	.22	.10	.09	3.2	12	2.0	.11	.11	.02	.72
6	.12	.17	.23	.10	.08	8.2	10	23	.11	.08	.28	.68
7	.17	.17	.23	.10	.08	6.6	8.0	20	.11	.05	22	.62
8	.12	.17	.23	.09	.08	5.4	7.0	4.4	.11	.11	1.8	.58
9	.08	.17	.23	.09	.08	5.5	5.7	2.8	.08	.15	52	.52
10	.06	.17	.23	.09	.08	4.3	5.0	2.1	.08	.08	3.0	.43
11	.07	.17	.23	.08	.30	4.0	4.5	1.8	.08	.08	117	.40
12	.10	.15	.23	.08	1.1	45	4.0	1.6	.08	.08	40	.52
13	.08	.13	.23	.08	6.0	13	3.8	1.3	.08	.08	15	.72
14	.06	.11	.24	.07	3.4	6.2	3.6	1.2	.08	.08	5.8	.52
15	.05	.13	.24	.07	1.2	5.3	3.3	1.0	.08	.08	3.8	.78
16	.04	.13	.24	.07	1.1	4.2	3.3	.90	.11	.08	3.2	.58
17	.05	.13	.24	.06	1.0	3.9	3.1	.73	.11	.11	16	.52
18	.04	.18	.23	.06	.80	4.7	3.1	.73	.15	.15	9.6	.40
19	.04	.11	.21	.07	1.2	4.1	3.5	.61	.15	.15	24	1.2
20	.12	.10	.20	.08	1.5	5.1	3.5	.55	.15	.15	1.6	114
21	.13	.08	.19	.09	1.3	4.6	3.1	.50	.17	.12	2.0	3.0
22	.10	.06	.20	.10	1.2	4.7	3.5	.44	.19	.88	4.3	1.7
23	.07	.05	.20	.11	5.3	4.4	3.2	.40	.15	1.5	1.6	1.2
24	1.6	.05	.18	.13	7.8	3.7	2.5	.40	.19	.50	2.0	1.7
25	1.0	.06	.16	.12	3.0	3.4	1.7	.35	.55	.35	.90	2.3
26	.55	.45	.14	.12	160	3.1	1.5	.35	1.1	.08	.72	1.4
27	.30	.30	.13	.12	130	54	1.4	.30	.55	.05	.72	.72
28	.18	.23	.12	.11	29	402	1.4	.30	.80	.05	.68	.58
29	.10	.34	.11	.11	---	42	1.4	.21	.72	.08	107	.58
30	.20	.30	.10	.11	---	19	1.3	.19	.55	.08	9.1	.78
31	.70	---	.09	.10	---	12	---	.15	---	.08	4.5	---
TOTAL	7.84	5.54	6.24	2.86	356.07	707.6	209.4	73.51	7.32	160.24	404.19	153.07
MEAN	.25	.18	.20	.092	12.7	22.8	6.98	2.37	.24	5.17	13.0	5.10
MAX	1.6	.45	.27	.13	160	402	55	23	1.1	.88	117	114
MIN	.04	.05	.09	.06	.08	3.1	1.3	.15	.08	.05	.02	.40
CFSM	.02	.01	.01	.006	.88	1.58	.49	.17	.02	.36	.90	.35
IN.	.02	.01	.02	.01	.92	1.83	.54	.19	.02	.41	1.04	.40
CAL YR 1976 TOTAL	2426.85			MEAN 6.63	MAX 287	MIN .04	CFSM .46	IN 6.27				
WTR YR 1977 TOTAL	2093.88			MEAN 5.74	MAX 402	MIN .02	CFSM .40	IN 5.41				

03342250 MUD CREEK NEAR DUGGER, IN

LOCATION.--Lat 39°06'28", long 87°16'42", in SE¼NE¼ sec.27, T.8 N., R.8 W., Sullivan County, Hydrologic Unit 05120111, on right bank at downstream side of bridge on County Road 700 East, 0.6 mile (1.0 km) north of County Road 100 North, 1.7 miles (2.7 km) upstream from mouth, and 2.5 miles (4.0 km) northwest of Dugger.

DRAINAGE AREA.--11.9 mi² (30.8 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 466.41 ft (142.162 m) above mean sea level (U.S. Soil Conservation Service bench mark).

REMARKS.--Records good except those for period Nov. 8 to Feb.24, which are poor. Flow affected by surface-mined areas.

AVERAGE DISCHARGE.--11 years, 13.4 ft³/s (0.379 m³/s), 15.29 in/yr (388 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 919 ft³/s (26.0 m³/s) May 30, 1974, gage height, 13.70 ft (4.176 m); minimum daily, 0.40 ft³/s (0.011 m³/s) Jan. 17, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 418 ft³/s (11.8 m³/s) Feb. 26, gage height, 10.44 ft (3.182 m); minimum daily, 0.40 ft³/s (0.011 m³/s) Jan. 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.3	2.0	1.2	.80	.70	14	14	5.1	3.4	3.2	3.0	1.8
2	1.7	1.8	1.1	.70	.80	12	31	4.9	3.4	2.7	2.7	4.3
3	1.5	1.5	1.0	.60	.90	52	21	6.4	3.2	2.6	2.6	2.0
4	1.3	1.6	1.1	.70	.90	85	17	10	2.7	2.4	2.5	1.4
5	1.2	1.6	1.2	.70	.80	24	15	10	2.0	2.3	2.4	1.3
6	1.8	1.5	1.4	.65	.72	14	12	18	2.0	2.3	7.4	1.1
7	1.2	1.4	1.5	.60	.77	10	10	16	2.0	2.0	5.5	.98
8	1.2	1.4	1.4	.57	.84	8.8	8.9	9.5	3.4	3.2	3.4	.91
9	1.1	1.3	1.3	.54	.90	8.2	8.2	7.1	3.2	3.1	17	.85
10	1.0	1.3	1.4	.52	2.0	7.0	7.9	6.2	3.0	2.5	2.7	.80
11	.91	1.3	1.5	.50	5.0	7.1	7.4	5.8	3.0	2.4	31	.78
12	.86	1.2	1.4	.53	15	41	7.2	5.4	2.9	2.2	7.1	1.3
13	.85	1.1	1.3	.56	13	17	7.1	5.4	3.4	2.1	3.2	1.5
14	.80	1.0	1.2	.60	10	11	6.2	5.3	2.9	2.0	2.4	1.2
15	.76	1.1	1.3	.52	8.0	8.6	6.3	5.0	2.7	2.0	1.9	1.9
16	.68	1.2	1.5	.45	7.0	7.0	6.4	4.7	2.6	1.8	2.0	1.3
17	.64	1.2	1.7	.40	6.0	6.8	5.8	4.3	2.3	1.8	2.0	1.1
18	.66	1.3	1.8	.46	5.0	11	5.7	4.2	4.8	1.8	1.6	26
19	1.0	1.3	1.9	.52	7.0	7.9	6.8	4.2	2.1	1.6	1.6	50
20	1.6	1.3	1.5	.55	10	10	6.1	3.9	2.1	1.4	1.5	4.5
21	1.1	1.3	1.3	.60	11	7.9	6.0	3.4	1.8	1.4	7.1	2.4
22	.99	1.3	1.2	.62	12	9.3	8.2	3.1	6.0	1.5	3.9	2.1
23	8.6	1.3	1.1	.64	20	7.4	7.2	3.0	3.0	1.2	1.9	1.9
24	11	1.3	1.0	.66	29	6.7	6.6	2.9	7.5	1.2	1.7	6.2
25	2.2	1.3	.95	.68	21	6.5	5.9	2.8	14	1.6	1.5	3.0
26	1.6	7.0	.98	.70	130	6.2	5.5	3.4	4.6	1.1	1.4	2.3
27	1.3	4.5	1.0	.66	72	71	4.7	4.0	4.2	1.1	1.4	2.3
28	1.1	3.3	1.1	.60	17	220	5.7	4.0	3.8	1.2	1.3	2.0
29	1.0	2.0	1.0	.50	---	40	5.5	3.6	3.4	1.2	2.2	2.0
30	6.4	1.5	.94	.50	---	24	5.0	3.7	3.4	8.6	2.0	16
31	3.8	---	.90	.60	---	17	---	3.2	---	4.9	1.8	---
TOTAL	62.15	52.2	39.17	18.23	407.33	778.4	270.3	178.5	108.8	70.4	129.7	145.22
MEAN	2.00	1.74	1.26	.59	14.5	25.1	9.01	5.76	3.63	2.27	4.18	4.84
MAX	11	7.0	1.9	.80	130	220	31	18	14	8.6	31	50
MIN	.64	1.0	.90	.40	.70	6.2	4.7	2.8	1.8	1.1	1.3	.78
CFSM	.17	.15	.11	.05	1.22	2.11	.76	.48	.31	.19	.35	.41
IN.	.19	.16	.12	.06	1.27	2.43	.84	.56	.34	.22	.41	.45
CAL YR 1976	TOTAL	2349.93	MEAN 6.42	MAX 72	MIN .50	CFSM .54	IN 7.35					
WTR YR 1977	TOTAL	2260.40	MEAN 6.19	MAX 220	MIN .40	CFSM .52	IN 7.07					

03342300 BUSSEYON CREEK NEAR SULLIVAN, IN

LOCATION.--Lat 39°04'33", long 87°23'11", in SE¼NW¼ sec.2, T.7 N., R.9 W., Sullivan County, Hydrologic Unit 05120111, on left bank at upstream side of bridge on State Highway 54, 1.5 miles (2.4 km) southeast of Sullivan, 1.6 miles (2.6 km) east of intersection of U.S. Highway 41 and State Highway 54, 1.7 miles (2.7 km) upstream from Buttermilk Creek, and at mile 16.7 (26.9 km).

DRAINAGE AREA.--138 mi² (357 km²).

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

REVISED RECORDS.--WRD Ind. 1972: 1971.

GAGE.--Water-stage recorder. Datum of gage is 440.00 ft (134.112 m) above mean sea level (Indiana State Highway Commission bench mark).

REMARKS.--Records good except those for winter periods, which are fair. Flow affected by surface-mined areas and U.S. Soil Conservation Service floodwater-retarding structures.

AVERAGE DISCHARGE.--11 years, 138 ft³/s (3.908 m³/s), 13.58 in/yr (345 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,480 ft³/s (155 m³/s) Jan. 30, 1969, gage height, 15.83 ft (4.825 m); minimum daily, 0.9 ft³/s (0.025 m³/s) Sept. 8, 1966.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,580 ft³/s (44.7 m³/s) Mar. 29, gage height, 13.17 ft (4.014 m); minimum daily, 1.8 ft³/s (0.051 m³/s) Jan. 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	14	5.4	2.8	2.5	240	302	19	7.2	16	5.6	25
2	6.1	11	4.7	2.3	2.8	151	289	18	6.9	12	4.7	19
3	5.4	8.0	5.2	2.0	2.9	148	473	19	6.8	9.3	5.1	18
4	4.7	6.5	5.8	2.2	3.1	565	266	36	6.7	7.2	5.3	14
5	4.3	5.8	5.4	2.4	3.3	480	220	31	5.0	5.7	5.1	12
6	6.9	5.8	6.4	2.8	3.0	214	177	60	3.9	5.9	5.3	11
7	5.9	6.1	7.6	2.7	2.7	133	151	185	3.9	5.8	18	9.4
8	4.6	5.3	6.4	2.6	2.9	94	120	99	7.0	4.8	22	8.5
9	3.9	4.7	6.2	2.5	3.3	70	94	61	8.6	9.1	42	7.8
10	3.3	5.5	6.4	2.5	4.0	57	80	45	6.4	6.7	67	5.8
11	4.0	5.1	6.2	2.4	13	54	69	35	5.3	7.0	73	4.6
12	3.2	4.5	5.8	2.4	44	204	59	30	6.1	5.9	361	5.7
13	2.6	4.0	5.0	2.3	181	250	53	26	6.6	5.9	110	8.9
14	2.5	3.5	3.8	2.3	116	127	46	24	7.6	5.9	111	9.0
15	2.3	4.0	3.9	2.3	74	87	41	24	5.6	5.2	52	9.4
16	3.0	4.5	4.0	2.0	42	64	38	22	8.4	4.5	36	9.2
17	1.9	5.0	4.2	1.8	27	51	34	23	10	5.0	31	7.0
18	1.9	4.9	4.7	1.9	22	66	29	20	13	11	22	15
19	2.2	4.3	5.6	2.0	33	59	30	17	13	29	17	223
20	6.8	4.2	7.0	2.1	45	61	30	16	7.8	22	15	106
21	5.3	4.0	5.8	2.2	37	58	28	15	6.9	16	15	44
22	4.0	3.7	5.0	2.4	32	64	35	14	16	64	24	27
23	4.4	3.5	4.3	2.6	80	58	43	12	13	33	18	20
24	51	4.0	3.7	2.8	168	48	36	11	17	19	17	29
25	14	4.9	3.6	3.3	294	46	28	13	33	15	18	25
26	10	14	3.8	3.8	270	45	24	11	16	12	14	19
27	7.1	13	3.8	3.7	907	111	22	10	15	7.8	12	15
28	5.4	8.2	4.0	3.6	452	1140	22	10	21	6.0	11	13
29	4.9	7.0	3.6	2.8	---	1430	21	8.6	13	5.1	89	11
30	12	6.2	3.3	2.3	---	1020	20	8.9	14	5.1	86	24
31	19	---	3.2	2.4	---	455	---	8.4	---	5.9	36	---
TOTAL	234.6	185.2	153.8	78.2	2867.5	7650	2880	931.9	310.7	372.8	1348.1	755.3
MEAN	7.57	6.17	4.96	2.52	102	247	96.0	30.1	10.4	12.0	43.5	25.2
MAX	51	14	7.6	3.8	907	1430	473	185	33	64	361	223
MIN	1.9	3.5	3.2	1.8	2.5	45	20	8.4	3.9	4.5	4.7	4.6
CFSM	.06	.05	.04	.02	.74	1.79	.70	.22	.08	.09	.32	.18
IN.	.06	.05	.04	.02	.77	2.06	.78	.25	.08	.10	.36	.20
CAL YR 1976	TOTAL	22886.7	MEAN	62.5	MAX	1310	MIN	1.9	CFSM	.45	IN	6.17
WTR YR 1977	TOTAL	17768.1	MEAN	48.7	MAX	1430	MIN	1.8	CFSM	.35	IN	4.79

03342360 BUTTERMILK CREEK NEAR SULLIVAN, IN

LOCATION.--Lat 39°03'58", long 87°21'32", in NW¼NE¼ sec.12, T.7 N., R.9 W., Sullivan County, Hydrologic Unit 05120111, on right bank at downstream side of bridge on County Road 275 East, 3.8 miles (6.1 km) east of Sullivan, and 2.0 miles (3.2 km) upstream from mouth.

DRAINAGE AREA.--17.6 mi² (45.6 km²).

PERIOD OF RECORD.--October 1974 to current year.

GAGE.--Water-stage recorder. Datum of gage is 446.35 ft (136.047 m) above mean sea level (U.S. Soil Conservation Service bench mark).

REMARKS.--Records fair except those for winter periods, which are poor. Flow affected by surface-mined areas and backwater from Busseron Creek.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 556 ft³/s (15.7 m³/s) Feb. 23, 1975, gage height, 9.75 ft (2.972 m); minimum daily, 0.03 ft³/s (0.001 m³/s) Jan. 16, 17, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 393 ft³/s (11.1 m³/s) Mar. 28, gage height, 8.22 ft (2.505 m); minimum daily, 0.03 ft³/s (0.001 m³/s) Jan. 16, 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.50	7.2	.09	.07	.09	22	35	2.5	2.9	1.9	.50	2.4
2	.30	2.2	.08	.05	.15	17	50	2.6	3.0	1.6	.55	2.7
3	.25	2.1	.07	.06	.22	36	47	5.8	2.2	2.5	.20	2.4
4	.23	1.8	.06	.08	.35	158	35	12	.92	.40	.76	1.2
5	.30	.35	.05	.10	.20	53	30	5.7	.60	.45	1.8	4.6
6	3.7	.20	.05	.14	.10	22	25	13	.55	1.9	.55	2.7
7	.68	.08	.05	.20	.10	16	20	28	3.7	2.1	4.8	3.5
8	.35	.68	.05	.18	.11	15	18	7.8	4.2	7.1	2.3	4.9
9	.25	.08	.05	.14	.25	12	19	3.9	3.9	13	6.8	3.0
10	.21	1.4	.06	.11	.50	10	17	5.1	2.0	2.4	3.5	2.9
11	.50	1.0	.07	.09	1.5	9.9	16	5.2	.68	3.3	46	2.8
12	1.5	.60	.07	.07	10	79	16	3.9	.60	4.8	46	4.0
13	.62	.06	.07	.06	30	35	14	2.7	.76	3.7	6.1	7.4
14	.25	.11	.08	.05	3.5	24	13	2.4	1.2	.76	2.1	5.1
15	.12	.20	.15	.04	2.0	18	11	2.4	1.3	.50	1.2	3.8
16	.11	1.2	.30	.03	1.0	16	11	1.9	3.9	.76	28	3.5
17	.10	.92	.68	.03	1.0	14	10	2.0	3.2	.55	30	2.5
18	.10	1.5	.90	.04	1.5	29	10	1.7	1.0	.45	7.4	2.8
19	3.8	1.4	1.4	.06	2.5	21	9.9	1.7	.92	.55	4.8	17
20	2.1	.30	2.0	.08	4.4	25	8.9	1.6	.68	.40	2.5	5.6
21	.60	.27	.25	.10	3.0	20	6.4	1.2	.60	3.2	2.3	3.3
22	.20	.25	.05	.15	2.0	20	7.2	1.1	2.5	5.9	3.7	4.1
23	1.5	1.3	.08	.19	2.2	15	7.3	1.2	6.2	.92	4.2	1.8
24	34	.72	.06	.25	7.0	15	6.6	1.2	13	.40	4.3	7.9
25	2.2	.30	.08	.30	2.1	12	5.2	1.2	20	1.2	3.9	3.9
26	6.6	2.0	.20	.17	78	12	3.8	1.1	5.0	3.9	3.1	4.0
27	8.3	1.4	.45	.11	175	71	2.9	2.1	6.6	3.2	3.1	3.5
28	1.2	.55	.94	.06	36	330	5.0	1.2	7.4	2.5	1.4	1.7
29	3.5	.20	.40	.05	---	90	4.5	.68	2.6	.20	4.3	3.0
30	9.2	.11	.17	.06	---	70	2.8	1.1	2.0	.12	4.3	13
31	8.6	---	.10	.07	---	50	---	1.0	---	1.6	2.5	---
TOTAL	91.87	30.48	9.11	3.19	364.77	1336.9	462.5	124.98	104.11	72.26	232.96	131.0
MEAN	2.96	1.02	.29	.10	13.0	43.1	15.4	4.03	3.47	2.33	7.51	4.37
MAX	34	7.2	2.0	.30	175	330	50	28	20	13	46	17
MIN	.10	.06	.05	.03	.09	9.9	2.8	.68	.55	.12	.20	1.2
CFSM	.17	.06	.02	.006	.74	2.45	.88	.23	.20	.13	.43	.25
IN.	.19	.06	.02	.01	.77	2.83	.98	.26	.22	.15	.49	.28

CAL YR 1976 TOTAL 3128.42 MEAN 8.55 MAX 140 MIN .05 CFSM .49 IN 6.61
WTR YR 1977 TOTAL 2964.13 MEAN 8.12 MAX 330 MIN .03 CFSM .46 IN 6.26

03342500 BUSSEY CREEK NEAR CARLISLE, IN

LOCATION.--Lat 38°58'26", long 87°25'33", in NW¼ survey 17, Vincennes Tract, Sullivan County, Hydrologic Unit 05120111, on left bank 10 ft (3 m) downstream from bridge on State Highway 58, 1.5 miles (2.4 km) northwest of Carlisle, and 7.2 miles (11.6 km) upstream from mouth.

DRAINAGE AREA.--228 mi² (591 km²).

PERIOD OF RECORD.--October 1943 to current year.

REVISED RECORDS.--WSP 1335: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 425.36 ft (129.650 m) above mean sea level (Indiana State Highway Commission bench mark). Prior to Nov. 8, 1950, nonrecording gage at same site and datum. Nov. 8, 1950, to Oct. 31, 1969, at site 200 ft (61 m) upstream at same datum.

REMARKS.--Records good except those for winter periods, which are fair. Flow affected by U.S. Soil Conservation Service floodwater-retarding structures and surface-mined areas.

AVERAGE DISCHARGE.--34 years, 214 ft³/s (6.060 m³/s), 12.75 in/yr (324 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,800 ft³/s (249 m³/s) Jan. 5, 1950, gage height, 20.05 ft (6.111 m); maximum gage height, 20.30 ft (6.187 m) May 9, 1961; no flow many days in 1954.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 2,200 ft³/s (62.3 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Mar. 28	2200	*2290 64.9	*13.78 4.20

Minimum daily discharge, 2.9 ft³/s (0.082 m³/s) Jan. 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	35	7.8	3.9	3.9	713	1080	33	13	97	12	33
2	12	27	7.4	3.6	4.2	347	697	32	14	35	6.5	25
3	8.7	19	6.3	3.3	4.8	347	790	33	14	27	5.4	29
4	7.3	14	8.1	3.3	5.6	1230	533	89	13	21	5.3	21
5	7.1	12	8.9	3.4	5.4	1100	390	68	11	16	6.0	17
6	12	10	9.3	3.4	4.7	607	292	71	8.4	14	6.8	18
7	14	9.8	10	3.5	4.8	303	228	381	6.8	14	28	14
8	9.6	9.4	9.3	3.6	5.0	212	180	206	11	39	31	13
9	7.1	9.0	9.1	3.7	5.3	162	143	109	18	86	25	12
10	5.8	8.5	9.6	3.5	6.0	120	127	74	16	38	83	10
11	4.9	9.1	9.8	3.2	20	110	112	59	11	25	119	7.9
12	7.9	8.7	9.4	3.0	90	444	97	48	8.7	22	713	7.6
13	7.3	6.4	8.6	3.3	400	573	86	40	12	17	231	14
14	5.6	5.3	7.4	3.4	250	289	78	35	13	15	149	18
15	4.4	7.0	7.9	3.5	150	191	70	33	11	12	81	16
16	4.2	7.2	8.0	3.3	80	141	65	30	10	9.7	57	18
17	5.1	8.3	8.3	2.9	60	116	60	30	17	8.8	196	13
18	4.4	9.4	9.3	3.0	50	170	53	29	18	11	54	9.4
19	3.8	8.2	10	3.3	70	149	53	23	25	18	33	181
20	8.8	7.3	11	3.5	90	148	56	21	15	40	25	216
21	12	6.5	9.4	3.8	66	135	49	20	9.6	25	25	68
22	7.4	6.1	8.5	3.9	64	132	52	18	23	48	35	41
23	7.4	4.9	7.6	4.0	131	124	69	17	30	63	29	29
24	212	6.2	6.6	4.2	223	101	62	15	31	27	24	58
25	65	7.2	6.3	4.3	157	86	51	16	83	20	24	67
26	26	12	6.9	4.5	489	74	43	17	53	18	20	35
27	22	31	6.6	4.6	1480	249	39	15	63	15	17	27
28	15	21	7.2	4.4	1220	1920	37	17	180	11	13	22
29	10	11	6.9	4.0	---	2100	40	14	65	8.4	42	18
30	18	10	6.0	3.7	---	1900	35	13	38	33	148	20
31	72	---	4.9	3.7	---	1660	---	14	---	48	51	---
TOTAL	642.8	346.5	252.4	112.7	5139.7	15953	5667	1620	841.5	881.9	2295.0	1077.9
MEAN	20.7	11.6	8.14	3.64	184	515	189	52.3	28.1	28.4	74.0	35.9
MAX	212	35	11	4.6	1480	2100	1080	381	180	97	713	216
MIN	3.8	4.9	4.9	2.9	3.9	74	35	13	6.8	8.4	5.3	7.6
CFSM	.09	.05	.04	.02	.81	2.26	.83	.23	.12	.13	.33	.16
IN.	.10	.06	.04	.02	.84	2.60	.92	.26	.14	.14	.37	.18
CAL YR 1976	TOTAL	39491.8	MEAN	108	MAX	1530	MIN	3.7	CFSM	.47	IN	6.44
WTR YR 1977	TOTAL	34830.4	MEAN	95.4	MAX	2100	MIN	2.9	CFSM	.42	IN	5.68

03343000 WABASH RIVER AT VINCENNES, IN

LOCATION.--Lat 38°42'26", long 87°31'10", in NW¼SW¼ sec.10, T.3 N., R.10 W., Knox County, Hydrologic Unit 05120111, near center of span on downstream side of bridge on U.S. Highway 50 at the Indiana-Illinois State line, 4.9 miles (7.9 km) downstream from Maria Creek, 7.7 miles (12.4 km) upstream from Embarras River, and at mile 129.8 (208.8 km).

DRAINAGE AREA.--13,706 mi² (35,498 km²).

PERIOD OF RECORD.--October 1929 to current year. Prior to December 1929 monthly discharge only, published in WSP 1305. Gage-height records for flood peaks in 1867 and 1883, intermittent records 1887-1904, and continuous since November 1904, collected at site 2.1 miles (3.4 km) downstream, are contained in reports of National Weather Service.

REVISED RECORDS.--WSP 1173: 1943 (maximum gage height only). WSP 1335: 1930-31, 1933, 1936. WSP 1909: 1955.
WRD Ind. 1973: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 394.43 ft (120.222 m) above mean sea level. Oct. 1, 1960, to September 30, 1968, nonrecording gage at site 2.1 miles (3.4 km) downstream at same datum. Oct. 1, 1960, to Sept. 30, 1968, auxiliary water-stage recorder at site 2.6 miles (4.2 km) upstream from base gage at datum 0.80 ft (0.244 m) lower. See WSP 1725 for history of changes prior to Oct. 1, 1960.

REMARKS.--Records good. Flow partially regulated by upstream reservoirs.

AVERAGE DISCHARGE.--48 years, 11,641 ft³/s (330.0 m³/s), 11.54 in/yr (293 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 189,000 ft³/s (5,350 m³/s) May 22, 23, 1943, gage height, 29.33 ft (8.940 m), at former site 2.1 miles (3.4 km) downstream and at present datum; minimum daily, 770 ft³/s (21.8 m³/s) Aug. 4, 5, 1934.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 29, 1913, reached a stage of 26.3 ft (8.02 m), at former site 2.1 miles (3.4 km) downstream and at present datum, from floodmarks, determined by Corps of Engineers, discharge, 255,000 ft³/s (7,220 m³/s).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 29,700 ft³/s (841 m³/s) Apr. 2, gage height, 14.91 ft (4.545 m); minimum daily, 1,290 ft³/s (36.5 m³/s) Jan. 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2340	3150	2360	1540	1490	10800	28300	6120	3450	3210	2320	6800
2	2340	3110	2320	1450	1500	9030	29200	5960	3280	3690	2160	7030
3	2300	3130	2180	1390	1490	8640	28300	5960	3150	4310	2070	6270
4	2260	3110	2030	1390	1490	10400	25600	5980	3010	3600	2030	5620
5	2240	3070	1830	1410	1490	11800	24100	5660	2910	3490	1980	5420
6	2240	3010	1870	1460	1480	12800	23200	6640	2820	4290	1920	5640
7	2260	3010	1940	1490	1450	15300	22000	10900	2730	4510	1990	6270
8	2380	2900	1850	1480	1430	17600	20100	17400	2840	4140	6360	6030
9	2600	2750	1750	1430	1430	18000	17800	20400	2930	3990	15400	5400
10	2780	2530	1670	1400	1440	16400	15500	20400	2990	5890	15300	4800
11	2800	2440	1650	1390	1480	14600	13300	18300	3320	6140	13700	4500
12	2680	2420	1650	1370	1530	14200	11300	15600	3240	4810	13700	4100
13	2600	2420	1650	1370	2490	14600	10200	13500	3050	4470	17000	3850
14	2530	2400	1670	1380	4440	13400	9380	11700	2950	4120	20500	3800
15	2530	2380	1650	1380	4690	11400	8690	9800	2950	3670	20200	3750
16	2490	2360	1610	1350	4250	9700	8020	8440	2880	3690	17300	14800
17	2470	2340	1610	1300	3870	8820	7490	7560	2800	3420	14500	20100
18	2420	2340	1650	1290	3580	8330	7180	6940	2780	3340	12300	22100
19	2470	2340	1650	1300	3360	7790	6840	6430	2730	3240	11900	23000
20	2530	2320	1650	1310	3320	8600	6570	5890	2620	2950	11100	21800
21	2570	2340	1640	1330	3190	10700	6180	5660	2490	2960	9870	18800
22	2640	2320	1610	1380	3090	13200	5960	5530	2640	2750	9260	16600
23	2900	2280	1590	1400	3190	14300	6180	5510	2710	2680	8640	14800
24	3260	2260	1470	1420	3580	14000	6200	5460	2660	2730	8110	13400
25	3450	2260	1420	1490	4160	13500	6000	4900	2570	2800	7100	12000
26	3240	2360	1500	1490	4970	12700	5820	4470	2600	2530	6680	11000
27	3150	2360	1550	1480	10200	12600	5930	4250	2600	2490	6140	10400
28	2990	2340	1590	1470	12600	19900	6730	4100	2750	2660	5680	9940
29	2930	2340	1620	1450	---	27000	6800	3910	2800	2570	5550	9310
30	3090	2360	1620	1450	---	27500	6430	3710	2820	2530	5930	8550
31	3150	---	1620	1480	---	27600	---	3580	---	2470	5960	---
TOTAL	82630	76750	53470	43720	92680	435210	385300	260660	86070	110040	282650	305880
MEAN	2665	2558	1725	1410	3310	14040	12840	8408	2869	3550	9118	10200
MAX	3450	3150	2360	1540	12600	27600	29200	20400	3450	6140	20500	23000
MIN	2240	2260	1420	1290	1430	7790	5820	3580	2490	2470	1920	3750
CFSM	.19	.19	.13	.10	.24	1.02	.94	.61	.21	.26	.67	.74
IN.	.22	.21	.15	.12	.25	1.18	1.05	.71	.23	.30	.77	.83
CAL YR 1976 TOTAL	3456460	MEAN	9444	MAX	55500	MIN	1420	CFSM	.69	IN	9.38	
WTR YR 1977 TOTAL	2215060	MEAN	6069	MAX	29200	MIN	1290	CFSM	.44	IN	6.01	

03346000 NORTH FORK FMBARRAS RIVER NEAR OBLONG, IL

LOCATION.--Lat 39°00'01", long 87°56'42", in NE¼SW¼ sec.35, T.7 N., R.14 W., Crawford County, Hydrologic Unit 05120112, at upstream side of pier of bridge on county highway, 200 ft (61 m) downstream from Illinois Central Gulf Railroad bridge, 2 mi (3 km) west of Oblong, and 7.8 mi (12.6 km) upstream from mouth.

DRAINAGE AREA.--319 mi² (826 km²).

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

REVISED RECORDS.--WDR IL-74: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 456.19 ft (139.047 m) above mean sea level. Prior to Dec. 11, 1940, nonrecording gage and Dec. 11, 1940, to Sept. 30, 1964, water-stage recorder at site 0.8 mi (1.3 km) upstream at datum 2.00 ft (0.610 m) higher. Oct. 1, 1964, to Oct. 8, 1971, water-stage recorder at site 0.8 mi (1.3 km) upstream at present datum.

REMARKS.--Records fair except those for winter periods, which are poor. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--37 years, 249 ft³/s (7.052 m³/s), 10.60 in/yr (269 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 27,100 ft³/s (767 m³/s) Jan. 4, 1950, gage height, 24.38 ft (7.431 m), present datum, from rating curve extended above 16,000 ft³/s (453 m³/s); no flow for many days in 1953-54, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,360 ft³/s (123 m³/s) Mar. 29, gage height, 16.45 ft (5.014 m); minimum daily, 0.50 ft³/s (0.014 m³/s) Oct. 18, 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.5	1.9	1.7	.80	.60	91	155	20	7.1	458	1.9	11
2	1.3	2.2	1.7	.80	.60	58	158	21	7.1	157	1.3	6.1
3	1.3	3.6	1.7	.80	.60	48	351	20	7.0	33	1.1	3.9
4	1.2	2.4	1.7	.80	.60	105	204	19	6.6	15	.90	2.9
5	1.3	2.0	1.6	.80	.60	172	132	18	6.5	10	.80	2.0
6	1.7	1.8	1.6	.80	.60	91	108	19	6.4	7.9	.70	6.7
7	1.4	1.6	1.7	.80	.60	52	87	317	6.4	6.6	1.3	6.6
8	1.1	1.5	1.7	.80	.60	36	74	232	6.7	5.9	4.9	3.3
9	.90	1.4	1.6	.80	.60	29	63	90	8.6	5.3	8.4	1.7
10	1.5	1.5	1.4	.80	.60	25	54	53	7.8	5.0	6.2	1.1
11	2.3	1.4	1.4	1.0	1.0	22	49	37	7.2	5.0	5.2	.70
12	2.0	1.3	1.2	1.0	5.0	108	44	29	7.4	5.0	5.3	.70
13	1.8	1.3	1.2	1.0	125	520	39	24	7.1	4.6	3.4	1.6
14	1.4	1.2	1.0	1.0	499	164	35	21	9.0	4.1	7.4	2.1
15	1.2	1.2	1.0	1.0	189	80	32	19	6.9	4.0	5.9	5.2
16	.90	1.2	1.0	1.0	115	53	30	17	6.3	3.8	3.9	6.8
17	.60	1.2	1.0	1.0	76	40	28	15	6.3	3.5	2.3	8.0
18	.50	1.2	1.0	1.0	48	36	26	14	5.8	3.3	1.2	7.1
19	.50	1.4	1.0	1.0	37	35	24	13	5.4	3.9	1.6	126
20	.70	1.5	1.0	1.0	35	36	23	12	5.1	4.8	4.2	253
21	.70	1.5	.80	1.0	36	31	23	11	4.8	3.2	4.4	29
22	.60	1.3	.80	1.0	40	29	29	11	6.2	4.4	34	11
23	1.0	1.3	.80	1.0	56	28	89	10	6.1	4.0	60	6.4
24	2.9	1.4	.80	1.1	175	29	98	9.4	6.9	3.1	20	29
25	2.6	1.5	.80	1.2	211	29	53	9.0	7.2	3.0	16	30
26	4.7	1.7	.60	1.0	146	25	34	8.7	12	2.7	8.1	46
27	4.3	1.6	.60	1.0	514	95	27	8.0	9.5	2.2	4.8	16
28	2.9	1.7	.60	.80	300	1970	24	7.8	146	1.8	2.7	8.2
29	2.3	1.8	.60	.80	---	4040	22	7.7	142	1.5	7.7	5.7
30	2.4	1.8	.60	.80	---	2520	20	7.5	54	1.8	43	4.5
31	2.3	---	.60	.80	---	388	---	7.0	---	1.9	31	---
TOTAL	51.80	48.4	34.80	28.50	2614.00	10985	2135	1107.1	531.4	775.3	299.60	642.30
MEAN	1.67	1.61	1.12	.92	93.4	354	71.2	35.7	17.7	25.0	9.66	21.4
MAX	4.7	3.6	1.7	1.2	514	4040	351	317	146	458	60	253
MIN	.50	1.2	.60	.80	.60	22	20	7.0	4.8	1.5	.70	.70
CFSM	.005	.005	.004	.003	.29	1.11	.22	.11	.06	.08	.03	.07
IN.	.01	.01	.00	.00	.30	1.28	.25	.13	.06	.09	.03	.07
CAL YR 1976 TOTAL	51987.50			MEAN 142	MAX 5640	MIN .50	CFSM .45	IN 6.06				
WTR YR 1977 TOTAL	19253.20			MEAN 52.7	MAX 4040	MIN .50	CFSM .17	IN 2.25				

03346900 PRAIRIE CREEK RESERVOIR NEAR MUNCIE, IN

LOCATION.--Lat 40°08'46", long 85°17'35", in NE¼NE¼ sec.32, T.20 N., R.11 E., Delaware County, Hydrologic Unit 05120201, at intake tower of reservoir on Prairie Creek, 0.3 mile (0.5 km) above mouth, and 5.8 miles (9.3 km) southeast of Muncie.

DRAINAGE AREA.--16.8 mi² (43.5 km²).

PERIOD OF RECORD.--1962 to current year.

GAGE.--Water-stage recorder.

REMARKS.--Reservoir is formed by earth-fill dam. Releases normally controlled by three 24-inch (610 mm) valves. Capacity at uncontrolled spillway elevation, 990 ft (301.8 m) is 22,100 acre-ft (27.2 km³). Reservoir is used for low-flow augmentation of the water supply for Muncie and recreation. Reservoir was filled for the first time in the spring of 1963.

COOPERATION.--Records furnished by Muncie Water Works Company.

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

Date	Elevation (feet)	Contents (acre-feet)	Change in Contents (acre-feet)
Sept. 30.....	987.0	18,240	
Oct. 31.....	986.4	17,540	-700
Nov. 30.....	986.3	17,420	-120
Dec. 31.....	986.2	17,300	-120
CAL YR 1976.....			-3,190
Jan. 31.....	Frozen		
Feb. 28.....	Frozen		
Mar. 31.....	986.2	17,300	
Apr. 30.....	986.7	17,880	+580
May 31.....	987.0	18,240	+360
June 30.....	986.8	18,000	-240
July 31.....	986.6	17,770	-230
Aug. 31.....	986.2	17,300	-470
Sept. 30.....	987.0	18,240	+940
WTR YR 1977.....			0

Diversion for municipal supply for city of Muncie

Water supply for the city of Muncie is from White River and augmented by Prairie Creek Reservoir. Water is diverted at Muncie Water Works on Burlington Drive, 3.0 miles (4.8 km) upstream from White River at Muncie (03347000) and returned at sewage disposal plant 3.9 miles (6.3 km) downstream from station.

Diversion, monthly and yearly means in ft³/s

1976										1977				
Oct.	Nov.	Dec.	Cal. year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Water year	
20.2	19.4	19.1	19.7	20.4	26.4	24.2	20.7	20.9	21.5	22.6	20.4	20.2	21.3	

03347000 WHITE RIVER AT MUNCIE, IN

LOCATION.--Lat 40°12'15", long 85°23'14", in SE¼NW¼ Hackley Reserve, Delaware County, Hydrologic Unit 05120201, on right bank 200 ft (61 m) downstream from Walnut Street bridge in Muncie, 6 miles (10 km) upstream from Bell Creek, and at mile 315.8 (508.1 km).

DRAINAGE AREA.--241 mi² (624 km²).

PERIOD OF RECORD.--November 1930 to current year. Prior to October 1948, published as West Fork White River at Muncie. Daily gage heights from July 1923 to December 1929 are available in the district office.

REVISED RECORDS.--WSP 1335: 1931-32(M), 1936(M), 1938, 1948. WSP 1435: 1955. WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 917.10 ft (279.532 m) above mean sea level (city of Muncie bench mark). See WSP 1705 for history of changes prior to Jan. 28, 1942. Jan. 28, 1942, to Apr. 27, 1964, water-stage recorder at present site at datum 3.00 ft (0.914 m) higher.

REMARKS.--Records good except those for winter periods, which are poor. Natural flow affected by regulation of Prairie Creek Reservoir (See sta 03346900) and by diversion of municipal water supply by Muncie Water Works Co. Records of diversion available since October 1937.

AVERAGE DISCHARGE.--46 years (1931 to current year), 203 ft³/s (5.749 m³/s), 11.43 in/yr (290 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,300 ft³/s (405 m³/s) Apr. 21, 1964, gage height, 14.98 ft (4.566 m) present datum; maximum gage height, 21.07 ft (6.422 m) Jan. 15, 1937, present datum; minimum daily discharge, 1.1 ft³/s (0.031 m³/s) Sept. 16, 17, 23-25, 1954, and Oct. 10, 1956.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, 22.6 ft (6.89 m) in March 1913, present datum, discharge, 20,000 ft³/s (566 m³/s).

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 2,500 ft³/s (70.8 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Apr. 03	0500	*1180 33.4	*6.01 1.832

Minimum daily discharge, 3.2 ft³/s (0.091 m³/s) Aug. 2.

DISCHARGE* IN CUBIC FEET PER SECOND* WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	10	4.1	9.0	5.2	236	114	50	11	9.3	3.5	9.1
2	13	8.3	4.1	8.1	5.6	148	312	52	6.5	6.2	3.2	5.4
3	15	7.0	3.6	9.0	6.2	123	982	87	5.7	5.5	5.1	4.8
4	14	5.3	13	10	7.0	436	562	237	4.5	5.0	6.1	4.9
5	12	4.4	18	9.2	6.2	522	362	224	4.6	4.6	4.0	5.2
6	20	4.2	17	8.6	4.8	289	248	187	7.2	4.2	12	5.0
7	16	4.2	17	8.0	4.5	187	180	174	31	8.1	29	4.4
8	17	4.2	18	7.6	4.5	135	147	131	28	17	28	5.0
9	14	4.2	15	7.4	5.2	103	120	98	206	22	21	5.2
10	9.1	5.7	16	7.0	6.8	84	103	77	132	21	44	6.5
11	8.9	8.3	17	6.5	8.6	69	90	65	62	15	89	5.2
12	5.2	9.1	19	6.0	20	68	73	56	43	12	175	4.7
13	5.1	8.8	16	5.6	59	75	63	49	33	10	70	12
14	5.5	11	15	5.4	48	70	57	46	23	6.4	47	77
15	6.8	11	16	6.0	39	58	54	42	15	5.3	62	68
16	8.4	8.9	15	4.6	30	47	48	36	11	5.3	35	65
17	12	8.7	14	4.0	26	45	45	29	8.1	5.1	45	122
18	12	9.0	18	3.3	19	110	42	24	6.4	4.5	40	65
19	12	9.4	21	3.5	16	158	37	21	7.9	4.2	18	37
20	21	7.4	25	3.9	15	131	34	22	7.0	4.3	11	26
21	18	4.6	17	4.7	15	111	33	17	4.9	6.1	8.5	16
22	15	4.6	16	4.9	40	113	63	17	4.7	296	6.6	13
23	19	4.4	15	5.1	190	186	142	12	4.7	73	4.6	11
24	28	4.1	14	6.0	145	176	100	8.4	4.8	30	12	8.8
25	28	4.2	13	6.5	113	132	72	7.2	5.9	11	13	9.1
26	29	8.0	15	6.8	244	101	59	6.6	26	3.8	8.4	6.3
27	17	9.8	14	7.0	836	96	52	8.0	31	3.3	5.9	3.9
28	9.0	15	16	6.8	460	246	51	7.8	88	3.6	5.1	3.6
29	6.8	13	15	6.5	---	369	58	17	11	3.3	14	4.2
30	7.4	6.0	14	5.7	---	235	57	54	6.0	3.9	24	4.1
31	8.7	---	11	5.0	---	162	---	31	---	4.0	18	---
TOTAL	427.9	222.8	461.8	197.7	2379.6	5021	4360	1893.0	839.9	613.0	868.0	617.4
MEAN	13.8	7.43	14.9	6.38	85.0	162	145	61.1	28.0	19.8	28.0	20.6
MAX	29	15	25	10	836	522	982	237	206	296	175	122
MIN	5.1	4.1	3.6	3.3	4.5	45	33	6.6	4.5	3.3	3.2	3.6
CFSM	.06	.03	.06	.03	.35	.67	.60	.25	.12	.08	.12	.09
IN.	.07	.03	.07	.03	.37	.78	.67	.29	.13	.09	.13	.10
CAL YR 1976	TOTAL	50403.5	MEAN	138	MAX	3300	MIN	3.6	CFSM	.57	IN	7.78
WTR YR 1977	TOTAL	17902.1	MEAN	49.0	MAX	982	MIN	3.2	CFSM	.20	IN	2.76

WABASH RIVER BASIN

03347500 BUCK CREEK NEAR MUNCIE, IN

LOCATION.--Lat 40°08'05", long 85°22'25", in SW¼SE¼ sec.34, T.20 N., R.10 E., Delaware County, Hydrologic Unit 05120201, on left bank at downstream side of bridge on County Road 400 South, 1.0 mile (1.6 km) upstream from Muncie Water Works Co. pumping station, 4.2 miles (6.8 km) southeast of courthouse in Muncie, and at mile 10.6 (17.0 km).

DRAINAGE AREA.--35.5 mi² (91.9 km²).

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

REVISED RECORDS.--WSP 1909: 1955, 1957. WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 944.67 ft (287.935 m) above mean sea level. Prior to May 5, 1955, nonrecording gage at same site and datum.

REMARKS.--Records good except those for period of no gage-height record, Dec. 31 to Feb. 9, which is fair.

AVERAGE DISCHARGE.--23 years, 34.0 ft³/s (0.963 m³/s), 13.00 in/yr (330 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,780 ft³/s (50.4 m³/s) Apr. 21, 1964, gage height, 13.96 ft (4.255 m); minimum daily, 4.7 ft³/s (0.13 m³/s) Jan. 17, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, about 15 ft (4.6 m), from information by local residents. Date unknown.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 400 ft³/s (11.3 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Feb. 27	0600	441 12.5	7.19 2.192
July 21	2100	*480 13.6	*7.48 2.280

Minimum daily discharge, 4.7 ft³/s (0.13 m³/s) Jan. 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.1	13	13	6.8	6.5	50	23	18	13	10	10	17
2	8.9	12	13	6.9	6.7	37	126	18	14	9.3	9.8	17
3	8.9	12	14	7.0	7.1	34	96	18	14	9.1	9.5	16
4	8.9	12	13	7.0	7.5	122	55	28	14	8.9	9.2	15
5	9.4	12	13	7.0	8.0	81	43	28	15	8.8	8.9	15
6	12	11	12	7.1	8.3	50	35	27	15	8.7	9.4	14
7	11	11	12	7.1	8.6	39	32	30	14	8.7	16	14
8	10	11	12	6.9	9.0	32	26	25	30	9.8	15	13
9	9.9	11	13	6.7	9.5	28	24	21	65	9.6	13	12
10	9.7	11	12	6.5	12	26	23	20	22	9.0	12	12
11	9.6	11	12	6.4	15	24	21	18	17	9.4	61	12
12	9.2	11	12	6.4	47	26	20	17	15	9.4	64	12
13	9.9	11	12	6.4	35	24	19	17	14	8.8	26	20
14	11	11	12	6.3	28	22	19	16	13	8.5	42	47
15	11	11	12	5.9	23	20	18	16	13	8.2	25	30
16	10	11	12	5.4	19	19	18	15	12	7.9	36	32
17	10	11	12	4.7	17	19	17	14	12	8.0	45	24
18	11	11	12	5.2	15	32	17	14	12	7.9	22	20
19	11	12	12	5.6	15	26	17	14	11	8.1	18	19
20	12	12	12	5.8	17	26	16	14	11	7.8	15	17
21	11	12	11	6.0	15	23	16	14	11	123	14	16
22	10	11	9.6	6.1	31	29	19	14	11	95	14	15
23	11	11	8.7	6.2	73	33	49	14	11	28	13	14
24	15	11	8.0	6.4	87	27	32	14	10	17	32	15
25	13	11	7.6	6.5	42	24	26	14	13	15	18	15
26	12	13	7.8	6.6	48	21	23	14	11	12	15	15
27	11	15	8.2	6.6	257	22	21	14	10	12	13	14
28	11	14	8.2	6.5	79	62	21	13	10	11	12	14
29	11	12	7.5	6.5	---	46	21	15	9.8	11	38	14
30	12	13	7.1	6.4	---	32	19	15	9.6	12	34	13
31	14	---	6.9	6.4	---	26	---	14	---	10	21	---
TOTAL	333.5	351	337.6	197.3	946.2	1082	912	543	452.4	521.9	690.8	523
MEAN	10.8	11.7	10.9	6.36	33.8	34.9	30.4	17.5	15.1	16.8	22.3	17.4
MAX	15	15	14	7.1	257	122	126	30	65	123	64	47
MIN	8.9	11	6.9	4.7	6.5	19	16	13	9.6	7.8	8.9	12
CFSM	.30	.33	.31	.18	.95	.98	.86	.49	.43	.47	.63	.49
IN.	.35	.37	.35	.21	.99	1.13	.96	.57	.47	.55	.72	.55
CAL YR 1976	TOTAL	10353.1	MEAN 28.3	MAX 480	MIN 6.9	CFSM .80	IN 10.85					
WTR YR 1977	TOTAL	6890.7	MEAN 18.9	MAX 257	MIN 4.7	CFSM .53	IN 7.22					

03348000 WHITE RIVER AT ANDERSON, IN

LOCATION.--Lat 40°06'20", long 85°40'16", in NW¼NW¼ sec.18, T.19 N., R.8 E., Madison County, Hydrologic Unit 05120201, on downstream side of Twelfth Street bridge, 250 ft (76 m) upstream from municipal water-supply plant in Anderson, 1 mile (2 km) upstream from Killbuck Creek, and at mile 293.3 (471.9 km).

DRAINAGE AREA.--406 mi² (1,052 km²).

PERIOD OF RECORD.--July 1925 to September 1926, October 1931 to current year. Monthly discharge only for some periods, published in WSP 1305. Gage-height records collected at site 950 ft (290 m) downstream December 1910 to February 1918, 250 ft (76 m) downstream from February 1918 to Sept. 14, 1973, and at present site since Sept. 15, 1973, are contained in reports of National Weather Service. Prior to October 1948, published as West Fork White River at Anderson.

REVISED RECORDS.--WSP 1335: 1932, 1934-35, 1936(M), 1938-40. WSP 1385: 1950(P). WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 825.02 ft (251.466 m) above mean sea level. Prior to May 12, 1934, nonrecording gage at present site and datum. May 12, 1934, to Sept. 14, 1973, nonrecording gage at site 250 ft (76 m) downstream at same datum. Sept. 15, 1973, to Sept. 23, 1976, nonrecording gage at present site and datum.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--47 years, 370 ft³/s (10.48 m³/s), 12.38 in/yr (314 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 18,700 ft³/s (530 m³/s) Apr. 21, 1964, gage height, 19.41 ft (5.916 m); maximum gage height, 19.96 ft (6.084 m) June 14, 1958; minimum daily discharge, 9.1 ft³/s (0.26 m³/s) Sept. 24, 1940.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, 23.6 ft (7.19 m) Mar. 25, 1913, at site 250 ft (76 m) downstream and at present datum, based on determination of National Weather Service at site then in use, discharge, 28,000 ft³/s (793 m³/s).

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 2,700 ft³/s (76.5 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Feb. 27	1700	*2170 61.5	*8.51 2.590

Minimum daily discharge, 45 ft³/s (1.27 m³/s) Jan. 21, 22, Aug. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	69	78	61	58	51	570	259	162	105	83	45	109
2	68	76	59	63	50	374	341	181	84	67	47	100
3	63	73	57	68	49	290	1520	167	78	57	47	91
4	63	71	56	70	50	671	1090	412	70	53	46	79
5	70	70	56	71	51	1170	691	433	74	51	50	93
6	92	68	70	72	54	647	464	392	77	55	55	87
7	96	64	78	71	60	404	348	380	81	55	130	89
8	76	59	74	70	68	307	291	300	105	85	111	79
9	74	65	72	68	64	254	250	243	300	85	113	75
10	69	67	73	65	68	225	228	207	335	69	136	75
11	62	66	76	60	95	203	205	187	174	66	230	68
12	67	70	74	56	150	197	190	170	124	71	885	63
13	63	70	73	57	368	191	179	157	102	66	329	77
14	61	68	72	59	371	187	169	145	95	62	218	142
15	64	67	70	59	268	174	163	135	83	58	200	198
16	63	72	69	57	180	159	156	129	75	56	160	173
17	65	71	69	54	137	150	148	120	67	55	221	176
18	64	71	68	50	110	237	146	115	62	49	177	182
19	75	71	68	48	100	282	146	107	58	52	128	133
20	110	70	79	46	108	262	143	101	59	53	103	113
21	92	67	74	45	100	234	138	97	62	56	92	100
22	79	62	68	45	95	263	166	89	60	545	87	90
23	80	63	64	46	206	324	450	87	57	272	81	86
24	118	62	61	49	696	341	337	87	59	131	104	89
25	98	64	61	50	726	277	249	84	60	91	148	87
26	91	67	62	52	455	233	219	81	65	73	112	79
27	89	89	62	54	1720	215	189	77	76	59	100	78
28	74	74	60	55	1290	408	183	77	106	54	84	73
29	70	67	59	56	---	686	197	82	130	53	88	71
30	74	64	58	54	---	468	174	151	75	54	135	71
31	103	---	56	52	---	330	---	152	---	50	140	---
TOTAL	2404	2066	2059	1780	7740	10733	9429	5307	2958	2686	4602	3026
MEAN	77.5	68.9	66.4	57.4	276	346	314	171	98.6	86.6	148	101
MAX	118	89	79	72	1720	1170	1520	433	335	545	885	198
MIN	61	59	56	45	49	150	138	77	57	49	45	63
CFSM	.19	.17	.16	.14	.68	.85	.77	.42	.24	.21	.37	.25
IN.	.22	.19	.19	.16	.71	.98	.86	.49	.27	.25	.42	.28
CAL YR 1976	TOTAL	104610	MEAN 286	MAX 4780	MIN 56	CFSM .70	IN 9.58					
WTR YR 1977	TOTAL	54790	MEAN 150	MAX 1720	MIN 45	CFSM .37	IN 5.02					

03348020 KILLBUCK CREEK NEAR GASTON, IN

LOCATION.--Lat 40°15'45", long 85°30'53", in SE¼SW¼ sec.16, T.21 N., R.9 E., Delaware County, Hydrologic Unit 05120201, on right bank 30 ft (9 m) upstream from bridge on County Road 500 North, 15 ft (5 m) east of County Road 675 West, 3.6 miles (5.8 km) southwest of Gaston, and at mile 15.6 (25.1 km).

DRAINAGE AREA.--25.5 mi² (66.0 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 873.00 ft (266.090 m) above mean sea level.

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

AVERAGE DISCHARGE.--9 years, 23.5 ft³/s (0.666 m³/s), 12.50 in/yr (318 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 378 ft³/s (10.7 m³/s) Jan. 18, 1969; maximum gage height, 11.14 ft (3.395 m) Apr. 20, 1972; minimum daily discharge, 0.76 ft³/s (0.022 m³/s) Jan. 19, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 250 ft³/s (7.08 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Feb. 27	1300	*116 3.29	*7.40 2.256

Minimum daily discharge, 0.76 ft³/s (0.022 m³/s) Jan. 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.5	2.6	1.5	.95	.90	37	17	9.6	6.2	3.5	1.0	2.1
2	1.4	2.2	1.4	.92	.92	22	21	9.6	5.8	3.2	1.0	1.6
3	1.4	1.9	1.4	.96	.92	17	24	11	5.5	2.7	1.0	1.8
4	1.4	1.9	1.4	1.0	.91	63	20	48	5.2	2.6	1.0	1.5
5	1.6	1.9	1.4	1.0	.88	69	18	61	5.2	2.5	.96	1.4
6	2.3	1.8	1.5	1.0	.84	37	14	48	11	2.4	1.4	1.3
7	2.8	1.8	1.5	.97	.84	24	12	53	13	2.4	3.0	1.4
8	3.1	1.8	1.5	.91	.88	17	11	35	7.8	2.6	4.3	1.3
9	2.5	1.7	1.5	.85	.89	15	10	25	14	2.5	3.3	1.3
10	2.1	1.7	1.5	.82	.86	13	10	20	10	2.3	3.5	1.4
11	1.5	1.7	1.5	.89	1.3	11	9.3	16	6.8	2.1	5.1	1.2
12	1.6	1.8	1.6	.94	2.6	10	8.5	14	5.7	2.3	6.9	1.3
13	1.6	1.7	1.6	.94	4.0	9.7	8.0	13	5.0	2.2	5.8	2.4
14	1.5	1.7	1.5	.92	2.6	8.4	8.0	12	4.7	2.0	4.0	9.6
15	1.7	1.7	1.5	.89	1.9	7.5	7.8	10	4.4	1.9	3.4	6.7
16	1.5	1.6	1.5	.83	1.7	6.8	7.3	9.2	4.2	1.8	3.2	4.5
17	1.5	1.6	1.5	.79	1.5	6.3	7.0	8.5	4.0	1.8	3.5	3.9
18	1.3	1.6	1.4	.77	1.4	21	6.5	8.1	3.9	1.9	3.4	3.3
19	1.6	1.6	1.4	.76	1.8	25	6.2	7.6	3.7	1.7	2.9	3.2
20	1.8	1.6	1.6	.78	2.0	17	6.1	7.2	3.6	1.7	2.5	3.0
21	2.3	1.6	1.6	.81	1.9	14	5.6	6.8	3.5	1.7	2.5	2.9
22	2.0	1.6	1.5	.83	2.6	18	6.3	6.5	3.5	2.2	2.6	2.7
23	1.8	1.6	1.4	.84	7.4	34	31	6.2	3.5	2.4	2.6	2.6
24	2.0	1.5	1.3	.86	17	23	32	5.9	3.4	2.0	3.0	2.7
25	2.7	1.5	1.2	.90	14	17	20	5.6	3.3	1.8	3.1	2.8
26	2.3	1.9	1.1	.94	12	14	16	5.3	3.3	1.6	3.2	2.8
27	1.8	2.1	1.1	.96	95	13	13	5.2	3.2	1.5	2.6	2.6
28	1.7	2.1	1.1	.96	64	47	11	5.0	3.2	1.3	2.1	2.3
29	1.6	1.7	1.2	.93	---	49	12	8.2	3.1	1.3	2.4	2.3
30	1.7	1.6	1.1	.87	---	31	11	9.5	3.0	1.2	2.9	2.3
31	2.0	---	1.0	.88	---	22	---	7.5	---	1.2	2.8	---
TOTAL	57.6	53.1	43.3	27.67	243.54	718.7	389.6	497.5	162.7	64.3	90.96	80.2
MEAN	1.86	1.77	1.40	.89	8.70	23.2	13.0	16.0	5.42	2.07	2.93	2.67
MAX	3.1	2.6	1.6	1.0	95	69	32	61	14	3.5	6.9	9.6
MIN	1.3	1.5	1.0	.76	.84	6.3	5.6	5.0	3.0	1.2	.96	1.2
CFSM	.07	.07	.06	.04	.34	.91	.51	.63	.21	.08	.12	.11
IN.	.08	.08	.06	.04	.36	1.05	.57	.73	.24	.09	.13	.12

CAL YR 1976	TOTAL	6600.70	MEAN	18.0	MAX	338	MIN	1.0	CFSM	.71	IN	9.63
WTR YR 1977	TOTAL	2429.17	MEAN	6.66	MAX	95	MIN	.76	CFSM	.26	IN	3.54

03348350 PIPE CREEK AT FRANKTON, IN

LOCATION.--Lat 40°13'38", long 85°45'58", in SE¼NE¼ sec.31, T.21 N., R.7 E., Madison County, Hydrologic Unit 05120201, on right bank 20 ft (6 m) downstream from bridge on County Road 500 West, at northeast edge of Frankton.

DRAINAGE AREA.--113 mi² (293 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 810.00 ft (246.888 m) above mean sea level.

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

AVERAGE DISCHARGE.--9 years, 103 ft³/s (2.917 m³/s), 12.35 in/yr (314 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,370 ft³/s (67.1 m³/s) July 12, 1976, gage height, 11.30 ft (3.444 m); minimum daily, 4.2 ft³/s (0.119 m³/s) Oct. 6, 7, 1970.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 10, 1958, reached a stage of 15.5 ft (4.72 m), from floodmark determined by State of Indiana, Department of Natural Resources.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 700 ft³/s (19.8 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Mar. 05	0600	*477 13.5	*6.56 1.999

Minimum daily discharge, 4.4 ft³/s (0.12 m³/s) Jan. 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.8	10	7.2	5.6	5.7	185	81	31	38	11	5.2	9.6
2	7.4	9.5	7.1	5.4	6.0	118	96	33	28	10	5.3	9.5
3	7.3	8.9	7.2	5.6	6.2	86	119	34	23	9.3	5.3	10
4	6.9	8.3	7.3	5.9	6.1	341	96	104	19	8.7	5.0	10
5	6.6	8.4	7.2	6.2	6.0	427	91	174	19	8.5	4.9	9.5
6	7.5	8.5	7.4	6.2	5.8	231	69	148	20	8.1	6.9	9.3
7	9.2	8.3	8.2	6.1	5.7	132	56	225	18	8.3	11	9.3
8	8.7	7.7	8.3	5.5	5.8	87	50	147	21	11	12	9.1
9	8.7	7.7	8.3	5.2	6.0	68	43	94	51	9.8	9.6	8.7
10	7.9	7.8	8.2	5.0	6.1	54	41	68	30	8.7	13	8.9
11	7.6	7.9	8.3	5.1	9.4	44	39	55	21	8.5	47	8.4
12	7.3	7.6	7.9	5.3	41	44	36	46	18	9.1	344	8.2
13	7.3	7.6	7.9	5.5	63	48	34	40	16	8.6	127	17
14	7.7	7.7	7.8	5.5	31	41	33	37	15	8.1	53	159
15	7.1	7.6	7.9	5.3	18	34	31	33	13	7.6	31	83
16	7.1	7.5	8.0	5.0	14	30	29	30	13	7.9	23	52
17	7.1	7.4	7.8	4.7	12	26	28	28	12	7.8	40	35
18	7.8	7.5	7.7	4.5	14	159	27	26	12	7.5	31	25
19	8.1	7.4	7.6	4.4	16	199	27	25	11	7.9	20	20
20	11	7.4	8.3	4.5	13	131	26	24	11	7.8	15	16
21	9.4	7.4	7.5	4.7	11	98	24	22	10	7.3	13	14
22	8.2	7.5	6.8	4.8	16	102	34	21	9.9	8.7	12	13
23	7.9	7.5	6.7	4.9	55	149	130	19	10	8.8	12	12
24	11	7.3	6.4	5.0	147	107	119	18	10	7.4	14	13
25	11	7.6	6.0	5.2	58	73	79	18	10	6.5	13	12
26	10	8.2	6.1	5.6	43	55	61	17	9.8	6.0	10	12
27	9.1	9.4	6.2	5.7	377	49	49	16	9.5	5.4	9.4	11
28	8.3	8.2	6.5	5.6	299	232	43	16	11	5.4	8.9	10
29	8.1	7.5	6.6	5.4	---	297	39	63	10	5.5	11	9.7
30	8.7	7.3	6.4	5.2	---	182	34	161	9.2	5.4	11	9.6
31	12	---	5.9	5.3	---	115	---	59	---	5.4	10	---
TOTAL	259.8	238.6	226.7	163.9	1296.8	3944	1664	1832	508.4	246.0	933.5	633.8
MEAN	8.38	7.95	7.31	5.29	46.3	127	55.5	59.1	16.9	7.94	30.1	21.1
MAX	12	10	8.3	6.2	377	427	130	225	51	11	344	159
MIN	6.6	7.3	5.9	4.4	5.7	26	24	16	9.2	5.4	4.9	8.2
CFSM	.07	.07	.07	.05	.41	1.12	.49	.52	.15	.07	.27	.19
IN.	.09	.08	.07	.05	.43	1.30	.55	.60	.17	.08	.31	.21
CAL YR 1976	TOTAL	30580.5	MEAN 83.6	MAX 1920	MIN 5.9	CFSM .74	IN 10.07					
WTR YR 1977	TOTAL	11947.5	MEAN 32.7	MAX 427	MIN 4.4	CFSM .29	IN 3.93					

WABASH RIVER BASIN

03349000 WHITE RIVER AT NOBLESVILLE, IN

LOCATION.--Lat 40°02'50", long 86°01'00", in SE¼SE¼ sec.36, T.19 N., R.4 E., Hamilton County, Hydrologic Unit 05120201, on right bank at downstream side of Logan Street bridge in Noblesville, 1.5 miles (2.4 km) upstream from Cicero Creek, 5.1 miles (8.2 km) downstream from dam at Clare, and at mile 263.5 (424.0 km).

DRAINAGE AREA.--858 mi² (2,222 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1946 to current year. Gage-height records collected at present site from December 1913 to December 1935, and after June 1951, and at site 400 ft (122 m) downstream January 1936 to May 1951, are contained in reports of National Weather Service. Prior to October 1948, published as West Fork White River at Noblesville.

REVISED RECORDS.--WSP 1335: 1949. WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 738.16 ft (224.991 m) above mean sea level.

REMARKS.--Records good. Flow slightly regulated by powerplant above station.

AVERAGE DISCHARGE.--31 years, 817 ft³/s (23.14 m³/s), 12.93 in/yr (328 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 26,800 ft³/s (759 m³/s) Apr. 22, 1964, gage height, 21.31 ft (6.495 m); minimum daily, 44 ft³/s (1.25 m³/s) Sept. 28, 1954.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 6,000 ft³/s (170 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Feb. 28	0500	*3460 98.0	*9.01 2.746

Minimum daily discharge, 73 ft³/s (2.07 m³/s) Feb. 10.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

WATER TEMPERATURE: November 1952 to September 1976.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	150	179	126	105	103	1630	790	358	275	154	98	214
2	146	161	123	113	108	1050	773	358	209	154	98	185
3	141	152	126	119	105	790	1480	377	178	131	96	188
4	132	145	124	124	103	1500	1780	636	161	117	96	154
5	138	140	122	125	117	2830	1340	1280	154	109	98	142
6	163	142	137	126	105	1980	1050	1180	180	109	113	166
7	185	133	154	128	105	1210	766	1470	161	115	190	163
8	175	128	159	119	105	891	607	1260	173	159	230	154
9	159	124	147	113	84	712	539	867	258	163	244	140
10	150	131	161	107	73	600	499	674	559	147	222	137
11	141	128	154	103	152	514	463	549	425	131	333	131
12	139	133	156	100	252	485	433	471	282	135	1220	124
13	138	131	147	100	457	519	410	414	195	137	1110	135
14	128	131	141	103	529	466	391	384	209	126	590	247
15	127	131	138	105	421	429	374	351	195	119	395	418
16	127	128	135	103	313	388	358	313	178	113	344	399
17	125	137	133	98	233	351	344	302	168	115	316	316
18	126	135	132	92	198	621	329	279	161	107	391	302
19	142	135	142	87	190	1090	319	272	152	105	306	275
20	178	131	147	85	198	921	314	282	145	109	233	219
21	203	128	135	84	195	756	309	252	142	111	198	193
22	182	128	128	84	195	734	344	233	147	178	183	175
23	172	121	123	85	289	915	670	214	147	564	175	161
24	209	128	120	86	808	940	1070	209	140	289	178	166
25	228	128	122	92	1210	779	785	214	147	195	225	171
26	196	135	123	98	903	642	572	206	140	154	219	147
27	178	159	124	98	2310	559	473	193	137	128	180	135
28	166	171	133	96	3100	1090	422	185	166	117	156	133
29	159	147	117	93	---	2100	433	178	188	109	156	128
30	162	131	107	92	---	1650	391	292	188	105	214	126
31	167	---	98	96	---	1090	---	369	---	103	252	---
TOTAL	4932	4131	4134	3159	12961	30232	18828	14622	5960	4608	8859	5744
MEAN	159	138	133	102	463	975	628	472	199	149	286	191
MAX	228	179	161	128	3100	2830	1780	1470	559	564	1220	418
MIN	125	121	98	84	73	351	309	178	137	103	96	124
CFSM	.19	.16	.16	.12	.54	1.14	.73	.55	.23	.17	.33	.22
IN.	.21	.18	.18	.14	.56	1.31	.82	.63	.26	.20	.38	.25
CAL YR 1976	TOTAL	268135	MEAN 733	MAX 11400	MIN 98	CFSM .85	IN 11.63					
WTR YR 1977	TOTAL	118170	MEAN 324	MAX 3100	MIN 73	CFSM .38	IN 5.12					

03350300 MORSE RESERVOIR NEAR NOBLESVILLE, IN

LOCATION.--Lat 40°04'21", long 86°02'47", in SF4SW4 sec.23, T.19 N., R.4 E., Hamilton County, Hydrologic Unit 05120201, in intake structure of reservoir on Cicero Creek, 2.5 miles (4.0 km) northwest of courthouse in Noblesville, and 4.8 miles (7.7 km) above mouth.

DRAINAGE AREA.--214 mi² (554 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 760.00 ft (231.648 m) above mean sea level.

REMARKS.--Reservoir is formed by earth-fill dam. Releases normally controlled by two 36-inch (914 mm) valves or one 16-inch (406 mm) valve. Minimum design capacity is essentially empty at invert of outlet conduit at elevation of 763.50 ft (232.715 m). Capacity at uncontrolled spillway elevation, 810 ft (246.9 m) is 21,180 acre-ft (26.1 hm³). Reservoir is used for low-flow augmentation of the water supply for Indianapolis and recreation. Reservoir put in operation on Dec. 9, 1955, and was filled for the first time on Feb. 3, 1957.

COOPERATION.--Records furnished by Indianapolis Water Company.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 25,310 acre-ft (31.2 hm³) June 28, 1957, elevation, 812.95 ft (247.787 m); minimum, 14,120 acre-ft (17.4 hm³) Jan. 5, 1964, elevation, 804.26 ft (245.138 m).

EXTREMES FOR CURRENT YEAR.--Maximum contents, 22,110 acre-ft (27.3 hm³) Mar. 29, elevation, 810.68 ft (247.095 m); minimum, 18,510 acre-ft (22.8 hm³) Aug. 6, elevation, 807.93 ft (246.257 m).

MONTHEND ELEVATION AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	809.00	19,890	
Oct. 31.....	809.04	19,940	+50
Nov. 30.....	809.10	20,020	+80
Dec. 31.....	809.25	20,210	+190
CAL YR 1976.....			-1,310
Jan. 31.....	809.49	20,520	+310
Feb. 28.....	810.27	21,550	+1,030
Mar. 31.....	810.37	21,690	+140
Apr. 30.....	810.10	21,310	-380
May 31.....	810.09	21,300	-10
June 30.....	809.80	20,920	-380
July 31.....	808.50	19,240	-1,680
Aug. 31.....	808.95	19,820	+580
Sept. 30.....	809.27	20,230	+410
WTR YR 1977.....			+340

WABASH RIVER BASIN

03350500 CICERO CREEK AT NOBLESVILLE, IN

LOCATION.--Lat 40°03'20", long 86°02'30", in NW¼ sec.35, T.19 N., R.4 E., Hamilton County, Hydrologic Unit 05120201, on right bank 150 ft (46 m) downstream from bridge on State Highway 38, 1.0 mile (1.6 km) northwest of Noblesville, 1.9 miles (3.1 km) downstream from Hinkle Creek, and 3.2 miles (5.1 km) upstream from mouth.

DRAINAGE AREA.--216 mi² (559 km²).

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

REVISED RECORDS.--WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 750.00 ft (228.600 m) above mean sea level (levels by State of Indiana, Department of Natural Resources).

REMARKS.--Records good except those for winter periods, which are poor. Flow regulated by Morse Reservoir (See sta 03350300).

AVERAGE DISCHARGE.--27 years, 190 ft³/s (5.380 m³/s), 11.95 in/yr (304 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,800 ft³/s (278 m³/s) June 28, 1957, gage height, 15.26 ft (4.651 m); minimum daily, 0.25 ft³/s (0.007 m³/s) Oct. 21, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 996 ft³/s (28.2 m³/s) Mar. 29, gage height, 7.97 ft (2.429 m); minimum daily, 0.25 ft³/s (0.007 m³/s) Oct. 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.7	2.5	2.5	1.3	1.2	191	265	65	53	4.3	55	1.0
2	2.7	2.5	2.5	1.3	1.2	116	299	73	31	7.1	64	1.0
3	2.2	2.5	2.5	1.3	1.2	145	931	79	15	5.5	64	1.2
4	2.2	2.5	2.5	1.2	1.2	436	735	145	18	6.7	64	1.0
5	2.5	2.3	2.7	1.2	1.2	818	508	226	16	22	64	1.0
6	3.7	2.5	2.7	1.2	1.0	439	363	274	54	52	65	1.0
7	3.2	2.5	2.7	1.2	1.0	270	269	468	23	64	36	1.0
8	3.1	2.5	2.5	1.2	1.0	195	211	445	6.8	52	1.9	1.0
9	2.9	2.5	2.3	1.1	1.0	154	164	297	27	31	1.6	1.0
10	2.9	2.5	2.5	1.1	1.0	125	146	209	25	20	1.9	1.0
11	2.7	2.5	2.5	1.1	1.2	106	128	167	30	19	3.1	1.0
12	2.7	2.5	2.5	1.1	1.2	111	115	135	35	19	2.3	1.0
13	9.1	2.5	2.3	1.1	1.3	121	101	110	15	19	1.5	1.3
14	19	2.5	2.3	1.0	1.3	113	100	101	20	30	1.3	1.3
15	18	2.5	2.5	1.0	1.8	103	89	90	14	40	1.2	1.0
16	18	2.5	2.5	1.0	26	77	79	69	10	39	1.5	1.0
17	17	2.5	2.3	1.0	35	60	74	60	9.6	40	1.5	1.0
18	13	2.5	2.1	1.0	31	238	59	56	18	53	1.3	1.0
19	5.5	2.5	2.3	1.0	30	414	57	69	16	62	1.3	1.0
20	4.0	2.5	1.9	1.0	28	332	55	239	15	63	1.3	1.0
21	.25	2.5	1.8	1.0	27	254	52	239	13	63	1.3	1.0
22	1.5	2.5	1.7	1.0	28	261	96	141	19	63	1.3	1.0
23	2.3	2.5	1.7	1.1	63	239	174	99	18	63	1.3	1.0
24	2.7	2.5	1.6	1.1	137	224	206	78	19	63	1.8	1.2
25	2.5	2.5	1.6	1.1	141	184	164	94	22	32	1.3	1.2
26	2.5	2.5	1.5	1.2	152	151	131	76	24	1.5	1.2	1.0
27	2.5	2.7	1.5	1.2	281	146	100	51	17	11	1.2	1.0
28	2.5	2.5	1.4	1.2	259	437	115	47	18	33	1.2	1.0
29	2.5	2.5	1.4	1.2	---	939	85	38	19	39	1.4	1.0
30	2.5	2.5	1.4	1.2	---	634	73	68	11	47	1.2	1.2
31	2.7	---	1.3	1.2	---	392	---	65	---	47	1.0	---
TOTAL	161.55	75.0	65.5	34.9	1255.8	8425	5944	4373	631.4	1111.1	447.9	31.4
MEAN	5.21	2.50	2.11	1.13	44.9	272	198	141	21.0	35.8	14.4	1.05
MAX	19	2.7	2.7	1.3	281	939	931	468	54	64	65	1.3
MIN	.25	2.3	1.3	1.0	1.0	60	52	38	6.8	1.5	1.0	1.0
CFSM	.02	.01	.01	.005	.21	1.26	.92	.65	.10	.17	.07	.005
IN.	.03	.01	.01	.01	.22	1.45	1.02	.75	.11	.19	.08	.01
CAL YR 1976	TOTAL	55034.75	MEAN	150	MAX	3800	MIN	.25	CFSM	.69	IN	9.48
WTR YR 1977	TOTAL	22556.55	MEAN	61.8	MAX	939	MIN	.25	CFSM	.29	IN	3.88

LOCATION.--Lat 40°01'44", long 85°59'42", in NEWNEK sec.7, T.18 N., R.5 E., Hamilton County, Hydrologic Unit 05120201, on left bank at downstream side of county road bridge, 1.4 miles (2.3 km) upstream from mouth, and 1.4 miles (2.3 km) southeast of Noblesville.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 300 ft³/s (8.496 m³/s) and maximum (*):

Date	Time	Discharge		Gage height	
		(ft ³ /s)	(m ³ /s)	(ft)	(m)
Feb. 27	0700	*302	8.553	*3.85	1.173

Minimum daily discharge, 2.3 ft³/s (0.065 m³/s) Aug. 4, 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.7	8.3	6.3	4.5	3.8	107	80	14	9.0	5.8	2.5	4.9
2	5.2	7.9	6.3	4.3	3.8	67	130	15	9.4	4.9	2.5	5.3
3	4.7	7.6	6.1	4.2	4.3	59	210	14	9.1	4.3	2.5	5.3
4	5.3	7.2	6.1	4.1	3.8	168	150	25	8.9	4.0	2.3	5.5
5	8.5	7.3	6.1	4.0	3.8	151	120	55	8.9	3.8	2.3	5.0
6	10	7.1	6.1	3.9	3.9	100	90	76	9.2	3.5	2.9	4.9
7	8.8	6.8	6.5	3.8	3.9	72	70	144	8.7	3.6	3.8	4.8
8	8.0	6.5	6.4	3.8	3.9	55	60	113	9.3	4.1	3.5	4.6
9	7.4	6.2	6.2	3.8	4.5	45	30	71	10	3.7	2.9	4.7
10	7.0	6.4	6.4	3.8	6.0	37	26	48	8.8	3.5	3.5	4.4
11	6.8	6.0	6.3	3.8	9.0	33	22	35	8.2	3.2	9.4	4.5
12	6.7	5.9	6.3	3.8	12	41	21	27	7.4	3.1	24	4.7
13	6.6	6.0	6.5	3.8	30	51	20	24	7.1	2.9	9.5	5.1
14	6.6	6.3	6.4	3.8	18	39	20	22	7.0	3.0	7.2	6.6
15	6.9	6.1	6.6	3.8	14	29	18	20	6.8	3.0	6.3	6.2
16	7.0	6.0	6.6	3.8	12	28	17	18	7.0	3.0	6.0	4.0
17	6.8	5.9	6.2	3.8	13	33	16	17	6.5	2.8	6.0	4.0
18	6.8	5.9	6.1	3.8	14	66	15	16	5.8	2.8	5.5	3.7
19	7.5	5.9	5.8	3.8	15	67	15	15	5.9	2.8	4.8	3.7
20	9.0	6.4	5.9	3.8	16	61	15	15	6.1	2.6	4.7	3.7
21	9.0	6.4	5.9	3.8	14	57	14	16	5.7	3.0	4.9	3.7
22	8.0	6.3	5.5	3.8	13	72	17	15	5.6	2.9	5.0	3.8
23	8.0	6.3	5.3	3.8	35	102	41	14	5.9	2.7	4.8	4.0
24	11	6.4	4.9	3.8	86	78	45	13	5.8	2.6	5.3	4.0
25	11	6.3	4.8	3.8	45	73	33	12	6.5	2.9	5.2	4.3
26	8.8	6.9	5.3	3.8	82	69	25	12	5.6	2.8	5.0	4.2
27	7.8	6.9	4.9	3.8	272	76	19	11	5.3	2.6	4.6	4.1
28	7.2	6.8	4.7	3.8	156	223	18	11	5.5	2.7	4.6	3.8
29	7.2	6.3	5.2	3.8	---	250	17	10	5.3	2.7	4.9	3.7
30	7.6	6.1	4.8	3.8	---	160	16	10	5.6	2.7	4.8	3.7
31	8.1	---	4.6	3.8	---	110	---	9.6	---	2.6	4.8	---
TOTAL	235.0	196.4	181.1	120.0	897.7	2579	1390	917.6	215.9	100.6	166.0	134.9
MEAN	7.58	6.55	5.84	3.87	32.1	83.2	46.3	29.6	7.20	3.25	5.35	4.50
MAX	11	8.3	6.6	4.5	272	250	210	144	10	5.8	24	6.6
MIN	4.7	5.9	4.6	3.8	3.8	28	14	9.6	5.3	2.6	2.3	3.7
CFSM	.15	.13	.12	.08	.63	1.64	.91	.58	.14	.06	.11	.09
IN.	.17	.14	.13	.09	.66	1.89	1.02	.67	.16	.07	.12	.10
CAL YR 1976	TOTAL	16084.5	MEAN	43.9	MAX	1150	MIN	4.5	CFSM	.86	IN	11.78
WTR YR 1977	TOTAL	7134.2	MEAN	19.5	MAX	272	MIN	2.3	CFSM	.38	IN	5.22

WABASH RIVER BASIN

03351000 WHITE RIVER NEAR NORA, IN

LOCATION.--Lat 39°54'35", long 86°06'20", in NW¼NW¼ sec.20, T.17 N., R.4 E., Marion County, Hydrologic Unit 05120201, on downstream side of center pier of bridge on State Highway 100, 2 miles (3 km) east of Nora, 14 miles (23 km) upstream from Fall Creek, and at mile 247.9 (398.9 km).

DRAINAGE AREA.--1,219 mi² (3,157 km²).

PERIOD OF RECORD.--October 1929 to current year. Prior to April 1930, monthly discharge only, published in WSP 1305. Prior to October 1948, published as West Fork White River near Nora.

REVISED RECORDS.--WSP 1335: 1930-31, 1934(m), 1936, 1941, 1943, 1945, 1947-48. WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 710.94 ft (216.695 m) above mean sea level (levels by Corps of Engineers). Oct. 26, 1929, to July 29, 1942, at site 200 ft (61 m) downstream at same datum. Supplemental water-stage recorder 4.5 miles (7.2 km) downstream.

REMARKS.--Records good except those for period of no gage-height record, Jan. 16 to Feb. 17, and winter periods, which are poor. Flow slightly regulated by Morse Reservoir (see sta 03350300).

AVERAGE DISCHARGE.--48 years, 1,075 ft³/s (30.44 m³/s), 11.98 in/yr (304 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 32,400 ft³/s (918 m³/s) May 19, 1943; maximum gage height, 18.65 ft (5.685 m) Apr. 23, 1964; minimum daily discharge, 49 ft³/s (1.39 m³/s) Sept. 17, 1941.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 26, 1913, reached a stage of 22.4 ft (6.83 m), from floodmark, determined by State Highway Department of Indiana, discharge, 58,500 ft³/s (1,660 m³/s).

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 7,000 ft³/s (198 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Feb. 28	Unknown	*4050 115	*7.07 2.155

Minimum daily discharge, 112 ft³/s (3.17 m³/s) Jan. 22, 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	160	184	154	132	132	3120	1320	459	368	189	149	268
2	154	190	151	136	142	1520	1280	459	289	162	154	236
3	151	181	149	140	145	1180	2050	475	232	160	160	215
4	146	172	148	144	144	1950	2940	629	199	149	160	209
5	137	169	146	142	140	3320	2170	1470	189	137	162	209
6	163	169	148	144	137	2800	1740	1670	202	139	229	229
7	178	163	166	147	135	1830	1260	1980	229	162	380	222
8	190	151	172	142	134	1290	991	2000	196	232	297	189
9	175	148	172	134	140	991	831	1500	225	264	282	181
10	163	143	175	128	152	844	736	1050	402	199	286	170
11	157	148	187	124	198	730	662	850	507	179	397	166
12	151	146	178	121	285	684	611	713	414	168	856	164
13	146	148	172	120	480	730	563	623	232	166	1380	170
14	148	148	160	124	710	690	524	552	232	160	736	239
15	157	148	157	127	555	617	502	502	229	162	485	364
16	157	146	155	130	390	558	464	445	205	160	397	428
17	160	143	153	125	325	485	445	406	186	158	352	356
18	157	163	152	120	292	640	414	380	177	158	380	320
19	157	166	155	117	282	1540	397	380	179	160	364	336
20	181	169	166	114	300	1470	397	480	168	168	293	268
21	203	166	154	113	281	1130	385	587	162	186	250	232
22	203	163	146	112	277	1110	423	441	168	172	222	215
23	196	163	143	112	358	1190	667	364	175	441	215	199
24	233	160	143	114	813	1310	1160	312	170	428	239	219
25	233	166	143	123	1380	1090	1020	312	170	297	225	209
26	223	178	145	130	1310	906	813	320	172	192	268	192
27	193	184	146	134	2950	807	684	282	168	156	229	172
28	187	190	151	130	3900	1680	593	253	170	147	202	168
29	181	181	148	126	---	2880	575	246	192	149	212	166
30	181	160	143	124	---	2640	524	246	236	149	225	164
31	190	---	135	124	---	1870	---	445	---	151	264	---
TOTAL	5411	4906	4813	3953	16487	43602	27141	20831	6843	5900	10450	6875
MEAN	175	164	155	128	589	1407	905	672	228	190	337	229
MAX	233	190	187	147	3900	3320	2940	2000	507	441	1380	428
MIN	137	143	135	112	132	485	385	246	162	137	149	164
CFSM	.14	.14	.13	.11	.48	1.15	.74	.55	.19	.16	.28	.19
IN.	.17	.15	.15	.12	.50	1.33	.83	.64	.21	.18	.32	.21

CAL YR 1976	TOTAL	346326	MEAN	946	MAX	14200	MIN	135	CFSM	.78	IN	10.57
WTR YR 1977	TOTAL	157212	MEAN	431	MAX	3900	MIN	112	CFSM	.35	IN	4.80

03351310 CROOKED CREEK AT INDIANAPOLIS, IN

LOCATION.--Lat 39°49'47", long 86°12'22", in NW¼SE¼ sec.16, T.16 N., R.3 E., Marion County, Hydrologic Unit 05120201, on left bank 150 ft (46 m) downstream from 42nd Street bridge in Indianapolis, and at mile 1.6 (2.6 km).

DRAINAGE AREA.--17.9 mi² (46.4 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 711.00 ft (216.713 m) above mean sea level (Indiana State Highway Commission bench mark).

REMARKS.--Records fair.

AVERAGE DISCHARGE.--8 years, 18.2 ft³/s (0.515 m³/s), 13.81 in/yr (351 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,580 ft³/s (73.1 m³/s) Feb. 23, 1975, gage height, 7.85 ft (2.393 m); minimum daily, 0.47 ft³/s (0.013 m³/s) Dec. 2, 1971.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 400 ft³/s (11.3 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Feb. 26	2400	*1010 28.6	*5.93 1.807
May 19	2130	609 17.2	5.16 1.573

Minimum daily discharge, 0.76 ft³/s (0.022 m³/s) Jan. 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	1.4	1.2	1.0	.89	25	16	4.5	3.5	10	1.2	3.9
2	1.1	1.4	1.2	1.0	.94	16	72	5.5	3.2	2.8	1.2	4.5
3	1.0	1.3	1.2	1.0	.95	23	40	5.4	3.1	3.0	1.2	14
4	1.1	1.4	1.2	1.0	.95	84	26	19	2.7	2.2	1.4	6.4
5	4.8	1.4	1.2	1.1	.87	39	27	37	2.6	1.8	1.2	8.3
6	2.3	1.4	1.2	1.2	.79	23	20	47	3.0	1.6	38	14
7	1.4	1.4	1.4	1.1	.78	17	17	66	2.1	1.8	40	6.1
8	1.2	1.4	1.3	1.0	.81	13	13	29	5.3	35	9.6	4.3
9	1.1	1.3	1.2	.96	.84	10	11	18	4.0	10	5.9	3.8
10	1.1	1.3	1.3	.96	1.3	8.6	9.7	12	2.1	3.5	7.7	3.6
11	1.3	1.2	1.3	.98	14	7.4	8.9	9.2	1.9	3.5	47	3.3
12	1.6	1.2	1.3	1.0	27	24	7.7	8.0	2.1	3.0	31	3.2
13	1.7	1.2	1.3	1.1	7.4	20	7.2	7.2	1.9	2.7	8.2	8.1
14	1.8	1.2	1.3	1.1	4.0	11	7.1	6.5	1.9	2.4	6.5	13
15	1.8	1.2	1.3	1.0	2.7	9.3	6.8	6.0	1.7	2.2	4.4	8.2
16	1.8	1.3	1.3	.91	1.9	8.2	6.5	5.6	1.7	2.3	4.0	5.9
17	1.7	1.3	1.3	.83	1.5	8.9	6.5	5.3	1.6	2.4	4.1	4.6
18	1.9	1.3	1.3	.78	1.3	24	6.1	5.1	1.7	2.3	3.3	4.1
19	2.8	1.3	1.3	.76	2.0	14	6.2	70	1.6	2.0	3.2	12
20	1.8	1.3	1.4	.78	1.7	18	5.8	25	1.5	2.5	3.2	4.4
21	1.8	1.3	1.3	.80	1.2	12	5.5	7.0	1.3	4.1	3.6	3.7
22	3.8	1.3	1.2	.81	2.0	26	17	5.5	4.8	1.7	4.0	3.4
23	16	1.3	1.1	.83	10	23	14	4.9	2.4	1.2	3.2	3.4
24	2.9	1.3	1.1	.86	26	16	8.2	4.8	1.7	1.2	39	12
25	1.9	1.3	1.1	.90	8.9	12	6.7	4.6	2.1	2.4	7.9	6.6
26	1.5	4.0	1.2	.93	120	9.4	6.0	4.3	3.1	1.7	4.6	4.7
27	1.3	2.8	1.2	.94	219	25	5.5	4.2	2.5	1.4	4.0	4.0
28	1.2	1.9	1.2	.94	32	165	6.0	4.0	4.4	1.4	3.7	3.5
29	4.5	1.4	1.1	.86	---	61	5.6	7.1	3.0	1.4	11	3.3
30	4.5	1.2	1.1	.86	---	30	4.9	7.4	9.6	1.3	6.0	3.2
31	2.4	---	1.0	.86	---	21	---	4.1	---	1.3	4.3	---
TOTAL	76.2	44.2	38.1	29.15	491.72	803.8	399.9	449.2	84.1	116.1	313.6	183.5
MEAN	2.46	1.47	1.23	.94	17.6	25.9	13.3	14.5	2.80	3.75	10.1	6.12
MAX	16	4.0	1.4	1.2	219	165	72	70	9.6	35	47	14
MIN	1.0	1.2	1.0	.76	.78	7.4	4.9	4.0	1.3	1.2	1.2	3.2
CFSM	.14	.08	.07	.05	.98	1.45	.74	.81	.16	.21	.56	.34
IN.	.16	.09	.08	.06	1.02	1.67	.83	.93	.17	.24	.65	.38

CAL YR 1976 TOTAL 4682.00 MEAN 12.8 MAX 425 MIN 1.0 CFSM .72 IN 9.73
WTR YR 1977 TOTAL 3029.57 MEAN 8.30 MAX 219 MIN .76 CFSM .46 IN 6.30

WABASH RIVER BASIN

03351400 SUGAR CREEK NEAR MIDDLETOWN, IN

LOCATION.--Lat 40°02'27", long 85°31'30", in NW¼SE¼ sec.5, T.18 N., R.9 E., Henry County, Hydrologic Unit 05120201, on right bank 90 ft (27 m) upstream from bridge on County Road 750 North, 1 mile (2 km) southeast of Middletown.

DRAINAGE AREA.--5.80 mi² (15.02 km²).

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

REVISED RECORDS.--WDR IN-75-1: 1969-74.

GAGE.--Water-stage recorder. Datum of gage is 950.00 ft (289.560 m) above mean sea level.

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

AVERAGE DISCHARGE.--9 years, 6.02 ft³/s (0.170 m³/s), 14.10 in/yr (358 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,100 ft³/s (31.2 m³/s) April 28, 1975, gage height, 7.72 ft (2.353 m); minimum daily, 0.02 ft³/s (0.001 m³/s) Aug. 30 to Sept. 2, 1972.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 120 ft³/s (3.40 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
May 29	1515	*558 15.8	*5.97 1.820

Minimum daily discharge 0.03 ft³/s (0.001 m³/s) Jan. 17, 18, July 18-20, 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.06	.16	.16	.05	.06	10	2.5	2.9	2.5	.17	.05	.23
2	.06	.16	.14	.05	.07	6.3	27	2.7	1.0	.14	.05	.15
3	.06	.14	.13	.06	.07	5.5	20	2.3	.63	.11	.05	.13
4	.07	.13	.13	.07	.07	31	12	3.5	.45	.09	.06	.12
5	.08	.14	.12	.08	.07	16	8.6	6.0	.51	.08	.06	.11
6	.18	.13	.12	.09	.07	8.4	5.6	7.6	.51	.07	.11	3.0
7	.14	.13	.12	.09	.06	4.9	4.8	11	.35	.09	2.9	1.0
8	.14	.13	.13	.08	.06	3.3	3.5	8.3	1.3	.12	1.0	.32
9	.11	.13	.17	.07	.08	2.4	3.0	5.2	3.5	2.6	.65	.18
10	.11	.13	.18	.06	.14	2.0	2.7	4.0	.74	.49	.27	.18
11	.11	.11	.17	.07	.27	1.8	2.1	3.0	.55	.26	7.1	.12
12	.11	.11	.15	.08	1.0	2.0	1.7	2.4	.47	.19	6.3	.10
13	.09	.11	.13	.08	4.2	1.6	1.6	2.1	.40	.14	1.6	.79
14	.08	.11	.12	.07	3.2	1.2	1.4	1.7	.38	.11	.69	7.6
15	.08	.10	.13	.05	1.9	1.1	1.2	1.4	.36	.08	.29	2.4
16	.09	.09	.14	.04	1.2	.83	1.0	1.1	.31	.05	1.2	2.1
17	.07	.09	.15	.03	.90	.83	.94	1.0	.31	.04	1.9	1.3
18	.07	.09	.16	.03	.74	2.9	.84	.94	.27	.03	.51	.86
19	.10	.09	.17	.04	1.1	2.0	.78	.83	.24	.03	.24	.60
20	.16	.09	.23	.05	.84	2.1	.73	.76	.22	.03	.17	.39
21	.12	.08	.16	.05	.66	1.7	.64	.71	.17	.06	.16	.27
22	.10	.08	.11	.05	.88	3.6	3.3	.68	.18	.05	.14	.23
23	.10	.08	.10	.06	5.5	5.0	30	.61	.20	.04	.12	.20
24	.35	.08	.09	.07	6.7	2.8	14	.55	.19	.04	.14	.21
25	.21	.08	.10	.07	6.4	2.0	9.2	.57	.24	.06	.12	.22
26	.19	.22	.12	.07	5.2	1.5	6.6	.50	.30	.05	.10	.19
27	.16	.50	.15	.07	55	1.8	5.1	.44	.24	.04	.09	.15
28	.16	.33	.14	.06	17	17	4.6	.42	.20	.03	.09	.14
29	.13	.24	.10	.05	---	10	3.7	79	.18	.05	.96	.14
30	.18	.22	.07	.05	---	6.3	3.3	28	.17	.04	1.8	.13
31	.20	---	.06	.06	---	3.5	---	9.3	---	.04	.57	---
TOTAL	3.87	4.28	4.15	1.90	113.44	161.36	182.43	189.51	17.07	5.42	29.49	23.56
MEAN	.12	.14	.13	.061	4.05	5.21	6.08	6.11	.57	.17	.95	.79
MAX	.35	.50	.23	.09	55	31	30	79	3.5	2.6	7.1	7.6
MIN	.06	.08	.06	.03	.06	.83	.64	.42	.17	.03	.05	.10
CFSM	.02	.02	.02	.01	.70	.90	1.05	1.05	.10	.03	.16	.14
IN.	.02	.03	.03	.01	.73	1.03	1.17	1.22	.11	.03	.19	.15

CAL YR 1976	TOTAL	1517.35	MEAN 4.15	MAX 122	MIN .05	CFSM .72	IN 9.73
WTR YR 1977	TOTAL	736.48	MEAN 2.02	MAX 79	MIN .03	CFSM .35	IN 4.72

WABASH RIVER BASIN

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033S1500 FALL CREEK NEAR FORTVILLE, IN

LOCATION.--Lat 39°57'15", long 85°52'05", in NW¼NE¼ sec.5, T.17 N., R.6 E., Hamilton County, Hydrologic Unit 05120201, on right bank 100 ft (30 m) downstream from bridge on State Highway 238, 0.2 mile (0.3 km) downstream from Lick Creek, 2 miles (3 km) northwest of Fortville, and at mile 26.1 (42.0 km).

DRAINAGE AREA.--169 mi² (437 km²).

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

REVISED RECORDS.--WSP 1435: 1949(P). WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 787.43 ft (240.009 m) above mean sea level (levels by Indianapolis Water Co.). Prior to June 27, 1942, nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter periods and period of no gage-height record, Aug. 7 to Sept. 30, which are fair.

AVERAGE DISCHARGE.--36 years, 162 ft³/s (4.588 m³/s), 13.02 in/yr (331 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,750 ft³/s (248 m³/s) Apr. 21, 1964, gage height, 9.88 ft (3.011 m); minimum daily, 5.0 ft³/s (0.14 m³/s) Sept. 23, 24, 1941.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, about 12 ft (3.7 m) March 1913 (information by local resident).

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 1,300 ft³/s (36.8 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Feb. 27	1300	*1410 39.9	*5.92 1.804

Minimum daily discharge, 12 ft³/s (0.34 m³/s) Aug. 5.

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33	40	34	23	25	292	122	87	68	33	16	48
2	31	38	31	23	26	199	239	94	52	29	14	45
3	30	36	28	25	27	174	456	88	45	26	13	47
4	29	34	33	28	27	458	304	105	42	24	13	44
5	30	34	29	30	26	511	255	137	41	24	12	49
6	34	33	33	30	25	301	200	158	52	22	19	360
7	37	33	34	30	25	211	163	217	44	19	168	130
8	36	32	31	28	26	163	145	204	43	25	82	168
9	35	31	31	26	26	140	125	156	55	39	59	104
10	34	31	34	24	28	124	115	126	54	47	50	78
11	32	31	33	25	34	110	107	110	44	41	94	68
12	32	30	32	27	48	110	98	97	41	36	163	62
13	31	29	28	28	246	114	93	89	39	33	89	77
14	31	30	31	28	186	101	89	84	38	30	64	122
15	32	30	30	25	108	92	85	76	36	27	57	96
16	32	30	30	22	78	85	81	69	35	26	64	90
17	32	30	31	20	76	80	77	65	33	26	75	66
18	32	31	31	19	80	104	75	63	32	24	50	56
19	34	30	31	20	82	114	73	60	31	22	41	51
20	42	30	34	21	82	105	71	58	31	23	39	47
21	42	30	31	21	84	101	69	58	29	25	37	44
22	38	30	28	21	94	121	80	52	31	23	36	42
23	37	28	27	22	170	156	202	50	36	20	39	41
24	55	27	26	23	290	138	246	48	35	19	50	74
25	53	28	27	25	199	117	173	46	39	21	44	65
26	42	34	29	26	186	103	141	43	39	21	39	57
27	37	46	31	25	1190	100	117	40	34	18	35	51
28	35	48	30	24	602	259	107	39	33	17	34	48
29	34	37	29	22	---	303	106	38	32	17	65	46
30	35	31	26	21	---	201	94	201	29	17	64	45
31	43	---	24	23	---	149	---	108	---	17	51	---
TOTAL	1110	982	937	755	4096	5326	4308	2866	1193	791	1676	2321
MEAN	35.8	32.7	30.2	24.4	146	172	144	92.5	39.8	25.5	54.1	77.4
MAX	55	48	34	30	1190	511	456	217	68	47	168	360
MIN	29	27	24	19	25	80	69	38	29	17	12	41
CFSM	.21	.19	.18	.14	.86	1.02	.85	.55	.24	.15	.32	.46
IN.	.24	.22	.21	.17	.90	1.17	.95	.63	.26	.17	.37	.51
CAL YR 1976	TOTAL	48564	MEAN	133	MAX	1630	MIN	24	CFSM	.79	IN	10.69
WTR YR 1977	TOTAL	26361	MEAN	72.2	MAX	1190	MIN	12	CFSM	.43	IN	5.80

03351700 GEIST RESERVOIR NEAR OAKLANDON, IN

LOCATION.--Lat 39°54'26", long 85°59'07", in SW¼NE¼ sec.20, T.17 N., R.5 E., Marion County, Hydrologic Unit 05120201, in intake structure of reservoir on Fall Creek, 2.6 miles (4.2 km) northwest of Oaklandon, 17.6 miles (28.3 km) above mouth.

DRAINAGE AREA.--215 mi² (556 km²).

PERIOD OF RECORD.--January 1943 to current year.

GAGE.--Water-stage recorder. Datum of gage is 755.00 ft (230.124 m) above mean sea level.

REMARKS.--Reservoir is formed by earth-fill dam. Releases normally controlled by a 36-inch (914 mm) valve. Minimum design capacity is essentially empty at invert on outlet conduit at elevation of 756.75 ft (230.657 m). Capacity at uncontrolled spillway elevation, 785 ft (239.3 m) is 21,180 acre-ft (26.1 hm³). Reservoir is used for low-flow augmentation of the water supply for Indianapolis and recreation. Reservoir filled for first time on Mar. 17, 1943.

COOPERATION.--Records furnished by Indianapolis Water Company.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 27,360 acre-ft (33.7 hm³) May 18, 1943, elevation, 788.02 ft (240.188 m); minimum, 11,230 acre-ft (13.8 hm³) Jan. 5, 1964, elevation, 778.42 ft (237.262 m).

EXTREMES FOR CURRENT YEAR.--Maximum contents, 22,330 acre-ft (27.5 hm³) Feb. 28, elevation, 785.60 ft (239.451 m); minimum, 15,460 acre-ft (19.1 hm³) Feb. 11, elevation, 781.47 ft (238.192 m).

MONTHEND ELEVATION AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	783.73	18,930	
Oct. 31.....	782.86	17,520	-1,410
Nov. 30.....	782.49	16,960	-560
Dec. 31.....	782.23	16,571	-389
CAL YR 1976.....			-5,309
Jan. 31.....	781.75	15,860	-711
Feb. 28.....	785.60	22,330	+6,470
Mar. 31.....	785.28	21,710	-620
Apr. 30.....	785.24	21,630	-80
May 31.....	785.18	21,520	-110
June 30.....	784.41	20,120	-1,400
July 31.....	782.97	17,690	-2,430
Aug. 31.....	783.87	19,170	+1,480
Sept. 30.....	785.05	21,270	+2,100
WTR YR 1977.....			+2,340

Diversion for municipal supply for city of Indianapolis

Water supply for the city of Indianapolis is from both White River and Fall Creek. Water from White River is diverted below White River near Nora (03351000) into Indianapolis Water Canal at Westfield Boulevard. Water from Fall Creek is diverted below Fall Creek at Millersville (03352500) at pumping station at Keystone Avenue. The return flow of the diversion is made below White River at Indianapolis (03353000). Major return flow is made at mouth of Eagle Creek and minor return flow is made at Southport Road.

Diversion, monthly and yearly means in ft³/s

1976												1977	
Oct.	Nov.	Dec.	Cal. year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Water year
164	149	141	150	167	163	156	160	180	195	193	181	174	169

03352500 FALL CREEK AT MILLERSVILLE, IN

LOCATION.--Lat 39°51'07", long 86°05'15", in NE¼NE¼ sec.9, T.16 N., R.4 E., Marion County, Hydrologic Unit 05120201, on right bank at downstream side of Emerson Way bridge at Millersville, and 9.2 miles (14.8 km) upstream from mouth.

DRAINAGE AREA.--298 mi² (772 km²).

PERIOD OF RECORD.--October 1929 to current year. Monthly discharges only for some periods, published in WSP 1305. Twice-daily chain gage readings at former site and datum from July 1925 to September 1926 are available in the district office.

REVISED RECORDS.--WSP 1335: 1930-31, 1933, 1936-38, 1942-43. WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 722.16 ft (220.114 m) above mean sea level. Prior to Oct. 21, 1961, water-stage recorder at site 500 ft (152 m) downstream at same datum.

REMARKS.--Records good. Flow regulated by Geist Reservoir (See sta 03351700).

AVERAGE DISCHARGE.--48 years, 276 ft³/s (7.816 m³/s), 12.58 in/yr (320 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,900 ft³/s (365 m³/s) May 28, 1956, gage height, 13.53 ft (4.124 m); minimum daily, 7.8 ft³/s (0.22 m³/s) Sept. 28, 1941.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, 16.3 ft (4.97 m) Mar. 26, 1913, from floodmarks, discharge, 22,000 ft³/s (623 m³/s) by slope-area measurement.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,250 ft³/s (35.4 m³/s) Feb. 26, gage height, 5.75 ft (1.753 m); minimum daily, 45 ft³/s (1.27 m³/s) Jan. 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	66	66	56	47	67	766	352	119	72	77	59	61
2	70	64	54	47	64	523	561	126	89	65	65	55
3	70	62	55	48	62	420	794	126	77	61	63	57
4	70	61	54	49	60	751	684	182	75	59	63	56
5	69	60	53	50	57	955	582	267	71	59	63	61
6	75	60	54	50	54	798	470	355	82	48	85	272
7	69	59	57	50	54	500	346	470	82	67	139	131
8	69	59	54	49	53	381	301	460	79	96	91	152
9	69	57	53	49	55	304	236	381	77	93	80	121
10	68	56	53	48	59	257	198	267	70	70	81	97
11	68	55	54	49	64	227	184	200	66	66	174	80
12	68	55	54	50	80	267	190	170	62	66	259	75
13	69	55	53	51	146	304	163	149	66	66	95	88
14	70	51	52	51	97	255	161	149	67	66	78	119
15	70	51	52	50	82	214	147	147	64	68	72	96
16	70	51	53	48	77	182	132	176	64	63	75	100
17	69	68	53	46	74	165	122	115	69	64	73	89
18	70	50	52	45	74	206	115	97	65	61	70	82
19	73	48	52	46	68	212	109	99	68	64	66	77
20	79	48	55	47	65	216	112	106	70	62	64	69
21	73	48	54	49	64	214	103	87	66	64	59	66
22	73	48	52	50	68	298	149	77	75	62	58	58
23	112	48	50	50	95	337	202	70	70	61	59	53
24	165	48	49	51	173	315	272	68	66	61	73	76
25	77	48	49	52	139	257	255	74	59	71	65	74
26	67	66	50	52	306	219	219	81	60	65	57	63
27	64	88	51	52	1060	210	182	71	60	62	56	57
28	64	68	52	52	1070	780	184	68	63	61	55	57
29	64	60	51	51	---	794	165	72	63	61	77	57
30	72	58	50	54	---	592	129	74	83	61	67	60
31	78	---	48	76	---	441	---	98	---	58	65	---
TOTAL	2310	1716	1629	1559	4387	12360	7819	5001	2100	2028	2506	2559
MEAN	74.5	57.2	52.5	50.3	157	399	261	161	70.0	65.4	80.8	85.3
MAX	165	88	57	76	1070	955	794	470	89	96	259	272
MIN	64	48	48	45	53	165	103	68	59	48	55	53
CFSM	.25	.19	.18	.17	.53	1.34	.88	.54	.24	.22	.27	.29
IN.	.29	.21	.20	.19	.55	1.54	.98	.62	.26	.25	.31	.32
CAL YR 1976	TOTAL	90322	MEAN	247	MAX	2240	MIN	48	CFSM	.83	IN	11.28
WTR YR 1977	TOTAL	45974	MEAN	126	MAX	1070	MIN	45	CFSM	.42	IN	5.74

WABASH RIVER BASIN

03353000 WHITE RIVER AT INDIANAPOLIS, IN

LOCATION.--Lat 39°45'05", long 86°10'30", in NW¼ sec.14, T.15 N., R.3 E., Marion County, Hydrologic Unit 05120201, on downstream side of second pier from right bank of Morris Street bridge in Indianapolis, 2.6 miles (4.2 km) downstream from Fall Creek, and at mile 230.3 (370.6 km).

DRAINAGE AREA.--1,635 mi² (4,235 km²).

PERIOD OF RECORD.--March 1904 to July 1906 and April 1930 to current year. Gage-height record published in reports of National Weather Service for site 1.1 miles (1.8 km) upstream Feb. 8, 1911, to Mar. 25, 1913, and at site 2.3 miles (3.7 km) upstream since Oct. 16, 1913. Prior to October 1948, published as West Fork White River at Indianapolis.

REVISED RECORDS.--WSP 1335: 1932-33, 1937, 1939-41. WSP 1505: 1938. WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 662.26 ft (201.857 m) above mean sea level. March 1904 to July 1906, nonrecording gage at railroad bridge 0.8 mile (1.3 km) upstream at datum approximately 2.9 ft (0.88 m) higher. April 1930 to July 20, 1931, nonrecording gage at Indianapolis sanitation plant, 2.5 miles (4.0 km) downstream at datum 660.00 ft (201.168 m) lower. July 21, 1931, to Mar. 2, 1932, nonrecording gage at present site at datum 660.00 ft (201.168 m) lower.

REMARKS.--Records fair. Natural flow affected by regulation of Morse Reservoir (See sta 03350300) and Geist Reservoir (See sta 03351700), and by diversion of municipal water supply (See sta 03351700) by the Indianapolis Water Co.

AVERAGE DISCHARGE.--48 years (1904-5, 1930 to current year), 1,367 ft³/s (38.71 m³/s), 11.36 in/yr (289 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 37,200 ft³/s (1,050 m³/s) May 18, 1943; maximum gage height, 21.57 ft (6.575 m) Jan. 16, 1937; minimum daily discharge, 8.0 ft³/s (0.23 m³/s) Sept. 29, 1941.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 26, 1913, reached a stage of 30.0 ft (9.14 m), from floodmarks determined by Indianapolis Water Co., discharge, 70,000 ft³/s (1,980 m³/s).

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 8,500 ft³/s (241 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Feb. 27	0100	*6370 180	*8.78 2.676

Minimum daily discharge, 58.0 ft³/s (1.64 m³/s) Aug. 2.

DISCHARGE IN CUBIC FEET PER SECOND: WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	107	195	132	83	78	3150	1720	547	446	706	64	200
2	99	175	125	80	80	1820	2580	535	318	203	58	183
3	97	160	127	78	81	1360	2660	550	252	141	60	165
4	99	145	123	86	81	2550	3550	893	200	132	62	163
5	97	136	121	98	80	3980	2940	1810	170	113	67	150
6	180	141	125	113	79	3800	2290	2400	214	101	90	287
7	153	136	130	109	78	2440	1730	2930	234	99	859	249
8	158	130	123	100	78	1730	1350	2640	353	663	441	209
9	163	130	132	92	85	1340	1160	1980	345	610	255	198
10	155	121	139	84	110	1090	954	1450	252	178	217	162
11	158	111	148	78	195	948	851	1130	500	139	553	139
12	155	115	150	75	425	1090	794	875	415	113	1330	129
13	139	105	148	72	553	1130	686	773	357	99	1190	198
14	127	119	136	71	506	948	638	657	209	90	884	285
15	125	125	132	73	441	843	650	610	183	90	522	255
16	115	119	130	75	349	713	562	591	168	75	353	376
17	127	145	128	73	261	610	532	478	148	105	321	324
18	130	119	127	71	205	758	510	446	136	82	267	268
19	145	109	132	69	190	1310	481	657	134	69	283	289
20	217	105	144	68	200	1690	480	743	134	66	234	230
21	165	117	136	67	190	1420	468	643	105	97	228	186
22	165	119	127	67	190	1500	737	565	405	158	190	162
23	231	107	123	67	267	1530	849	425	234	93	178	138
24	565	107	120	69	867	1580	1270	340	158	325	506	174
25	261	113	124	72	1170	1340	1310	328	145	246	206	196
26	203	234	130	74	2040	1140	1030	345	134	148	185	160
27	180	290	136	74	4580	1330	869	325	139	95	190	130
28	155	193	132	73	4100	3230	706	228	158	75	160	101
29	150	163	124	72	---	3880	724	220	150	66	446	93
30	252	139	109	72	---	3420	604	300	811	62	240	89
31	267	---	91	74	---	2360	---	401	---	60	193	---
TOTAL	5340	4223	4004	2429	17559	56030	35685	26815	7607	5299	10832	5888
MEAN	172	141	129	78.4	627	1807	1190	865	254	171	349	196
MAX	565	290	150	113	4580	3980	3550	2930	811	706	1330	376
MIN	97	105	91	67	78	610	468	220	105	60	58	89
CFSM	.11	.09	.08	.05	.38	1.11	.73	.53	.16	.11	.21	.12
IN.	.12	.10	.09	.06	.40	1.27	.81	.61	.17	.12	.25	.13
CAL YR 1976	TOTAL	418998	MEAN	1145	MAX	15800	MIN	78	CFSM	.70	IN	9.53
WTR YR 1977	TOTAL	181711	MEAN	498	MAX	4580	MIN	58	CFSM	.31	IN	4.13

03353120 PLEASANT RUN AT ARLINGTON AVENUE AT INDIANAPOLIS, IN

LOCATION.--Lat 39°46'33", long 86°03'50", in SW¼NW¼ sec.2, T.15 N., R.4 E., Marion County, Hydrologic Unit 05120201, on right bank 46 ft (14 m) upstream from Arlington Avenue bridge in Indianapolis, 0.5 mile (0.8 km) downstream from small left-bank tributary, and at mile 7.9 (12.7 km).

DRAINAGE AREA.--7.58 mi² (19.63 km²).

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

REVISED RECORDS.--WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 780.00 ft (237.744 m) above mean sea level (levels by State of Indiana, Department of Natural Resources).

REMARKS.--Records good except those for winter periods and period of no gage-height record, Mar. 1 to Apr. 1, which are poor.

AVERAGE DISCHARGE.--17 years (1960 to current year), 7.27 ft³/s (0.206 m³/s), 13.03 in/yr (331 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,610 ft³/s (45.6 m³/s) Mar. 4, 1963, gage height, 10.32 ft (3.146 m); no flow at times in 1960-62.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in May 1956 reached a stage of 16.0 ft (4.88 m), from information by local resident.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 450 ft³/s (12.7 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Feb. 26	2315	*1010 28.6	*8.27 2.521

Minimum daily discharge, 0.27 ft³/s (0.008 m³/s) Jan. 19.

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.97	1.7	1.3	.51	.36	4.6	3.0	.94	.61	11	.44	.84
2	.82	.90	1.1	.52	.39	2.8	96	.94	.64	1.2	.58	.70
3	.86	.85	.96	.53	.47	23	14	2.2	.58	.64	.64	.63
4	.71	1.2	.92	.56	.43	29	10	12	.56	.55	.71	.68
5	.62	1.1	1.0	.61	.40	9.3	7.8	23	.51	.67	.69	1.1
6	7.5	.88	1.3	.64	.39	5.4	4.3	40	.72	.70	25	.63
7	.81	.77	2.3	.61	.38	3.9	3.2	44	.61	4.4	17	.66
8	.66	1.2	1.4	.51	.38	3.2	2.6	5.9	7.4	82	16	.61
9	.62	1.2	.89	.50	.40	2.9	2.1	2.7	3.2	11	2.2	.59
10	.64	1.3	1.2	.49	.48	2.6	1.8	1.7	.72	2.6	5.4	.57
11	.60	1.3	1.4	.51	2.7	5.6	1.6	1.3	.76	1.9	72	.57
12	.59	1.5	.93	.52	20	22	1.5	1.1	.75	1.4	11	.67
13	.57	1.2	.79	.54	10	10	1.4	1.0	.50	1.3	2.4	14
14	.58	1.0	.87	.62	5.0	7.6	1.8	1.0	.52	4.8	1.2	4.9
15	.65	1.1	.96	.54	2.2	6.0	3.2	.95	.51	1.5	.91	2.7
16	.72	.95	1.0	.40	1.2	5.3	1.2	.86	.59	1.8	1.2	1.2
17	.66	.79	.88	.31	.88	5.2	1.2	.87	.57	1.6	1.2	.75
18	.67	1.1	.75	.28	1.4	10	1.1	.85	.63	.88	.75	.68
19	5.3	.89	.92	.27	1.5	5.5	1.5	.79	.46	.94	.71	1.5
20	11	.71	3.1	.28	.91	8.4	1.4	.78	.49	1.9	.63	.84
21	.95	.71	.93	.30	.54	6.0	1.3	.75	.37	.75	2.9	.80
22	.68	.93	.72	.32	.50	21	18	.70	16	1.3	.73	.77
23	24	1.0	.64	.33	16	7.7	6.1	.70	1.0	.69	.56	.78
24	29	1.0	.62	.35	40	5.0	2.5	.72	.61	.65	24	7.2
25	3.0	.74	.69	.38	5.4	4.4	1.7	.69	.52	3.4	1.0	1.0
26	1.3	29	.82	.40	164	4.1	1.4	1.7	.54	.77	.68	.74
27	.72	23	1.1	.49	142	24	1.1	.70	5.7	.66	.61	.64
28	.66	4.8	1.0	.43	14	49	3.1	.60	1.8	.59	.57	.60
29	.68	2.7	.84	.40	---	12	1.5	4.6	.63	.48	30	.67
30	19	1.7	.66	.37	---	5.4	.98	4.7	82	.46	3.8	.85
31	7.2	---	.57	.34	---	3.6	---	1.6	---	.43	1.2	---
TOTAL	122.74	87.22	32.56	13.86	432.31	314.5	198.38	160.34	130.50	142.96	226.71	48.87
MEAN	3.96	2.91	1.05	.45	15.4	10.1	6.61	5.17	4.35	4.61	7.31	1.63
MAX	29	29	3.1	.64	164	49	96	44	82	82	72	14
MIN	.57	.71	.57	.27	.36	2.6	.98	.60	.37	.43	.44	.57
CFSM	.52	.38	.14	.06	2.03	1.33	.87	.68	.57	.61	.96	.22
IN.	.60	.43	.16	.07	2.12	1.54	.97	.79	.64	.70	1.11	.24
CAL YR 1976	TOTAL	2299.45	MEAN 6.28	MAX 165	MIN .46	CFSM .83	IN 11.28					
WTR YR 1977	TOTAL	1910.95	MEAN 5.24	MAX 164	MIN .27	CFSM .69	IN 9.38					

03353160 PLEASANT RUN AT BROOKVILLE ROAD AT INDIANAPOLIS, IN

LOCATION.--Lat 39°45'52", long 86°05'43", in NE¼NW¼ sec.9, T.15 N., R.4 E., Marion County, Hydrologic Unit 05120201, on right bank at downstream side of Brookville Road bridge in Indianapolis, 2.2 miles (3.5 km) downstream from Arlington Avenue, and at mile 5.7 (9.2 km).

DRAINAGE AREA.--10.1 mi² (26.2 km²).

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

REVISED RECORDS.--WSP 1909: 1960. WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 752.00 ft (229.210 m) above mean sea level (levels by State of Indiana, Department of Natural Resources).

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

AVERAGE DISCHARGE.--17 years (1960 to current year), 9.62 ft³/s (0.272 m³/s), 12.94 in/yr (329 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,010 ft³/s (56.9 m³/s) Mar. 4, 1963, gage height, 9.22 ft (2.810 m); no flow at times in 1960-68.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 520 ft³/s (14.73 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Feb. 26	2200	*1220 34.6	*7.22 2.201
Aug. 11	1745	630 17.8	5.41 1.649

Minimum daily discharge, 0.17 ft³/s (0.005 m³/s) June 21, Aug. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.97	1.9	1.1	.50	.48	4.6	2.2	.69	2.0	16	.17	1.1
2	.80	1.3	1.0	.52	.52	2.1	96	.77	1.3	2.9	.19	.65
3	.77	1.0	.92	.56	.57	31	18	1.3	.52	1.8	.30	.43
4	.80	.99	.90	.61	.62	47	12	12	.43	1.5	.35	.38
5	.75	1.0	.99	.66	.54	9.5	9.9	23	.44	1.8	.34	1.1
6	5.7	.80	1.3	.68	.48	6.7	6.1	40	.89	1.7	31	.44
7	1.1	.64	2.2	.65	.45	11	4.6	44	.51	4.4	21	.38
8	.63	.64	1.3	.56	.44	8.0	3.7	5.3	8.5	128	19	.33
9	.48	.80	.91	.52	.46	6.2	3.2	2.3	5.0	12	2.6	.26
10	.42	.66	1.1	.50	.51	5.7	3.0	1.2	1.1	2.1	4.1	.21
11	.44	.66	1.6	.53	2.0	5.6	2.8	.89	1.2	1.6	86	.18
12	.41	.65	.95	.56	32	33	2.6	.69	1.2	1.2	13	.22
13	.40	.66	.66	.61	16	14	2.0	.56	.75	1.2	2.4	19
14	.37	.61	.57	.67	9.7	9.5	1.6	.59	.57	9.6	1.3	7.1
15	.41	.66	.64	.58	5.5	7.1	2.9	.60	.50	1.6	.78	3.0
16	.68	.63	.67	.47	3.2	4.7	1.3	.56	.59	1.8	.76	1.8
17	.54	.60	.66	.39	2.2	4.9	1.2	.80	.76	1.8	1.3	.85
18	.47	.75	.63	.35	1.9	14	1.2	.84	1.2	.87	.51	.58
19	2.4	.78	1.6	.35	2.7	4.6	1.6	.88	.70	.93	.40	2.0
20	8.2	.91	3.4	.37	2.4	11	1.7	.83	.45	1.6	.38	.76
21	1.1	1.4	1.7	.39	1.9	4.4	1.5	.71	.17	1.4	3.3	.77
22	.52	1.3	1.1	.42	2.5	30	18	.75	19	1.7	1.1	.44
23	14	1.0	.83	.45	19	9.8	5.0	.78	2.5	.60	.50	.43
24	27	1.2	.68	.48	50	5.2	1.9	1.0	1.2	.56	37	9.7
25	2.8	.90	.62	.50	9.5	3.8	1.4	.73	1.1	4.0	1.8	1.6
26	1.3	24	.96	.54	242	3.0	1.2	1.3	1.1	.93	.92	.63
27	.88	19	1.4	.62	104	38	.84	.63	6.7	.65	.72	.42
28	.72	4.3	1.2	.59	9.0	78	2.3	.33	3.8	.56	.60	.28
29	.82	2.3	.80	.54	---	16	1.4	5.8	1.6	.46	40	.29
30	14	1.4	.61	.49	---	7.0	.68	9.1	114	.34	5.3	1.1
31	6.5	---	.53	.47	---	3.0	---	3.9	---	.28	2.2	---
TOTAL	96.38	73.44	33.53	16.13	520.57	438.4	211.82	162.83	179.78	205.88	279.32	56.43
MEAN	3.11	2.45	1.08	.52	18.6	14.1	7.06	5.25	5.99	6.64	9.01	1.88
MAX	27	24	3.4	.68	242	78	96	44	114	128	86	19
MIN	.37	.60	.53	.35	.44	2.1	.68	.33	.17	.28	.17	.18
CFSM	.31	.24	.11	.05	1.84	1.40	.70	.52	.59	.66	.89	.19
IN.	.35	.27	.12	.06	1.92	1.61	.78	.60	.66	.76	1.03	.21
CAL YR 1976	TOTAL	2625.48	MEAN	7.17	MAX	191	MIN	.32	CFSM	.71	IN	9.67
WTR YR 1977	TOTAL	2274.51	MEAN	6.23	MAX	242	MIN	.17	CFSM	.62	IN	8.38

03353180 BEAN CREEK AT INDIANAPOLIS, IN

LOCATION.--Lat 39°43'45", long 86°07'14", in NW¼SW¼ sec.20, T.15 N., R.4 E., Marion County, Hydrologic Unit 05120201, on left bank 80 ft (24 m) upstream from Keystone Avenue bridge and west edge of Sarah Shank Golf Course in Indianapolis, and at mile 1.8 (2.9 km).

DRAINAGE AREA.--4.40 mi² (11.40 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 735.00 ft (224.028 m) above mean sea level.

REMARKS.--Records good except period of no gage-height record, Dec. 31 to Feb. 16, which is poor.

AVERAGE DISCHARGE.--7 years, 5.36 ft³/s (0.152 m³/s), 16.54 in/yr (420 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 556 ft³/s (15.7 m³/s) May 17, 1974, gage height, 6.57 ft (2.003 m); minimum daily, 0.54 ft³/s (0.015 m³/s) Jan. 18, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 80 ft³/s (2.26 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Feb. 24	0415	84	2.37	3.47	1.058		
Feb. 26	2230	*396	11.2	*5.93	1.807		
Apr. 02	1345	151	4.28	3.83	1.167		
May 07	0315	106	3.00	3.34	1.018		
				June 30	1900	161	4.56
				July 08	2000	134	3.79
				July 21	1945	118	3.34
				Aug. 11	1645	130	3.68
							3.61 1.100

Minimum daily discharge, 0.54 ft³/s (0.015 m³/s) Jan. 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.94	3.8	1.4	.92	.64	8.6	3.6	2.1	1.8	5.9	1.5	1.8
2	.77	1.8	1.6	.85	.69	6.9	4.8	2.1	2.0	2.0	1.7	1.7
3	.72	1.2	1.5	.87	.71	15	10	2.6	1.8	1.8	1.6	1.6
4	.82	2.0	1.4	.95	.72	28	9.5	8.4	1.6	1.6	1.6	1.6
5	1.2	1.8	1.3	1.0	.71	12	7.0	13	1.4	1.5	1.6	1.6
6	4.7	1.5	1.8	1.2	.69	7.3	4.8	18	1.7	1.5	8.4	1.6
7	1.7	1.2	1.5	1.2	.67	5.4	4.3	24	1.8	2.0	6.4	1.5
8	1.2	1.4	1.3	1.1	.66	4.5	3.1	5.3	7.7	20	7.4	1.5
9	.92	2.4	1.3	1.0	.68	3.7	2.9	3.8	3.6	5.9	2.4	1.5
10	.92	1.3	1.6	.93	.75	3.3	2.7	3.2	1.7	1.8	2.2	1.5
11	.89	1.5	1.4	.88	.91	3.1	2.6	3.1	1.6	2.2	20	1.4
12	.84	2.0	1.3	1.0	1.4	10	2.4	2.7	1.5	1.6	4.5	1.8
13	.72	2.4	1.2	1.2	8.6	3.9	2.2	2.6	1.6	1.4	2.1	9.1
14	.82	2.7	1.5	1.0	6.0	3.3	2.4	2.4	1.7	6.7	2.0	3.8
15	.88	2.6	1.8	.83	4.2	3.3	2.4	2.2	1.6	2.0	1.5	2.1
16	.72	2.0	1.6	.64	3.2	3.0	2.2	2.1	1.6	2.6	2.1	1.8
17	.77	2.7	1.5	.56	2.8	3.6	2.1	2.2	1.5	2.1	1.7	1.6
18	.99	3.0	1.4	.54	3.5	5.3	2.2	2.2	1.8	1.4	1.7	1.5
19	2.8	2.8	1.9	.55	3.0	3.0	1.8	5.6	1.4	1.3	1.7	3.4
20	3.8	2.6	3.0	.57	2.4	5.8	2.6	2.4	1.4	1.2	1.6	1.8
21	1.1	3.7	1.8	.64	3.3	3.3	2.6	2.0	2.4	9.1	2.6	1.6
22	1.6	4.2	1.5	.67	8.1	11	8.7	1.8	11	1.6	1.6	1.7
23	11	4.8	1.3	.69	18	4.3	3.2	2.0	2.2	1.1	1.7	1.6
24	21	6.5	1.2	.72	31	3.4	2.6	3.2	2.1	1.1	11	5.0
25	4.2	6.7	1.2	.77	8.5	3.2	2.6	2.1	1.8	2.7	2.0	1.6
26	1.7	23	1.3	.76	69	2.9	2.6	2.0	1.6	1.5	1.7	1.5
27	1.3	12	1.4	.75	53	14	2.4	2.0	6.7	1.4	1.6	1.6
28	1.1	2.9	1.5	.71	12	32	3.4	2.0	2.6	1.4	1.5	1.6
29	1.3	1.9	1.4	.64	---	9.4	2.4	2.1	1.8	1.4	14	1.6
30	14	1.6	1.2	.60	---	5.5	2.1	3.4	20	1.4	2.6	2.0
31	8.2	---	1.0	.62	---	4.0	---	2.1	---	1.3	2.0	---
TOTAL	93.62	110.0	46.1	25.36	245.83	232.0	151.4	134.7	93.0	90.5	116.0	64.0
MEAN	3.02	3.67	1.49	.82	8.78	7.48	5.05	4.35	3.10	2.92	3.74	2.13
MAX	21	23	3.0	1.2	69	32	48	24	20	20	20	9.1
MIN	.72	1.2	1.0	.54	.64	2.9	1.8	1.8	1.4	1.1	1.5	1.4
CFSM	.69	.83	.34	.19	2.00	1.70	1.15	.99	.71	.66	.85	.48
IN.	.79	.93	.39	.21	2.08	1.96	1.28	1.14	.79	.76	.98	.54
CAL YR 1976	TOTAL	1391.19	MEAN	3.80	MAX	43	MIN	.61	CFSM	.86	IN	11.76
WTR YR 1977	TOTAL	1402.51	MEAN	3.84	MAX	69	MIN	.54	CFSM	.87	IN	11.85

WABASH RIVER BASIN

03353200 EAGLE CREEK AT ZIONSVILLE, IN

LOCATION.--Lat 39°56'56", long 86°15'22", in SW¼NW¼ sec.1, T.17 N., R.2 E., Boone County, Hydrologic Unit 05120201, on downstream side of second pier from right bank of bridge on State Highway 334 at Zionsville, 200 ft (61 m) upstream from Long Branch, and at mile 24.7 (39.7 km).

DRAINAGE AREA.--103 mi² (267 km²).

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 816.85 ft (248.976 m) above mean sea level. Prior to Oct. 9, 1957, nonrecording gage at same site and datum.

REMARKS.--Records good except those for period of no gage-height record, Dec. 31 to Feb. 28, which are fair.

AVERAGE DISCHARGE.--20 years, 95.1 ft³/s (2.693 m³/s), 12.54 in/yr (319 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,400 ft³/s (351 m³/s) Apr. 20, 1964, gage height, 14.64 ft (4.462 m); no flow at times during 1959, 1963-68, 1970, 1971.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 28, 1957, reached a stage of 19.20 ft (5.852 m), from floodmark.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 1,500 ft³/s (42.5 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Mar. 28	1800	*906 25.7	*5.72 1.743

Minimum daily discharge, 0.02 ft³/s (0.001 m³/s) Aug. 5.

DISCHARGE* IN CUBIC FEET PER SECOND* WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.53	2.2	1.8	1.2	1.3	90	85	21	8.8	8.2	.10	1.2
2	.53	2.5	1.7	1.2	1.4	68	134	23	7.5	6.9	.08	2.5
3	.49	2.5	1.6	1.3	1.6	72	164	22	6.6	5.0	.05	2.3
4	.45	2.3	1.6	1.4	1.6	181	115	39	6.2	3.6	.03	1.3
5	.38	2.2	1.5	1.3	1.5	190	100	63	5.9	2.8	.02	1.3
6	.59	2.0	1.5	1.2	1.4	134	80	117	6.7	2.2	.16	2.2
7	.70	1.9	1.7	1.2	1.3	95	69	215	7.2	2.5	1.5	1.7
8	.80	1.8	2.4	1.2	1.3	75	60	133	6.8	81	.70	1.4
9	.91	1.7	2.4	1.2	1.5	63	53	91	6.9	16	.63	1.1
10	.91	1.7	1.9	1.2	2.1	52	49	68	6.9	6.6	1.0	1.0
11	.91	1.7	1.7	1.0	7.4	43	45	56	5.8	4.8	8.3	.91
12	.91	1.7	1.7	1.1	71	53	40	45	5.1	4.1	52	.91
13	.89	1.7	1.7	1.2	62	66	37	39	4.8	3.5	11	2.3
14	.84	1.7	1.6	1.3	32	55	36	35	4.7	3.0	4.8	3.3
15	.80	1.7	1.6	1.2	18	45	34	31	4.3	2.6	3.1	2.7
16	.76	1.7	1.6	1.1	13	38	31	27	3.8	2.2	2.3	2.2
17	.76	1.7	1.6	1.0	11	32	30	23	3.4	1.8	1.9	1.8
18	.76	1.7	1.6	1.1	10	56	28	21	3.0	1.9	1.7	1.6
19	.91	1.7	1.6	1.2	14	63	26	30	3.1	1.8	1.4	1.4
20	1.4	1.7	1.8	1.3	12	65	26	79	3.2	1.5	1.3	1.3
21	1.5	1.7	1.8	1.3	11	67	25	46	2.6	1.2	1.2	1.1
22	1.5	1.6	1.7	1.2	13	73	44	30	2.8	.84	1.2	1.1
23	1.5	1.6	1.6	1.3	26	85	121	21	3.1	.63	1.1	1.1
24	1.6	1.6	1.4	1.4	70	73	87	17	3.2	.53	1.9	1.4
25	1.6	1.6	1.4	1.5	45	60	62	119	3.0	.45	1.6	1.4
26	1.6	1.6	1.4	1.4	65	53	49	46	2.9	.37	1.3	1.2
27	1.8	1.7	1.4	1.3	245	55	38	24	4.5	.28	1.1	1.1
28	1.8	1.8	1.5	1.3	144	568	33	16	13	.22	1.0	1.0
29	1.8	1.8	1.5	1.2	---	408	28	13	11	.22	1.6	1.0
30	1.8	1.8	1.4	1.2	---	193	23	13	7.8	.19	1.4	1.0
31	1.9	---	1.4	1.2	---	117	---	12	---	.16	1.3	---
TOTAL	33.63	54.6	51.1	38.2	884.4	3288	1752	1535	164.6	167.09	106.77	45.82
MEAN	1.08	1.82	1.65	1.23	31.6	106	58.4	49.5	5.49	5.39	3.44	1.53
MAX	1.9	2.5	2.4	1.5	245	568	164	215	13	81	52	3.3
MIN	.38	1.6	1.4	1.0	1.3	32	23	12	2.6	.16	.02	.91
CFSM	.01	.02	.02	.01	.31	1.03	.57	.48	.05	.05	.03	.02
IN.	.01	.02	.02	.01	.32	1.19	.63	.55	.06	.06	.04	.02

CAL YR 1976	TOTAL	29085.36	MEAN	79.5	MAX	3350	MIN	.31	CFSM	.77	IN	10.50
WTR YR 1977	TOTAL	8121.21	MEAN	22.2	MAX	568	MIN	.02	CFSM	.22	IN	2.93

03353200 EAGLE CREEK AT ZIONSVILLE, IN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

SEDIMENT DISCHARGE: October 1969 to current year (partial-record station).

WATER QUALITY DATA. WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	SUS- PENDE SEDI- MENT (MG/L)	SUS- PENDE SEDI- MENT DIS- CHARGE (T/DAY)	DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	SUS- PENDE SEDI- MENT (MG/L)	SUS- PENDE SEDI- MENT DIS- CHARGE (T/DAY)
OCT						APR					
27...	1400	1.8	7.0	106	.52	13...	1020	36	16.0	54	5.3
JAN						MAY					
05...	1415	5.1	.0	44	.61	27...	1110	23	24.0	202	12
FEB						JUL					
17...	1430	11	1.0	15	.45	08...	1455	63	25.0	622	106
MAR						SEP					
14...	0930	54	5.0	41	1.5	19...	1130	1.5	18.0	46	.19
28...	1800	901	--	354	861						
29...	0945	421	--	89	101						

WABASH RIVER BASIN

03353450 EAGLE CREEK RESERVOIR NEAR INDIANAPOLIS, IN

LOCATION.--Lat 39°49'20", long 86°18'11", in NW¼NW¼ sec.22, T.16 N., R.2 E., Marion County, Hydrologic Unit 05120201, in outlet structure of reservoir on Eagle Creek, 800 ft (240 m) upstream from Interstate Highway 74, 0.5 mile (0.8 km) downstream from School Branch, 1.0 mile (1.6 km) northeast of Clermont, and 2 miles (3.2 km) west of Indianapolis.

DRAINAGE AREA.--162 mi² (419 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 780.00 ft (237.744 m) above mean sea level.

REMARKS.--Reservoir is formed by earth-fill dam. Low flow is controlled through a 48-inch (1,219 mm) diameter conduit. Spillway elevation, 783 ft (238.7 m) is an ogee section with 6 taintor gates, each 40 ft (12.2 m) wide and 25 ft (7.6 m) high. Permanent pool capacity is 24,000 acre-ft (29.6 hm³), elevation, 790.00 ft (240.792 m). Reservoir is used for flood control, pollution abatement, and recreation. Reservoir put into operation Nov. 27, 1969.

COOPERATION.--Water-stage recorder graph and capacity tables furnished by Indianapolis Flood Control District.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 24,840 acre-ft (30.6 hm³) May 18, 1974, elevation, 790.60 ft (240.975 m); minimum, 13,750 acre-ft (17.0 hm³) Nov. 28, 1971, elevation, 781.25 ft (238.125 m).

EXTREMES FOR CURRENT YEAR.--Maximum contents, 24,320 acre-ft (30.0 hm³) Mar. 28, elevation, 790.23 ft (240.862 m); minimum, 16,160 acre-ft (19.9 hm³) Feb. 11, elevation, 783.60 ft (238.841 m).

MONTHEND ELEVATION AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	787.84	21,190	
Oct. 31.....	786.62	19,640	-1,550
Nov. 30.....	785.67	18,500	-1,140
Dec. 31.....	784.56	17,220	-1,280
CAL YR 1976.....			-6,930
Jan. 31.....	783.85	16,440	-780
Feb. 28.....	786.60	19,620	+3,180
Mar. 31.....	790.04	24,060	+4,440
Apr. 30.....	790.00	24,000	-60
May 31.....	789.89	23,860	-140
June 30.....	788.66	22,260	-1,600
July 31.....	787.90	21,270	-990
Aug. 31.....	787.86	21,220	-50
Sept. 30.....	787.41	20,630	-590
WTR YR 1977.....			-560

03353500 EAGLE CREEK AT INDIANAPOLIS, IN

LOCATION.--Lat 39°46'33", long 86°15'01", in NW¼ sec.6, T.15 N., R.3 E., Marion County, Hydrologic Unit 05120201, on right bank at downstream side of bridge on Lynhurst Drive, approximately 600 ft (183 m) south of intersection of West 10th Street and Lynhurst Drive, 0.5 mile (0.8 km) downstream from West 10th Street bridge, 1.0 mile (1.6 km) upstream from Vermont Street bridge, 3.0 miles (4.8 km) upstream from Little Eagle Creek, and 7.1 miles (11.4 km) from mouth.

DRAINAGE AREA.--174 mi² (451 km²).

PERIOD OF RECORD.--November 1938 to current year.

REVISED RECORDS.--WSP 953: 1939. WSP 1625: 1958. WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 699.00 ft (213.055 m) above mean sea level. Aug. 8, 1957, to June 30, 1958, temporary site during reconstruction of bridge on Lynhurst Drive, a nonrecording gage on downstream side of 10th Street bridge. Mar. 10, 1966, to Aug. 16, 1967, during channelization of Eagle Creek, a nonrecording gage on downstream side of Lynhurst Drive bridge. Prior to Oct. 1, 1967, at datum 7.21 ft (2.198 m) higher.

REMARKS.--Records good except those for period of no gage-height record, Dec. 12 to Feb. 28, which are poor. Flow regulated since November 1969 by Eagle Creek Reservoir, 4.7 miles (7.6 km) upstream (See sta 03353450).

AVERAGE DISCHARGE.--38 years (1939 to current year), 150 ft³/s (4.248 m³/s), 11.71 in/yr (297 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 28,800 ft³/s (816 m³/s) June 28, 1957, gage height, 23.59 ft (7.190 m), from rating curve extended above 9,000 ft³/s (255 m³/s) on basis of a combined current-meter measurement and slope-area measurement; no flow for several days in August 1941.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of 23.2 ft (7.07 m), from information by local residents.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,350 ft³/s (66.6 m³/s) Mar. 28, gage height, 4.99 ft (1.521 m); minimum daily, 5.1 ft³/s (0.14 m³/s) Aug. 1, 3, 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	19	19	10	9.6	25	128	34	43	29	5.1	10
2	21	18	18	9.4	9.8	24	475	34	43	22	5.5	11
3	22	18	20	9.7	9.8	38	309	48	41	21	5.1	12
4	21	18	18	10	9.7	80	222	98	35	21	5.1	10
5	20	18	18	11	9.5	44	183	134	41	20	11	11
6	26	16	17	11	9.3	33	125	270	41	11	17	11
7	19	15	17	10	9.2	28	101	683	40	12	27	10
8	18	16	18	10	9.2	24	104	179	44	28	28	9.8
9	17	11	22	9.6	9.4	20	55	138	30	15	14	8.2
10	18	10	14	9.1	12	49	85	37	40	14	12	7.7
11	17	11	16	8.8	23	28	35	53	38	14	64	8.2
12	17	11	17	9.0	37	138	80	34	32	13	33	8.7
13	17	11	17	9.4	25	73	53	55	28	12	25	12
14	17	11	17	9.6	17	64	87	33	28	11	19	9.8
15	17	11	17	9.4	14	49	44	33	33	11	12	9.3
16	18	11	250	9.0	13	35	51	33	28	14	9.8	8.2
17	18	11	36	8.6	12	51	51	34	24	12	9.8	7.7
18	18	10	22	8.5	13	87	48	33	25	17	10	8.2
19	19	9.9	16	8.4	18	69	49	31	22	14	11	12
20	20	10	18	8.4	15	75	41	73	22	20	10	16
21	20	10	14	8.5	13	69	41	34	25	27	12	10
22	22	10	12	8.6	16	98	53	31	34	18	11	12
23	25	11	11	9.0	36	121	179	33	25	14	10	13
24	29	10	11	9.2	66	73	85	35	23	14	27	15
25	20	11	11	9.4	44	31	78	33	24	15	14	10
26	19	14	12	9.6	150	64	80	60	23	18	12	9.3
27	18	16	14	9.6	74	106	38	33	25	12	10	8.7
28	19	12	16	9.6	39	967	57	34	27	11	11	8.7
29	18	35	15	9.2	---	876	38	33	24	5.9	20	9.3
30	25	19	14	9.0	---	159	34	33	29	5.9	12	11
31	21	---	12	9.3	---	204	---	33	---	5.9	12	---
TOTAL	616	413.9	749	289.9	722.5	3802	3009	2459	937	477.7	484.4	307.8
MEAN	19.9	13.8	24.2	9.35	25.8	123	100	79.3	31.2	15.4	15.6	10.3
MAX	29	35	250	11	150	967	475	683	44	29	64	16
MIN	17	9.9	11	8.4	9.2	20	34	31	22	5.9	5.1	7.7
CFSM	.11	.08	.14	.05	.15	.71	.58	.46	.18	.09	.09	.06
IN.	.13	.09	.16	.06	.15	.81	.64	.53	.20	.10	.10	.07

CAL YR 1976 TOTAL 46177.9 MEAN 126 MAX 4760 MIN 9.9 CFSM .72 IN 9.87
WTR YR 1977 TOTAL 14268.2 MEAN 39.1 MAX 967 MIN 5.1 CFSM .23 IN 3.05

WABASH RIVER BASIN

03353600 LITTLE EAGLE CREEK AT SPEEDWAY, IN

LOCATION.--Lat 39°47'15", long 86°13'41", in NE¼SW¼ sec.32, T.16 N., R.3 E., Marion County, Hydrologic Unit 05120201, on right bank at downstream side of 16th Street bridge in Speedway, 0.6 mile (1.0 km) upstream from Dry Run, and 2.3 miles (3.7 km) upstream from mouth.

DRAINAGE AREA.--23.9 mi² (61.9 km²) including 5.57 mi² (14.43 km²) from Dry Run basin. Since June 1964 part of the flow from the 5.57 mi² (14.43 km²) of Dry Run basin has been diverted into Little Eagle Creek above gage.

PERIOD OF RECORD.--October 1959 to current year. Figures of runoff for June 1964 to September 1966 have been found to be in error and should not be used.

GAGE.--Water-stage recorder. Datum of gage is 707.82 ft (215.744 m) above mean sea level (levels by State of Indiana, Department of Natural Resources). Prior to June 13, 1975, at datum 3.00 ft (0.914 m) higher.

REMARKS.--Records poor. High-water flow is diverted from Dry Run basin into Little Eagle Creek above gage.

AVERAGE DISCHARGE.--13 years (water years 1965 to current year) 18.5 ft³/s (0.524 m³/s), 10.51 in/yr (267 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,940 ft³/s (54.9 m³/s) Apr. 25, 1961, gage height, 10.44 ft (3.182 m), present datum; no flow at times in 1960-64, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 450 ft³/s (12.74 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
June 30	1930	*877 24.84	*7.05 2.149	Aug. 11	1430	869 24.61	7.03 2.143

Minimum daily discharge, 0.24 ft³/s (0.007 m³/s) Jan. 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.67	3.5	1.1	.26	.36	21	16	2.8	1.3	38	.45	1.1
2	.66	2.0	.94	.29	.39	20	109	4.1	1.3	3.8	.52	.74
3	.66	1.6	.87	.34	.40	47	58	7.0	1.2	1.8	.52	1.2
4	.66	1.5	.82	.41	.39	165	34	25	1.2	1.2	.52	.94
5	2.0	1.3	1.0	.39	.36	61	37	103	1.3	1.1	.52	1.3
6	16	1.2	1.2	.36	.34	30	24	97	1.6	.83	62	9.1
7	3.0	1.2	1.1	.32	.32	20	19	154	1.4	1.0	94	1.9
8	3.0	1.1	.95	.32	.32	15	15	43	10	32	55	1.1
9	1.2	1.1	.86	.30	.35	13	12	22	3.1	26	40	.79
10	1.3	1.1	.94	.28	.50	10	10	16	12	4.7	38	.65
11	1.3	1.1	.96	.27	16	9.0	8.6	9.1	.84	1.6	265	.60
12	.83	1.1	.86	.29	35	39	6.9	6.1	.64	1.3	30	.67
13	.59	1.2	.84	.32	6.6	22	6.3	4.7	.55	.90	5.6	8.1
14	.60	1.0	.82	.34	3.5	13	7.7	4.0	.55	.79	7.4	8.9
15	.60	.94	.85	.32	2.7	10	5.6	3.6	.51	.66	4.2	4.0
16	.60	.92	.82	.28	2.3	8.3	4.0	3.3	.51	8.0	4.6	2.0
17	.57	1.1	.80	.25	2.0	11	3.6	3.2	.48	4.8	2.3	1.3
18	.57	.94	.86	.24	1.8	25	3.4	3.1	.47	.86	1.0	1.0
19	1.6	.97	1.1	.25	2.9	13	3.3	150	.46	.76	.85	17
20	5.1	1.0	1.6	.26	2.6	18	3.0	56	.45	.84	1.3	2.2
21	22	1.0	1.2	.28	2.2	13	2.8	24	.47	1.2	2.1	1.1
22	1.3	1.0	.94	.30	3.0	39	28	10	15	2.7	1.2	1.0
23	14	1.0	.76	.31	10	26	14	5.8	2.1	1.4	.81	.76
24	45	1.0	.68	.32	26	16	6.8	4.2	.60	1.3	44	13
25	3.6	1.2	.64	.34	12	13	5.1	7.6	.63	2.1	4.5	3.9
26	2.4	14	.68	.37	300	10	4.5	3.2	.65	.72	1.9	1.4
27	1.8	16	.74	.39	125	55	4.0	3.0	.82	.50	1.2	.93
28	1.1	3.9	.45	.38	27	243	4.3	2.8	3.4	.49	.88	.76
29	.96	1.8	.34	.35	---	91	3.9	3.2	2.4	.52	17	.76
30	22	1.4	.30	.33	---	41	3.3	3.9	101	.45	3.3	1.5
31	16	---	.28	.34	---	23	---	2.1	---	.46	1.4	---
TOTAL	171.67	68.17	26.30	9.80	584.33	1140.3	463.1	786.8	166.93	142.78	692.07	89.70
MEAN	5.54	2.27	.85	.32	20.9	36.8	15.4	25.4	5.56	4.61	22.3	2.99
MAX	45	16	1.6	.41	300	243	109	154	101	38	265	17
MIN	.57	.92	.28	.24	.32	8.3	2.8	2.1	.45	.45	.45	.60
CAL YR 1976	TOTAL	5926.35	MEAN	16.2	MAX	609	MIN	.28				
WTR YR 1977	TOTAL	4341.95	MEAN	11.9	MAX	300	MIN	.24				

03353620 LICK CREEK AT INDIANAPOLIS, IN

LOCATION.--Lat 39°42'21", long 86°06'13", in NE¼NE¼ sec.32, T.15 N., R.4 E., Marion County, Hydrologic Unit 05120201, on left bank at upstream side of Sherman Drive bridge in Indianapolis, and at mile 6.2 (10.0 km).

DRAINAGE AREA.--15.6 mi² (40.4 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 742.00 ft (226.162 m) above mean sea level (Indiana Flood Control and Water Resources Commission bench mark).

REMARKS.--Records good except those for winter periods and period of no gage-height record, Nov. 13 to Dec. 15, which are fair. The City of Beech Grove sewage treatment plant puts in effluent 1.1 miles (1.8 km) upstream.

AVERAGE DISCHARGE.--7 years, 18.5 ft³/s (0.524 m³/s), 16.14 in/yr (410 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,900 ft³/s (53.8 m³/s) May 17, 1974, gage height, 7.37 ft (2.246 m); minimum daily, 1.4 ft³/s (0.040 m³/s) May 4, 1971.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 200 ft³/s (5.66 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)	
Feb. 26	2230	*1370	38.8	*6.61	2.015
Apr. 02	1400	219	6.2	3.81	1.161
July 21	1945	692	19.6	5.33	1.624

Minimum daily discharge, 1.8 ft³/s (0.05 m³/s) June 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.8	5.6	3.0	2.0	2.8	37	15	4.0	2.8	32	2.7	5.5
2	3.0	3.4	3.0	2.2	3.1	24	133	4.2	2.7	6.4	2.4	3.3
3	2.6	3.1	2.9	2.5	3.3	45	62	5.0	2.5	2.8	2.4	2.9
4	3.1	3.1	2.8	2.6	3.4	126	41	28	2.6	2.2	2.3	2.4
5	3.3	2.9	2.6	2.8	3.3	58	39	59	3.0	2.0	2.3	8.5
6	7.5	2.7	3.2	2.6	3.2	32	26	69	3.3	1.9	9.3	23
7	4.1	2.7	4.0	2.6	3.0	23	19	101	4.6	2.0	25	5.5
8	3.7	2.9	3.0	2.6	2.8	18	14	36	13	36	20	3.4
9	3.1	2.9	2.7	2.4	3.2	15	11	20	16	25	7.1	2.9
10	2.8	2.8	3.4	2.3	4.0	13	9.3	14	4.1	5.3	4.4	2.5
11	3.2	2.9	3.4	2.2	7.4	11	8.6	9.9	3.2	5.1	38	2.2
12	3.2	3.2	2.8	2.3	24	38	8.6	7.7	2.9	3.9	23	2.9
13	3.8	3.5	2.6	2.4	16	25	8.2	6.5	2.8	3.2	5.3	17
14	3.7	3.6	2.9	2.6	11	16	7.6	5.6	2.9	6.6	3.8	18
15	3.5	3.5	3.2	2.6	8.6	13	6.6	4.7	2.4	5.1	3.2	5.8
16	3.2	3.0	3.1	2.2	7.3	11	5.6	4.3	2.3	3.3	3.3	4.7
17	3.3	3.4	3.0	2.0	6.5	13	6.2	4.0	2.2	5.5	2.8	3.3
18	4.3	3.9	3.3	1.9	6.0	17	5.8	3.4	2.2	3.3	3.0	2.9
19	6.8	3.6	3.0	1.9	8.8	10	5.8	5.2	2.2	3.0	2.8	5.5
20	12	3.4	4.2	2.0	8.6	16	6.2	4.1	2.2	2.6	2.6	3.5
21	4.6	4.3	3.6	2.2	6.9	11	5.4	2.9	1.8	36	5.9	2.8
22	3.6	4.7	2.8	2.4	10	31	22	2.7	24	8.9	5.5	2.7
23	21	5.2	2.5	2.6	34	21	13	3.7	10	3.3	3.3	2.7
24	29	6.7	2.2	2.6	99	14	7.4	2.9	3.5	2.6	40	9.7
25	6.1	6.6	2.3	2.7	41	12	6.7	3.9	2.8	6.3	6.3	4.6
26	4.1	41	2.5	2.7	211	10	6.3	3.2	2.3	4.0	3.7	3.2
27	3.5	27	2.8	2.8	378	34	5.5	2.8	4.7	2.4	3.3	2.7
28	3.2	6.5	2.9	2.8	60	129	6.9	2.7	3.3	2.4	2.8	2.5
29	3.2	4.1	2.7	2.6	---	53	6.1	2.5	2.7	2.4	45	3.0
30	24	3.3	2.4	2.6	---	29	4.3	5.1	37	2.4	14	2.8
31	11	---	2.1	2.7	---	19	---	3.6	---	2.2	5.7	---
TOTAL	197.3	175.5	90.9	75.4	976.2	924	522.1	431.6	172.0	230.1	301.2	162.4
MEAN	6.36	5.85	2.93	2.43	34.9	29.8	17.4	13.9	5.73	7.42	9.72	5.41
MAX	29	41	4.2	2.8	378	129	133	101	37	36	45	23
MIN	2.6	2.7	2.1	1.9	2.8	10	4.3	2.5	1.8	1.9	2.3	2.2
CFSM	.41	.38	.19	.16	2.24	1.91	1.12	.89	.37	.48	.62	.35
IN.	.47	.42	.22	.18	2.33	2.20	1.24	1.03	.41	.55	.72	.39

CAL YR 1976 TOTAL 4962.5 MEAN 13.6 MAX 192 MIN 1.9 CFSM .87 IN 11.83
WTR YR 1977 TOTAL 4258.7 MEAN 11.7 MAX 378 MIN 1.8 CFSM .75 IN 10.15

WABASH RIVER BASIN

03353700 WEST FORK WHITE LICK CREEK AT DANVILLE, IN

LOCATION.--Lat 39°45'36", long 86°30'47", in NW¼NE¼ sec.10, T.15 N., R.1 W., Hendricks County, Hydrologic Unit 05120201, on downstream side of bridge on U.S. Highway 36, 0.1 mile (0.2 km) east of city limits of Danville, 0.5 mile (0.8 km) upstream from small left-bank tributary and 7 miles (11.3 km) west of Avon.

DRAINAGE AREA.--28.8 mi² (74.6 km²).

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

REVISED RECORDS.--WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 828.83 ft (252.627 m) above mean sea level. Prior to Oct. 23, 1968, nonrecording gage and crest-stage gage on upstream side of bridge at same datum. Oct. 23, 1968, to Aug. 6, 1970 water-stage recorder on upstream side of bridge at same datum.

REMARKS.--Records good except those for winter periods, which are poor. Low flow affected by releases from Danville Filtration Plant.

AVERAGE DISCHARGE.--19 years, 28.2 ft³/s (0.799 m³/s), 13.30 in/yr (338 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,330 ft³/s (94.3 m³/s) July 14, 1962, gage height, 11.32 ft (3.450 m); no flow at times during 1961-67, 1970, 1971.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 28, 1957, reached a stage of 16.0 ft (4.88 m), from floodmarks, discharge, 6,660 ft³/s (189 m³/s), from contracted-opening measurement.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 700 ft³/s (19.8 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
June 30	2045	1390 39.4	7.21 2.198
July 08	1830	*1630 46.2	*7.75 2.362

Minimum daily discharge, 0.01 ft³/s (<0.001 m³/s) Jan. 2-4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.18	1.9	.24	.02	.07	45	40	6.9	1.4	221	1.7	3.9
2	.12	1.3	.24	.01	.08	38	150	7.8	1.3	71	1.3	2.5
3	.11	.83	.33	.01	.08	60	92	8.5	1.1	30	1.8	1.7
4	.12	.63	.22	.01	.08	200	67	12	.83	13	1.7	1.3
5	1.3	1.2	.21	.12	.08	105	54	98	2.8	7.7	1.3	1.3
6	4.0	3.5	.26	.17	.07	64	40	147	6.5	5.9	3.2	1.2
7	1.0	2.5	.42	.11	.07	46	34	162	2.2	5.7	8.5	1.2
8	.50	.42	.31	.03	.07	34	25	84	14	350	4.8	.91
9	.30	.48	.25	.03	.08	27	21	54	22	218	3.4	.81
10	.27	.39	.40	.03	.10	22	19	35	5.4	70	2.5	.75
11	.23	.37	.33	.04	1.5	18	15	24	3.4	36	45	.66
12	.31	.43	.31	.07	27	35	13	18	2.5	19	75	.64
13	.39	.32	.28	.17	13	37	11	14	1.9	10	20	1.3
14	.54	.30	.33	.12	6.8	26	10	12	1.6	7.5	8.9	8.4
15	.66	.30	.24	.08	4.1	21	9.4	9.8	1.1	6.1	6.3	4.8
16	.19	.39	.27	.05	2.7	15	8.5	8.5	.82	44	5.0	3.4
17	.17	.30	.34	.03	2.1	12	8.1	7.8	.72	45	4.3	2.0
18	.45	.33	.27	.02	1.8	21	7.5	7.2	.93	14	2.6	1.3
19	.39	.34	.29	.03	5.5	16	8.0	6.5	.65	12	1.8	4.0
20	.33	.34	.44	.04	3.6	20	7.4	5.9	.47	9.7	1.5	2.2
21	1.1	.32	.32	.05	2.7	19	6.9	5.8	.34	119	2.0	1.3
22	.36	.32	.21	.05	7.4	28	16	5.3	4.6	242	1.8	1.2
23	1.6	.30	.15	.06	16	34	30	4.7	4.0	45	1.3	1.2
24	5.4	.43	.11	.06	75	24	21	4.3	2.1	18	113	3.0
25	3.0	.28	.12	.07	36	19	15	4.0	1.2	9.8	37	3.1
26	1.6	1.4	.13	.08	69	15	11	3.7	.80	6.7	11	2.1
27	1.9	1.2	.15	.08	141	40	9.3	3.0	26	5.2	6.6	1.3
28	2.3	.59	.25	.08	64	319	8.8	2.9	28	4.3	4.6	1.2
29	.67	.39	.15	.07	---	161	7.5	2.7	11	3.4	10	1.0
30	2.5	.37	.11	.06	---	86	6.8	2.2	204	2.5	7.7	5.6
31	2.9	---	.06	.07	---	56	---	1.9	---	2.4	5.3	---
TOTAL	34.89	22.17	7.74	1.92	479.98	1663	772.2	769.4	353.66	1653.9	400.9	65.27
MEAN	1.13	.74	.25	.062	17.1	53.6	25.7	24.8	11.8	53.4	12.9	2.18
MAX	5.4	3.5	.44	.17	141	319	150	162	204	350	113	8.4
MIN	.11	.28	.06	.01	.07	12	6.8	1.9	.34	2.4	1.3	.64
CFSM	.04	.03	.009	.002	.59	1.86	.89	.86	.41	1.85	.45	.08
IN.	.05	.03	.01	.00	.62	2.15	1.00	.99	.46	2.14	.52	.08
CAL YR 1976	TOTAL	6409.83	MEAN	17.5	MAX	499	MIN	.06	CFSM	.61	IN	8.28
WTR YR 1977	TOTAL	6225.03	MEAN	17.1	MAX	350	MIN	.01	CFSM	.59	IN	8.04

03353800 WHITE LICK CREEK AT MOORESVILLE, IN

LOCATION.--Lat 39°36'28", long 86°22'56", in NE¼SE¼ sec.35, T.14 N., R.1 E., Morgan County, Hydrologic Unit 05120201, on right bank at downstream side of bridge on State Highway 42 at Mooresville, 0.9 mile (1.4 km) downstream from McCracken Creek, 2.0 miles (3.2 km) upstream from East Fork White Lick Creek, and at mile 11.4 (18.3 km).

DRAINAGE AREA.--212 mi² (549 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 644.64 ft (196.486 m) above mean sea level. Dec. 10, 1963, to Sept. 30, 1964, nonrecording gage at bridge 1,950 ft (594 m) upstream at datum 1.39 ft (0.424 m) higher.

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

AVERAGE DISCHARGE.--20 years, 213 ft³/s (6.032 m³/s), 13.64 in/yr (346 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 18,000 ft³/s (510 m³/s) Mar. 4, 1963, gage height, 22.95 ft (6.995 m); minimum daily, 2.0 ft³/s (0.057 m³/s) Dec. 24, 25, 1960, Sept. 2, 1966.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 28, 1957, reached a stage of 22.5 ft (6.86 m), from levels to high-water mark by State of Indiana, Department of Natural Resources.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 3,000 ft³/s (85.0 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Feb. 27	0400	*5150 146	*18.75 5.715

Minimum daily discharge, 8.6 ft³/s (0.244 m³/s) Jan. 18-20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	26	16	10	9.9	369	261	103	57	1500	26	35
2	11	20	15	9.6	10	270	734	103	55	250	23	30
3	9.8	18	14	9.7	11	249	648	102	53	138	21	27
4	10	16	13	9.9	11	1600	374	118	52	107	24	32
5	13	15	13	11	10	895	334	437	52	85	23	32
6	29	14	14	11	9.7	422	262	923	63	73	23	27
7	23	14	15	11	9.6	286	220	1150	57	65	40	43
8	15	13	15	10	9.6	227	190	506	60	260	44	35
9	13	13	17	10	9.8	198	166	266	103	1010	34	28
10	12	12	14	9.6	12	180	155	179	60	186	29	24
11	11	12	14	9.2	52	167	143	142	46	125	77	22
12	11	12	15	9.0	350	204	134	121	38	107	280	21
13	9.9	12	14	9.3	226	250	127	110	32	93	105	25
14	11	12	13	9.8	168	195	123	102	28	82	73	29
15	10	12	13	10	125	173	119	96	27	75	58	39
16	11	11	13	9.4	95	158	115	90	25	71	49	36
17	11	11	13	8.8	81	147	111	85	24	157	44	29
18	10	11	13	8.6	71	165	109	81	23	84	39	25
19	14	12	14	8.6	74	166	108	78	24	71	35	32
20	18	11	15	8.6	91	169	108	75	23	64	32	33
21	19	11	16	8.7	80	165	107	75	21	61	34	26
22	19	11	14	9.0	76	186	125	74	27	384	35	23
23	19	11	13	9.2	183	204	203	71	43	90	32	22
24	34	11	13	9.6	418	180	178	69	40	66	126	28
25	31	11	13	10	245	161	146	68	37	56	102	28
26	20	14	13	10	474	150	130	65	35	46	63	25
27	15	28	13	10	2640	159	118	63	186	39	47	22
28	13	27	12	9.8	534	2160	112	61	182	35	38	20
29	13	20	13	9.5	---	1310	110	62	132	32	49	19
30	17	17	12	9.3	---	590	105	61	202	30	52	20
31	30	---	11	9.4	---	353	---	58	---	27	41	---
TOTAL	494.7	438	426	297.6	6085.6	12108	5875	5594	1807	5469	1698	837
MEAN	16.0	14.6	13.7	9.60	217	391	196	180	60.2	176	54.8	27.9
MAX	34	28	17	11	2640	2160	734	1150	202	1500	280	43
MIN	9.8	11	11	8.6	9.6	147	105	58	21	27	21	19
CFSM	.08	.07	.07	.05	1.02	1.84	.93	.85	.28	.83	.26	.13
IN.	.09	.08	.07	.05	1.07	2.12	1.03	.98	.32	.96	.30	.15
CAL YR 1976	TOTAL	56215.7	MEAN 154	MAX 2790	MIN 9.8	CFSM .73	IN 9.86					
WTR YR 1977	TOTAL	41129.9	MEAN 113	MAX 2640	MIN 8.6	CFSM .53	IN 7.22					

03354000 WHITE RIVER NEAR CENTERTON, IN

LOCATION--Lat 39°29'51", long 86°24'02", in NE¼NE¼ sec.10, T.12 N., R.1 E., Morgan County, Hydrologic Unit 05120201, on right bank at upstream side of bridge on Blue Bluff Road, 1 mile (1.6 km) south of Centerton, 0.8 mile (1.3 km) downstream from White Lick Creek, and at mile 199.3 (321.0 km).

DRAINAGE AREA.--2,444 mi² (6,330 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1925 to September 1930 (gage heights only), October 1930 to March 1932, October 1946 to current year. Monthly discharge only for October and November 1946, published in WSP 1305. Published as West Fork White River at Martinsville prior to March 1932, and as West Fork White River near Centerton October 1946 to September 1948.

REVISED RECORDS.--WSP 1335: 1948-49. WSP 1909: 1931(M). WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 595.44 ft (181.490 m) above mean sea level (Corps of Engineers bench mark), levels by Indianapolis Power and Light Co. See WSP 1725 for history of changes prior to July 1953. July 1953 to Aug. 7, 1975, water-stage recorder at site 0.4 mile (0.6 km) downstream at same datum.

REMARKS.--Records good except those for period of no gage-height record, Nov. 14 to Dec. 13, and winter periods, which are fair. Flow regulated by upstream reservoirs.

AVERAGE DISCHARGE.--32 years (1930-31, 1946 to current year), 2,343 ft³/s (66.35 m³/s), 13.02 in/yr (331 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 50,500 ft³/s (1,430 m³/s) Apr. 22, 1964, gage height, 17.57 ft (5.355 m) at site 0.4 mile (0.6 km) downstream; minimum daily, 131 ft³/s (3.71 m³/s) Nov. 15, 1930.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of 22.8 ft (6.95 m) at Martinsville site (from information by Indiana State Highway Commission) and 21.9 ft (6.68 m) at site 0.4 mile (0.6 km) downstream (from information by Corps of Engineers), discharge, 90,000 ft³/s (2,550 m³/s).

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 9,500 ft³/s (269 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Feb. 27	1400	*13200 374	*11.08 3.38

Minimum daily discharge, 240 ft³/s (6.80 m³/s) Jan. 24.

DISCHARGE IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	404	622	375	334	284	5750	3200	1020	763	3290	332	553
2	353	540	362	340	264	4040	4450	998	710	1220	332	553
3	342	489	356	342	259	3320	5530	989	644	756	310	507
4	348	476	352	337	264	6090	4830	1250	574	601	321	476
5	387	464	344	337	269	6180	4900	2370	514	526	337	476
6	440	446	346	353	254	5690	3900	3620	527	470	337	514
7	615	428	362	370	250	4280	3130	6210	530	445	820	710
8	501	416	382	358	264	3110	2590	4580	553	1020	989	630
9	476	440	386	338	254	2500	2210	3510	894	1570	844	594
10	446	434	396	324	295	2080	1870	2620	665	1120	630	560
11	416	422	414	312	460	1870	1710	2090	687	790	644	514
12	428	416	426	305	910	1910	1580	1690	853	610	2080	458
13	428	416	408	308	1330	2280	1510	1490	771	547	1520	464
14	440	410	385	316	1270	1950	1370	1300	724	501	1470	673
15	452	406	359	326	1020	1730	1340	1180	622	476	1050	630
16	464	412	353	326	911	1520	1210	1110	630	440	844	665
17	452	430	434	321	787	1330	1120	1050	615	581	710	748
18	464	445	440	300	710	1440	1080	937	658	514	637	680
19	482	440	376	282	687	1670	1020	894	630	458	587	658
20	587	448	376	270	724	2340	998	1250	533	422	608	702
21	567	462	393	262	665	2170	972	1110	488	410	574	587
22	476	456	387	254	644	2270	1060	1040	476	1060	587	520
23	476	450	372	250	963	2360	1610	886	868	644	507	495
24	963	446	365	240	2000	2300	1650	787	588	540	812	495
25	836	442	368	259	2040	2170	1930	756	507	695	928	658
26	622	465	380	264	2210	1910	1680	687	495	630	608	581
27	553	840	393	259	11200	1720	1490	710	560	501	547	533
28	520	745	422	264	6450	6720	1290	644	748	416	520	495
29	464	495	404	254	---	7570	1280	588	795	376	594	482
30	482	400	370	274	---	5840	1150	622	588	359	972	501
31	820	---	352	269	---	4330	---	673	---	359	615	---
TOTAL	15704	14201	11838	9348	37638	100440	63660	48661	19210	22347	22666	17112
MEAN	507	473	382	302	1344	3240	2122	1570	640	721	731	570
MAX	963	840	440	370	11200	7570	5530	6210	894	3290	2080	748
MIN	342	400	344	240	250	1330	972	588	476	359	310	458
CFSM	.21	.19	.16	.12	.55	1.33	.87	.64	.26	.30	.30	.23
IN.	.24	.22	.18	.14	.57	1.53	.97	.74	.29	.34	.34	.26
CAL YR 1976	TOTAL	689056	MEAN	1883	MAX	19900	MIN	325	CFSM	.77	IN	10.49
WTR YR 1977	TOTAL	382825	MEAN	1049	MAX	11200	MIN	240	CFSM	.43	IN	5.83

03354000 WHITE RIVER NEAR CENTERTON, IN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

WATER TEMPERATURE: September 1953 to April 1956, October 1966 to September 1967, May 1970 to September 1972.

SEDIMENT DISCHARGE: March 1965 to current year (partial-record station).

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	SUS- PENDE SEDI- MENT (MG/L)	SUS- PENDE SEDI- MENT DIS- CHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM
FEB 28...	1515	5780	--	268	4180	39	51
APR 05...	0930	5310	11.0	82	1180	--	--

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. FALL DIAM. % FINER THAN .062 MM	SUS. SED. FALL DIAM. % FINER THAN .125 MM	SUS. SED. FALL DIAM. % FINER THAN .250 MM	SUS. SED. FALL DIAM. % FINER THAN .500 MM
FEB 28...	58	65	72	78	83	96	100
APR 05...	--	--	--	--	--	--	--

WABASH RIVER BASIN

03354500 BEANBLOSSOM CREEK AT BEANBLOSSOM, IN

LOCATION.--Lat 39°15'45", long 86°14'55", in SW¼NW¼ sec.31, T.10 N., R.3 E., Brown County, Hydrologic Unit 05120202, on right bank 15 ft (5 m) downstream from bridge on State Highway 135, 0.3 mile (0.5 km) south of Beanblossom, 2.7 miles (4.3 km) upstream from North Fork Beanblossom Creek, and at mile 42.1 (67.7 km).

DRAINAGE AREA.--14.6 mi² (37.8 km²).

PERIOD OF RECORD.--October 1951 to current year. Prior to October 1965, published as Bean Blossom Creek at Bean Blossom.

REVISED RECORDS.--WSP 1555: 1952, 1953(M), 1956-57. WSP 1705: 1952(P).

GAGE.--Water-stage recorder. Datum of gage is 673.65 ft (205.329 m) above mean sea level.

REMARKS.--Records fair. No gage-height record May 11 to June 20.

AVERAGE DISCHARGE.--26 years, 15.7 ft³/s (0.445 m³/s), 14.61 in/yr (371 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,140 ft³/s (231 m³/s) June 23, 1960, gage height, 11.78 ft (3.591 m), from curve extended above 2,000 ft³/s (56.6 m³/s) on basis of contracted-opening measurement at gage height 11.78 ft (3.591 m); no flow for many days in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 700 ft³/s (19.8 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Mar. 28	0230	733 20.8	5.90 1.798	Apr. 02	1430	*2080 58.9	*9.13 2.783

Minimum daily discharge, no flow July 27 to Aug. 5, Sept. 3, 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.1	1.9	.70	.09	.27	25	16	7.9	.41	4.1	.00	.13
2	.74	1.1	.53	.08	.32	19	659	6.3	.29	1.7	.00	.03
3	.18	.64	.43	.10	.37	80	123	5.5	.24	1.0	.00	.00
4	.07	.34	.36	.11	.27	212	51	17	.22	.72	.00	.00
5	.05	.23	.40	.12	.20	70	31	14	.34	.47	.00	1.3
6	.05	.51	.70	.13	.14	32	26	17	.29	.28	.02	3.2
7	.04	.71	.52	.14	.12	20	24	43	.23	.12	.04	1.3
8	.04	.85	.41	.15	.11	15	18	24	.20	.08	.35	.62
9	.04	.96	.35	.14	.21	11	15	14	.46	.09	.93	.23
10	.04	.71	.38	.12	.25	9.2	12	7.9	.42	.19	.09	.10
11	.04	.66	.52	.15	2.2	7.9	9.6	6.0	.29	.34	1.1	.04
12	.03	.62	.39	.20	17	27	7.9	4.7	.22	.21	4.9	.05
13	.03	2.5	.31	.24	10	29	6.9	3.7	.18	.33	2.6	.28
14	.03	1.2	.34	.19	6.6	19	6.0	3.0	.14	1.2	1.4	1.0
15	.03	.30	.38	.15	4.5	14	5.2	2.4	.12	.76	.49	1.1
16	.03	.24	.33	.11	3.6	9.6	4.5	2.0	.10	.32	2.0	1.2
17	.03	.28	.30	.09	3.0	8.2	4.1	1.6	.09	.19	5.0	.99
18	.03	.30	.28	.08	2.6	26	3.7	1.3	.36	.15	2.0	.69
19	.04	.49	.25	.08	4.0	20	3.8	1.1	.20	.09	.63	.88
20	.05	1.4	.22	.07	3.5	22	4.5	.92	.14	.05	.17	.46
21	.10	.34	.20	.14	3.0	18	4.7	.78	.12	.07	2.2	.28
22	.06	.27	.17	.15	2.7	38	22	.68	1.3	.13	4.8	.18
23	.59	.23	.15	.16	25	28	55	.61	1.4	.15	2.3	.11
24	4.7	.36	.14	.17	58	19	28	.55	1.3	.04	1.2	.57
25	3.3	.50	.16	.19	33	15	18	.51	3.1	.10	.44	.46
26	1.6	12	.19	.25	22	11	13	.62	1.9	.03	.16	.35
27	.70	9.8	.23	.35	194	43	9.2	.56	5.2	.00	.07	.18
28	.34	4.2	.21	.37	40	360	10	.50	8.5	.00	.04	.10
29	.21	1.8	.19	.28	---	83	13	.48	6.5	.00	1.7	.09
30	2.3	1.1	.14	.20	---	38	9.6	.89	2.6	.00	1.5	.10
31	3.8	---	.11	.22	---	22	---	.63	---	.00	.52	---
TOTAL	22.39	46.54	9.99	5.02	436.96	1350.9	1213.7	190.13	36.86	12.91	36.65	16.02
MEAN	.72	1.55	.32	.16	15.6	43.6	40.5	6.13	1.23	.42	1.18	.53
MAX	4.7	12	.70	.37	194	360	659	43	8.5	4.1	5.0	3.2
MIN	.03	.23	.11	.07	.11	7.9	3.7	.48	.09	.00	.00	.00
CFSM	.05	.11	.02	.01	1.07	2.99	2.77	.42	.08	.03	.08	.04
IN.	.06	.12	.03	.01	1.11	3.44	3.09	.48	.09	.03	.09	.04

CAL YR 1976	TOTAL	2927.96	MEAN 8.00	MAX 230	MIN .00	CFSM .55	IN 7.46
WTR YR 1977	TOTAL	3378.07	MEAN 9.25	MAX 659	MIN .00	CFSM .63	IN 8.61

03355400 LAKE LEMON NEAR BLOOMINGTON, IN

LOCATION.--Lat 39°16'20", long 86°25'37", in NW¼SE¼ sec.28, T.10 N., R.1 E., Monroe County, Hydrologic Unit 05120202, on left side of dam on Beanblossom Creek, 5 miles (8 km) downstream from Bear Creek, 5.5 miles (8.8 km) west of Trevlac, 9.2 miles (14.8 km) northeast of Bloomington, and at mile 29.7 (47.8 km).

DRAINAGE AREA.--70.9 mi² (184 km²).

PERIOD OF RECORD.--April 1953 to March 1958, October 1960 to current year.

REVISED RECORDS.--WRD Ind. 1968: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 620.10 ft (189.006 m) above mean sea level.

REMARKS.--Reservoir is formed by earth-fill dam. Releases normally controlled by 42-inch (1,067 mm) diameter gate in 42-inch (1,067 mm) conduit. Capacity at uncontrolled spillway elevation, 9.87 ft (3.008 m) is 14,420 acre-ft (17.8 hm³). Reservoir is used for low-flow augmentation of the water supply for Bloomington and recreation. Reservoir put in operation on April 15, 1953.

COOPERATION.--Capacity tables furnished by State of Indiana, Department of Natural Resources.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 20,470 acre-ft (25.2 hm³) May 24, 1968, gage height, 13.32 ft (4.060 m); minimum, 5,390 acre-ft (6.65 hm³) Mar. 3, 1964, gage height, 2.50 ft (0.762 m).

EXTREMES FOR CURRENT YEAR.--Maximum contents, 13,240 acre-ft (16.3 hm³) Sept. 26, gage height, 9.15 ft (2.789 m); minimum observed, 9,040 acre-ft (11.1 hm³) Jan. 14, gage height, 6.03 ft (1.838 m).

MONTHEND GAGE HEIGHT AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

Date	Gage height (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	7.52	10,930	
Oct. 31.....			
Nov. 30.....	6.67	9,790	-1,140
Dec. 31.....	6.27	9,320	-470
CAL YR 1976.....			-6,430
Jan. 31.....			
Feb. 28.....			
Mar. 31.....	6.71	9,850	+530
Apr. 30.....			
May 31.....	8.75	12,650	+2,800
June 30.....	8.88	12,830	+180
July 31.....	9.14	13,220	+390
Aug. 31.....	9.09	13,140	-80
Sept. 30.....	9.09	13,140	0
WTR YR 1977.....			+2,210

03356000 BEANBLOSSOM CREEK AT DOLAN, IN

LOCATION.--Lat 39°14'30", long 86°29'57", in NW¼SW¼ sec.2, T.9 N., R.1 W., Monroe County, Hydrologic Unit 05120202, on downstream side of pier of highway bridge at Dolan, 5.8 miles (9.3 km) northeast of Bloomington, 8.2 miles (13.2 km) downstream from Lake Lemon, and 21.5 miles (34.6 km) upstream from mouth.

DRAINAGE AREA.--100 mi² (259 km²).

PERIOD OF RECORD.--April 1946 to current year. Prior to October 1965, published as Bean Blossom Creek at Dolan.

REVISED RECORDS.--WSP 1113: 1947. WSP 1275: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 576.41 ft (175.690 m) above mean sea level (unadjusted). Prior to Sept. 28, 1951, nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter periods, which are fair. Flow regulated by Lake Lemon 8.2 miles (13.2 km) upstream (See sta 03355400).

AVERAGE DISCHARGE.--31 years, 111 ft³/s (3.144 m³/s), 15.07 in/yr (383 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,420 ft³/s (267 m³/s) June 2, 1947; maximum gage height, 17.9 ft (5.46 m) Jan. 5, 1949; no flow at times during 1946-49, 1953.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,000 ft³/s (113 m³/s) Apr. 3, gage height, 15.56 ft (4.743 m); minimum daily, 0.37 ft³/s (0.01 m³/s) Aug. 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	12	14	17	11	123	163	40	15	25	11	4.9
2	13	11	14	19	11	107	730	37	15	16	11	4.6
3	13	12	17	20	12	124	3100	33	14	15	10	4.6
4	13	11	14	18	12	546	1300	55	15	14	6.0	4.6
5	13	11	15	17	12	345	543	69	16	14	.37	4.6
6	14	11	14	16	12	310	332	84	16	14	1.8	7.2
7	14	11	14	15	12	251	296	215	15	14	4.4	4.6
8	14	11	15	14	12	206	221	226	16	14	6.0	4.4
9	13	11	17	13	12	178	181	148	16	14	5.5	4.4
10	13	12	14	12	12	153	156	89	15	14	2.7	4.4
11	15	12	14	11	13	141	133	64	15	14	2.7	4.0
12	13	12	13	10	60	213	92	47	16	14	4.6	4.4
13	12	12	15	10	300	244	55	37	16	33	3.4	4.6
14	12	13	13	10	220	172	48	31	16	171	2.7	4.9
15	13	13	13	11	150	100	42	31	16	25	2.4	4.6
16	13	13	13	10	130	71	37	28	16	18	2.1	4.9
17	13	13	13	10	119	64	34	26	16	16	4.0	4.0
18	13	13	13	10	118	85	31	24	17	15	3.0	7.2
19	13	11	13	10	123	111	31	22	16	14	2.4	21
20	14	11	14	10	135	111	35	20	16	14	2.4	7.6
21	13	11	13	10	127	108	32	19	16	13	4.0	5.5
22	13	12	19	11	132	151	39	17	18	13	19	4.9
23	13	13	13	11	187	188	110	16	16	12	5.7	4.6
24	17	13	13	12	259	154	90	15	17	12	4.9	6.0
25	13	13	13	12	129	114	72	14	24	11	4.4	6.8
26	12	21	13	11	130	86	50	15	29	11	4.4	5.5
27	12	19	13	11	637	111	55	14	18	11	4.4	4.9
28	12	16	13	11	180	1320	44	15	17	11	4.4	4.4
29	12	15	16	10	---	1240	54	15	17	12	5.7	3.7
30	14	14	13	10	---	507	47	15	18	11	6.4	4.4
31	15	---	15	10	---	240	---	14	---	11	5.2	---
TOTAL	410	383	436	382	3267	7874	8153	1495	503	616	156.97	166.2
MEAN	13.2	12.8	14.1	12.3	117	254	272	48.2	16.8	19.9	5.06	5.54
MAX	17	21	19	20	637	1320	3100	226	29	171	19	21
MIN	12	11	13	10	11	64	31	14	14	11	.37	3.7
CFSM	.13	.13	.14	.12	1.17	2.54	2.72	.48	.17	.20	.05	.06
IN.	.15	.14	.16	.14	1.22	2.93	3.03	.56	.19	.23	.06	.06
CAL YR 1976	TOTAL	22990.00	MEAN 62.8	MAX 892	MIN 11	CFSM .63	IN 8.55					
WTR YR 1977	TOTAL	23842.17	MEAN 65.3	MAX 3100	MIN .37	CFSM .65	IN 8.87					

WABASH RIVER BASIN

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03357350 PLUM CREEK NEAR BAINBRIDGE, IN

LOCATION.--Lat 39°45'42", long 86°43'46", in SW¼SE¼ sec.3, T.15 N., R.3 W., Putnam County, Hydrologic Unit 05120203, on right upstream wingwall of bridge on U.S. Highway 36, 0.5 mile (0.8 km) west of Groveland, and 4.5 miles (7.2 km) east of Bainbridge.

DRAINAGE AREA.--3.00 mi² (7.77 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 828.44 ft (252.509 m) above mean sea level (Indiana State Highway Commission bench mark).

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

AVERAGE DISCHARGE.--8 years, 3.53 ft³/s (0.100 m³/s), 15.96 in/yr (405 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 744 ft³/s (21.1 m³/s) June 30, 1977, gage height, 5.75 ft (1.753 m); no flow at times during 1970, 1975-77.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 150 ft³/s (4.25 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)	
June 08	2000	422	12.0	4.36	1.329
June 30	1900	*744	21.1	*5.75	1.753
July 08	1730	238	6.74	3.51	1.070

Minimum daily discharge, no flow Oct. 1-5, Dec. 23-27, 29 to Feb. 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.03	.01	.00	.00	1.1	2.5	.46	.07	13	.04	.05
2	.00	.02	.01	.00	.00	.54	14	.59	.07	3.8	.04	.05
3	.00	.02	.01	.00	.00	6.4	4.9	.50	.08	1.6	.04	.04
4	.00	.02	.01	.00	.00	17	3.4	.84	.08	.96	.04	.05
5	.00	.02	.02	.00	.00	6.7	2.8	12	.09	.63	.03	.05
6	.01	.02	.03	.00	.00	3.3	2.4	16	.12	.45	.09	.05
7	.01	.02	.02	.00	.00	2.0	2.1	15	.08	4.2	.09	.04
8	.01	.02	.01	.00	.00	1.5	1.7	5.8	50	60	.05	.04
9	.01	.02	.01	.00	.00	1.2	1.6	2.9	12	8.1	.14	.04
10	.01	.02	.01	.00	.01	.96	1.5	2.2	3.2	3.1	.06	.04
11	.01	.02	.02	.00	.35	.79	1.3	1.7	1.5	2.1	1.4	.04
12	.01	.01	.02	.00	1.3	2.8	1.0	1.4	.97	1.3	.40	.05
13	.01	.01	.01	.00	.50	2.1	.95	1.2	.71	.89	.09	1.1
14	.01	.01	.01	.00	.28	1.2	.89	1.0	.57	.65	.06	.84
15	.01	.02	.01	.00	.15	.95	.79	.83	.43	.50	.05	.12
16	.01	.01	.01	.00	.11	.65	.75	.67	.35	.46	.05	.11
17	.01	.02	.01	.00	.09	.67	.68	.57	.29	.48	.05	.10
18	.01	.02	.01	.00	.22	1.6	.60	.47	.22	.38	.04	.08
19	.01	.02	.02	.00	.46	.97	.60	.38	.17	.32	.04	8.7
20	.01	.01	.05	.00	.25	1.4	.55	.34	.14	.20	.04	.45
21	.01	.01	.02	.00	.17	1.2	.48	.29	.07	.17	.05	.21
22	.01	.01	.01	.00	.22	2.8	1.2	.24	.44	.13	.04	.15
23	.01	.01	.00	.00	1.3	3.6	2.0	.20	.30	.08	.05	.12
24	.03	.01	.00	.00	4.3	2.0	1.9	2.4	.20	.07	1.2	.35
25	.02	.01	.00	.00	1.6	1.5	1.2	1.0	.16	.07	.11	.24
26	.02	.04	.00	.00	9.2	1.2	.92	.32	.12	.05	.06	.14
27	.01	.04	.00	.00	10	7.6	.71	.22	.06	.05	.05	.08
28	.01	.03	.01	.00	3.0	42	.63	.16	.21	.05	.04	.06
29	.01	.02	.00	.00	---	12	.54	.12	.16	.05	.96	.06
30	.02	.02	.00	.00	---	6.0	.45	.08	86	.04	.19	4.6
31	.03	---	.00	.00	---	3.1	---	.09	---	.04	.07	---
TOTAL	.33	.56	.35	.00	33.51	136.83	55.04	69.97	158.86	103.92	5.66	18.05
MEAN	.011	.019	.011	.000	1.20	4.41	1.83	2.26	5.30	3.35	.18	.60
MAX	.03	.04	.05	.00	10	42	14	16	86	60	1.4	8.7
MIN	.00	.01	.00	.00	.00	.54	.45	.08	.06	.04	.03	.04
CFSM	.004	.006	.004	.000	.40	1.47	.61	.75	1.77	1.12	.06	.20
IN.	.00	.01	.00	.00	.42	1.70	.68	.87	1.97	1.29	.07	.22
CAL YR 1976	TOTAL 611.27	MEAN 1.67	MAX 54	MIN .00	CFSM .56	IN 7.58						
WTR YR 1977	TOTAL 583.08	MEAN 1.60	MAX 86	MIN .00	CFSM .53	IN 7.23						

03357420 BIG WALNUT CREEK AT GREENCASTLE, IN

LOCATION.--Lat 39°40'01", long 86°51'57", in NW¼SW¼ sec.9, T.14 N., R.4 W., Putnam County, Hydrologic Unit 05120203, on left bank, 30 ft (9.1 m) upstream from concrete dam at the Greencastle Waterworks, 0.2 mile (0.3 km) downstream from Synder Branch, 0.3 mile (0.5 km) upstream from bridge on U.S. Highway 231, 1.1 miles (1.8 km) north of Greencastle, and at mile 21.1 (33.9 km).

DRAINAGE AREA.--216 mi² (559 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1974 to current year.

GAGE.--Water-stage recorder. Datum of the gage is 665.00 ft (202.692 m) above mean sea level (levels by State of Indiana, Department of Natural Resources).

REMARKS.--Water-discharge records good except those for winter periods, which are fair.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,580 ft³/s (186 m³/s), Feb. 23, 1975, gage height, 12.58 ft (3.834 m); minimum daily, 3.1 ft³/s (0.088 m³/s) Oct. 18, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 28, 1957, reached a stage of 24.1 ft (7.35 m), from flood profile by State of Indiana, Department of Natural Resources.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 1,800 ft³/s (51.0 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
June 30	2400	*3330 94.3	*10.92 3.328	July 08	2100	2740 77.6	10.56 3.219

Minimum daily discharge, 3.1 ft³/s (0.088 m³/s) Oct. 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	15	10	8.0	6.2	216	267	60	29	1340	23	71
2	11	13	9.6	8.7	6.8	161	557	62	26	215	22	54
3	9.6	12	10	9.3	7.6	165	528	61	25	86	22	38
4	7.7	11	11	10	7.0	617	357	71	24	51	22	24
5	6.1	10	10	11	6.6	491	311	292	24	37	20	17
6	6.8	9.8	10	11	6.4	325	258	590	27	30	20	14
7	8.4	9.6	9.6	10	6.2	226	216	735	33	28	43	12
8	11	9.0	9.4	9.3	6.0	174	183	455	31	1350	38	11
9	12	9.1	10	8.8	5.8	149	158	287	369	775	31	10
10	10	9.2	10	8.2	5.8	130	146	203	68	213	27	9.2
11	8.9	9.2	9.5	7.2	5.8	117	132	167	41	112	31	8.4
12	7.9	9.3	9.1	6.2	40	150	118	124	32	79	63	7.7
13	7.1	9.4	8.9	6.0	140	175	111	108	29	56	39	9.6
14	5.9	9.4	9.7	7.0	100	157	105	100	27	45	29	99
15	4.8	9.4	9.5	6.0	75	129	96	91	26	37	33	92
16	4.0	9.4	9.3	5.4	52	110	89	83	24	175	32	68
17	3.5	9.4	9.0	5.4	40	99	84	76	23	164	26	80
18	3.1	9.5	9.3	5.4	36	126	81	72	23	120	30	34
19	3.2	9.5	10	5.5	32	147	79	67	22	66	25	96
20	3.3	9.5	12	5.8	30	140	77	63	21	42	21	48
21	4.3	9.5	7.0	6.0	28	131	68	72	20	67	30	35
22	6.3	9.5	7.2	6.2	90	160	79	64	21	74	39	30
23	7.1	9.5	7.6	6.6	161	212	107	58	26	50	25	27
24	14	9.5	7.4	7.0	283	181	124	54	24	35	92	31
25	17	9.5	7.8	7.4	184	146	100	70	21	30	110	38
26	13	10	8.3	6.8	252	125	88	53	21	27	65	35
27	11	11	9.0	6.6	626	158	79	47	20	25	52	29
28	9.8	11	8.8	6.4	288	1250	72	43	21	24	44	25
29	9.3	11	8.3	6.2	---	1030	71	41	23	23	92	22
30	11	10	7.8	6.0	---	578	62	39	485	22	99	19
31	14	---	7.4	5.8	---	361	---	28	---	23	83	---
TOTAL	263.1	302.2	282.5	225.2	2527.2	8336	4803	4336	1606	5421	1328	1093.9
MEAN	8.49	10.1	9.11	7.26	90.3	269	160	140	53.5	175	42.8	36.5
MAX	17	15	12	11	626	1250	557	735	485	1350	110	99
MIN	3.1	9.0	7.0	5.4	5.8	99	62	28	20	22	20	7.7
CFSM	.04	.05	.04	.03	.42	1.25	.74	.65	.25	.81	.20	.17
IN.	.05	.05	.05	.04	.44	1.44	.83	.75	.28	.93	.23	.19
CAL YR 1976	TOTAL	56257.8	MEAN	154	MAX	2760	MIN	3.1	CFSM	.71	IN	9.69
WTR YR 1977	TOTAL	30524.1	MEAN	83.6	MAX	1350	MIN	3.1	CFSM	.39	IN	5.26

03357420 BIG WALNUT CREEK AT GREENCASTLE, IN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

CHEMICAL ANALYSES: December 1973 to current year.

WATER TEMPERATURE: December 1973 to current year.

INSTRUMENTATION.--Water-quality monitor.

REMARKS.--Chemical records fair.

EXTREMES FOR PERIOD OF RECORD.--

WATER TEMPERATURE: Maximum, 30.5°C Aug. 23, 24, 1975, July 11, 1976; minimum, freezing point on many days during the winter period.

SPECIFIC CONDUCTANCE: Maximum, 698 micromhos, Feb. 4, 1976; minimum, 117 micromhos, Jan. 19, 1974.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 30.0°C July 7; minimum, freezing point on many days during the winter period.

SPECIFIC CONDUCTANCE: Maximum, 694 micromhos, Jan. 3, minimum, 143 micromhos, July 1.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	18.0	15.0	7.5	6.0	1.0	.5	.5	.0				
2	18.5	15.5	8.0	7.0	1.0	.5	.5	.0				
3	22.5	13.5	8.5	7.5	4.5	.5	.5	.0				
4	24.0	11.0	7.5	5.5	4.5	.5	.5	.0				
5	24.0	13.0	6.5	5.5	1.0	.5	.5	.0				
6	18.0	9.0	6.0	5.0	1.0	.5	.5	.0				
7	12.5	7.5	6.0	4.5	1.0	.5	.5	.0				
8	13.5	12.0	4.0	3.0	1.0	.5	.5	.0				
9	13.5	12.5	5.0	3.0	1.0	.5	.5	.0				
10	13.5	10.0	6.5	5.0	1.0	.5	---	---				
11	16.5	5.5	5.0	4.0	1.0	.5	---	---				
12	23.0	8.0	4.0	3.5	1.0	.5	---	---				
13	22.5	6.0	3.5	2.5	1.0	.5	---	---				
14	22.0	2.0	3.0	2.0	1.0	.5	---	---				
15	20.5	4.5	3.0	1.5	1.0	.5	---	---				
16	14.5	---	3.0	2.0	1.0	.5	---	---				
17	14.0	---	3.0	1.5	1.0	.5	---	---				
18	14.0	---	4.0	2.0	1.0	.5	---	---				
19	9.0	5.0	4.5	3.5	1.0	.5	---	---				
20	8.5	5.0	5.0	4.5	1.5	1.0	---	---				
21	8.5	5.0	5.0	3.5	1.0	.5	---	---				
22	8.0	6.5	3.5	2.5	.5	.5	---	---				
23	7.0	6.0	3.0	1.5	.5	.5	---	---				
24	10.0	7.0	2.0	1.5	.5	.0	---	---				
25	10.0	9.0	3.5	2.0	1.0	.5	---	---				
26	9.0	8.0	9.0	3.5	.5	.5	---	---				
27	8.5	7.5	9.5	7.5	.5	.5	---	---				
28	7.5	6.0	7.5	2.5	.5	.0	---	---				
29	6.5	5.0	2.5	1.0	.5	.0	---	---				
30	7.5	5.5	1.5	.5	.5	.0	---	---				
31	8.0	7.0	---	---	.5	.0	---	---				
MONTH	24.0	2.0	9.5	.5	4.5	.0	.5	.0				

03357420 BIG WALNUT CREEK AT GREENCASTLE, IN--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

[illegible]

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	562	536	535	498	583	570	674	642				
2	567	546	542	513	594	578	689	673				
3	572	553	553	539	601	594	694	677				
4	569	542	552	546	600	584	680	659				
5	345	---	554	541	623	596	659	640				
6	593	546	551	537	626	601	639	624				
7	554	538	553	542	608	591	630	619				
8	556	545	560	519	604	594	630	623				
9	558	543	559	554	639	607	626	618				
10	557	531	561	556	634	620	---	---				
11	555	521	560	547	631	620	---	---				
12	551	537	562	551	630	609	---	---				
13	580	403	576	558	623	602	---	---				
14	617	---	572	557	632	615	---	---				
15	---	---	578	566	629	604	---	---				
16	---	---	574	565	614	593	---	---				
17	---	---	573	567	596	590	---	---				
18	---	---	575	563	595	579	---	---				
19	---	---	574	559	585	563	---	---				
20	612	---	564	549	562	547	---	---				
21	573	560	560	551	578	547	---	---				
22	570	562	556	550	600	580	---	---				
23	569	535	564	555	604	593	---	---				
24	532	476	560	548	638	603	---	---				
25	513	500	554	540	638	610	---	---				
26	523	504	542	528	609	595	---	---				
27	554	525	535	519	609	598	---	---				
28	557	546	537	529	604	587	---	---				
29	561	542	550	531	622	597	---	---				
30	560	515	579	549	628	621	---	---				
31	533	499	---	---	643	628	---	---				
MONTH	617	403	579	498	643	547	694	618				
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1			---	---	589	556	232	143	---	---	496	482
2			---	---	592	588	288	236	---	---	571	497
3			---	---	601	593	502	289	---	---	586	503
4			---	---	603	586	537	504	---	---	509	501
5			---	---	590	560	568	536	---	---	513	506
6			---	---	570	533	576	554	---	---	514	507
7			---	---	577	571	581	542	---	---	561	507
8			---	---	573	540	470	244	---	---	560	554
9			---	---	504	316	345	248	---	---	557	550
10			---	---	475	349	400	348	---	---	559	552
11			---	---	524	473	427	402	---	---	561	552
12			---	---	548	526	445	428	---	---	560	555
13			---	---	561	549	453	442	---	---	557	540
14			---	---	596	562	453	447	---	---	542	479
15			---	---	596	528	---	---	---	---	550	482
16			---	---	568	511	---	---	---	---	487	483
17			---	---	541	503	---	---	---	---	---	---
18			---	---	586	529	---	---	---	---	---	---
19			---	---	586	460	---	---	---	---	---	---
20			---	---	593	498	---	---	540	510	---	---
21			---	---	528	509	---	---	558	541	---	---
22			---	---	589	522	---	---	550	529	---	---
23			---	---	597	545	---	---	565	513	---	---
24			---	---	595	551	---	---	584	548	---	---
25			---	---	558	540	---	---	545	469	---	---
26			---	---	548	540	---	---	523	460	---	---
27			---	---	543	536	---	---	451	437	---	---
28			---	---	551	530	---	---	473	451	---	---
29			---	---	547	541	---	---	468	428	---	---
30			---	---	544	156	---	---	508	444	---	---
31			583	548	---	---	---	---	523	486	---	---
MONTH			583	548	603	156	581	143	584	428	586	479
YEAR	617	143										

WABASH RIVER BASIN

03357500 BIG WALNUT CREEK NEAR REELSVILLE, IN

LOCATION.--Lat 39°32'11", long 86°58'35", in NW¼SW¼ sec.28, T.13 N., R.5 W., Putnam County, Hydrologic Unit 05120203, on left bank at downstream side of county highway bridge, 1.5 miles (2.4 km) southwest of Reelsville, and 4.1 miles (6.6 km) upstream from mouth.

DRAINAGE AREA.--326 mi² (844 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1949 to current year. Published as Eel River near Reelsville, October 1952 to September 1956.

REVISED RECORDS.--WSP 1335: 1950. WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 588.24 ft (179.296 m) above mean sea level (levels by State of Indiana, Department of Natural Resources). Prior to Dec. 10, 1949, nonrecording gage at same site and datum.

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

AVERAGE DISCHARGE.--28 years, 334 ft³/s (9.459 m³/s), 13.91 in/yr (353 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 27,400 ft³/s (776 m³/s) June 28, 1957, gage height, 18.63 ft (5.678 m), from rating curve extended above 18,000 ft³/s (510 m³/s) on basis of slope-conveyance method; minimum daily, 1.4 ft³/s (0.040 m³/s) Sept. 8, 1954.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 2,800 ft³/s (79.3 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Mar. 28	1700	*3070 86.9	*9.44 2.877

Minimum daily discharge, 10 ft³/s (0.28 m³/s) Jan. 16-19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	36	22	15	11	343	413	92	55	1600	40	64
2	20	32	20	16	13	275	819	91	54	387	37	55
3	20	29	19	17	14	249	833	91	50	191	36	48
4	19	26	20	19	14	829	549	98	48	126	35	43
5	18	24	21	20	13	824	479	430	47	97	34	41
6	22	23	22	21	12	475	398	1260	63	82	33	42
7	26	24	20	19	12	331	342	1150	60	71	70	36
8	90	23	17	17	11	257	293	675	59	1060	81	34
9	39	21	19	16	11	216	248	440	323	1320	66	32
10	24	21	20	15	11	190	224	320	159	372	53	30
11	22	21	19	14	11	168	202	254	94	216	69	28
12	21	20	18	13	70	204	180	211	74	159	94	28
13	88	21	16	12	350	256	164	181	65	122	80	28
14	96	21	18	14	300	220	154	161	62	112	60	55
15	110	20	19	11	160	180	146	145	54	86	50	68
16	34	21	18	10	100	155	137	130	50	96	68	55
17	22	21	17	10	80	137	127	118	47	336	85	44
18	19	21	19	10	70	152	120	106	44	184	49	39
19	18	21	20	10	64	179	116	99	42	209	43	109
20	20	21	23	11	60	176	115	93	40	103	36	99
21	20	21	20	11	56	169	109	93	37	107	76	66
22	19	20	17	12	130	204	125	92	39	113	98	52
23	21	20	16	12	250	262	163	83	44	109	52	45
24	50	20	15	13	412	251	172	77	48	76	64	53
25	48	20	16	15	298	205	153	83	45	65	121	54
26	38	25	17	13	352	175	133	77	92	58	74	48
27	30	36	18	12	1040	246	119	69	50	52	56	43
28	25	30	17	12	500	2240	109	64	46	47	46	38
29	23	27	16	11	---	1760	107	60	44	45	174	35
30	28	24	15	11	---	891	98	70	111	43	115	34
31	44	---	14	11	---	565	---	56	---	42	82	---
TOTAL	1097	710	568	423	4425	12784	7347	6969	2046	7686	2077	1446
MEAN	35.4	23.7	18.3	13.6	158	412	245	225	68.2	248	67.0	48.2
MAX	110	36	23	21	1040	2240	833	1260	323	1600	174	109
MIN	18	20	14	10	11	137	98	56	37	42	33	28
CFSM	.11	.07	.06	.04	.49	1.26	.75	.69	.21	.76	.21	.15
IN.	.13	.08	.06	.05	.50	1.46	.84	.80	.23	.88	.24	.17

CAL YR 1976	TOTAL	79702	MEAN 218	MAX 3260	MIN 14	CFSM .67	IN 9.09
WTR YR 1977	TOTAL	47578	MEAN 130	MAX 2240	MIN 10	CFSM .40	IN 5.43

03357500 BIG WALNUT CREEK NEAR REELSVILLE, IN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

SEDIMENT DISCHARGE: September 1969 to current year (partial-record station).

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	SUS- PENDE SEDIM- ENT (MG/L)	SUS- PENDE SEDIM- ENT DIS- CHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM
NOV 03...	1645	27	9.5	93	7.0	--	--
DEC 14...	1530	--	.5	5	.33	--	--
FEB 14...	1540	312	1.0	70	59	--	--
MAR 28...	1330	2530	--	1420	9700	24	31
APR 05...	1550	468	--	56	70	--	--
28...	1305	--	17.0	25	7.6	--	--
JUN 03...	1245	49	24.0	56	7.4	--	--
JUL 07...	1510	69	32.0	51	9.5	--	--
AUG 19...	1345	40	24.0	41	4.4	--	--

DATE	SUS. SED. FALL DIAM. % FINER THAN .008 MM	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. FALL SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. FALL SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. FALL SIEVE DIAM. % FINER THAN .250 MM	SUS. SED. FALL SIEVE DIAM. % FINER THAN .500 MM
NOV 03...	--	--	--	--	--	--	--
DEC 14...	--	--	--	--	--	--	--
FEB 14...	--	--	--	--	--	--	--
MAR 28...	41	56	75	81	87	92	100
APR 05...	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--
JUN 03...	--	--	--	--	--	--	--
JUL 07...	--	--	--	--	--	--	--
AUG 19...	--	--	--	--	--	--	--

WABASH RIVER BASIN

03358000 MILL CREEK NEAR CATARACT, IN

LOCATION.--Lat 39°26'00", long 86°45'48", in NE¼SE¼ sec.32, T.12 N., R.3 W., Owen County, Hydrologic Unit 05120203, on right bank at downstream side of bridge on State Highway 43, 3 miles (5 km) east of Cataract, and at mile 17.5 (28.2 km).

DRAINAGE AREA.--245 mi² (635 km²).

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WSP 1505: 1956(P). WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 706.40 ft (215.311 m) above mean sea level. Prior to Nov. 8, 1949, nonrecording gage, and Nov. 8, 1949, to Sept. 22, 1968, water-stage recorder at site 100 ft (30 m) upstream at same datum.

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

AVERAGE DISCHARGE.--28 years, 248 ft³/s (7.023 m³/s), 13.75 in/yr (349 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,400 ft³/s (323 m³/s) June 24, 1960, gage height, 22.58 ft (6.882 m); minimum daily, 0.1 ft³/s (0.003 m³/s) Sept. 7, 28, 1954.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 2,500 ft³/s (70.8 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Feb. 27	1000	*3020 85.5	*13.14 4.005	Mar. 28	2400	2930 83.0	12.97 3.953

Minimum daily discharge, 4.7 ft³/s (0.13 m³/s) Jan. 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	53	20	8.0	5.8	837	270	58	21	718	13	20
2	11	36	18	7.8	6.3	466	869	57	14	194	12	15
3	8.3	28	16	7.4	6.9	399	1190	55	12	88	11	12
4	7.0	24	15	8.7	6.5	1930	462	126	11	57	10	11
5	6.7	20	15	10	6.4	1480	413	673	10	42	11	11
6	16	17	15	9.4	6.2	583	327	1180	61	33	11	364
7	40	16	18	8.6	6.0	393	287	2180	38	27	33	55
8	19	14	18	8.0	6.0	300	227	836	20	501	61	28
9	12	14	13	7.4	6.0	246	177	385	92	824	38	19
10	10	15	14	6.8	6.0	203	159	251	81	167	24	15
11	9.1	16	13	6.2	7.0	171	136	183	46	87	75	13
12	8.6	14	13	5.8	35	281	115	140	36	63	530	12
13	8.0	13	12	5.4	800	407	103	115	31	45	109	16
14	7.6	12	12	5.0	550	258	95	98	28	38	52	22
15	7.7	13	11	6.1	260	201	88	84	26	28	35	20
16	7.6	13	11	4.7	100	160	80	71	23	23	31	18
17	7.9	13	10	4.9	94	131	73	62	21	902	68	15
18	7.8	14	11	5.1	85	157	68	55	20	183	29	14
19	8.0	14	12	5.3	76	147	64	49	20	83	18	93
20	10	14	13	5.5	70	143	68	43	20	54	14	75
21	12	15	12	5.8	122	142	67	39	17	67	36	35
22	12	14	11	6.0	152	187	82	36	18	286	175	23
23	12	12	10	6.2	539	229	221	35	27	95	51	19
24	26	12	9.0	6.5	952	178	163	31	28	43	71	21
25	44	13	9.5	6.7	366	144	121	65	28	31	75	37
26	27	19	10	6.5	575	124	101	33	23	24	36	30
27	18	45	11	6.3	2940	165	85	26	20	19	22	21
28	14	53	10	6.1	2400	2420	74	22	43	16	16	17
29	12	30	9.6	5.8	---	2620	73	20	74	14	24	15
30	15	25	9.0	5.6	---	813	63	18	46	14	53	14
31	53	---	8.4	5.3	---	393	---	33	---	14	32	---
TOTAL	477.3	611	389.5	202.9	10185.1	16308	6321	7059	955	4780	1776	1080
MEAN	15.4	20.4	12.6	6.55	364	526	211	228	31.8	154	57.3	36.0
MAX	53	53	20	10	2940	2620	1190	2180	92	902	530	364
MIN	6.7	12	8.4	4.7	5.8	124	63	18	10	14	10	11
CFSM	.06	.08	.05	.03	1.49	2.15	.86	.93	.13	.63	.23	.15
IN.	.07	.09	.06	.03	1.55	2.48	.96	1.07	.15	.73	.27	.16

CAL YR 1976	TOTAL	51834.0	MEAN	142	MAX	2400	MIN	6.7	CFSM	.58	IN	7.87
WTR YR 1977	TOTAL	50144.8	MEAN	137	MAX	2940	MIN	4.7	CFSM	.56	IN	7.61

03358000 MILL CREEK NEAR CATARACT, IN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

SEDIMENT DISCHARGE: September 1969 to current year (partial-record station).

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	SUS- PENDE SEDI- MENT (MG/L)	SUS- PENDE SEDI- MENT DIS- CHARGE (T/DAY)	DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	SUS- PENDE SEDI- MENT (MG/L)	SUS- PENDE SEDI- MENT DIS- CHARGE (T/DAY)
FEB 21...	1135	122	1.0	12	3.9	MAY 08...	1340	--	21.0	83	155
MAR 28...	1150	--	--	690	5050	JUL 08...	1155	858	23.5	4250	9850
APR 04...	1315	447	12.0	50	60						

WABASH RIVER BASIN

03358900 CAGLES MILL LAKE NEAR MANHATTAN, IN

LOCATION.--Lat 39°29'14", long 86°55'02", in NE¼NW¼ Sec.13, T.12 N., R.5 W., Putnam County, Hydrologic Unit 05120203, in discharge tower of reservoir on Mill Creek, 1.5 miles (2.4 km) upstream from Deer Creek, 2.7 miles (4.3 km) above mouth, and 5.8 miles (9.3 km) south of Manhattan.

DRAINAGE AREA.--293 mi² (759 km²).

PERIOD OF RECORD.--July 1953 to current year. Prior to September 1970, published as Cagles Mill "Reservoir".

GAGE.--Water-stage recorder. Datum of gage is 600.00 ft (182.880 m) above mean sea level (levels by Corps of Engineers). Prior to Oct. 1, 1975, at datum 18.17 ft (5.538 m) lower.

REMARKS.--Reservoir is formed by earth and rock-fill dam. Releases normally controlled by three gates, 5 ft (1.5 m) wide and 10 ft (3.0 m) high, in 12 ft (3.7 m) by 12 ft (3.7 m) concrete-lined tunnel 496 ft (151.2 m) long through right abutment. Minimum design capacity is 27,110 acre-ft (33.4 hm³), elevation, 636 ft (193.9 m). Capacity at uncontrolled spillway elevation, 704 ft (214.6 m) is 228,000 acre-ft (218 hm³). Reservoir is used for flood control and recreation. Reservoir put in operation on July 6, 1953.

COOPERATION.--Water-state recorder graph and capacity tables furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 127,760 acre-ft (158 hm³) May 15, 1961, elevation, 679.30 ft (207.051 m); minimum, 21,700 acre-ft (26.8 hm³) Oct. 21-26, 1964, elevation, 631.89 ft (192.600 m). Pool lowered to elevation, 597.57 ft (182.139 m) Oct. 23, 1971 (contents, dry) due to drainage of lake to kill fish.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 52,210 acre-ft (64.4 hm³) Mar. 7, elevation, 650.58 ft (198.297 m); minimum, 27,110 acre-ft (33.4 hm³) Oct. 19, elevation, 636.00 ft (193.853 m).

MONTHEND ELEVATION AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	636.35	27,610	
Oct. 31.....	636.42	27,710	+100
Nov. 30.....	636.38	27,650	-60
Dec. 31.....	636.34	27,590	-60
CAL YR 1976.....			-2,480
Jan. 31.....	636.20	27,400	-190
Feb. 28.....	646.54	44,310	+16,910
Mar. 31.....	644.95	41,380	-2,930
Apr. 30.....	637.43	29,160	-12,220
May 31.....	637.20	28,820	-340
June 30.....	637.47	29,220	+400
July 31.....	637.51	29,280	+60
Aug. 31.....	637.80	29,700	+420
Sept. 30.....	638.27	30,400	+700
WTR YR 1977.....			+2,790

03359000 MILL CREEK NEAR MANHATTAN, IN

LOCATION.--Lat 39°29'22", long 86°55'50", in SW¼SE¼ sec.11, T.12 N., R.5 W., Putnam County, Hydrologic Unit 05120203, on left bank 200 ft (61 m) downstream from Cagles Mill, 0.7 mile (1.1 km) (revised) downstream from Cagles Mill Lake, 0.8 mile (1.3 km) upstream from Deer Creek, 5.8 miles (9.3 km) south of Manhattan, and at mile 2.0 (3.2 km).

DRAINAGE AREA.--294 mi² (761 km²).

PERIOD OF RECORD.--May to September 1931 (fragmentary), October 1938 to current year. Monthly discharge only for some periods, published in WSP 1305.

REVISED RECORDS.--WSP 1335: 1940-41. WSP 2109: Drainage area.

GAGE (revised).--None. Datum of gage was 581.83 ft (177.342 m) above mean sea level. May 12, 1941 to Sept. 30, 1974, water-stage recorder at site described in "LOCATION" paragraph. See WSP 1725 for history of changes prior to May 12, 1941.

REMARKS.--Flow regulated by Cagles Mill Lake (See sta 03358900). Daily discharge computed from relation between discharge, head, and gate openings for Cagles Mill Lake beginning Oct. 1, 1974.

COOPERATION.--Records of daily discharge furnished by Corps of Engineers beginning Oct. 1, 1976.

AVERAGE DISCHARGE.--39 years (1938 to current year), 289 ft³/s (8.184 m³/s), 13.35 in/yr (339 mm/yr).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	525	109	154	345	137	122	96	136	108	29	6.0	246
2	268	104	221	354	133	122	97	136	119	19	14	147
3	113	104	224	356	134	122	450	770	260	19	19	25
4	95	114	225	358	135	1000	1450	1680	328	19	52	19
5	76	265	225	359	720	1750	2150	1850	166	19	70	19
6	45	478	225	829	1460	1850	2460	1940	163	19	102	19
7	34	544	261	1190	1620	1960	2520	1900	130	61	121	19
8	34	403	464	897	1600	1960	2470	1850	89	64	104	19
9	34	131	555	172	1580	1910	2450	882	87	21	39	19
10	34	120	559	138	1550	1880	2380	167	61	19	20	19
11	53	263	557	134	1520	1820	2060	137	50	19	19	19
12	171	258	555	138	1090	241	1760	200	49	19	19	19
13	236	196	555	140	1250	141	1720	157	50	15	19	19
14	33	367	554	141	1470	137	1690	104	94	6.0	19	19
15	7.0	539	553	141	1310	138	1650	101	118	15	19	19
16	46	440	557	141	1050	138	1620	335	119	19	19	19
17	98	236	559	800	1300	139	1730	717	119	19	19	19
18	118	227	732	1600	1090	141	1340	655	119	19	19	19
19	119	226	841	1610	655	143	374	246	119	35	19	19
20	102	226	653	1850	468	144	424	94	72	92	19	39
21	69	225	326	2020	335	145	678	88	51	119	19	40
22	68	189	474	1990	280	146	464	88	50	102	19	20
23	68	121	539	1950	136	146	211	88	50	69	19	19
24	68	220	542	1910	134	146	134	88	50	68	19	19
25	68	470	549	1740	140	980	131	88	50	35	19	19
26	68	399	724	1450	143	1820	133	99	50	20	19	19
27	68	200	700	1420	129	1880	134	119	50	19	87	19
28	68	223	433	1400	122	511	135	189	50	15	102	19
29	68	152	288	591	---	147	135	180	50	6.0	37	19
30	102	120	226	159	---	128	136	91	50	6.0	20	9.7
31	117	---	262	144	---	129	---	87	---	6.0	66	---
TOTAL	3073.0	7669	14292	26467	21691	22016	33182	15262	2921	1012.0	1163.0	963.7
MEAN	99.1	256	461	854	775	710	1106	492	97.4	32.6	37.5	32.1
MAX	525	544	841	2020	1620	1960	2520	1940	328	119	121	246
MIN	7.0	104	154	134	122	122	96	87	49	6.0	6.0	9.7
CAL YR 1974	TOTAL	177194.0	MEAN	485	MAX	2230	MIN	7.0				
WTR YR 1975	TOTAL	149711.7	MEAN	410	MAX	2520	MIN	6.0				

WARASH RIVER BASIN

03359000 MILL CREEK NEAR MANHATTAN, IN--Continued

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,960 ft³/s (254 m³/s) Jan. 5, 1950, gage height, 18.38 ft (5.602 m); no flow Aug. 7, 1953.

EXTREMES FOR 1975 WATER YEAR.--Maximum daily discharge, 2,520 ft³/s (71.4 m³/s) Apr. 7, 1975; minimum daily discharge, 6.0 ft³/s (0.17 m³/s) July 14, July 29 to Aug. 1, 1975.

EXTREMES FOR 1976 WATER YEAR.--Maximum daily discharge, 2,000 ft³/s (56.6 m³/s) Mar. 1, 1976; minimum daily discharge, 18 ft³/s (0.51 m³/s) Oct. 1, 1975.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 1,650 ft³/s (46.7 m³/s) Apr. 9; minimum daily, 4.0 ft³/s (0.11 m³/s) Oct. 20, 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	34	136	137	1680	2000	552	50	40	145	75	36
2	19	34	451	138	1230	1960	555	50	56	784	75	36
3	19	34	1070	635	300	1910	551	34	56	1030	75	36
4	19	34	1070	1040	126	714	441	20	56	430	49	36
5	19	34	454	1050	120	166	236	19	56	93	37	35
6	19	34	132	820	131	147	227	19	50	56	37	35
7	19	34	119	585	415	148	226	20	38	54	98	35
8	19	34	185	203	630	148	154	20	37	54	131	35
9	19	45	182	93	873	149	121	20	37	54	131	35
10	19	50	150	88	464	615	119	20	37	54	102	35
11	19	63	100	89	150	1530	119	20	37	54	63	35
12	19	69	88	108	140	1760	119	20	37	54	38	35
13	19	69	88	120	140	1750	119	20	37	42	97	35
14	19	57	88	384	141	1720	119	20	37	36	131	35
15	19	35	116	551	142	1550	102	21	37	36	406	35
16	19	34	137	555	143	983	89	21	37	36	278	35
17	19	33	140	550	145	649	89	21	37	37	101	35
18	19	29	140	440	149	478	89	21	37	37	63	34
19	19	20	563	234	139	337	88	21	37	37	38	34
20	29	19	1390	153	134	331	88	21	37	37	37	34
21	34	37	1400	120	134	193	89	21	36	37	36	34
22	34	50	742	119	136	138	89	21	36	36	36	34
23	34	50	144	118	137	368	89	21	36	36	36	34
24	34	50	119	160	137	557	89	21	37	36	36	34
25	34	50	118	222	137	562	89	21	37	36	36	34
26	34	50	118	141	540	558	80	21	37	36	36	34
27	34	50	119	142	1440	554	69	21	37	36	36	34
28	34	50	119	142	1640	551	59	21	61	61	36	34
29	56	50	186	143	1840	547	51	21	377	74	36	34
30	68	104	188	674	---	265	50	21	297	75	36	34
31	45	---	132	1500	---	395	---	21	---	75	36	---
TOTAL	830	1336	10184	11454	13533	23733	4957	709	1824	3698	2458	1041
MEAN	26.8	44.5	329	369	467	766	165	22.9	60.8	119	79.3	34.7
MAX	68	104	1400	1500	1840	2000	555	50	377	1030	406	36
MIN	18	19	88	88	120	138	50	19	36	36	36	34
CAL YR 1975	TOTAL	137027.7	MEAN	375	MAX	2520	MIN	6.0				
WTR YR 1976	TOTAL	75757	MEAN	207	MAX	2000	MIN	18				

03359000 MILL CREEK NEAR MANHATTAN, IN--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	18	18	29	18	110	108	64	29	314	29	99
2	29	18	18	22	18	601	108	59	29	402	29	62
3	29	18	18	18	11	1060	110	59	22	158	29	44
4	29	18	18	18	7.0	415	111	86	18	65	29	44
5	29	18	18	18	7.0	100	111	159	18	44	29	33
6	29	18	18	18	7.0	101	367	216	18	34	29	77
7	29	18	18	18	7.0	534	1260	104	18	29	29	100
8	29	18	18	18	7.0	1370	1570	106	18	64	29	100
9	29	18	18	18	7.0	1530	1650	245	26	100	29	63
10	29	18	18	18	7.0	1500	1610	664	29	282	29	44
11	29	18	18	18	7.0	1460	1560	1180	29	460	29	44
12	29	18	18	11	68	1430	1520	1340	29	366	227	44
13	29	18	18	7.0	100	1410	1310	1300	29	102	369	44
14	29	18	18	7.0	100	1480	389	1020	29	48	100	44
15	18	18	18	7.0	100	1530	99	249	29	33	88	37
16	13	18	18	7.0	100	1480	99	99	29	29	76	44
17	13	18	18	7.0	100	1170	99	98	29	76	76	44
18	10	18	18	7.0	100	275	87	69	29	100	76	44
19	6.0	18	18	7.0	100	97	75	59	29	100	76	44
20	4.0	18	18	7.0	100	98	75	59	29	100	76	44
21	4.0	18	26	7.0	100	148	75	52	29	100	76	44
22	7.0	18	29	7.0	100	184	91	44	29	340	92	44
23	9.0	18	29	7.0	101	184	99	44	29	234	100	44
24	15	18	29	7.0	102	184	158	44	29	99	100	44
25	18	18	29	14	550	183	139	36	29	84	100	44
26	18	18	29	18	784	183	99	29	29	76	100	44
27	18	18	29	18	105	126	99	29	29	76	100	44
28	18	18	29	18	108	101	99	29	29	76	99	44
29	18	18	29	18	---	105	83	29	29	76	99	44
30	18	18	29	18	---	107	75	29	29	45	99	44
31	18	---	29	18	---	108	---	29	---	29	99	---
TOTAL	631.0	540	676	430.0	2921.0	19364	13335	7629	805	4141	2547	1539
MEAN	20.4	18.0	21.8	13.9	104	625	445	246	26.8	134	82.2	51.3
MAX	29	18	29	29	784	1530	1650	1340	29	460	369	100
MIN	4.0	18	18	7.0	7.0	97	75	29	18	29	29	33
CAL YR 1976	TOTAL	65254.0	MEAN 178	MAX 2000	MIN 4.0							
WTR YR 1977	TOTAL	54558.0	MEAN 149	MAX 1650	MIN 4.0							

03360000 EEL RIVER AT BOWLING GREEN, IN

LOCATION.--Lat 39°22'58", long 87°01'14", in NE¼NE¼ sec.24, T.11 N., R.6 W., Clay County, Hydrologic Unit 05120203, on left bank 500 ft (152 m) downstream from bridge on State Highway 46 at Bowling Green, 0.2 mile (0.3 km) downstream from Jordan Creek, and at mile 38.4 (61.8 km).

DRAINAGE AREA.--830 mi² (2,150 km²).

PERIOD OF RECORD.--January 1931 to current year. Prior to October 1934, published as "near Centerpoint".

REVISED RECORDS.--WSP 893: 1935, 1937-39. WSP 973: 1937-38, 1939(M). WSP 1335: 1931(M). WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 548.02 ft (167.036 m) above mean sea level (levels by Corps of Engineers). See WSP 1725 for history of changes prior to Dec. 1, 1949.

REMARKS.--Records good except those for winter periods, which are fair. Flow regulated by Cagles Mill Lake (See sta 03358900).

AVERAGE DISCHARGE.--46 years, 847 ft³/s (23.99 m³/s), 13.85 in/yr (352 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 34,000 ft³/s (963 m³/s) Jan. 4, 1950, gage height, 23.53 ft (7.172 m); minimum daily, 11 ft³/s (0.31 m³/s) Oct. 7, 8, 1954.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, about 30.0 ft (9.14 m) in 1875, present datum, from information by Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,050 ft³/s (171 m³/s) Mar. 28, gage height, 15.59 ft (4.752 m); minimum daily, 19 ft³/s (0.54 m³/s) Feb. 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	97	117	60	39	40	831	895	247	126	1560	105	194
2	77	96	52	33	38	811	1220	228	123	1350	100	166
3	69	85	46	28	35	1570	2090	223	118	560	97	125
4	66	82	43	28	32	2830	1730	255	105	293	93	115
5	63	75	44	28	30	2030	1060	587	101	204	92	108
6	68	70	46	28	27	1100	896	1740	104	172	92	315
7	81	67	42	28	25	874	1660	3200	110	148	139	175
8	88	63	37	28	23	1690	2080	1450	112	137	679	150
9	124	60	38	26	22	1940	2140	906	174	2260	235	139
10	85	58	40	24	20	1870	2080	998	325	838	173	102
11	72	59	36	23	19	1820	2020	1520	179	803	501	96
12	67	59	33	21	230	1950	1950	1770	146	700	1180	95
13	70	59	29	20	1500	2060	1870	1710	129	392	665	99
14	122	59	30	20	1100	1940	1130	1610	119	258	290	103
15	136	60	32	20	800	1980	469	720	111	204	219	123
16	121	59	30	20	560	1890	424	368	106	174	190	125
17	82	59	29	20	490	1780	394	331	101	618	305	112
18	56	59	28	20	420	958	371	298	99	414	196	341
19	48	59	28	20	370	528	334	254	96	452	168	478
20	46	59	28	20	330	517	323	238	92	292	156	271
21	45	59	39	20	290	514	302	224	87	249	284	176
22	42	59	39	20	250	628	313	211	90	352	822	145
23	42	59	39	20	400	704	387	197	93	532	268	129
24	73	58	39	20	946	684	421	185	95	237	205	161
25	122	58	39	27	851	617	469	177	135	210	236	166
26	104	66	39	43	1860	569	343	173	126	175	225	138
27	86	103	39	43	4400	613	320	157	117	162	185	124
28	76	122	39	42	1330	4650	303	149	122	135	167	114
29	68	95	39	41	---	4870	293	142	121	127	369	106
30	73	69	39	41	---	1940	262	148	102	122	349	104
31	121	---	39	40	---	1210	---	134	---	110	235	---
TOTAL	2490	2112	1180	851	16438	47968	28049	20550	3664	14240	9020	4795
MEAN	80.3	70.4	38.1	27.5	587	1547	935	663	122	459	291	160
MAX	136	122	60	43	4400	4870	2140	3200	325	2260	1180	478
MIN	42	58	28	20	19	514	262	134	87	110	92	95
CFSM	.10	.09	.05	.03	.71	1.86	1.13	.80	.15	.55	.35	.19
IN.	.11	.09	.05	.04	.74	2.15	1.26	.92	.16	.64	.40	.21
CAL YR 1976	TOTAL	195416	MEAN 534	MAX 5550	MIN 28	CFSM .64	IN 8.76					
WTR YR 1977	TOTAL	151357	MEAN 415	MAX 4870	MIN 19	CFSM .50	IN 6.78					

03360500 WHITE RIVER AT NEWBERRY, IN

LOCATION.--Lat 38°55'42", long 87°01'00", in NE¼NE¼ sec.25, T.6 N., R.6 W., Greene County, Hydrologic Unit 05120202, on right bank 500 ft (152 m) upstream from bridge on State Highway 57 at Newberry, 2.3 miles (3.7 km) downstream from Doans Creek, and at mile 112.7 (181.3 km).

DRAINAGE AREA.--4,688 mi² (12,142 km²).

PERIOD OF RECORD.--September 1928 to current year. Prior to October 1948, published as West Fork White River at Newberry.

REVISED RECORDS.--WSP 873: 1937(M). WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 465.59 ft (141.912 m) above mean sea level. Prior to Oct. 21, 1928, nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter periods, which are fair. Flow slightly regulated by upstream reservoirs.

AVERAGE DISCHARGE.--49 years, 4,593 ft³/s (130.1 m³/s), 13.31 in/yr (338 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 76,900 ft³/s (2,180 m³/s) May 21, 1943, gage height, 24.19 ft (7.373 m); minimum daily, 200 ft³/s (5.66 m³/s) Oct. 1, 1941.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1875, 27.5 ft (8.38 m) Mar. 27, 1913, from floodmarks by Indiana State Highway Commission; discharge, 130,000 ft³/s (3,680 m³/s).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 18,700 ft³/s (530 m³/s) Mar. 29, gage height, 14.91 ft (4.545 m); minimum daily, 350 ft³/s (9.91 m³/s) Jan. 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	856	1090	789	460	410	14700	12400	2390	1210	1930	755	1400
2	909	1140	742	500	410	10400	9650	2220	1200	2630	684	1160
3	866	1010	706	520	410	7800	13700	2110	1230	3740	642	1030
4	724	898	670	520	410	12300	14200	2690	1190	2260	618	947
5	628	827	629	520	400	14700	12900	2850	1140	1630	596	869
6	622	781	621	500	390	13600	11700	3340	1090	1330	592	825
7	623	758	627	490	380	10200	9840	8350	1030	1160	735	889
8	618	715	619	480	380	8020	8070	10200	1040	1040	854	964
9	627	682	596	440	380	6960	7230	8890	1060	1100	2480	965
10	635	667	604	400	380	6280	6550	6640	1060	2890	2040	899
11	644	657	619	380	400	5570	5990	5410	1390	2860	1590	834
12	642	651	624	410	800	5620	5460	4910	1270	2050	3280	783
13	636	641	609	420	2000	6770	5060	4650	1200	1780	4290	766
14	627	632	589	420	3800	6550	4700	4230	1230	1510	3020	739
15	619	624	587	410	3500	5730	4030	3910	1150	1330	2450	730
16	616	621	585	400	2800	5230	3150	3170	1090	1250	2000	867
17	613	605	577	350	2200	4770	2890	2520	1000	1070	1700	877
18	608	595	569	380	1900	4600	2670	2300	978	1150	1580	972
19	589	597	597	390	1770	4050	2520	2140	969	1350	1360	2290
20	518	602	671	400	1740	3520	2400	1970	977	1210	1190	2610
21	540	600	601	400	1820	3630	2270	1890	946	1180	1130	1610
22	568	587	574	400	1710	4030	2240	2010	925	1380	1490	1250
23	641	557	589	400	2270	4320	2350	1870	930	1310	2330	1040
24	1120	546	576	410	4420	4400	2700	1730	950	1570	1610	973
25	1040	546	698	430	4450	4310	2890	1620	1250	1260	1260	988
26	1140	774	561	440	4320	4070	3040	1500	1580	1060	1360	1000
27	1080	1170	570	440	12200	3960	2960	1440	1540	1070	1360	966
28	926	951	482	420	15100	12100	2710	1370	1420	980	1150	861
29	845	1020	450	380	---	18300	2660	1330	1370	888	1070	781
30	846	924	420	390	---	18500	2550	1270	1490	803	1460	765
31	1120	---	390	400	---	17500	---	1220	---	764	1530	---
TOTAL	23086	22468	18541	13300	71150	252490	171680	102140	34905	47535	48206	31650
MEAN	745	749	598	429	2541	8145	5723	3295	1164	1533	1555	1055
MAX	1140	1170	789	520	15100	18500	14200	10200	1580	3740	4290	2610
MIN	518	546	390	350	380	3520	2240	1220	925	764	592	730
CFSM	.16	.16	.13	.09	.54	1.74	1.22	.70	.25	.33	.33	.23
IN.	.18	.18	.15	.11	.56	2.00	1.36	.81	.28	.38	.38	.25
CAL YR 1976	TOTAL	1255286	MEAN	3430	MAX	23700	MIN	390	CFSM	.73	IN	9.96
WTR YR 1977	TOTAL	837151	MEAN	2294	MAX	18500	MIN	350	CFSM	.49	IN	6.64

WABASH RIVER BASIN

03361000 BIG BLUE RIVER AT CARTHAGE, IN

LOCATION.--Lat 39°44'38", long 85°34'33", in SW¼SW¼ sec.18, T.15 N., R.9 E., Rush County, Hydrologic Unit 05120204, on right bank 300 ft (91 m) upstream from highway bridge, 0.5 mile (0.8 km) northwest of Carthage, 2.2 miles (3.5 km) downstream from Three Mile Creek, and at mile 50.7 (81.6 km)

DRAINAGE AREA.--184 mi² (477 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1950 to current year. Prior to October 1961, published as Blue River at Carthage, Ind.

REVISED RECORDS.--WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 859.33 ft (261.924 m) above mean sea level. Prior to July 19, 1951, nonrecording gage at site 300 ft (91 m) downstream at same datum.

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

AVERAGE DISCHARGE.--27 years, 192 ft³/s (5.437 m³/s), 14.17 in/yr (360 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,900 ft³/s (365 m³/s) Mar. 4, 1963, gage height, 14.62 ft (4.456 m), from floodmarks, from rating curve extended above 6,200 ft³/s (176 m³/s); minimum daily, 17 ft³/s (0.48 m³/s) Jan. 18, Aug. 5, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 2,000 ft³/s (56.6 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Apr. 02	2000	*1370 38.8	*5.93 1.807

Minimum daily discharge, 17 ft³/s (0.48 m³/s) Jan. 18, Aug. 5.

DISCHARGE, IN CUBIC FEET PER SECOND* WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34	50	38	24	22	262	123	101	54	71	20	52
2	33	43	36	20	22	188	764	97	51	44	19	45
3	31	41	46	23	23	163	918	94	51	37	18	47
4	30	40	35	28	25	599	465	121	48	34	18	40
5	33	40	33	34	23	520	343	128	48	32	17	37
6	50	38	34	37	22	301	268	131	69	32	18	37
7	46	35	39	36	22	214	219	223	53	30	250	37
8	39	34	35	35	21	169	184	202	52	34	176	35
9	39	36	33	33	21	146	158	153	92	41	111	33
10	37	36	32	30	22	130	145	129	71	37	66	32
11	36	35	33	33	25	118	132	114	57	36	60	29
12	39	34	33	39	32	126	122	103	52	40	142	29
13	38	34	32	35	190	124	115	97	49	33	73	34
14	37	34	32	34	152	111	110	91	49	31	63	78
15	38	34	32	32	93	103	104	86	47	29	50	57
16	38	35	32	24	65	96	99	81	44	29	44	74
17	38	35	32	18	52	91	95	78	43	39	64	60
18	38	37	31	17	45	105	92	74	43	30	44	51
19	41	37	31	19	42	98	91	72	42	30	39	56
20	57	36	37	23	49	100	93	69	40	27	33	50
21	47	35	33	26	45	94	90	66	38	26	50	45
22	43	34	29	27	89	115	112	62	45	37	66	43
23	45	34	27	28	463	117	292	61	51	26	45	41
24	89	35	28	29	658	110	215	68	44	22	52	42
25	65	35	30	30	332	100	171	98	51	35	43	42
26	55	55	31	30	221	94	149	66	52	28	38	39
27	50	60	33	29	880	94	129	58	42	22	36	38
28	48	47	35	28	434	295	123	57	44	20	33	36
29	48	41	34	23	---	303	123	55	49	22	48	36
30	53	39	35	20	---	194	107	68	41	28	64	36
31	69	---	29	21	---	147	---	61	---	24	51	---
TOTAL	1384	1159	1030	865	4090	5427	6151	2964	1512	1006	1851	1311
MEAN	44.6	38.6	33.2	27.9	146	175	205	95.6	50.4	32.5	59.7	43.7
MAX	89	60	46	39	880	599	918	223	92	71	250	78
MIN	30	34	27	17	21	91	90	55	38	20	17	29
CFSM	.24	.21	.18	.15	.79	.95	1.11	.52	.27	.18	.32	.24
IN.	.28	.23	.21	.17	.83	1.10	1.24	.60	.31	.20	.37	.27
CAL YR 1976	TOTAL	50044	MEAN	137	MAX	2220	MIN	27	CFSM	.75	IN	10.12
WTR YR 1977	TOTAL	28750	MEAN	78.8	MAX	918	MIN	17	CFSM	.43	IN	5.81

03361000 BIG BLUE RIVER AT CARTHAGE, IN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

CHEMICAL ANALYSES: July 1973 to current year.

WATER TEMPERATURE: November 1974 to current year.

INSTRUMENTATION.--Water-quality monitor.

REMARKS.--Chemical records fair.

EXTREMES FOR PERIOD OF RECORD.--

WATER TEMPERATURE: Maximum, 26.5°C July 11, 1976; minimum, freezing point on several days during the winter period.

SPECIFIC CONDUCTANCE: Maximum, 996 micromhos Feb. 7, 1977; minimum, 114 micromhos Jan. 27, 1976.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 25.5°C June 17; minimum, freezing point on several days during winter period.

SPECIFIC CONDUCTANCE: Maximum, 996 micromhos, Feb. 7; minimum, 274 micromhos Mar. 10.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1			---	---	1.0	.5	.5	.0	.0	.0	7.5	5.0
2			9.0	7.5	1.0	.5	.5	.0	.0	.0	9.0	6.5
3			9.0	7.0	1.0	.0	.5	.5	.5	.0	9.0	8.0
4			7.0	5.5	1.0	.5	.5	.5	.5	.5	8.5	7.0
5			7.0	5.5	1.5	.0	.5	.5	.5	.0	9.5	6.0
6			7.0	5.0	3.0	1.0	.5	.5	.0	.0	10.0	7.0
7			6.5	5.0	4.0	2.0	.5	.5	.0	.0	11.5	7.0
8			5.0	3.5	1.5	.0	.5	.5	.0	.0	6.0	4.0
9			6.5	3.5	1.5	.0	.5	.5	1.0	.0	9.5	9.0
10			6.5	5.5	3.0	.0	.5	.0	2.0	.5	8.0	6.5
11			5.5	4.5	3.5	2.0	.5	.0	1.5	1.5	11.0	5.0
12			4.5	3.0	4.5	3.0	.5	.0	2.0	1.5	---	---
13			4.0	2.0	3.0	1.0	.5	.0	2.0	1.5	---	---
14			3.5	1.5	2.0	.0	.5	.5	3.5	2.0	---	---
15			4.0	1.5	3.0	1.0	.5	.5	3.5	1.0	---	---
16			4.0	1.5	3.0	2.0	.5	.0	3.5	1.0	---	---
17			4.5	2.0	3.5	2.0	.0	.0	2.5	1.0	---	---
18			5.5	4.0	3.5	1.5	.0	.0	6.0	2.0	---	---
19			7.0	5.0	5.5	3.0	.0	.0	7.0	5.5	---	---
20			6.0	4.5	5.5	3.0	.0	.0	6.5	4.5	---	---
21			5.0	4.0	2.5	.0	.0	.0	5.0	2.5	---	---
22			4.0	3.0	1.0	.0	.0	.0	8.0	3.5	---	---
23			3.0	2.0	1.0	.0	.0	.0	7.5	5.5	---	---
24			3.0	2.0	1.0	.0	.5	.0	8.0	5.0	---	---
25			6.0	2.5	1.0	.5	.5	.0	8.0	6.0	---	---
26			9.0	6.5	.5	.0	.5	.0	6.0	4.0	---	---
27			9.5	7.0	.5	.0	.0	.0	6.5	4.0	---	---
28			7.0	3.0	1.0	.0	.0	.0	8.0	5.5	---	---
29			3.0	.0	.5	.0	.0	.0	---	---	---	---
30			.5	.0	1.0	.0	.0	.0	---	---	---	---
31			---	---	.5	.0	.0	.0	---	---	---	---
MONTH			9.5	.0	5.5	.0	.5	.0	8.0	.0	11.5	4.0

03361000 BIG BLUE RIVER AT CARTHAGE, IN--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

[illegible]

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SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1			---	---	756	727	858	835	915	906	704	670
2			700	674	783	753	853	827	928	911	727	574
3			752	697	796	757	823	778	950	812	561	418
4			788	752	769	754	775	738	888	820	614	534
5			797	760	781	758	768	735	908	838	638	593
6			768	745	811	632	779	742	959	905	682	640
7			741	734	722	641	799	780	996	951	720	679
8			731	699	771	726	834	795	978	947	813	776
9			721	696	782	716	825	813	987	915	818	766
10			739	710	795	752	826	785	923	546	765	274
11			755	700	783	764	809	785	591	544	764	750
12			759	722	788	761	835	805	691	589	763	745
13			775	737	769	746	858	814	575	485	---	---
14			772	745	762	743	867	815	536	487	---	---
15			753	723	789	744	828	807	672	529	---	---
16			724	696	782	744	837	812	824	672	535	525
17			758	713	820	778	872	824	863	813	540	325
18			754	739	812	786	881	859	800	630	520	510
19			759	729	812	779	885	859	643	612	590	500
20			770	729	795	742	859	826	676	633	545	525
21			771	722	791	717	835	823	732	648	530	500
22			771	723	800	777	860	828	677	333	500	480
23			738	712	805	781	865	836	498	332	535	500
24			764	720	859	789	861	826	578	494	525	510
25			802	746	836	778	838	827	629	574	600	485
26			777	684	778	752	850	824	576	399	500	480
27			770	651	775	752	862	828	598	507	510	490
28			695	640	760	749	875	859	672	574	515	---
29			701	679	816	750	909	864	---	---	---	---
30			748	708	852	825	950	905	---	---	---	---
31			---	---	834	822	923	901	---	---	---	---
MONTH			802	640	859	632	950	735	996	332	818	274
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	540	520	728	653	695	652					---	---
2	525	300	698	655	736	702					---	---
3	440	375	699	641	739	712					---	---
4	475	460	694	645	761	730					---	---
5	500	485	633	607	750	723					---	---
6	540	505	627	616	722	626					---	---
7	540	530	635	460	680	652					---	---
8	610	545	629	586	715	675					---	---
9	---	---	634	400	747	601					832	791
10	---	---	669	633	718	558					848	823
11	---	---	666	647	694	572					842	824
12	---	---	712	640	746	660					840	801
13	---	---	673	651	739	662					831	805
14	---	---	679	658	745	658					873	635
15	590	580	685	681	774	678					683	587
16	590	570	674	640	784	686					735	666
17	570	540	692	656	719	706					746	691
18	540	540	710	673	721	699					---	---
19	570	560	718	645	723	696					---	---
20	590	580	728	666	736	714					---	---
21	600	575	725	677	706	687					---	---
22	550	470	725	650	714	685					---	---
23	520	500	749	676	743	686					---	---
24	570	540	721	695	740	689					---	---
25	595	550	684	572	704	690					---	---
26	---	560	744	663	764	667					---	---
27	666	635	732	687	702	610					---	---
28	701	640	723	696	745	648					---	---
29	720	625	729	635	748	703					---	---
30	688	631	693	645	---	---					---	---
31	---	---	656	595	---	---					---	---
MONTH	720	300	749	400	784	558					873	587
YEAR	996	274										

WABASH RIVER BASIN

03361500 BIG BLUE RIVER AT SHELBYVILLE, IN

LOCATION.--Lat 39°31'45", long 85°46'55", in SE¼SE¼ sec.31, T.13 N., R.7 E., Shelby County, Hydrologic Unit 05120204, on left bank 0.2 mile (0.3 km) downstream from bridge on U.S. Highway 421 at Shelbyville, 0.6 mile (1.0 km) downstream from Little Blue River, and at mile 23.9 (38.4 km).

DRAINAGE AREA.--421 mi² (1,090 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 1943 to current year. Prior to October 1961, published as Blue River at Shelbyville.

REVISED RECORDS.--WSP 1505: 1944. WSP 1909: 1959(M). WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 737.67 ft (224.842 m) above mean sea level. Prior to Oct. 1, 1953, nonrecording gage at bridge 0.2 mile (0.3 km) upstream at datum 3.5 ft (1.07 m) higher.

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

AVERAGE DISCHARGE.--34 years, 450 ft³/s (12.74 m³/s), 14.52 in/yr (369 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,800 ft³/s (447 m³/s) Mar. 5, 1963, gage height, 17.70 ft (5.395 m); minimum daily, 27 ft³/s (0.76 m³/s) Jan. 18, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of about 20.2 ft (6.16 m) from floodmarks.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 3,400 ft³/s (96.3 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Apr. 03	0200	*2860 81.0	*10.13 3.088

Minimum daily discharge, 27 ft³/s (0.76 m³/s) Jan. 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	59	89	64	38	33	842	319	244	131	490	51	104
2	55	79	62	30	34	608	1040	229	118	327	46	90
3	53	73	67	34	35	508	2520	218	113	183	43	86
4	51	70	64	42	37	1280	1430	243	110	134	42	81
5	51	68	60	47	35	1610	1030	333	106	111	41	74
6	60	67	57	49	33	1020	781	451	114	97	45	78
7	67	66	65	48	32	721	618	1500	122	90	109	73
8	68	63	63	46	32	554	511	1260	125	87	312	68
9	64	62	60	43	34	456	413	864	139	86	293	64
10	63	64	59	37	38	378	359	604	161	90	167	60
11	63	63	58	40	43	323	317	465	129	106	160	57
12	61	62	58	46	54	309	283	367	115	108	240	56
13	62	62	57	48	228	335	260	311	108	96	204	56
14	60	62	56	45	476	299	246	276	105	89	368	60
15	60	62	55	40	318	267	232	248	102	77	258	97
16	60	60	54	33	224	243	218	224	98	86	164	95
17	60	62	54	29	178	220	207	208	94	227	126	116
18	59	63	53	27	108	226	198	196	101	146	121	117
19	61	63	52	30	96	226	191	192	117	99	97	124
20	69	63	56	34	112	217	191	185	98	86	86	106
21	76	63	49	36	104	215	188	175	89	81	83	92
22	70	63	41	38	179	217	233	165	93	74	100	84
23	71	61	39	39	935	234	960	157	108	77	102	79
24	84	62	40	40	1850	226	871	151	104	65	119	77
25	118	62	42	41	1240	209	617	167	99	63	128	75
26	89	88	45	41	791	196	488	168	100	66	96	73
27	77	116	50	40	1650	199	386	146	102	61	83	66
28	70	104	53	36	1470	533	328	135	120	54	74	63
29	68	86	52	30	---	842	305	142	125	51	78	60
30	75	67	51	29	---	584	267	142	117	51	102	60
31	80	---	45	31	---	418	---	139	---	55	123	---
TOTAL	2084	2095	1681	1187	10399	14515	16007	10305	3363	3513	4061	2391
MEAN	67.2	69.8	54.2	38.3	371	468	534	332	112	113	131	79.7
MAX	118	116	67	49	1850	1610	2520	1500	161	490	368	124
MIN	51	60	39	27	32	196	188	135	89	51	41	56
CFSM	.16	.17	.13	.09	.88	1.11	1.27	.79	.27	.27	.31	.19
IN.	.18	.19	.15	.10	.92	1.28	1.41	.91	.30	.31	.36	.21
CAL YR 1976	TOTAL	108568	MEAN 297	MAX 3410	MIN 39	CFSM .71	IN 9.59					
WTR YR 1977	TOTAL	71601	MEAN 196	MAX 2520	MIN 27	CFSM .47	IN 6.33					

03361500 BIG BLUE RIVER AT SHELBYVILLE, IN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

SEDIMENT DISCHARGE: July 1968 to current year (partial-record station).

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	SUS- PENDE D SEDI- MENT (MG/L)	SUS- PENDE D SEDI- MENT DIS- CHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM
FEB 28...	1145	1390	172	646	59	70	79

DATE	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. FALL DIAM. % FINER THAN .062 MM	SUS. SED. FALL DIAM. % FINER THAN .125 MM	SUS. SED. FALL DIAM. % FINER THAN .250 MM	SUS. SED. FALL DIAM. % FINER THAN .500 MM
FEB 28...	86	90	95	96	98	100

03361650 SUGAR CREEK AT NEW PALESTINE, IN

LOCATION.--39°42'51", long 85°53'08", in SE¼SW¼ sec.29, T.15 N., R.6 E., Hancock County, Hydrologic Unit 05120204, on left bank 10 ft (3 m) downstream from bridge on County Road 450 West, 0.5 mile (0.8 km) south of New Palestine, 3.1 miles (5.0 km) upstream from Little Sugar Creek, and 37.3 miles (60.0 km) upstream from mouth.

DRAINAGE AREA.--93.9 mi² (243.2 km²).

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

REVISED RECORDS.--WDR IN-76-1: 1975.

GAGE.--Water-stage recorder. Datum of gage is 786.00 ft (239.573 m) above mean sea level.

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

AVERAGE DISCHARGE.--10 years, 97.2 ft³/s (2.753 m³/s), 14.06 in/yr (357 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,850 ft³/s (52.4 m³/s) June 23, 1974, gage height, 9.12 ft (2.780 m); maximum gage height, 9.34 ft (2.847 m) Feb. 2, 1968; minimum daily discharge, 3.2 ft³/s (0.091 m³/s) Oct. 7, 1970.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 950 ft³/s (26.9 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Feb. 27	0800	*908 25.7	*6.83 2.082

Minimum daily discharge, 3.3 ft³/s (0.09 m³/s) Jan. 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.1	13	12	7.0	4.3	324	87	44	13	28	4.7	30
2	8.4	13	11	6.6	4.3	213	269	42	12	12	4.2	18
3	8.4	14	10	7.3	4.4	152	366	40	12	7.5	4.0	14
4	9.1	16	10	7.8	4.5	388	305	47	11	8.1	4.0	12
5	10	15	9.2	8.2	4.5	408	212	59	10	7.5	4.0	26
6	15	14	10	8.0	4.4	278	154	81	12	6.6	4.1	36
7	14	13	10	7.7	4.3	179	120	171	11	6.0	7.6	23
8	12	12	9.7	7.6	4.3	132	99	158	13	6.6	4.7	18
9	10	11	9.7	7.3	4.4	105	82	114	14	7.3	5.5	14
10	8.8	9.4	9.7	6.5	4.7	90	72	85	15	6.6	31	11
11	8.4	9.7	9.7	5.6	5.8	77	65	69	22	7.4	23	9.7
12	8.4	8.8	9.2	5.0	9.0	78	61	59	17	7.0	32	9.9
13	9.6	8.4	9.2	5.1	9.4	79	55	51	14	6.3	42	9.8
14	11	8.0	9.2	5.3	7.0	70	52	46	12	6.0	37	13
15	13	8.0	9.2	5.4	4.4	62	47	42	11	5.5	26	16
16	13	8.0	8.8	4.3	3.0	55	44	38	11	5.8	18	19
17	13	9.2	8.8	3.5	2.6	49	39	34	10	5.0	15	17
18	12	8.8	8.8	3.3	2.4	52	37	31	9.2	11	12	14
19	12	8.4	8.7	3.5	2.3	51	34	28	9.1	7.5	11	16
20	16	8.4	9.5	3.8	4.7	53	33	25	8.5	8.2	10	12
21	15	8.4	8.6	3.9	3.6	50	31	23	7.9	7.7	12	11
22	15	8.4	8.0	4.0	4.1	60	37	22	10	7.4	9.5	10
23	17	8.0	7.8	4.2	10.0	75	57	20	11	6.2	7.8	10
24	23	8.0	7.7	4.5	2.64	72	151	18	11	5.8	12	11
25	18	8.4	7.7	4.6	2.11	63	120	18	11	9.6	9.3	11
26	16	11	7.6	4.6	159	55	91	16	9.4	9.7	8.4	11
27	13	14	8.1	4.5	758	58	73	15	8.0	6.3	7.6	10
28	12	14	8.8	4.4	542	209	64	14	10	5.5	8.6	9.6
29	12	13	9.0	4.2	---	242	57	14	9.8	5.5	18	9.3
30	13	12	8.7	4.1	---	173	49	15	11	5.8	19	9.1
31	17	---	8.1	4.2	---	115	---	13	---	5.1	27	---
TOTAL	392.2	321.3	282.5	166.0	2527.9	4067	2963	1452	345.9	285.5	530.8	440.4
MEAN	12.7	10.7	9.11	5.35	90.3	131	98.8	46.8	11.5	9.21	17.1	14.7
MAX	23	16	12	8.2	758	408	366	171	22	50	55	36
MIN	8.4	8.0	7.6	3.3	4.3	49	31	13	7.9	5.1	4.0	9.1
CFSM	.14	.11	.10	.06	.96	1.40	1.05	.50	.12	.10	.18	.16
IN.	.16	.13	.11	.07	1.00	1.61	1.17	.58	.14	.11	.21	.17

CAL YR 1976	TOTAL	22978.9	MEAN	62.8	MAX	608	MIN	4.6	CFSM	.67	IN	9.10
WTR YR 1977	TOTAL	13774.5	MEAN	37.7	MAX	758	MIN	3.3	CFSM	.40	IN	5.46

03361850 BUCK CREEK AT ACTON, IN

LOCATION.--Lat 39°39'25", long 85°57'27", in NW¼SE¼ sec.15, T.14 N., R.5 E., Marion County, Hydrologic Unit 05120204, on left bank 30 ft (9 m) downstream from McGregor Road bridge, 0.5 mile (0.8 km) east of Acton, and 4.1 miles (6.6 km) upstream from mouth.

DRAINAGE AREA.--78.8 mi² (204.1 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 757.00 ft (230.734 m) above mean sea level.

REMARKS.--Records fair prior to Feb. 24 and good thereafter.

AVERAGE DISCHARGE.--10 years, 87.4 ft³/s (2.475 m³/s), 15.06 in/yr (382 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,300 ft³/s (150 m³/s) July 20, 1969, gage height, 14.99 ft (4.569 m); minimum daily, 0.60 ft³/s (0.017 m³/s) Oct. 1, 4, 1967.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 1,000 ft³/s (28.3 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Feb. 27	1445	*1720 48.7	*9.33 2.844

Minimum daily discharge, 2.8 ft³/s (0.079 m³/s) Jan. 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.4	13	9.1	4.5	3.8	239	88	17	8.3	74	4.7	9.2
2	7.6	11	8.9	4.2	4.0	151	466	16	7.9	22	4.5	7.4
3	6.8	9.6	8.7	4.4	4.1	112	447	16	7.6	11	4.4	6.4
4	6.0	8.7	8.6	5.0	4.0	536	219	51	7.0	8.7	4.2	6.2
5	6.2	8.2	8.5	5.6	3.9	469	177	109	8.0	7.5	4.1	7.6
6	7.9	8.9	11	5.4	3.7	212	127	162	8.6	7.1	4.0	7.6
7	18	8.3	10	5.3	3.7	140	93	381	8.5	6.6	7.0	24
8	17	7.8	9.3	5.2	3.8	104	62	181	8.7	8.6	30	13
9	14	7.5	8.7	5.0	4.0	84	53	112	15	21	28	9.4
10	12	7.3	8.4	4.6	4.3	68	47	80	11	9.9	22	7.8
11	10	8.1	9.1	4.4	5.7	54	39	61	9.0	7.9	17	6.9
12	9.2	7.8	8.8	4.3	9.2	65	34	49	8.4	7.4	30	6.7
13	8.6	7.4	8.4	4.5	77	147	31	41	8.1	6.7	20	6.9
14	9.5	7.2	8.2	4.6	65	93	35	36	9.4	6.3	14	17
15	9.0	6.9	8.7	4.4	44	67	33	32	8.4	6.1	10	14
16	8.1	6.6	8.6	3.8	31	51	29	27	7.4	6.8	7.5	13
17	8.0	6.8	8.5	3.2	24	37	27	23	7.5	15	6.0	9.6
18	9.2	6.7	8.3	2.8	20	43	26	19	6.2	7.7	5.0	7.4
19	10	6.5	8.0	2.9	19	42	28	20	5.1	6.3	4.6	8.4
20	9.5	6.4	8.8	3.1	30	35	29	21	4.8	5.6	4.6	9.7
21	9.0	6.2	8.0	3.2	28	40	27	18	6.3	28	5.2	6.4
22	10	6.1	7.3	3.2	36	44	47	16	7.6	53	5.5	4.9
23	16	6.0	6.9	3.3	74	93	54	15	13	12	4.8	5.9
24	26	6.3	6.7	3.4	259	78	42	14	8.0	7.8	15	7.7
25	20	14	6.7	3.6	154	50	35	12	7.4	6.6	11	10
26	12	28	6.6	3.9	101	39	30	12	7.7	6.4	6.4	8.0
27	8.5	32	7.2	4.0	1290	31	25	12	7.5	6.0	5.8	7.2
28	9.2	17	7.4	4.1	564	268	24	11	6.9	5.7	5.0	7.0
29	9.9	12	7.1	3.7	---	456	22	10	7.2	5.4	9.5	7.0
30	9.1	10	5.8	3.6	---	184	17	11	9.3	5.1	40	6.8
31	20	---	5.0	3.7	---	118	---	10	---	4.9	14	---
TOTAL	345.7	298.3	251.3	126.9	2870.2	4150	2413	1595	245.8	393.1	353.8	337.5
MEAN	11.2	9.94	8.11	4.09	103	134	80.4	51.5	8.19	12.7	11.4	11.3
MAX	26	32	11	5.6	1290	536	466	381	15	74	40	76
MIN	6.0	6.0	5.0	2.8	3.7	31	17	10	4.8	4.9	4.0	4.9
CFSM	.14	.13	.10	.05	1.31	1.70	1.02	.65	.10	.16	.15	.14
IN.	.16	.14	.12	.06	1.35	1.96	1.14	.75	.12	.19	.17	.16

CAL YR 1976	TOTAL	19547.7	MEAN 53.4	MAX 1040	MIN 4.1	CFSM .68	IN 9.23
WTR YR 1977	TOTAL	13380.6	MEAN 36.7	MAX 1290	MIN 2.8	CFSM .47	IN 6.32

03362000 YOUNGS CREEK NEAR EDINBURG, IN

LOCATION.--Lat 39°25'08", long 86°00'18", in SE¼SW¼ sec.5, T.11 N., R.5 E., Johnson County, Hydrologic Unit 05120204, on left bank on upstream side of highway bridge, 0.5 mile (0.8 km) southwest of Amity, 2.0 miles (3.2 km) upstream from mouth, and 5 miles (8 km) northwest of Edinburg.

DRAINAGE AREA.--107 mi² (277 km²).

PERIOD OF RECORD.--October 1942 to current year. Prior to December 1942 monthly discharge only, published in WSP 1305.

REVISED RECORDS.--WSP 1335: 1944. WSP 1909: 1958. WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 670.20 ft (204.277 m) above mean sea level. Prior to June 30, 1955, nonrecording gage at same site and datum.

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

AVERAGE DISCHARGE.--35 years, 105 ft³/s (2.974 m³/s), 13.33 in/yr (339 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,700 ft³/s (303 m³/s) Jan. 27, 1952, gage height, 13.4 ft (4.08 m); minimum daily, 0.5 ft³/s (0.014 m³/s) Sept. 29, Oct. 20, 21, 1953.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 1,300 ft³/s (36.8 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Feb. 27	1400	*1310 37.1	*6.53 1.990

Minimum daily discharge, 1.9 ft³/s (0.054 m³/s) Jan. 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31	23	8.6	3.5	3.2	298	90	21	19	311	2.9	9.9
2	18	14	7.4	3.3	3.2	213	660	21	17	120	2.8	8.2
3	12	11	7.7	3.6	3.3	202	525	20	15	57	2.8	6.9
4	10	8.6	6.9	4.0	3.4	797	273	27	13	37	2.6	5.8
5	9.9	7.4	7.1	4.3	3.4	553	200	56	12	27	2.6	5.4
6	9.9	6.6	7.1	4.2	3.3	300	144	137	14	21	2.8	6.0
7	10	6.2	7.9	4.0	3.2	207	122	652	13	18	5.2	18
8	9.9	5.7	8.0	3.9	3.2	157	95	348	13	15	41	12
9	9.9	6.0	7.3	3.7	3.3	124	71	193	22	13	19	8.0
10	8.9	5.9	7.1	3.3	3.8	101	62	126	22	11	11	6.0
11	7.8	6.1	7.4	2.9	5.4	78	52	83	15	11	9.1	5.5
12	8.2	5.8	7.5	2.7	11	110	45	56	12	11	14	4.7
13	6.1	5.3	6.9	2.6	74	150	41	45	12	11	10	6.6
14	7.3	5.0	6.8	2.8	105	102	38	37	11	8.8	14	6.6
15	7.0	4.3	6.9	3.0	67	78	34	30	11	7.7	11	6.5
16	7.4	4.9	7.0	2.6	45	60	30	25	9.8	7.0	9.2	7.6
17	6.7	5.1	7.0	2.1	28	47	28	22	9.1	6.4	10	6.8
18	6.7	5.5	6.6	1.9	21	61	27	19	8.9	5.7	7.8	6.0
19	7.9	5.7	6.3	2.0	28	48	27	17	38	6.1	6.5	34
20	11	5.2	7.1	2.4	61	47	27	17	38	5.6	6.0	20
21	11	5.1	5.8	2.7	48	43	26	19	22	5.8	7.1	12
22	10	4.8	5.3	2.9	48	55	36	14	19	6.9	10	8.9
23	10	5.1	5.1	3.0	198	52	80	13	19	5.0	7.4	7.7
24	21	5.2	5.3	3.1	488	44	56	12	17	4.7	14	8.1
25	21	5.3	5.3	3.3	278	38	43	13	16	5.4	13	9.1
26	15	16	5.2	3.4	181	33	36	11	14	4.2	11	7.0
27	9.4	24	5.3	3.4	1090	38	30	9.6	16	3.7	8.2	7.1
28	7.5	17	5.5	3.3	482	540	28	9.0	17	3.6	7.0	6.5
29	6.8	12	5.4	3.1	---	410	28	27	133	3.6	11	6.3
30	9.2	9.6	5.2	3.0	---	217	23	35	69	3.4	13	6.2
31	24	---	4.0	3.1	---	134	---	25	---	3.1	14	---
TOTAL	350.5	251.4	202.0	97.1	3291.7	5337	2977	2139.6	666.8	759.7	306.0	269.4
MEAN	11.3	8.38	6.52	3.13	118	172	99.2	69.0	22.2	24.5	9.87	8.98
MAX	31	24	8.6	4.3	1090	797	660	652	133	311	41	34
MIN	6.1	4.3	4.0	1.9	3.2	33	23	9.0	8.9	3.1	2.6	4.7
CFSM	.11	.08	.06	.03	1.10	1.61	.93	.65	.21	.23	.09	.08
IN.	.12	.09	.07	.03	1.14	1.86	1.03	.74	.23	.26	.11	.09
CAL YR 1976	TOTAL	16156.6	MEAN	44.1	MAX	853	MIN	3.5	CFSM	.41	IN	5.62
WTR YR 1977	TOTAL	16648.2	MEAN	45.6	MAX	1090	MIN	1.9	CFSM	.43	IN	5.79

03362500 SUGAR CREEK NEAR EDINBURG, IN

LOCATION.--Lat 39°21'39", long 85°59'51", in SW¼SE¼ sec.29, T.11 N., R.5 E., Johnson County, Hydrologic Unit 05120204, on left bank 50 ft (15 m) upstream from highway bridge in Camp Atterbury, 1.2 miles (1.9 km) upstream from confluence with Blue River, 1.5 miles (2.4 km) northwest of Edinburg, and at mile 1.3 (2.1 km).

DRAINAGE AREA.--474 mi² (1,228 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1942 to current year. Prior to February 1943 monthly discharge only, published in WSP 1305.

REVISED RECORDS.--WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 646.23 ft (196.971 m) above mean sea level. Prior to Oct. 1, 1952, nonrecording gage on downstream side of old highway bridge, 100 ft (30 m) downstream at same datum.

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

AVERAGE DISCHARGE.--35 years, 478 ft³/s (13.54 m³/s), 13.69 in/yr (348 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 27,600 ft³/s (782 m³/s) May 29, 1956, gage height, 18.38 ft (5.602 m); minimum daily, 9.2 ft³/s (0.26 m³/s) Sept. 19, 1954.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 4,200 ft³/s (119 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Feb. 28	1300	*3330 94.3	*9.07 2.764

Minimum daily discharge, 27 ft³/s (0.76 m³/s) Jan. 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	71	129	67	33	38	1730	480	171	97	370	43	90
2	57	122	64	32	39	1090	1180	161	90	366	42	81
3	49	104	63	38	40	811	2720	156	83	198	41	71
4	43	95	61	42	41	1940	1640	166	79	137	39	62
5	42	90	59	46	41	2520	1160	248	77	110	39	55
6	42	88	76	45	40	1570	844	448	77	95	37	54
7	42	88	79	44	39	1030	641	1810	77	83	42	155
8	41	86	79	44	39	746	522	1770	79	77	92	115
9	48	85	72	41	40	585	417	974	90	73	90	88
10	48	82	55	38	42	476	362	647	97	81	107	71
11	44	87	74	36	46	399	319	478	92	85	92	60
12	42	82	73	34	54	388	281	375	85	77	88	54
13	45	79	54	33	84	563	255	316	83	73	97	52
14	53	80	66	35	436	472	237	275	79	69	102	52
15	52	78	69	37	384	373	222	243	77	64	97	54
16	52	78	69	33	233	314	206	217	73	62	85	64
17	57	78	70	29	165	263	192	196	69	60	73	64
18	58	76	69	27	134	262	182	181	67	155	64	62
19	59	75	68	28	120	256	174	167	85	123	57	90
20	66	75	67	30	165	232	173	158	102	88	54	83
21	68	74	46	32	201	228	165	156	75	73	54	69
22	73	72	44	33	208	234	186	126	68	73	59	60
23	77	72	42	34	690	282	350	134	71	134	60	54
24	95	70	40	35	1530	308	411	128	76	88	67	52
25	116	71	39	38	1270	260	404	126	76	69	69	54
26	125	94	38	42	761	227	327	118	69	60	81	52
27	99	122	40	42	2350	214	265	112	66	51	66	52
28	88	121	42	41	3130	1020	227	108	69	54	55	49
29	82	111	41	37	---	1770	210	106	161	49	54	46
30	87	92	40	35	---	1070	189	131	134	46	62	48
31	109	---	36	36	---	692	---	107	---	45	110	---
TOTAL	2030	2656	1802	1130	12360	22325	14941	10509	2523	3188	2118	2013
MEAN	65.5	88.5	58.1	36.5	441	720	498	339	84.1	103	68.3	67.1
MAX	125	129	79	46	3130	2520	2720	1810	161	370	110	155
MIN	41	70	36	27	38	214	165	106	66	45	37	46
CFSM	.14	.19	.12	.08	.93	1.52	1.05	.72	.18	.22	.14	.14
IN.	.16	.21	.14	.09	.97	1.75	1.17	.82	.20	.25	.17	.16
CAL YR 1976	TOTAL	121567	MEAN 332	MAX 3630	MIN 35	CFSM .70	IN 9.54					
WTR YR 1977	TOTAL	77595	MEAN 213	MAX 3130	MIN 27	CFSM .45	IN 6.09					

WABASH RIVER BASIN

03362500 SUGAR CREEK NEAR EDINBURG, IN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

SEDIMENT DISCHARGE: July 1968 to current year (partial-record station).

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	SUS- PENDE SEDI- MENT CHARGE (MG/L)	SUS- PENDE SEDI- MENT DIS- CHARGE (T/DAY)	SUS. SED. FALL DIAM. % FINER THAN .002 MM	SUS. SED. FALL DIAM. % FINER THAN .004 MM	SUS. SED. FALL DIAM. % FINER THAN .008 MM
FEB 28...	1345	3330	239	2150	68	73	81

DATE	SUS. SED. FALL DIAM. % FINER THAN .016 MM	SUS. SED. FALL DIAM. % FINER THAN .031 MM	SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. SIEVE DIAM. % FINER THAN .125 MM	SUS. SED. SIEVE DIAM. % FINER THAN .250 MM	SUS. SED. SIEVE DIAM. % FINER THAN .500 MM
FEB 28...	84	88	90	92	96	100

03363000 DRIFTWOOD RIVER NEAR EDINBURG, IN

LOCATION.--Lat 39°20'21", long 85°59'11", in NW¼SW¼ sec.4, T.10 N., R.5 E., Bartholomew County, Hydrologic Unit 05120204, on left bank just downstream from highway bridge, 0.8 mile (1.3 km) downstream from confluence of Big Blue River and Sugar Creek, 1.5 miles (2.4 km) southwest of Edinburg, and at mile 14.1 (22.7 km).

DRAINAGE AREA.--1,060 mi² (2,745 km²).

PERIOD OF RECORD.--October 1940 to current year. Prior to July 1941 monthly discharge only, published in WSP 1305.

REVISED RECORDS.--WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 636.99 ft (194.155 m) above mean sea level. Prior to Oct. 7, 1941, nonrecording gage at same site and datum.

REMARKS.--Records good.

AVERAGE DISCHARGE.--37 years, 1,116 ft³/s (31.60 m³/s), 14.30 in/yr (363 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 40,500 ft³/s (1,147 m³/s) Mar. 6, 1963, gage height, 16.97 ft (5.172 m); minimum daily, 38 ft³/s (1.08 m³/s) Sept. 23, 1941.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of 20.3 ft (6.19 m).

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 7,000 ft³/s (198 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Feb. 28	1600	*5920 168	*9.91 3.021

Minimum daily discharge, 88 ft³/s (2.49 m³/s) Aug. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	211	260	160	105	112	3640	1090	674	350	553	117	274
2	187	266	151	103	115	2340	2010	632	324	1010	110	245
3	167	233	148	107	122	1780	5230	601	305	630	102	228
4	156	211	146	115	134	3190	4670	632	293	418	95	199
5	148	197	144	124	141	4820	3100	796	284	334	91	191
6	145	191	142	134	135	3590	2290	1090	282	281	88	175
7	148	186	153	146	129	2340	1780	2890	285	250	111	167
8	156	182	159	136	123	1730	1480	3980	288	226	298	187
9	163	176	141	132	123	1400	1240	2550	318	219	374	301
10	160	171	137	126	141	1180	1100	1750	332	227	397	228
11	156	173	140	121	169	1020	989	1360	330	233	301	191
12	148	168	154	125	250	961	889	1120	298	241	337	163
13	145	163	150	122	520	1120	812	957	284	231	369	148
14	143	163	136	119	827	1030	760	851	275	214	364	134
15	141	162	135	113	778	880	715	766	266	195	476	131
16	135	161	140	104	662	773	669	695	256	180	364	134
17	139	160	147	97	485	682	628	635	241	234	285	128
18	139	160	145	95	368	666	596	587	233	531	231	163
19	142	160	144	96	324	656	569	549	253	362	200	274
20	156	159	145	100	346	617	567	523	311	264	168	228
21	164	157	138	107	360	600	549	503	252	223	166	203
22	173	156	128	115	460	602	591	470	234	209	162	179
23	178	154	121	119	987	652	1170	444	244	269	184	160
24	210	152	117	128	3150	690	1790	424	262	211	208	152
25	245	154	115	135	3450	628	1520	415	267	178	221	148
26	282	196	113	143	2190	570	1230	424	247	158	236	141
27	235	246	120	138	3730	546	1030	391	236	155	182	134
28	212	265	130	128	5650	1420	890	373	246	144	151	128
29	196	242	129	119	---	2880	815	354	336	134	144	121
30	210	181	125	112	---	2100	745	401	348	126	154	118
31	236	---	114	110	---	1450	---	374	---	120	274	---
TOTAL	5426	5605	4267	3674	25981	46553	41514	28211	8480	8760	6960	5373
MEAN	175	187	138	119	928	1502	1384	910	283	283	225	179
MAX	282	266	160	146	5650	4820	5230	3980	350	1010	476	301
MIN	135	152	113	95	112	546	549	354	233	120	88	118
CFSM	.17	.18	.13	.11	.88	1.42	1.31	.86	.27	.27	.21	.17
IN.	.19	.20	.15	.13	.91	1.63	1.46	.99	.30	.31	.24	.19

CAL YR 1976	TOTAL	285711	MEAN 781	MAX 7200	MIN 113	CFSM .74	IN 10.03
WTR YR 1977	TOTAL	190804	MEAN 523	MAX 5650	MIN 88	CFSM .49	IN 6.70

WABASH RIVER BASIN

03363500 FLATROCK RIVER AT ST. PAUL, IN

LOCATION.--Lat 39°25'03", long 85°38'03", in SE¼NE¼ sec.9, T.11 N., R.8 E., Shelby County, Hydrologic Unit 05120205, on right bank 500 ft (152 m) downstream from highway bridge, 0.8 mile (1.3 km) southwest of St. Paul, and 1.5 miles (2.4 km) downstream from Mill Creek, and at mile 34.4 (55.3 km).

DRAINAGE AREA.--303 mi² (785 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1930 to current year. Prior to October 1958, published as Flatrock Creek at St. Paul.

REVISED RECORDS.--WSP 853: 1934-36. WSP 973: 1942. WSP 1335: 1933, 1936. WSP 1725: 1957(M). WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 764.84 ft (233.123 m) above mean sea level (levels by State of Indiana, Department of Natural Resources). Prior to Oct. 21, 1938, nonrecording gage at site 500 ft (152 m) upstream at same datum.

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

AVERAGE DISCHARGE.--47 years, 311 ft³/s (8.808 m³/s), 13.94 in/yr (354 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 18,500 ft³/s (524 m³/s) Jan. 5, 1949, gage height, 10.60 ft (3.231 m); maximum recorded gage height, 12.37 ft (3.770 m) May 24, 1968; minimum daily discharge, 0.6 ft³/s (0.017 m³/s) Aug. 7, 1931.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of approximately 20.5 ft (6.25 m), from information by local residents.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 2,500 ft³/s (70.8 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Feb. 24	0500	2550 72.2	4.20 1.280	May 07	0800	2650 75.0	4.29 1.308
Apr. 02	2000	*3320 94.0	*4.90 1.494				

Minimum daily discharge, 7.4 ft³/s (0.21 m³/s) Oct. 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	26	19	16	13	415	236	116	75	615	26	39
2	11	31	20	16	13	294	1670	125	60	289	22	34
3	9.6	26	17	16	13	264	2290	115	53	143	17	30
4	7.8	23	17	17	15	1050	1690	222	48	98	14	26
5	7.4	22	17	17	15	1200	1010	577	45	78	12	26
6	12	20	16	16	14	781	711	686	46	65	11	25
7	14	19	20	16	13	502	552	1820	57	53	14	24
8	17	18	16	16	13	357	442	1260	51	45	99	23
9	14	16	15	16	15	284	341	748	89	41	193	21
10	14	16	17	15	19	238	289	501	79	137	275	19
11	12	16	17	15	25	203	250	362	59	145	158	18
12	11	16	17	15	100	230	217	281	51	89	563	17
13	11	17	16	15	700	337	195	235	46	63	227	17
14	10	17	15	16	330	280	182	209	45	73	565	22
15	9.4	16	17	16	260	223	168	185	42	49	482	19
16	9.3	16	17	15	200	188	155	165	39	38	201	24
17	9.4	16	17	14	160	162	145	153	35	72	135	67
18	9.8	16	20	13	115	237	140	143	33	61	99	76
19	8.1	16	22	13	98	227	136	136	68	50	76	91
20	12	16	23	14	133	211	134	128	58	43	63	71
21	15	16	22	16	163	208	130	118	45	34	58	50
22	15	16	18	15	220	219	137	108	39	61	61	40
23	16	16	17	14	1200	208	192	101	53	41	54	34
24	28	16	16	15	1800	194	177	95	54	27	157	30
25	31	16	16	16	1210	173	161	90	54	23	116	28
26	26	35	17	16	602	156	152	86	77	26	78	27
27	23	64	16	15	698	152	138	80	114	20	59	25
28	19	63	16	14	696	500	132	73	145	17	47	22
29	17	39	16	13	---	629	136	83	123	17	45	21
30	17	26	16	13	---	443	123	95	92	52	48	20
31	22	---	16	13	---	305	---	78	---	45	45	---
TOTAL	449.8	686	541	467	8853	10870	12431	9174	1875	2610	4020	986
MEAN	14.5	22.9	17.5	15.1	316	351	414	296	62.5	84.2	130	32.9
MAX	31	64	23	17	1800	1200	2290	1820	145	615	565	91
MIN	7.4	16	15	13	13	152	123	73	33	17	11	17
CFSM	.05	.08	.06	.05	1.04	1.16	1.37	.98	.21	.28	.43	.11
IN.	.06	.08	.07	.06	1.09	1.33	1.53	1.13	.23	.32	.49	.12
CAL YR 1976	TOTAL	69798.2	MEAN 191	MAX 3010	MIN 4.1	CFSM .63	IN 8.57					
WTR YR 1977	TOTAL	52962.8	MEAN 145	MAX 2290	MIN 7.4	CFSM .48	IN 6.50					

03363500 FLATROCK RIVER AT ST. PAUL, IN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

CHEMICAL ANALYSES: January 1976 to June 1977 (discontinued).

WATER TEMPERATURE: January 1976 to June 1977 (discontinued).

SEDIMENT DISCHARGE: August 1969 to current year (partial-record station).

INSTRUMENTATION.--Multi-parameter monitor.

REMARKS.--Chemical and temperature records fair.

EXTREMES FOR PERIOD OF RECORD.--

WATER TEMPERATURE: Maximum, 28.5°C June 14, July 11, 12, 1976; minimum temperature, 1.0°C Jan. 23-25, 27, 28, Feb. 2-4, 6-9, 1976.

SPECIFIC CONDUCTANCE: Maximum, 612 micromhos Feb. 7, Mar. 3, 1976; minimum, 221 micromhos Jan. 26, 1976.

TEMPERATURE (DEG. C) OF WATER. WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1									---	---	4.0	6.5
2									---	---	4.0	8.0
3									---	---	5.0	9.5
4									---	---	6.5	11.0
5									---	---	6.0	10.5
6									---	---	6.0	9.5
7									---	---	6.0	11.0
8									---	---	7.5	11.5
9									---	---	8.5	6.5
10									---	---	9.5	8.0
11									---	---	11.0	9.5
12									---	---	13.0	11.0
13									---	---	12.5	10.5
14									---	---	11.5	9.5
15									1.5	1.0	13.0	11.0
16									1.5	1.5	13.5	11.5
17									2.0	1.5	11.5	9.5
18									1.5	1.0	9.5	8.0
19									1.5	1.5	8.0	7.0
20									2.0	1.5	7.5	6.5
21									2.0	1.5	9.0	5.5
22									2.0	1.0	10.0	8.5
23									1.5	1.0	9.5	7.5
24									3.0	1.0	9.5	7.5
25									4.5	3.0	10.0	7.5
26									4.5	4.0	11.0	8.0
27									4.5	3.5	11.0	10.0
28									5.5	2.5	12.5	11.0
29									---	---	14.0	11.5
30									---	---	15.5	13.0
31									---	---	15.0	11.5
MONTH									5.5	1.0	15.5	5.5

[illegible]

KABASH RIVER BASIN

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03363500 FLATROCK RIVER AT ST. PAUL, IN--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1									---	---	508	475
2									---	---	535	510
3									---	---	541	522
4									---	---	518	433
5									---	---	460	441
6									---	---	500	462
7									---	---	524	502
8									---	---	536	525
9									---	---	545	537
10									---	---	553	545
11									---	---	554	550
12									---	---	598	537
13									---	---	596	589
14									---	---	590	581
15									374	322	589	575
16									425	376	589	572
17									469	426	581	566
18									494	472	580	546
19									517	499	576	548
20									533	518	578	565
21									536	520	569	542
22									544	347	575	548
23									309	254	566	541
24									329	287	548	520
25									417	331	536	503
26									479	421	557	486
27									496	480	552	507
28									497	467	525	498
29									---	---	536	531
30									---	---	544	528
31									---	---	545	528
MONTH									544	254	598	433
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	546	542	485	401	618	591						
2	542	254	450	378	632	614						
3	396	294	499	396	652	624						
4	489	397	521	398	654	614						
5	546	494	536	463	648	626						
6	560	545	554	456	---	---						
7	572	571	471	202	---	---						
8	582	574	560	480	---	---						
9	587	579	605	558	---	---						
10	587	573	616	604	---	---						
11	579	544	625	614	---	---						
12	545	512	624	616	---	---						
13	541	514	622	615	---	---						
14	537	505	617	605	---	---						
15	526	500	612	596	---	---						
16	523	473	610	590	---	---						
17	518	460	608	583	---	---						
18	521	473	606	580	---	---						
19	517	491	607	581	---	---						
20	524	507	609	587	---	---						
21	526	510	614	589	---	---						
22	528	506	620	595	---	---						
23	537	516	615	595	---	---						
24	551	535	620	600	---	---						
25	552	538	613	596	---	---						
26	558	534	618	600	---	---						
27	543	485	633	605	---	---						
28	473	452	629	596	---	---						
29	482	442	630	418	---	---						
30	485	429	598	473	---	---						
31	---	---	592	571	---	---						
MONTH	587	254	633	202	654	591						

WABASH RIVER BASIN

03363900 FLATROCK RIVER AT COLUMBUS, IN

LOCATION.--Lat 39°14'06", long 85°55'36", in NE¼SW¼ sec.12, T.9 N., R.5 E., Bartholomew County, Hydrologic Unit 05120205, on left bank at downstream side of bridge on U.S. Highway 31 (bypass), 0.2 mile (0.3 km) northwest of Columbus city limits, and 2.6 miles (4.2 km) upstream from mouth.

DRAINAGE AREA.--534 mi² (1,383 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 610.14 ft (185.971 m) above mean sea level.

REMARKS.--Records good.

AVERAGE DISCHARGE.--10 years, 568 ft³/s (16.09 m³/s), 14.45 in/yr (367 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 20,000 ft³/s (566 m³/s) May 25, 1968, gage height, 15.87 ft (4.837 m), from inside high-water mark; minimum daily, 22 ft³/s (0.62 m³/s) Oct. 5, 1967.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 3,500 ft³/s (99.1 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Feb. 25	0100	3510 99.4	8.68 2.646	May 08	0300	4250 120	9.32 2.841
Apr. 03	1700	*5460 155	*10.24 3.121				

Minimum daily discharge, 28 ft³/s (0.79 m³/s) Jan. 18, 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	44	52	61	29	30	847	484	303	214	262	87	100
2	42	53	54	30	30	622	765	318	188	656	76	96
3	41	55	51	32	31	513	4540	297	167	405	69	89
4	39	53	51	32	33	959	3560	334	152	271	65	84
5	38	51	50	30	33	1980	2290	749	145	205	61	80
6	38	49	49	30	32	1520	1480	1320	140	170	58	76
7	37	48	51	31	31	998	1120	2560	132	148	58	74
8	36	46	50	32	30	738	904	3420	138	130	68	71
9	38	45	47	31	30	595	729	1830	144	119	184	70
10	39	44	46	30	31	503	616	1150	202	114	271	67
11	40	43	48	30	33	434	542	851	179	180	334	63
12	39	42	49	30	40	397	477	693	150	214	431	61
13	38	42	48	31	118	490	426	585	136	166	588	60
14	37	41	46	32	514	528	392	514	129	134	359	59
15	37	41	44	33	514	438	362	460	124	167	857	60
16	37	41	44	32	364	374	331	413	119	144	594	71
17	36	41	45	30	267	324	305	372	113	120	382	73
18	36	41	45	28	226	318	283	342	108	188	272	139
19	36	41	44	28	198	401	268	315	105	166	204	169
20	38	41	45	30	170	358	259	312	118	147	163	206
21	38	41	45	31	171	350	252	290	125	135	143	170
22	37	41	43	32	177	351	260	261	116	116	135	136
23	39	41	41	29	506	351	841	240	112	112	125	117
24	44	41	38	30	2130	326	841	224	115	110	132	105
25	47	41	36	31	2520	303	620	227	128	93	231	96
26	52	47	35	32	1280	275	504	220	125	84	196	90
27	54	51	34	32	987	259	428	208	129	78	150	83
28	52	69	34	31	1150	477	375	192	169	77	124	78
29	51	77	34	30	---	1020	348	184	209	72	113	74
30	52	68	41	30	---	844	323	345	200	69	108	71
31	51	---	40	30	---	621	---	284	---	72	103	---
TOTAL	1283	1427	1389	949	11676	18514	24925	19813	4331	5124	6741	2788
MEAN	41.4	47.6	44.8	30.6	417	597	831	639	144	165	217	92.9
MAX	54	77	61	33	2520	1980	4540	3420	214	656	857	206
MIN	36	41	34	28	30	259	252	184	105	69	58	59
CFSM	.08	.09	.08	.06	.78	1.12	1.56	1.20	.27	.31	.41	.17
IN.	.09	.10	.10	.07	.81	1.29	1.74	1.38	.30	.36	.47	.19
CAL YR 1976	TOTAL	133385	MEAN 364	MAX 5750	MIN 33	CFSM .68	IN 9.29					
WTR YR 1977	TOTAL	98960	MEAN 271	MAX 4540	MIN 28	CFSM .51	IN 6.89					

03364000 EAST FORK WHITE RIVER AT COLUMBUS, IN

LOCATION.--Lat 39°12'00", long 85°55'32", in NE¼NW¼ sec.25, T.9 N., R.5 E., Bartholomew County, Hydrologic Unit 05120205, on left bank at abutment of abandoned bridge at west end of Second Street in Columbus, 0.6 mile (1.0 km) downstream from confluence of Driftwood River and Flatrock River, 1.3 miles (2.1 km) upstream from Haw Creek, and at mile 238.7 (384.1 km).

DRAINAGE AREA.--1,707 mi² (4,421 km²).

PERIOD OF RECORD.--October 1947 to current year. Prior to January 1948 monthly discharge only, published in WSP 1305.

REVISED RECORDS.--WSP 1335: 1948-49. WSP 2109: Drainage area.

GAGE.--Water-stage recorder above concrete control. Datum of gage is 603.12 ft (183.831 m) above mean sea level. Prior to Oct. 22, 1952, nonrecording gage 600 ft (183 m) upstream at same datum.

REMARKS.--Records good.

AVERAGE DISCHARGE.--30 years, 1,789 ft³/s (50.66 m³/s), 14.23 in/yr (361 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 52,300 ft³/s (1,480 m³/s) Mar. 6, 1963, gage height, 16.23 ft (4.947 m); minimum daily, 87 ft³/s (2.46 m³/s) Sept. 29, 1954.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 10,000 ft³/s (283 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Apr. 03	2000	*11300 320	*5.30 1.615

Minimum daily discharge, 141 ft³/s (3.99 m³/s) Jan. 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	291	298	296	166	175	5290	1920	1250	606	661	234	400
2	270	324	275	173	171	3440	3760	1220	553	1500	217	357
3	247	299	248	173	152	2610	10300	1080	511	1030	206	342
4	233	284	267	174	159	4480	9040	1500	482	717	198	300
5	242	266	255	181	165	6560	5230	1700	483	567	191	293
6	251	257	250	180	165	5700	3890	2540	479	481	187	286
7	234	253	263	180	166	3990	3090	4270	447	425	197	314
8	227	246	246	167	162	2900	2580	6220	464	380	264	368
9	234	242	230	159	153	2320	2160	4120	488	351	560	314
10	235	239	240	154	161	1970	1880	2910	546	365	645	307
11	230	234	248	152	193	1680	1700	2210	541	417	720	256
12	224	238	243	149	334	1660	1530	1800	482	470	756	245
13	220	231	233	146	650	1890	1380	1520	449	448	943	245
14	213	229	226	150	1160	1830	1290	1340	430	446	723	240
15	215	229	223	156	1310	1560	1210	1210	411	392	1220	245
16	210	229	225	169	1060	1350	1130	1100	396	350	1000	286
17	210	228	225	160	794	1200	1050	1010	378	315	736	286
18	210	225	219	148	785	1260	993	934	364	595	559	359
19	213	224	218	141	702	1280	954	872	360	581	471	433
20	229	222	221	143	656	1220	948	834	437	445	404	503
21	232	221	216	150	679	1150	938	795	410	388	409	433
22	234	216	190	157	720	1170	1240	744	385	349	393	377
23	250	214	211	163	1270	1170	3000	695	377	359	356	335
24	287	214	190	166	4580	1200	2880	662	396	353	382	307
25	301	213	213	167	5810	1110	2410	661	427	295	482	293
26	356	259	201	167	4050	1020	1970	645	395	261	476	280
27	298	315	186	167	4540	997	1660	617	382	245	402	262
28	263	348	203	170	6450	2900	1470	578	438	243	341	250
29	247	382	183	174	---	4440	1400	551	508	231	326	245
30	264	330	178	176	---	3630	1260	760	582	220	311	240
31	286	---	169	177	---	2530	---	706	---	217	350	---
TOTAL	7656	7709	6991	5055	37372	75507	74263	47054	13607	14097	14659	9401
MEAN	247	257	226	163	1335	2436	2475	1518	454	455	473	313
MAX	356	382	296	181	6450	6560	10300	6220	606	1500	1220	503
MIN	210	213	169	141	152	997	938	551	360	217	187	240
CFSM	.15	.15	.13	.10	.78	1.43	1.45	.89	.27	.27	.28	.18
IN.	.17	.17	.15	.11	.81	1.65	1.62	1.03	.30	.31	.32	.20

CAL YR 1976	TOTAL	448236	MEAN	1225	MAX	12900	MIN	169	CFSM	.72	IN	9.77
WTR YR 1977	TOTAL	313371	MEAN	859	MAX	10300	MIN	141	CFSM	.50	IN	6.83

03364200 HAW CREEK NEAR CLIFFORD, IN

LOCATION.--Lat 39°16'04", long 85°51'22", in NW¼SW¼ sec.34, T.10 N., R.6 E., Bartholomew County, Hydrologic Unit 05120205, on left bank 20 ft downstream from bridge on County Road 450 North, 1.2 miles (1.9 km) southeast of Clifford, 5.8 miles (9.3 km) northeast of Columbus, and 7.6 miles (12.2 km) upstream from mouth.

DRAINAGE AREA.--47.5 mi² (123.0 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 643.00 ft (195.986 m) above mean sea level.

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

AVERAGE DISCHARGE.--10 years, 46.9 ft³/s (1.328 m³/s), 13.42 in/yr (341 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,560 ft³/s (72.5 m³/s) May 24, 1968, gage height, 13.9 ft (4.24 m), from floodmark; no flow at times during September and October 1967 due to diversion for irrigation.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 600 ft³/s (17.0 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)	
Apr. 02	1800	*2000	56.6	*12.53	3.819
May 29	2100	609	17.2	6.80	2.073

Minimum daily discharge, 0.43 ft³/s (0.012 m³/s) Jan. 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.0	7.2	6.2	1.0	.87	51	39	29	20	120	.86	4.4
2	1.8	5.9	5.5	.92	.95	43	893	40	15	41	.81	3.6
3	1.7	5.1	5.1	.87	1.1	50	443	32	12	22	.81	3.2
4	1.6	4.6	4.8	.96	1.4	305	166	72	11	16	1.0	2.8
5	1.5	4.2	4.6	1.2	1.6	140	118	109	9.7	13	.90	2.5
6	2.1	3.7	4.4	1.4	1.4	94	85	97	9.7	9.9	.82	2.8
7	2.6	3.5	5.4	1.3	1.3	65	71	189	8.7	8.7	2.0	6.3
8	2.2	3.3	4.8	1.2	1.3	48	56	114	8.5	7.7	38	4.5
9	2.1	3.2	4.3	1.2	1.3	40	46	71	10	7.2	31	3.6
10	2.0	3.4	4.1	1.0	1.6	35	40	51	8.5	7.7	22	2.8
11	1.9	3.2	4.4	.82	4.6	31	35	40	7.7	9.5	26	2.4
12	1.7	3.2	4.1	.68	66	142	31	34	7.4	7.7	90	2.2
13	1.7	3.1	3.8	.64	57	95	28	29	7.0	6.6	45	2.1
14	1.5	3.2	3.6	.70	40	64	26	26	6.8	6.1	28	3.2
15	1.5	3.3	3.4	.76	31	45	23	23	6.4	5.6	21	2.8
16	1.5	3.1	3.4	.55	24	36	21	20	6.0	5.2	19	2.6
17	1.5	3.2	3.3	.43	20	30	20	19	5.8	6.1	147	3.1
18	1.6	3.2	3.2	.60	17	98	18	17	5.6	5.4	35	2.9
19	1.7	3.2	3.2	.68	15	72	18	15	5.6	4.6	15	7.7
20	2.2	3.1	3.6	.78	19	62	19	15	5.5	4.3	8.6	11
21	2.0	3.0	3.3	.90	21	52	18	14	5.2	3.3	7.2	5.2
22	2.0	2.9	2.7	.98	37	60	52	13	6.5	3.3	24	4.4
23	2.5	2.9	2.5	1.1	129	40	282	12	6.9	3.9	16	4.1
24	6.0	2.9	2.4	1.1	220	31	131	11	6.7	3.4	10	3.9
25	6.4	2.9	2.2	1.2	92	24	87	21	10	3.0	8.2	3.9
26	4.9	8.4	2.1	1.2	62	21	64	15	16	1.7	6.6	3.9
27	4.0	16	2.2	1.3	114	22	49	12	11	1.4	4.7	3.6
28	3.4	11	2.3	1.3	68	256	42	10	12	1.2	4.1	3.4
29	3.2	7.9	2.2	1.2	---	139	37	127	19	1.1	6.0	3.4
30	3.9	7.1	1.8	1.0	---	81	31	102	25	1.2	11	3.4
31	8.0	---	1.3	.84	---	52	---	32	---	.93	6.5	---
TOTAL	82.7	140.9	110.2	29.81	1049.42	2324	2989	1411	295.2	338.73	637.10	115.7
MEAN	2.67	4.70	3.55	.96	37.5	75.0	99.6	45.5	9.84	10.9	20.6	3.86
MAX	8.0	16	6.2	1.4	220	305	893	189	25	120	147	11
MIN	1.5	2.9	1.3	.43	.87	21	18	10	5.2	.93	.81	2.1
CFSM	.06	.10	.08	.02	.79	1.58	2.10	.96	.21	.23	.43	.08
IN.	.06	.11	.09	.02	.82	1.82	2.34	1.11	.23	.27	.50	.09
CAL YR 1976	TOTAL	9694.60	MEAN 26.5	MAX 1240	MIN 1.2	CFSM .56	IN 7.59					
WTR YR 1977	TOTAL	9523.76	MEAN 26.1	MAX 893	MIN .43	CFSM .55	IN 7.46					

03564500 CLIFTY CREEK AT HARTSVILLE, IN

LOCATION.--Lat 39°16'25", long 85°42'10", in NW¼ sec.36, T.10 N., R.7 E., Bartholomew County, Hydrologic Unit 05120206, at downstream side of left abutment of highway bridge, 0.2 mile (0.3 km) north of Hartsville, 5.9 miles (9.5 km) upstream from Duck Creek, and at mile 20.0 (32.2 km).

DRAINAGE AREA.--91.4 mi² (236.7 km²).

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WSP 1335: 1950. WSP 1725: 1949(M). WSP 2109: Drainage area. WRD Ind. 1974: 1973.

GAGE.--Water-stage recorder. Datum of gage is 677.34 ft (206.453 m) above mean sea level. Prior to Sept. 24, 1952, nonrecording gage at same site and datum.

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

AVERAGE DISCHARGE.--29 years, 94.2 ft³/s (2.668 m³/s), 13.99 in/yr (355 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,300 ft³/s (320 m³/s) Jan. 21, 1959, gage height, 14.29 ft (4.356 m); no flow at times most years.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in 1913 reached an elevation of 702.4 ft (214.09 m) above mean sea level, from floodmarks, upstream from bridge (revised).

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 1,300 ft³/s (36.8 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Apr. 02	2300	*1940 54.9	*6.21 1.893	May 07	1500	1720 48.7	5.83 1.777

Minimum daily discharge, 0.07 ft³/s (0.002 m³/s) Oct. 4, 5.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

CHEMICAL ANALYSES: December 1970 to September 1975.

WATER TEMPERATURE: December 1970 to September 1975.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.12	18	6.4	1.3	1.4	109	73	29	30	133	1.0	15
2	.10	26	5.1	.99	1.6	85	862	28	21	100	1.0	11
3	.09	14	4.4	.99	1.8	102	862	28	16	39	1.0	8.3
4	.07	7.7	4.0	1.1	2.2	566	319	100	13	22	1.3	6.8
5	.07	5.8	3.8	1.7	2.3	351	238	286	11	15	1.2	5.9
6	.28	4.7	3.6	1.8	2.0	202	184	254	11	11	1.0	7.8
7	.27	4.0	4.8	1.7	1.9	141	154	993	10	8.3	1.5	29
8	.33	3.5	4.2	1.6	1.9	107	125	396	11	6.8	53	15
9	.39	2.9	4.0	1.5	1.9	85	100	215	15	5.9	80	8.8
10	.59	2.8	4.2	1.3	2.3	68	85	146	16	13	26	6.3
11	.50	2.7	4.4	1.1	8.4	56	71	104	16	143	39	4.7
12	.43	2.5	4.1	1.0	78	87	58	85	11	53	172	4.4
13	.36	2.3	4.0	.94	127	181	53	71	8.8	25	121	4.3
14	.31	2.2	3.8	.98	76	116	49	60	8.3	15	51	7.8
15	.33	2.2	3.7	1.4	54	85	46	51	7.8	10	27	18
16	.38	2.2	3.6	1.0	43	66	39	42	6.8	7.8	21	16
17	.38	2.2	3.5	.82	36	53	37	38	5.9	8.8	20	23
18	.38	2.1	3.3	.92	33	98	34	34	5.5	5.9	16	23
19	.40	2.1	3.4	1.1	31	123	33	31	5.5	5.1	16	192
20	.75	2.1	3.8	1.4	39	104	34	28	5.1	4.3	9.4	205
21	.68	2.3	3.3	1.8	55	98	31	27	4.7	3.6	19	109
22	.58	2.3	2.8	1.9	100	100	41	23	7.3	4.7	16	66
23	1.1	2.4	2.7	2.0	206	85	90	20	8.3	6.8	13	44
24	3.2	2.4	2.6	2.1	429	71	62	18	7.3	4.3	10	34
25	4.3	2.6	2.4	2.1	228	58	49	17	12	4.7	8.2	28
26	5.3	5.5	2.5	2.1	143	51	44	16	13	3.3	6.4	24
27	9.6	9.5	2.4	2.1	246	49	38	16	16	2.0	5.4	20
28	9.2	34	2.5	2.1	160	233	35	29	14	1.3	4.8	17
29	6.8	21	2.4	1.9	---	217	35	20	31	1.3	7.3	14
30	7.7	9.6	2.1	1.5	---	138	33	138	35	1.5	43	13
31	12	---	1.8	1.3	---	98	---	56	---	1.0	21	---
TOTAL	66.99	203.6	109.6	45.54	2111.7	3983	3914	3399	383.3	666.4	813.5	981.1
MEAN	2.16	6.79	3.54	1.47	75.4	128	130	110	12.8	21.5	26.2	32.7
MAX	12	34	6.4	2.1	429	566	862	993	35	143	172	205
MIN	.07	2.1	1.8	.82	1.4	49	31	16	4.7	1.0	1.0	4.3
CFSM	.02	.07	.04	.02	.83	1.40	1.42	1.20	.14	.24	.29	.36
IN.	.03	.08	.04	.02	.86	1.62	1.59	1.38	.16	.27	.33	.40

CAL YR 1976 TOTAL 17379.96 MEAN 47.5 MAX 1560 MIN .00 CFSM .52 IN 7.07
WTR YR 1977 TOTAL 16677.73 MEAN 45.7 MAX 993 MIN .07 CFSM .50 IN 6.79

03365000 SAND CREEK NEAR BREWERSVILLE, IN

LOCATION.--Lat 39°05'03", long 85°39'32", in NW¼NE¼ sec.5, T.7 N., R.8 E., Jennings County, Hydrologic Unit 05120206, on left bank at downstream side of county highway bridge, 2.5 miles (4.0 km) west of Brewersville, 5.7 miles (9.2 km) upstream from Wyalloosing Creek, and 16.0 miles (25.7 km) upstream from mouth.

DRAINAGE AREA.--155 mi² (401 km²).

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WSP 1335: 1949. WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 629.13 ft (191.759 m) above mean sea level (levels by State of Indiana, Department of Natural Resources). Prior to Oct. 6, 1952, nonrecording gage at site 1.7 miles (2.7 km) upstream at datum approximately 8 ft (2.4 m) higher.

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

AVERAGE DISCHARGE.--29 years, 166 ft³/s (4.701 m³/s), 14.54 in/yr (369 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 19,900 ft³/s (564 m³/s) Jan. 21, 1959, gage height, 21.70 ft (6.614 m) inside, 22.20 ft (6.767 m) outside, from rating curve extended above 6,500 ft³/s (184 m³/s) on basis of contracted-opening measurement of peak flow; no flow at times during 1948, 1949, 1953-55, 1964, 1965, 1967.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 2,900 ft³/s (82.1 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Feb. 24	0400	3000 85.0	9.24 2.816
Mar. 04	0500	3500 99.1	9.96 3.036
Apr. 02	2200	*3700 105	*10.24 3.121

Minimum daily discharge, 3.3 ft³/s (0.093 m³/s) Jan. 18.

DISCHARGE IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	113	22	6.7	4.8	199	127	50	34	827	22	38
2	9.1	62	20	6.3	5.3	166	1150	47	21	224	14	27
3	7.8	43	17	6.1	5.7	307	1420	61	15	110	10	21
4	6.8	33	16	5.8	6.1	2500	467	485	12	70	8.6	17
5	6.4	27	14	5.7	6.8	824	430	937	12	52	7.6	15
6	9.5	23	14	5.6	6.4	364	309	445	15	37	6.8	199
7	9.5	19	15	6.4	6.0	237	273	424	9.0	27	7.6	107
8	34	17	15	6.2	5.8	174	190	279	8.1	22	8.1	59
9	20	15	14	5.9	5.7	141	143	164	9.3	18	141	34
10	12	14	13	5.3	6.2	122	120	118	13	980	135	24
11	9.1	13	14	4.6	21	106	103	91	18	602	101	18
12	7.5	15	16	4.1	113	470	87	75	12	288	359	15
13	7.1	16	17	3.9	214	530	81	65	9.8	146	309	13
14	6.2	12	14	4.0	196	250	72	56	8.8	150	160	14
15	5.2	11	13	4.4	131	172	69	47	8.3	66	98	75
16	5.6	10	12	4.0	82	135	64	40	7.6	45	61	47
17	5.4	12	12	3.5	66	109	58	34	7.4	32	396	64
18	6.0	11	12	3.3	56	319	54	30	7.6	26	168	59
19	5.8	10	12	3.6	51	258	48	29	7.4	23	69	66
20	7.1	10	12	4.1	54	239	48	26	7.2	19	37	285
21	8.5	11	12	4.8	77	211	47	25	7.0	16	27	154
22	10	11	11	5.4	144	229	48	24	8.3	16	156	101
23	18	10	10	5.9	360	197	83	20	9.5	22	115	72
24	70	9.8	9.8	6.2	724	143	90	17	13	26	65	57
25	113	9.5	9.3	6.3	451	118	74	19	107	18	234	47
26	57	18	8.8	6.3	258	103	61	18	110	14	125	41
27	33	72	8.3	6.4	560	94	53	13	467	12	69	34
28	22	70	8.0	6.4	319	888	55	13	574	12	45	28
29	16	45	7.6	6.0	---	480	90	13	571	12	58	24
30	23	30	7.3	5.2	---	250	64	15	206	66	103	20
31	121	---	7.0	4.6	---	168	---	62	---	54	65	---
TOTAL	683.6	772.3	393.1	163.0	3935.8	10503	5978	3742	2315.3	4032	3180.7	1775
MEAN	22.1	25.7	12.7	5.26	141	339	199	121	77.2	130	103	59.2
MAX	121	113	22	6.7	724	2500	1420	937	574	980	396	285
MIN	5.2	9.5	7.0	3.3	4.8	94	47	13	7.0	12	6.8	13
CFSM	.14	.17	.08	.03	.91	2.19	1.28	.78	.50	.84	.67	.38
IN.	.16	.19	.09	.04	.94	2.52	1.43	.90	.56	.97	.76	.43
CAL YR 1976	TOTAL	34813.6	MEAN	95.1	MAX	4690	MIN	3.3	CFSM	.61	IN	8.36
WTR YR 1977	TOTAL	37473.8	MEAN	103	MAX	2500	MIN	3.3	CFSM	.67	IN	8.99

03365000 SAND CRFEK NEAR BREWERSVILLE, IN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

SEDIMENT DISCHARGE: August 1969 to current year (partial-record station).

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	SUS- PENDE SEDI- MENT (MG/L)	SUS- PENDE SEDI- MENT DIS- CHARGE (T/DAY)	DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	SUS- PENDE SEDI- MENT (MG/L)	SUS- PENDE SEDI- MENT DIS- CHARGE (T/DAY)
OCT						APR					
12...	1515	7.5	13.0	11	.22	13...	1750	80	--	38	1.8
NOV											
18...	1600	11	5.0	13	.39						

03365500 EAST FORK WHITE RIVER AT SEYMOUR, IN

LOCATION.--Lat 38°58'57", long 85°53'57", in NW¼NE¼ sec.7, T.6 N., R.6 E., Jackson County, Hydrologic Unit 05120206, on left bank 1,700 ft (518 m) downstream from highway bridge, 1 mile (2 km) north of Seymour, 9.5 miles (15.3 km) downstream from Sand Creek, and at mile 214.6 (345.3 km).

DRAINAGE AREA.--2,341 mi² (6,063 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1927 to current year. Yearly maximum discharge only for water years 1924-27, published in WSP 1305. Daily gage heights from May 1923 to September 1927 are available in the district office.

REVISED RECORDS.--WSP 743: 1928-29, 1931-32. WSP 783: 1934. WSP 873: 1938. WSP 1335: 1928(M), 1929-30, 1932-33(M), 1937(M), 1942. WSP 1435: 1949. WSP 1705: 1958. WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 550.67 ft (167.844 m) above mean sea level. Oct. 1, 1927, to July 2, 1931, non-recording gage 1,700 ft (518 m) upstream at datum 7.61 ft (2.320 m) higher. July 3, 1931, to July 16, 1934, nonrecording gage at site 100 ft (30 m) downstream at present datum.

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

AVERAGE DISCHARGE.--50 years, 2,377 ft³/s (67.32 m³/s), 13.79 in/yr (350 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 78,500 ft³/s (2,220 m³/s) Jan. 5, 1949, gage height, 19.67 ft (5.995 m); minimum daily, 86 ft³/s (2.44 m³/s) Sept. 28, 30, 1941.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 26, 1913, reached a stage of 21.0 ft (6.40 m), from information by Corps of Engineers and Indiana State Highway Commission, discharge, 120,000 ft³/s (3,400 m³/s).

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 12,000 ft³/s (340 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Apr. 04	0800	*12700 360	*13.95 4.252

Minimum daily discharge, 168 ft³/s (4.76 m³/s) Jan. 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	316	467	387	202	188	7020	2820	1540	905	1980	420	542
2	305	429	359	200	183	5220	3060	1550	783	1720	391	524
3	282	404	331	198	180	3650	9920	1400	702	1620	367	484
4	264	379	324	200	182	6560	12500	1950	646	1140	343	450
5	250	359	320	206	187	9530	10600	3050	617	916	328	429
6	279	343	312	214	191	8860	7480	3910	676	769	316	420
7	268	324	320	222	188	6670	5400	4290	612	679	324	520
8	250	312	312	214	184	4480	4220	7030	584	631	324	498
9	246	309	309	204	181	3430	3420	7730	607	607	437	476
10	254	297	305	194	184	2850	2890	5240	607	1420	709	429
11	250	294	309	186	218	2440	2540	3630	636	2540	774	387
12	243	286	312	180	524	2280	2260	2850	626	1570	905	363
13	239	282	309	177	1090	3350	2020	2350	579	1030	1220	355
14	232	282	305	182	2050	2950	1830	2020	556	1510	1090	356
15	224	279	294	194	1860	2450	1700	1780	538	927	954	343
16	222	279	294	200	1430	2070	1570	1590	520	744	1170	404
17	215	279	294	188	1140	1780	1450	1430	502	641	1130	412
18	208	279	294	178	1030	1910	1350	1300	489	612	1110	429
19	213	282	286	168	965	2320	1280	1200	489	795	785	493
20	278	279	278	170	920	2030	1220	1180	480	704	645	694
21	264	279	264	175	945	1950	1200	1120	524	621	575	826
22	355	275	255	178	1050	1850	1200	1080	511	575	816	670
23	234	275	273	181	1760	1850	3410	1030	502	524	764	575
24	294	279	254	184	5450	1700	3860	973	493	533	631	515
25	347	279	271	184	7200	1590	3320	930	607	520	689	471
26	383	297	275	187	6100	1440	2710	909	827	480	821	445
27	375	339	250	193	4880	1330	2250	878	661	441	694	433
28	355	424	240	195	6330	3020	1950	822	1020	420	588	408
29	324	437	220	198	---	5620	1930	777	1790	408	547	383
30	316	420	220	197	---	5170	1760	874	1080	404	556	363
31	359	---	206	193	---	3830	---	1040	---	441	538	---
TOTAL	8644	9748	8982	5942	46790	111200	103120	67453	20169	27922	20961	14097
MEAN	279	325	290	192	1671	3587	3437	2176	672	901	676	470
MAX	383	467	387	222	7200	9530	12500	7730	1790	2540	1220	826
MIN	208	275	206	168	180	1330	1200	777	480	404	316	343
CFSM	.12	.14	.12	.08	.71	1.53	1.47	.93	.29	.39	.29	.20
IN.	.14	.15	.14	.09	.74	1.77	1.64	1.07	.32	.44	.33	.22
CAL YR 1976	TOTAL	586229	MEAN	1602	MAX	17400	MIN	206	CFSM	.68	IN	9.32
WTR YR 1977	TOTAL	445028	MEAN	1219	MAX	12500	MIN	168	CFSM	.52	IN	7.07

03365500 EAST FORK WHITE RIVER AT SEYMOUR, IN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

WATER TEMPERATURE: October 1954 to current year.

SEDIMENT DISCHARGE: July 1966 to current year.

REMARKS.--Some regulation of low flow and temperatures by Seymour Water Co. at dam 500 ft (152 m) upstream. Sediment samples collected at highway bridge, 1,700 ft (518 m) upstream.

EXTREMES FOR PERIOD OF RECORD.--

WATER TEMPERATURE: Maximum, 31.0°C July 13, 14, 1966; minimum, freezing point on many days during most winter periods.

Maximum of 32.0°C was observed on July 19, 1954.

SEDIMENT CONCENTRATIONS: Maximum daily, 1,200 mg/L May 25, June 25, 1968; minimum daily, 2 mg/L Jan. 3 to Feb. 11, 1977.

SEDIMENT DISCHARGE: Maximum daily load, 179,000 tons (162,000 tonnes) May 25, 1968; minimum daily, 0.91 ton (2.7 tonnes) Jan. 19, 1977.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 28.5°C July 7, 8, 19, 20; minimum, 0.0°C Dec. 30 to Jan. 26.

SEDIMENT CONCENTRATIONS: Maximum daily, 939 mg/L July 1; minimum daily, 2 mg/L Jan. 3 to Feb. 11.

SEDIMENT DISCHARGE: Maximum daily load, 8,870 tons (8,046 tonnes) Apr. 3; minimum daily, 0.91 ton (0.83 tonne) Jan. 19.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	17.0	16.0	9.0	8.5	2.0	1.5	0.0	0.0	1.5	1.5	3.5	3.0
2	18.5	16.5	9.0	8.5	2.0	1.5	0.0	0.0	1.5	1.5	3.5	3.5
3	19.5	16.5	10.0	9.0	1.5	1.5	0.0	0.0	1.5	1.5	4.0	3.5
4	20.5	18.0	9.0	8.0	2.0	1.5	0.0	0.0	1.5	1.5	5.5	4.0
5	20.5	19.5	8.0	8.0	2.0	1.5	0.0	0.0	1.5	1.5	5.5	5.5
6	20.0	18.5	8.5	8.0	2.0	2.0	0.0	0.0	1.5	1.5	5.5	5.0
7	18.5	16.0	8.5	7.0	3.0	2.0	0.0	0.0	1.5	1.5	5.5	5.0
8	16.0	15.5	7.0	6.5	3.0	1.5	0.0	0.0	1.5	1.5	6.0	5.5
9	16.0	15.5	7.0	6.0	1.5	1.5	0.0	0.0	1.5	1.5	7.0	6.0
10	15.5	14.5	8.5	7.0	2.0	1.5	0.0	0.0	1.5	1.5	8.5	7.0
11	16.0	14.5	8.0	6.0	3.0	2.0	0.0	0.0	1.5	1.5	9.5	8.5
12	16.5	15.0	6.0	5.5	3.5	3.0	0.0	0.0	1.5	1.5	10.5	9.5
13	17.0	16.0	5.5	5.0	3.5	3.0	0.0	0.0	1.5	1.5	11.0	10.5
14	16.5	15.5	5.0	4.5	3.0	2.0	0.0	0.0	1.5	1.5	11.0	10.5
15	16.0	15.0	5.5	4.5	3.0	2.0	0.0	0.0	1.5	1.5	11.5	10.0
16	15.5	14.5	5.0	4.5	3.0	3.0	0.0	0.0	1.5	1.5	11.5	10.5
17	14.5	13.0	5.0	4.5	3.0	2.0	0.0	0.0	1.5	1.5	10.5	9.5
18	13.0	11.5	6.0	5.0	3.5	3.0	0.0	0.0	1.5	1.5	10.0	9.0
19	11.5	11.0	6.5	5.5	4.0	3.5	0.0	0.0	1.5	1.5	9.0	8.0
20	11.0	10.5	7.0	6.5	5.0	4.0	0.0	0.0	1.5	1.5	8.0	7.0
21	11.0	10.0	6.5	6.0	4.0	1.5	0.0	0.0	1.5	1.5	8.5	6.5
22	10.5	9.5	6.0	5.0	1.5	1.0	0.0	0.0	2.0	1.5	9.5	8.0
23	10.0	9.5	5.0	4.5	1.5	1.0	0.0	0.0	3.0	2.0	9.0	7.0
24	10.0	9.5	5.0	4.5	1.5	1.0	0.0	0.0	3.0	2.0	10.0	8.5
25	10.5	10.0	6.0	5.0	1.5	1.0	0.0	0.0	3.5	2.0	10.5	9.0
26	10.5	10.0	8.0	6.0	1.0	1.0	1.0	0.0	4.0	3.5	11.0	10.0
27	10.0	9.5	8.5	8.0	1.0	1.0	1.5	1.0	4.0	4.0	11.0	11.0
28	9.5	9.0	8.5	5.5	1.5	1.0	1.5	1.5	4.0	3.5	11.5	11.0
29	9.0	8.5	5.5	3.5	1.0	0.5	1.5	1.5	---	---	13.0	11.5
30	9.0	9.0	3.5	1.5	1.0	0.0	1.5	1.5	---	---	14.5	13.0
31	9.0	9.0	---	---	0.5	0.0	1.5	1.5	---	---	14.5	13.5
MONTH	20.5	8.5	10.0	1.5	5.0	0.0	1.5	0.0	4.0	1.5	14.5	3.0

WABASH RIVER BASIN

03365500 EAST FORK WHITE RIVER AT SEYMOUR, IN

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	13.5	13.0	17.0	16.0	25.0	22.0	23.5	22.0	24.0	23.0	24.5	23.5
2	13.5	13.0	19.5	17.0	24.0	22.0	24.0	21.5	23.5	22.0	25.5	24.5
3	14.0	13.5	19.5	19.0	23.5	21.0	23.5	22.0	24.0	22.0	25.5	24.5
4	13.5	12.0	19.5	18.5	23.0	21.0	24.5	23.0	24.5	23.0	25.0	24.0
5	12.0	10.0	19.0	16.5	23.5	22.0	26.0	24.5	25.0	23.5	24.5	23.5
6	10.0	9.0	18.5	18.0	23.5	22.0	28.0	26.0	25.5	24.5	23.5	23.0
7	9.0	8.5	18.5	18.0	23.0	20.0	28.5	27.0	24.5	24.0	23.0	22.0
8	10.5	9.0	18.0	16.5	21.0	20.0	28.5	26.5	24.0	23.0	22.0	21.5
9	10.5	10.0	16.5	15.5	20.0	18.0	26.5	25.5	23.5	22.0	23.0	21.5
10	12.0	10.5	15.5	14.5	19.5	19.0	25.5	20.5	23.5	23.5	22.0	21.5
11	14.5	12.0	15.0	14.5	20.5	19.0	21.0	20.5	23.5	23.0	21.5	20.0
12	16.5	14.5	16.0	15.0	21.5	20.0	23.5	21.0	23.0	21.5	20.0	19.0
13	18.0	16.0	17.0	15.5	21.5	21.0	25.0	23.5	21.5	21.0	19.5	18.5
14	19.0	17.0	18.5	17.0	21.5	21.0	25.0	24.0	23.0	21.0	19.0	18.5
15	19.0	18.0	19.5	18.0	23.5	21.5	26.5	24.5	23.5	22.0	19.0	18.0
16	19.5	18.0	20.5	19.0	24.0	23.0	27.0	26.0	23.5	23.0	19.5	18.5
17	20.0	18.5	21.0	20.0	25.5	24.0	27.0	26.0	23.5	23.0	20.5	19.5
18	20.0	19.0	22.0	21.0	25.5	25.0	28.0	26.5	23.0	21.0	21.5	20.0
19	20.5	18.0	23.5	21.5	25.0	24.0	28.5	27.0	21.5	20.0	20.5	19.5
20	19.0	18.5	23.5	22.0	25.0	24.0	28.5	28.0	21.0	20.0	19.5	18.5
21	19.0	18.5	24.0	21.5	25.0	23.5	28.0	26.0	21.0	19.5	18.5	17.0
22	18.5	18.0	24.0	23.5	24.5	21.0	26.0	25.0	20.0	19.0	18.0	16.5
23	18.0	16.5	23.5	22.0	21.0	20.0	25.5	24.0	20.0	19.5	18.5	18.0
24	16.5	16.0	24.0	23.0	21.0	20.0	25.0	24.0	20.5	20.0	18.5	18.0
25	16.5	15.5	24.0	23.5	21.5	20.5	25.0	24.0	20.5	19.5	18.5	18.0
26	15.5	14.5	24.0	22.0	23.5	21.5	24.0	22.0	20.5	19.5	19.5	18.0
27	16.0	14.5	24.0	23.0	24.5	23.5	23.0	21.0	23.0	20.5	19.5	18.5
28	16.0	15.5	24.5	23.0	24.0	23.0	23.5	21.0	23.5	22.0	18.5	17.0
29	16.0	15.0	24.5	23.5	23.5	21.5	23.5	22.0	23.5	22.0	18.0	16.5
30	16.5	15.5	24.5	23.5	24.0	22.0	24.5	21.5	22.0	21.5	17.0	16.0
31	---	---	25.0	24.0	---	---	24.5	23.5	23.5	22.0	---	---
MONTH	20.5	8.5	25.0	14.5	25.5	18.0	28.5	20.5	25.5	19.0	25.5	16.0

03365500 EAST FORK WHITE RIVER AT SEYMOUR, IN

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)
OCTOBER			NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	10	8.5	44	55	26	27	6	3.3	2	1.0	247	4680
2	10	8.2	37	43	22	21	4	2.2	2	.99	122	1720
3	10	7.6	28	31	19	17	2	1.1	2	.97	67	660
4	10	7.1	26	27	16	14	2	1.1	2	.98	436	7720
5	11	7.4	25	24	13	11	2	1.1	2	1.0	172	4430
6	11	8.3	25	23	11	9.3	2	1.2	2	1.0	107	2560
7	11	8.0	25	22	10	8.6	2	1.2	2	1.0	80	1440
8	11	7.4	25	21	10	8.4	2	1.2	2	.99	61	738
9	11	7.3	23	19	10	8.3	2	1.1	2	.98	62	574
10	10	6.9	20	16	10	8.2	2	1.0	2	.99	63	485
11	9	6.1	16	13	10	8.1	2	1.0	2	1.2	65	428
12	10	6.6	16	12	10	8.4	2	.97	22	31	72	443
13	11	7.1	16	12	10	8.3	2	.96	73	215	134	1210
14	11	6.9	14	11	10	8.2	2	.98	81	448	71	566
15	10	6.0	14	11	10	7.9	2	1.0	33	166	65	430
16	10	6.0	16	12	10	7.9	2	1.1	17	66	64	358
17	10	5.8	18	14	10	7.9	2	1.0	15	46	63	303
18	9	5.1	18	14	10	7.9	2	.96	8	22	72	371
19	11	6.3	18	14	10	7.7	2	.91	5	13	83	520
20	12	9.0	16	12	9	6.8	2	.92	7	17	70	384
21	13	9.3	16	12	8	5.7	2	.94	11	28	67	353
22	13	12	14	10	8	5.5	2	.96	11	31	65	325
23	13	8.2	13	9.7	9	6.6	2	.98	102	485	63	315
24	12	9.5	11	8.3	9	6.2	2	.99	554	8150	61	280
25	12	11	11	8.3	10	7.3	2	.99	406	7890	60	258
26	13	13	27	22	10	7.4	2	1.0	233	3840	58	226
27	13	13	31	28	10	6.8	2	1.0	152	2000	56	201
28	13	12	42	48	10	6.5	2	1.1	190	3250	407	3320
29	13	11	34	40	10	5.9	2	1.1	---	---	220	3340
30	14	12	30	34	9	5.3	2	1.1	---	---	182	2540
31	16	16	---	---	8	4.4	2	1.0	---	---	110	1140
TOTAL	---	268.6	---	626.3	---	279.7	---	35.46	---	26709.10	---	42318
APRIL			MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	95	723	36	150	59	144	939	5020	55	62	71	104
2	149	1230	46	193	48	101	305	1420	55	58	48	68
3	331	8870	38	144	43	82	178	779	54	54	39	51
4	217	7320	235	1240	41	72	107	329	53	49	36	44
5	156	4460	222	1830	40	67	79	195	53	47	34	39
6	77	1560	158	1670	70	128	63	131	52	44	33	37
7	59	860	101	1170	63	104	55	101	65	57	73	102
8	66	752	285	5410	54	85	51	87	68	59	73	98
9	67	619	179	3740	66	108	49	80	94	111	65	84
10	66	515	121	1710	64	105	258	989	106	203	55	64
11	64	439	90	882	89	153	433	2970	50	104	50	52
12	61	372	76	585	91	154	117	496	59	144	49	48
13	56	305	71	450	81	127	76	211	121	399	52	50
14	55	272	67	365	68	102	224	913	97	285	56	54
15	53	243	56	269	58	84	152	380	74	191	59	55
16	52	220	54	232	49	69	100	201	113	357	70	76
17	51	200	52	201	45	61	86	149	99	302	45	50
18	50	182	49	172	44	58	84	139	127	381	38	44
19	48	166	46	149	60	79	129	277	92	195	36	48
20	46	152	43	137	57	74	78	142	80	139	96	180
21	45	146	41	124	67	95	52	87	75	116	77	172
22	56	181	38	111	57	79	49	76	148	326	44	80
23	310	2850	34	95	53	72	47	66	131	270	43	67
24	181	1890	32	84	52	69	59	85	85	145	44	61
25	98	878	30	75	77	126	54	76	118	220	44	56
26	52	380	29	71	116	259	53	69	161	357	45	54
27	43	261	28	66	87	155	53	63	119	223	44	51
28	41	216	27	60	145	399	54	61	97	154	43	47
29	40	208	26	55	369	1780	54	59	80	118	42	43
30	38	181	37	87	106	309	55	60	65	98	42	41
31	---	---	42	230	---	---	55	65	57	83	---	---
TOTAL	---	36651	---	21757	---	5300	---	15782	---	5351	---	2020

TOTAL LOAD FOR YEAR: 157098.16 TONS.

03366200 HARBERTS CREEK NEAR MADISON, IN

LOCATION.--Lat 38°46'55", long 85°29'08", in SW¼SE¼ sec.14, T.4 N., R.9 E., Jefferson County, Hydrologic Unit 05120207, attached to left downstream wingwall of bridge on County Road 533 West, 0.2 mile (0.3 km) west of Smyrna, 3.7 miles (6.0 km) upstream from Big Creek, and 4 miles (6 km) northwest of Madison.

DRAINAGE AREA.--9.31 mi² (24.11 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 725.75 ft (221.209 m) above mean sea level.

REMARKS.--Records good except those for winter periods and period of no gage-height record, Jan. 10 to Feb. 11, which are poor.

AVERAGE DISCHARGE.--9 years, 11.6 ft³/s (0.329 m³/s), 16.92 in/yr (430 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,540 ft³/s (43.6 m³/s) Apr. 2, 1970, gage height, 7.89 ft (2.405 m); no flow at times most years.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 300 ft³/s (8.50 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Feb. 23	2400	384 10.9	5.10 1.554	May 04	0700	320 9.06	4.86 1.481
Mar. 03	2300	687 19.5	5.97 1.820	May 05	1200	636 18.0	5.75 1.753
Mar. 12	1300	359 10.2	4.89 1.490	July 10	1500	496 14.0	5.35 1.631
Apr. 02	1900	*1100 31.2	*6.77 2.063				

Minimum daily discharge, 0.03 ft³/s (0.001 m³/s) Aug. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.4	9.5	1.7	.68	.45	13	4.6	41	.18	39	.15	1.0
2	1.1	4.6	1.7	.64	.50	15	322	37	.12	3.7	.08	.85
3	.66	3.1	1.6	.60	.55	141	63	9.1	.12	1.3	.06	.78
4	.49	2.4	1.5	.58	.60	279	25	111	.10	.78	.05	.71
5	.41	1.9	1.4	.56	.60	44	31	217	.12	1.1	.05	.65
6	2.7	1.7	1.5	.54	.60	18	16	29	1.7	.65	.03	.65
7	2.1	1.5	2.5	.52	.60	12	12	31	.58	.40	1.7	.65
8	1.0	1.4	2.6	.51	.60	8.5	7.4	11	.35	1.9	.92	.58
9	.65	1.3	1.9	.50	.60	6.7	5.4	6.2	4.4	2.8	.40	.52
10	.58	1.3	1.7	.48	.70	5.6	4.6	4.4	.78	186	1.0	.92
11	.46	1.2	1.9	.47	1.0	4.8	3.7	3.3	.40	23	5.6	.52
12	.40	1.1	2.1	.46	4.0	168	3.1	2.6	.26	6.2	100	.40
13	.35	.92	2.0	.45	70	54	2.8	2.1	.22	2.8	15	.40
14	.35	.92	1.8	.45	33	17	2.4	1.8	.22	1.8	7.7	.40
15	.30	.92	1.6	.45	20	9.9	2.1	1.5	.18	1.3	3.7	.85
16	.30	.85	1.5	.45	15	6.5	1.9	1.3	.52	1.8	2.6	7.1
17	.35	.78	1.4	.45	13	4.8	1.8	1.2	.52	1.2	20	1.4
18	.35	.78	1.3	.45	9.0	83	1.7	1.0	.65	.78	4.1	.71
19	.30	.85	1.2	.45	19	19	1.7	.85	.78	.65	2.1	1.9
20	2.6	.71	1.4	.45	30	19	1.6	.78	.46	.52	1.6	1.0
21	2.0	.71	1.4	.45	17	11	1.4	.65	.22	.40	26	.65
22	.92	.71	1.2	.45	41	12	2.4	.58	2.1	.35	38	.52
23	1.1	.71	1.1	.45	96	7.4	3.7	.58	1.2	.22	7.1	.40
24	60	.71	.96	.45	141	5.1	4.1	.52	2.1	.18	4.6	.40
25	12	.71	1.9	.45	24	3.9	11	.52	5.9	.18	2.9	.46
26	4.1	1.8	1.7	.45	15	3.5	3.9	.58	1.6	.18	2.1	.40
27	2.1	7.4	1.2	.45	38	3.3	2.3	.40	.92	.08	1.8	.30
28	1.5	3.7	1.0	.45	16	83	13	.35	4.4	.06	1.5	.30
29	1.3	2.4	.85	.45	---	23	22	.35	5.9	.65	1.4	.30
30	37	2.0	.76	.45	---	9.9	6.5	.30	6.8	.78	1.3	.30
31	41	---	.70	.45	---	5.9	---	.26	---	.22	1.1	---
TOTAL	180.87	58.58	47.07	15.09	607.80	1096.8	584.1	518.22	43.80	280.98	254.64	26.02
MEAN	5.83	1.95	1.52	.49	21.7	35.4	19.5	16.7	1.46	9.06	8.21	.87
MAX	60	9.5	2.6	.68	141	279	322	217	6.8	186	100	7.1
MIN	.30	.71	.70	.45	.45	3.3	1.4	.26	.10	.06	.03	.30
CFSM	.63	.21	.16	.05	2.33	3.80	2.10	1.79	.16	.97	.88	.09
IN.	.72	.23	.19	.06	2.43	4.38	2.33	2.07	.17	1.12	1.02	.10

CAL YR 1976 TOTAL 2463.64 MEAN 6.73 MAX 293 MIN .02 CFSM .72 IN 9.84
WTR YR 1977 TOTAL 3713.97 MEAN 10.2 MAX 322 MIN .03 CFSM 1.10 IN 14.84

03366500 MUSCATATUCK RIVER NEAR DEPUTY, IN

LOCATION.--Lat 38°48'15", long 85°40'26", in SW¼NE¼ sec.7, T.4 N., R.8 E., Jefferson County, Hydrologic Unit 05120207, on left bank at downstream side of highway bridge, 1.4 miles (2.3 km) northwest of Deputy, 1.9 miles (3.1 km) upstream from Coffee Creek, 2.4 miles (3.9 km) downstream from confluence of Graham Creek and Big Creek, and at mile 50.0 (80.4 km).

DRAINAGE AREA.--293 mi² (759 km²).

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WSP 1335: 1948. WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 541.17 ft (164.949 m) above mean sea level. Prior to June 22, 1955, nonrecording gage at same site and datum.

REMARKS.--Records good except those for period of no gage-height record, Jan. 1 to Feb. 22, which is poor.

AVERAGE DISCHARGE.--29 years (1948 to current year), 335 ft³/s (9.487 m³/s), 15.53 in/yr (394 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 52,200 ft³/s (1,480 m³/s) Jan. 21, 1959, from rating curve extended above 25,000 ft³/s (708 m³/s) on basis of contracted-opening measurement of peak flow, gage height, 33.1 ft (10.09 m), from flood-marks; no flow at times most years.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 7,500 ft³/s (212 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Mar. 04	1600	8740 248	19.78 6.029
July 10	1800	*14100 399	*22.70 6.919

Minimum daily discharge, 7.3 ft³/s (0.207 m³/s) Oct. 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31	576	76	10	10	554	263	179	30	865	48	25
2	23	244	63	9.4	10	447	806	450	19	616	32	20
3	17	135	53	9.3	11	494	2110	263	14	167	26	18
4	14	95	49	9.6	12	6940	753	1690	12	89	22	16
5	12	77	43	9.8	13	3240	824	3160	11	58	19	15
6	14	61	40	10	13	867	657	2170	13	40	17	14
7	20	52	42	9.8	13	518	595	828	11	28	19	13
8	31	42	40	9.6	12	368	455	562	12	22	32	12
9	37	35	40	9.4	12	288	310	330	16	53	39	11
10	26	30	42	9.2	13	226	240	215	59	6720	227	11
11	19	26	39	9.0	15	189	201	151	50	4760	282	9.1
12	15	24	39	9.0	140	1340	163	120	29	1210	1710	8.4
13	12	22	40	9.0	2400	3020	138	98	19	444	1020	9.1
14	10	20	42	9.0	1300	886	123	83	15	328	425	9.1
15	9.7	20	37	9.0	600	503	109	70	14	221	241	9.7
16	8.4	19	35	9.0	200	351	98	62	12	145	150	16
17	7.3	18	33	9.0	130	261	90	54	11	114	385	23
18	8.4	17	32	9.0	100	1240	83	47	9.7	88	224	21
19	9.7	17	30	9.0	100	1370	79	41	10	69	122	26
20	11	15	31	9.0	140	618	79	35	11	58	85	128
21	15	15	29	9.0	200	615	74	29	14	49	120	93
22	17	14	32	9.0	500	464	74	25	23	45	674	50
23	23	14	27	9.0	1240	524	97	20	19	37	225	31
24	256	14	22	9.0	4490	336	150	19	17	32	115	22
25	643	14	19	9.0	1620	250	166	19	171	32	76	18
26	288	16	18	9.0	840	200	129	18	488	38	57	16
27	129	117	17	9.0	650	171	98	18	168	37	44	14
28	80	322	16	9.0	760	1360	121	16	113	27	34	12
29	56	171	15	9.2	---	1300	421	14	322	28	32	11
30	75	105	13	9.4	---	584	244	14	274	120	34	10
31	726	---	12	9.6	---	371	---	17	---	74	29	---
TOTAL	2643.5	2347	1066	286.3	15544	29895	9750	10817	1986.7	16614	6565	691.4
MEAN	85.3	78.2	34.4	9.24	555	964	325	349	66.2	536	212	23.0
MAX	726	576	76	10	4490	6940	2110	3160	488	6720	1710	128
MIN	7.3	14	12	9.0	10	171	74	14	9.7	22	17	8.4
CFSM	.29	.27	.12	.03	1.89	3.29	1.11	1.19	.23	1.83	.72	.08
IN.	.34	.30	.14	.04	1.97	3.80	1.24	1.37	.25	2.11	.83	.09
CAL YR 1976	TOTAL	70667.2	MEAN 193	MAX 7230	MIN 2.6	CFSM .66	IN 8.97					
WTR YR 1977	TOTAL	98205.9	MEAN 269	MAX 6940	MIN 7.3	CFSM .92	IN 12.47					

WABASH RIVER BASIN

03366500 MUSCATATUCK RIVER NEAR DEPUTY, IN--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	SUS- PENDE SEDIM- ENT DIS- CHARGE (MG/L)	SUS- PENDE SEDIM- ENT DIS- CHARGE (T/DAY)
FEB 23...	1200	1200	162	525

03368000 BRUSH CREEK NEAR NEBRASKA, IN

LOCATION.--Lat 39°04'13", long 85°29'10", in NW 1/4 sec. 11, T. 7 N., R. 9 E., Jennings County, Hydrologic Unit 05120207, on right bank at downstream side of county road bridge, 1.5 miles (2.4 km) northwest of Nebraska, 2.9 miles (4.7 km) northeast of Butlerville, and 3.6 miles (5.8 km) upstream from Brush Creek Dam.

DRAINAGE AREA.--11.4 mi² (29.5 km²).

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

REVISED RECORDS.--WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 717.17 ft (218.593 m) above mean sea level (levels by State of Indiana, Department of Natural Resources).

REMARKS.--Records good except those for periods of no gage-height record, Oct. 12 to Nov. 18, Jan. 1 to Feb. 23, and those days below 1.0 ft³/s (0.028 m³/s), which are poor.

AVERAGE DISCHARGE.--22 years, 12.5 ft³/s (0.354 m³/s), 14.89 in/yr (378 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,440 ft³/s (97.4 m³/s) May 24, 1968, gage height, 11.40 ft (3.475 m), from rating curve extended above 440 ft³/s (12.5 m³/s) on basis of contracted-opening measurement of peak flow at gage height, 9.70 ft (2.957 m); no flow at times most years.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 950 ft³/s (26.9 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
May 5	0745	*1760 49.8	*8.62 2.63

Minimum daily discharge, no flow for many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	3.0	1.1	.08	.07	6.0	4.5	3.7	.38	.47	.12	.02
2	.00	.80	1.0	.07	.07	5.5	104	3.3	.29	3.3	.06	.00
3	.00	.60	.72	.07	.07	141	23	2.8	.25	1.8	.03	.00
4	.00	.40	.76	.07	.07	161	16	.49	.21	1.2	.02	.00
5	.00	.45	.58	.07	.07	20	17	364	.18	.78	.00	.00
6	.03	.35	.64	.06	.07	8.9	14	23	.18	.62	.00	.00
7	.08	.30	.99	.06	.07	6.1	14	14	.18	.49	.00	.00
8	.06	.27	.71	.06	.07	4.8	7.9	7.0	.18	.33	.00	.00
9	.04	.24	.49	.06	.07	4.5	6.0	4.5	.43	.33	.00	.00
10	.02	.22	.61	.06	.10	4.2	5.1	3.5	.29	22	.00	.00
11	.00	.21	1.1	.06	.30	3.7	4.2	2.7	.25	8.7	.78	.00
12	.00	.20	1.1	.06	6.0	97	3.5	2.3	.21	2.7	4.1	.00
13	.00	.19	.87	.06	55	20	3.1	2.0	.15	1.4	1.7	.00
14	.00	.18	.68	.06	23	9.2	2.8	1.8	.12	1.4	1.4	.00
15	.00	.17	.69	.06	7.0	6.8	2.5	1.7	.12	.56	.29	.00
16	.00	.17	.69	.06	4.0	5.0	2.2	1.4	.10	.38	.21	.00
17	.00	.16	.68	.06	2.7	4.2	2.0	1.2	.06	.29	3.5	.00
18	.00	.16	.62	.06	2.2	33	1.9	1.2	.05	.25	.62	.00
19	.00	.21	.64	.06	2.2	9.7	1.9	.95	.05	.18	.21	.18
20	.10	.21	.78	.06	3.5	10	1.8	.86	.05	.12	.12	.08
21	.10	.18	.59	.06	5.0	7.2	1.6	.78	.05	.10	.15	.05
22	.10	.18	.34	.06	20	13	3.0	.78	.12	.10	.43	.03
23	.10	.18	.33	.06	180	7.5	5.3	.78	.29	.05	.21	.03
24	7.0	.18	.27	.06	71	5.6	3.9	.62	1.6	.03	6.1	.03
25	1.5	.18	.22	.06	12	4.7	4.3	.70	6.7	.05	.33	.03
26	.80	4.1	.18	.06	8.1	4.0	3.2	.86	8.0	.05	.05	.03
27	.50	7.5	.17	.06	21	3.9	2.6	.78	1.8	.02	.03	.03
28	.40	3.0	.13	.06	7.3	66	6.4	.62	21	.00	.02	.02
29	.30	1.8	.11	.07	---	13	8.3	.95	8.3	.00	.10	.00
30	.30	1.1	.10	.07	---	7.8	4.6	1.8	14	.43	.12	.00
31	10	---	.09	.07	---	5.5	---	.62	---	.29	.08	---
TOTAL	21.43	26.89	17.98	1.95	431.03	698.8	280.6	500.20	65.59	94.95	20.78	.53
MEAN	.69	.90	.58	.063	15.4	22.5	9.35	16.1	2.19	3.06	.67	.018
MAX	10	7.5	1.1	.08	180	161	104	364	21	47	6.1	.18
MIN	.00	.16	.09	.06	.07	3.7	1.6	.62	.05	.00	.00	.00
CFSM	.06	.08	.05	.006	1.35	1.97	.82	1.41	.19	.27	.06	.002
IN.	.07	.09	.06	.01	1.41	2.28	.92	1.63	.21	.31	.07	.00

CAL YR 1976 TOTAL 2389.19 MEAN 6.53 MAX 341 MIN .00 CFSM .57 IN 7.80
WTR YR 1977 TOTAL 2160.73 MEAN 5.92 MAX 364 MIN .00 CFSM .52 IN 7.05

WABASH RIVER BASIN

03369000 VERNON FORK NEAR BUTLERVILLE, IN

LOCATION.--Lat 39°02'55", long 85°32'40", in NW¼SE¼ sec.17, T.7 N., R.9 E., Jennings County, Hydrologic Unit 05120207, on left bank 0.3 mile (0.5 km) downstream from Muscatatuck State School dam, 1.1 miles (1.8 km) downstream from Brush Creek, 2 miles (3 km) northwest of Butlerville, and at mile 50.6 (81.4 km).

DRAINAGE AREA.--85.9 mi² (222.5 km²).

PERIOD OF RECORD.--February 1942 to current year. Prior to October 1960, published as North Fork of Vernon Fork near Butlerville.

REVISED RECORDS.--WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 669.40 ft (204.033 m) above mean sea level. Prior to Aug. 19, 1942, nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter periods, which are fair. Water supply for the Muscatatuck State School is diverted and the sewage effluent returned above station. Flow regulated by Brush Creek Reservoir.

AVERAGE DISCHARGE.--35 years, 92.2 ft³/s (2.611 m³/s), 14.58 in/yr (370 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 26,200 ft³/s (742 m³/s) Jan. 21, 1959, gage height, 25.41 ft (7.745 m) from rating curve extended above 10,000 ft³/s (283 m³/s) on basis of slope-area measurement of peak flow; no flow at times during 1944, 1945, 1949, and 1968.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 4,000 ft³/s (113 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Mar. 04	0200	*4210 119	*11.16 3.40

Minimum daily discharge, 1.1 ft³/s (0.31 m³/s) Oct. 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.6	40	9.6	1.5	1.4	59	51	23	3.8	537	6.2	9.3
2	2.1	22	8.9	1.4	1.4	51	747	21	2.5	92	3.6	6.4
3	1.9	17	7.4	1.4	1.4	269	396	18	1.7	46	2.6	4.7
4	1.4	13	6.7	1.4	1.4	2150	149	340	1.5	28	2.1	3.8
5	1.3	11	6.4	1.3	1.5	384	165	1020	1.5	19	1.7	3.3
6	3.3	9.2	6.2	1.3	1.5	145	116	269	1.7	14	1.5	45
7	2.0	7.7	7.2	1.3	1.4	86	133	229	1.3	10	1.8	18
8	3.8	6.7	6.9	1.3	1.4	96	89	126	1.3	8.6	1.9	7.5
9	4.9	6.2	5.5	1.3	1.3	75	66	76	1.9	7.2	36	4.9
10	3.3	5.3	5.5	1.3	1.4	40	54	51	2.5	67	73	3.6
11	2.2	5.1	6.7	1.3	2.6	34	44	40	3.9	65	23	2.5
12	2.0	4.9	7.7	1.3	52	521	36	31	2.6	51	76	2.2
13	1.8	4.7	6.7	1.3	479	264	29	25	2.0	36	44	2.1
14	1.6	4.5	5.7	1.2	162	123	26	21	1.8	45	19	2.4
15	1.4	4.3	5.1	1.2	69	85	24	17	1.6	17	12	16
16	1.8	4.1	4.9	1.2	41	65	21	15	1.4	11	8.0	9.6
17	1.5	4.1	5.1	1.2	25	50	18	12	1.3	7.7	96	7.5
18	1.3	4.1	4.9	1.2	20	186	16	9.9	1.3	5.7	38	9.9
19	1.1	3.9	4.7	1.2	20	124	16	8.0	1.4	4.7	15	9.9
20	2.2	3.8	5.5	1.2	32	126	15	6.9	1.4	3.9	7.5	16
21	3.2	3.8	5.3	1.2	48	101	13	6.2	1.2	3.4	6.0	14
22	3.2	3.6	4.1	1.2	67	126	17	5.5	1.8	2.8	74	7.5
23	4.6	3.3	3.4	1.2	676	98	35	4.7	2.0	2.2	20	5.5
24	50	3.3	2.6	1.2	1100	69	31	4.3	4.1	2.1	37	4.5
25	41	3.3	2.6	1.2	184	55	31	4.7	149	2.2	24	3.8
26	20	12	2.4	1.2	99	45	23	4.5	89	6.2	13	3.4
27	13	57	2.2	1.2	213	41	19	3.8	93	8.6	8.9	3.1
28	9.4	29	2.0	1.3	86	566	21	3.3	279	3.9	6.4	2.5
29	7.5	18	1.8	1.3	---	186	44	3.6	215	3.3	8.6	2.1
30	12	12	1.7	1.4	---	105	29	6.2	77	24	40	2.2
31	78	---	1.6	1.5	---	70	---	6.0	---	14	17	---
TOTAL	285.4	326.9	157.0	39.7	3389.7	6395	2474	2411.6	949.5	1148.5	723.8	233.2
MEAN	9.21	10.9	5.06	1.28	121	206	82.5	77.8	31.7	37.0	23.3	7.77
MAX	78	57	9.6	1.5	1100	2150	747	1020	279	537	96	45
MIN	1.1	3.3	1.6	1.2	1.3	34	13	3.3	1.2	2.1	1.5	2.1
CFSM	.11	.13	.06	.02	1.41	2.40	.96	.91	.37	.43	.27	.09
IN.	.12	.14	.07	.02	1.47	2.77	1.07	1.04	.41	.50	.31	.10
CAL YR 1976	TOTAL	19492.95	MEAN 53.3	MAX 2700	MIN .79	CFSM .62	IN 8.44					
WTR YR 1977	TOTAL	18534.30	MEAN 50.8	MAX 2150	MIN 1.1	CFSM .59	IN 8.03					

03369500 VERNON FORK AT VERNON, IN

LOCATION.--Lat 38°58'34", long 85°37'13", in NW¼SE¼ sec.10, T.6 N., R.8 E., Jennings County, Hydrologic Unit 05120207, at downstream end of left bank bridge pier, 1 mile (2 km) southwest of Vernon, 3.1 miles (5.0 km) downstream from Otter Creek, and at mile 36.4 (58.6 km).

DRAINAGE AREA.--198 mi² (513 km²).

PERIOD OF RECORD.--October 1939 to current year. Monthly discharge only for some periods, published in WSP 1305.

REVISED RECORDS.--WSP 1335: 1940, 1953. WSP 1909: 1952-53. WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 587.30 ft (179.009 m) above mean sea level, supplementary adjustment of 1944 (levels by State of Indiana, Department of Natural Resources). Prior to Jan. 14, 1940, and June 23 to Nov. 13, 1967, non-recording gage, and Jan. 14, 1940, to June 22, 1967, water-stage recorder at site on right bank at same datum.

REMARKS.--Records good. Diversion above station for municipal water supply of North Vernon and Vernon. Part of this diversion returned above gage as sewage effluent by North Vernon Sewage Treatment Plant. Some regulation at times at low flow by Old Timbers Lake on Jefferson Proving Grounds.

AVERAGE DISCHARGE.--38 years, 216 ft³/s (6.117 m³/s), 14.81 in/yr (376 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 56,800 ft³/s (1,610 m³/s) Jan. 21, 1959, from rating curve extended above 24,000 ft³/s (680 m³/s) on basis of slope-area measurement of peak flow, gage height, 32.83 ft (10.007 m), from high-water mark. No flow at times in 1940, 1943-44.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 6,000 ft³/s (170 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Mar. 04	0600	*7200 204	*12.82 3.91

Minimum daily discharge, 3.5 ft³/s (0.099 m³/s) Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	178	32	5.4	4.6	218	149	84	14	1110	19	23
2	10	81	27	4.7	4.8	202	817	83	13	302	11	15
3	6.9	51	24	4.4	5.1	423	1300	67	9.3	139	7.3	11
4	4.9	38	22	4.0	5.5	4720	413	877	6.8	81	5.5	8.5
5	4.1	29	19	4.4	5.8	1250	475	2410	5.7	52	4.4	6.4
6	7.0	24	18	4.6	6.0	462	353	911	7.0	36	3.7	8.3
7	15	21	19	4.6	5.8	249	400	582	11	26	3.9	58
8	8.0	18	20	4.6	5.5	196	264	341	8.5	24	4.0	22
9	8.0	16	18	4.5	5.4	202	187	202	34	34	4.0	11
10	7.0	14	16	4.4	6.0	124	151	139	22	185	55	8.3
11	6.8	13	17	4.3	11	105	129	105	11	307	52	5.7
12	6.6	12	19	4.2	88	1040	110	83	8.0	211	139	4.4
13	5.8	11	20	4.1	1490	1090	96	67	6.8	147	157	3.7
14	4.9	9.9	19	4.1	931	387	85	56	6.8	430	84	3.9
15	4.4	9.9	16	4.0	430	242	74	48	6.6	96	41	4.7
16	5.5	9.9	15	4.0	120	176	67	42	5.7	48	26	11
17	4.9	9.6	14	4.0	80	135	58	36	4.4	29	85	15
18	4.3	8.8	14	4.0	60	627	53	31	4.3	23	151	9.6
19	3.9	8.8	13	4.0	60	455	51	29	37	17	62	28
20	7.5	9.0	14	4.0	100	327	50	25	8.8	14	28	28
21	10	8.3	14	4.0	150	307	46	23	4.7	30	19	19
22	8.8	7.8	13	4.0	356	321	51	20	6.0	41	99	19
23	8.5	8.0	11	4.0	1430	302	102	17	13	12	77	12
24	133	7.8	9.3	4.0	2980	191	107	16	68	8.5	41	9.3
25	178	7.5	8.3	4.0	641	147	84	16	313	6.6	73	7.3
26	77	33	7.5	4.0	344	122	78	15	307	9.0	51	6.2
27	42	189	7.0	4.0	585	108	62	13	280	6.8	27	5.5
28	27	129	6.6	4.0	350	1240	61	12	235	7.3	18	4.7
29	20	72	6.2	4.1	---	666	161	11	652	9.6	16	3.9
30	45	45	5.9	4.3	---	315	117	11	205	20	27	3.5
31	264	---	5.6	4.5	---	207	---	12	---	17	46	---
TOTAL	953.8	1079.3	470.4	131.2	10260.5	16556	6151	6384	2314.4	3478.8	1436.8	375.9
MEAN	30.8	36.0	15.2	4.23	366	534	205	206	77.1	112	46.3	12.5
MAX	264	189	32	5.4	2980	4720	1300	2410	652	1110	157	58
MIN	3.9	7.5	5.6	4.0	4.6	105	46	11	4.3	6.6	3.7	3.5
CFSM	.16	.18	.08	.02	1.85	2.70	1.04	1.04	.39	.57	.23	.06
IN.	.18	.20	.09	.02	1.93	3.11	1.16	1.20	.43	.65	.27	.07
CAL YR 1976	TOTAL	45418.1	MEAN 124	MAX 5730	MIN 2.2	CFSM .63	IN 8.53					
WTR YR 1977	TOTAL	49592.1	MEAN 136	MAX 4720	MIN 3.5	CFSM .69	IN 9.32					

03371500 EAST FORK WHITE RIVER NEAR BEDFORD, IN

LOCATION.--Lat 38°46'10", long 86°24'30", in SW¼NE¼ sec.21, T.4 N., R.1 E., Lawrence County, Hydrologic Unit 05120208, on downstream side of center pier of bridge on county road, 0.4 mile (0.6 km) upstream from Mill Creek, 2.9 miles (4.7 km) downstream from Sugar Creek, 3.9 miles (6.3 km) northeast of Mitchell, 7.8 miles (12.6 km) southeast of Bedford, and at mile 153.3 (246.7 km).

DRAINAGE AREA.--3,861 mi² (10,000 km²).

PERIOD OF RECORD.--May 1939 to current year (high-water records only October 1943 to September 1957).

REVISED RECORDS.--WSP 2109: Drainage area. WRD Ind. 1973: 1972.

GAGE.--Water-stage recorder. Datum of gage is 473.59 ft (144.350 m) above mean sea level. Prior to Feb. 6, 1940, nonrecording gage, and Feb. 6, 1940, to Sept. 24, 1957, water-stage recorder, at site 9.8 miles (15.8 km) downstream at datum 4.39 ft (1.338 m) lower (now used as an auxiliary gage).

REMARKS.--Records good except those for period of no gage-height record, Jan. 8 to Feb. 10, which are fair.

AVERAGE DISCHARGE.--24 years (1939-43, 1957 to current year), 3,679 ft³/s (104.2 m³/s), 11.67 in/yr (296 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 75,700 ft³/s (2,140 m³/s) Mar. 12, 1964; maximum gage height, 35.97 ft (10.964 m) May 11, 1961; minimum daily discharge, 138 ft³/s (3.91 m³/s) Sept. 7, 1941.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of 47.5 ft (14.48 m), from floodmark determined by Corps of Engineers, discharge, 155,000 ft³/s (4,390 m³/s) at former site.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 13,000 ft³/s (368 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Apr. 07	0600	*13500 382	*17.68 5.389

Minimum daily discharge, 273 ft³/s (7.73 m³/s) Jan. 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	556	972	827	311	301	9030	8700	3770	1330	3230	836	1150
2	532	1350	734	306	295	8970	7580	3260	1340	3630	841	1040
3	501	1400	657	304	295	8570	8300	2900	1250	4140	796	985
4	463	1060	599	306	300	9460	9020	3490	1180	3500	744	925
5	431	832	564	316	309	9930	10800	4950	1120	2520	704	866
6	412	717	536	327	313	10000	12800	7560	1120	1920	672	821
7	408	654	529	336	310	11000	13500	8600	1060	1580	696	860
8	421	603	517	327	303	11900	11900	9010	1050	1370	725	803
9	418	565	507	313	299	12000	9680	9300	1010	1230	814	795
10	409	532	498	301	309	10900	7210	9860	991	1760	809	777
11	405	509	505	292	364	9000	5470	9930	984	3460	931	751
12	414	491	495	285	612	6960	4550	7850	1000	5660	1830	712
13	409	477	497	281	1330	6010	3970	5300	1020	5720	3070	680
14	395	466	498	287	1740	6660	3560	4080	997	5410	3740	658
15	382	457	489	302	2600	7270	3250	3480	949	5180	3810	648
16	370	447	484	310	3380	7170	2990	3050	913	4200	3110	705
17	361	439	478	296	2880	6500	2760	2750	880	2650	3380	765
18	358	430	474	285	2210	5640	2570	2490	858	1840	2500	717
19	351	422	469	273	1840	5870	2400	2250	872	1500	2300	723
20	359	417	466	275	1650	6370	2290	2070	840	1380	1910	973
21	363	413	448	282	1520	6270	2190	1940	808	1390	1570	924
22	366	413	431	286	1730	5690	2380	1830	828	1540	2550	1040
23	370	412	420	289	2670	4980	6490	1730	874	1330	3140	1090
24	458	408	409	293	4150	4480	7520	1630	895	1170	2780	985
25	561	404	418	293	6320	4030	7150	1560	913	1060	2110	884
26	753	430	427	295	7500	3470	6630	1530	1070	1060	1680	816
27	1030	477	434	302	9010	3090	5240	1430	1570	1080	1500	759
28	943	520	432	305	9330	5430	4100	1380	1950	991	1400	716
29	767	623	402	309	---	7560	3690	1340	2720	901	1310	683
30	694	843	356	309	---	8390	3910	1300	2580	863	1580	658
31	792	---	322	303	---	9040	---	1260	---	832	1310	---
TOTAL	15452	18183	15322	9299	63870	231640	182600	122880	34972	74097	55148	24909
MEAN	498	606	494	300	2281	7472	6087	3964	1166	2390	1779	830
MAX	1030	1400	827	336	9330	12000	13500	9930	2720	5720	3810	1150
MIN	351	404	322	273	295	3090	2190	1260	808	832	672	648
CFSM	.13	.16	.13	.08	.59	1.94	1.58	1.03	.30	.62	.46	.22
IN.	.15	.18	.15	.09	.62	2.23	1.76	1.18	.34	.71	.53	.24

CAL YR 1976	TOTAL	957096	MEAN	2615	MAX	21000	MIN	322	CFSM	.68	IN	9.22
WTR YR 1977	TOTAL	848372	MEAN	2324	MAX	13500	MIN	273	CFSM	.60	IN	8.17

03371520 BACK CREEK AT LEESVILLE, IN

LOCATION.--Lat 38°50'48", long 86°18'06", in SW 1/4 sec. 21, T.5 N., R.2 E., Lawrence County, Hydrologic Unit 05120208, on left bank at downstream side of county road bridge, 0.9 mile (1.4 km) west of Leesville, 2.5 miles (4.0 km) upstream from Jones Defeat Hollow and 7 miles (11 km) above mouth.

DRAINAGE AREA.--24.1 mi² (62.4 km²).

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

REVISED RECORDS.--WRD Ind. 1972: 1971.

GAGE.--Water-stage recorder. Datum of gage is 575.00 ft (175.260 m) above mean sea level.

REMARKS.--Records good except those for winter periods and period of no gage-height record, Dec. 29 to Feb. 16, which are fair.

AVERAGE DISCHARGE.--7 years, 32.0 ft³/s (0.906 m³/s), 18.03 in/yr (458 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,300 ft³/s (433 m³/s) July 21, 1973, gage height, 14.0 ft (4.27 m), from floodmarks, from rating extended above 550 ft³/s (15.6 m³/s) on basis of step-backwater analysis and contracted-opening and flow-over-road measurement of peak flow; no flow at times during 1971, 1975 and 1976.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in 1913 reached a stage of 18.1 ft (5.52 m) from information by local resident.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 1,000 ft³/s (28.3 m³/s) (revised) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Mar. 03	2215	1170 33.1	5.25 1.600	July 29	0915	1040 29.4	5.06 1.542
July 14	0015	*1370 38.8	*5.61 1.710				

Minimum daily discharge, 0.51 ft³/s (0.014 m³/s) July 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.4	14	4.9	.98	.89	35	41	50	4.1	59	6.6	5.9
2	1.7	10	4.2	.90	1.0	27	153	46	3.0	22	4.5	4.7
3	1.4	10	3.8	.94	1.1	168	107	43	2.3	15	3.3	3.9
4	1.1	7.7	3.7	1.0	1.2	420	70	96	1.6	11	2.4	3.3
5	1.1	6.6	4.1	1.1	1.1	124	55	152	1.6	9.4	1.6	2.7
6	2.0	5.9	4.6	1.2	1.1	68	48	77	2.6	7.8	.98	2.4
7	2.7	5.5	4.0	1.2	1.0	51	43	68	2.3	6.4	2.0	1.9
8	2.4	4.8	3.7	1.2	.96	42	37	45	1.5	5.5	3.4	1.5
9	2.0	4.7	3.5	1.1	1.0	37	34	33	3.4	5.1	2.5	1.1
10	2.0	4.8	3.9	1.0	1.5	33	32	27	3.7	117	2.4	.85
11	2.0	4.5	4.0	1.0	15	30	29	23	2.4	23	48	.55
12	2.0	3.8	3.6	1.1	80	142	25	18	1.8	13	92	.56
13	2.0	3.6	3.3	1.1	120	80	24	15	1.3	28	23	.84
14	2.0	3.2	3.1	1.1	60	52	23	12	1.1	109	21	1.2
15	2.0	2.6	3.4	1.0	30	43	21	11	1.0	15	13	1.4
16	2.0	2.4	3.3	.88	24	36	19	8.6	.74	8.7	11	5.8
17	2.0	2.3	3.1	.80	20	33	15	7.3	.52	5.9	12	3.6
18	1.7	2.0	3.1	.73	17	117	15	6.1	8.3	4.5	7.5	2.5
19	1.7	2.0	3.1	.70	23	62	17	5.0	8.3	3.6	5.3	33
20	2.7	2.2	3.1	.72	25	53	23	4.4	3.9	2.7	4.3	9.1
21	3.1	2.0	2.8	.78	20	46	26	3.8	2.2	2.4	14	5.7
22	3.1	1.7	2.4	.88	18	56	179	3.3	16	4.4	44	4.4
23	3.4	1.5	2.1	.92	57	50	194	2.8	10	2.1	12	3.6
24	40	1.4	2.0	.94	147	43	100	2.3	7.3	1.2	9.1	3.8
25	11	1.4	2.5	1.0	45	37	72	1.7	113	.85	6.7	4.2
26	7.9	1.9	2.7	1.1	33	33	59	2.0	20	3.3	5.3	3.6
27	6.0	4.5	2.7	1.1	217	60	50	1.5	11	1.0	4.5	3.0
28	5.2	6.9	2.6	1.1	56	374	63	1.1	121	.51	3.7	2.4
29	4.9	7.4	2.3	.97	---	121	73	.89	44	101	13	2.0
30	20	6.0	1.5	.90	---	63	56	20	29	16	12	4.8
31	29	---	1.1	.86	---	47	---	6.2	---	9.2	7.8	---
TOTAL	172.5	137.3	98.2	30.30	1017.85	2583	1703	792.99	428.96	613.56	398.88	124.30
MEAN	5.56	4.58	3.17	.98	36.4	83.3	56.8	25.6	14.3	19.8	12.9	4.14
MAX	40	14	4.9	1.2	217	420	194	152	121	117	92	33
MIN	1.1	1.4	1.1	.70	.89	27	15	.89	.52	.51	.98	.55
CFSM	.23	.19	.13	.04	1.51	3.46	2.36	1.06	.59	.82	.54	.17
IN.	.27	.21	.15	.05	1.57	3.99	2.63	1.22	.66	.95	.62	.19

CAL YR 1976	TOTAL	5727.71	MEAN 15.6	MAX 498	MIN .00	CFSM .65	IN 8.84
WTR YR 1977	TOTAL	8100.84	MEAN 22.2	MAX 420	MIN .51	CFSM .92	IN 12.50

WABASH RIVER BASIN

03372300 STEPHENS CREEK NEAR BLOOMINGTON, IN

LOCATION.--Lat 39°10'11", long 86°25'07", in NE¼NW¼ sec.4, T.8 N., R.1 E., Monroe County, Hydrologic Unit 05120208, on downstream side of right pier of bridge on State Highway 46, 0.2 mile (0.3 km) downstream from Kerr Creek, 4.0 miles (6.4 km) west of Belmont, and 6.1 miles (9.8 km) east of Bloomington.

DRAINAGE AREA.--10.9 mi² (28.2 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 550.00 ft (167.640 m) above mean sea level.

REMARKS.--Records good except those for period of no gage-height record, Dec. 21 to Feb. 14, which are fair.

AVERAGE DISCHARGE.--7 years, 12.7 ft³/s (0.360 m³/s), 15.86 in/yr (403 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,370 ft³/s (67.1 m³/s) Apr. 2, 1977, gage height, 11.52 ft (3.511 m) from rating curve extended above 270 ft³/s (7.6 m³/s) on basis of slope-area measurement at gage height 8.37 ft (2.551 m) and contracted-opening measurement at gage height 11.52 ft (3.511 m); no flow at times most years.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 350 ft³/s (9.91 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Feb. 27	0045	367 10.4	7.95 2.423	Apr. 02	1215	*2370 67.1	*11.52 3.511
Mar. 28	0045	492 13.9	8.77 2.673	Sept. 05	2315	361 10.2	8.02 2.444

Minimum daily discharge, 0.02 ft³/s (0.001 m³/s) Oct. 2-5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.03	1.1	.53	.08	.08	14	25	8.4	.21	2.2	.36	.95
2	.02	.70	.39	.07	.08	11	404	7.1	.15	2.0	.28	.69
3	.02	.54	.33	.08	.09	47	87	6.8	.12	1.6	.20	.52
4	.02	.44	.28	.08	.09	116	44	27	.11	1.5	.17	.43
5	.02	.38	.34	.08	.08	50	27	30	.15	1.1	.15	26
6	.04	.31	.42	.09	.07	24	25	33	.13	1.5	.20	28
7	.03	.26	.37	.09	.07	14	29	96	.11	2.2	1.4	4.8
8	.03	.23	.30	.08	.07	9.6	22	46	.26	14	.71	2.8
9	.03	.27	.27	.08	.08	7.2	17	25	.23	5.4	.48	1.7
10	.04	.25	.28	.08	.08	5.8	13	16	.16	2.5	.34	1.4
11	.05	.23	.30	.08	3.5	4.8	9.4	11	.12	1.9	.60	.98
12	.05	.23	.31	.08	25	19	7.3	7.5	.10	1.1	2.7	.85
13	.05	.21	.23	.09	14	19	5.9	5.7	.09	.62	1.2	1.0
14	.05	.24	.25	.09	10	14	5.1	4.5	.08	7.0	.82	1.1
15	.05	.23	.26	.08	8.1	9.7	4.3	3.5	.08	4.8	.70	5.9
16	.05	.22	.23	.07	6.2	7.2	3.6	2.7	.07	1.9	.63	7.0
17	.05	.20	.23	.06	4.6	5.8	3.2	2.1	.08	1.2	1.6	3.4
18	.05	.19	.21	.06	3.5	15	2.6	1.6	.11	.86	1.0	2.7
19	.05	.19	.19	.06	6.1	12	3.0	1.3	.54	.68	.86	4.0
20	.07	.19	.17	.06	7.4	14	3.1	1.1	.26	.62	1.2	3.2
21	.05	.19	.15	.06	5.9	12	2.9	.90	.14	.62	11	2.2
22	.05	.18	.13	.07	12	27	7.0	.75	.64	.85	9.3	1.5
23	.08	.18	.12	.07	41	23	11	.67	4.5	.65	1.9	1.1
24	3.3	.19	.11	.08	44	16	10	.60	4.0	.56	1.2	2.6
25	.88	.19	.12	.08	14	12	8.4	.60	2.2	.45	.80	2.8
26	.39	6.5	.14	.08	21	8.7	7.3	.84	1.8	.31	.54	2.2
27	.27	4.1	.18	.09	108	42	6.1	.67	1.5	.20	.40	1.6
28	.21	2.1	.16	.10	24	250	10	.61	7.5	.87	.24	1.2
29	.17	1.2	.15	.09	---	87	13	.62	3.3	.93	3.6	.95
30	2.7	.78	.12	.08	---	51	10	.70	2.0	.67	2.4	.81
31	2.2	---	.10	.08	---	34	---	.35	---	.48	1.4	---
TOTAL	11.10	22.22	7.37	2.42	359.09	981.8	826.2	343.61	30.74	61.27	48.38	114.38
MEAN	.36	.74	.24	.078	12.8	31.7	27.5	11.1	1.02	1.98	1.56	3.81
MAX	3.3	6.5	.53	.10	108	250	404	96	7.5	14	11	28
MIN	.02	.18	.10	.06	.07	4.8	2.6	.35	.07	.20	.15	.43
CFSM	.03	.07	.02	.007	1.17	2.91	2.52	1.02	.09	.18	.14	.35
IN.	.04	.08	.03	.01	1.23	3.35	2.82	1.17	.10	.21	.17	.39

CAL YR 1976 TOTAL 2438.00 MEAN 6.66 MAX 127 MIN .00 CFSM .61 IN 8.32
WTR YR 1977 TOTAL 2808.58 MEAN 7.69 MAX 404 MIN .02 CFSM .71 IN 9.58

03372400 MONROE LAKE NEAR HARRODSBURG, IN

LOCATION.--Lat 39°00'24", long 86°50'56", in SW¼SW¼ sec.27, T.7 N., R.1 W., Monroe County, Hydrologic Unit 05120208, in discharge tower of reservoir on Salt Creek, 1.3 miles (2.1 km) upstream from Clear Creek, 2.2 miles (3.5 km) southeast of Harrodsburg, and 26.1 miles (42.0 km) upstream from mouth.

DRAINAGE AREA.--432 mi² (1,119 km²).

PERIOD OF RECORD.--April 1966 to current year. Prior to September 1970 published as Monroe "Reservoir".

GAGE.--Water-stage recorder. Datum of gage is 500.00 ft (152.400 m) above mean sea level (levels by Corps of Engineers).

REMARKS.--Reservoir is formed by earth and rock-fill dam. Releases normally controlled by three gates, 3.75 ft (1.143 m) wide and 12.0 ft (3.66 m) high, in semi-elliptical concrete conduit through dam. Minimum design capacity is 22,300 acre-ft (27.5 hm³), elevation, 515 ft (157.0 m). Capacity at uncontrolled spillway elevation, 556 ft (169.5 m) is 446,000 acre-ft (550 hm³). Reservoir is used for flood control, water supply of Bloomington, and recreation. Reservoir put in operation on Apr. 26, 1966.

COOPERATION.--Water-stage recorder graph and capacity tables furnished by Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 348,700 acre-ft (430 hm³) May 2, 1973, elevation, 550.60 ft (167.823 m); minimum, 149,500 acre-ft (184 hm³) Nov. 7, 1966, elevation, 534.77 ft (163.000 m).

EXTREMES FOR CURRENT YEAR.--Maximum contents, 239,690 acre-ft (296 hm³) Apr. 7, elevation, 542.92 ft (165.482 m); minimum, 152,740 acre-ft (188 hm³) Feb. 8, 9, elevation, 535.11 ft (163.102 m).

MONTHEND ELEVATION AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	536.50	166,550	
Oct. 31.....	536.19	163,410	-3,140
Nov. 30.....	535.83	159,800	-3,610
Dec. 31.....	535.48	156,340	-3,460
CAL YR 1976.....			-57,720
Jan. 31.....	535.21	153,710	-2,630
Feb. 28.....	537.39	175,760	+22,050
Mar. 31.....	540.61	211,580	+35,820
Apr. 30.....	540.36	208,660	-2,920
May 31.....	538.75	190,420	-18,240
June 30.....	538.70	189,870	-550
July 31.....	538.63	189,100	-770
Aug. 31.....	538.96	192,740	+3,640
Sept. 30.....	538.80	190,970	-1,770
WTR YR 1977.....			+24,420

03372500 SALT CREEK NEAR HARRODSBURG, IN

LOCATION.--Lat 39°00'16", long 86°30'31", in NE¼NW¼ sec.34, T.7 N., R.1 W., Monroe County, Hydrologic Unit 05120208, on right bank 0.35 mile (0.56 km) downstream from Monroe Lake, 0.9 mile (1.4 km) upstream from Clear Creek, 2.2 miles (3.5 km) south-east of Harrodsburg, and 25.7 miles (41.4 km) upstream from mouth.

DRAINAGE AREA.--432 mi² (1,119 km²).

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WSP 1705: 1959. WSP 1725: 1956(M). WSP 2109: Drainage area.

GAGE (revised).--None. Datum of gage was 480.00 ft (146.304 m) above mean sea level (levels by Corps of Engineers). Oct. 1, 1960 to Sept. 30, 1974, water-stage recorder at site described in "LOCATION" paragraph. Prior to Oct. 1, 1960, nonrecording gage at site 0.7 mile (1.1 km) upstream at datum 2.41 ft (0.735 m) higher.

REMARKS.--Flow regulated by Monroe Lake (See sta 03372400). Daily discharge computed from relation between discharge, head, and gate openings for Monroe Lake beginning Oct. 1, 1974.

COOPERATION.--Records of daily discharge furnished by Corps of Engineers beginning Oct. 1, 1976.

AVERAGE DISCHARGE.--22 years, 470 ft³/s (13.31 m³/s), 14.77 in/yr (375 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 22,000 ft³/s (623 m³/s) June 25, 1960, gage height, 32.76 ft (9.985 m) site and datum then in use; maximum gage height at present site and datum, 35.35 ft (10.775 m) May 9, 1961; no flow Sept. 29 to Dec. 2, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 2,020 ft³/s (57.2 m³/s) Apr. 16; minimum daily, 56 ft³/s (1.59 m³/s) Feb. 1-13.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

WATER TEMPERATURES: August 1966 to September 1976.

EXTREMES FOR PERIOD OF RECORD.--

WATER TEMPERATURES: Maximum temperature, 29.0°C July 10, 11, 1973, July 30, 1975; minimum, 1.0°C Jan. 4, 5, 8-13, 1968.

EXTREMES OUTSIDE PERIOD OF RECORD.--

WATER TEMPERATURES: Maximum temperature observed, 31.0°C Aug. 6, 1964.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	58	58	57	57	56	59	623	584	61	61	61	61
2	58	58	57	57	56	59	644	584	61	61	60	61
3	58	57	57	57	56	60	215	438	61	61	60	61
4	58	57	57	57	56	144	218	634	61	61	60	61
5	58	57	57	57	56	206	219	996	61	61	60	61
6	58	57	57	57	56	207	428	1350	61	61	60	61
7	58	57	57	57	56	622	1190	1590	60	61	60	61
8	58	57	57	57	56	1250	1630	1590	60	61	60	61
9	58	57	57	57	56	1380	1780	1320	60	61	60	61
10	58	57	57	57	56	1370	1770	1230	60	61	60	61
11	58	57	58	57	56	1370	1850	1580	60	61	60	61
12	58	57	57	57	56	1360	1910	1770	60	61	61	61
13	58	57	57	57	56	1360	1900	1670	60	61	61	61
14	58	57	57	57	57	1360	1890	1570	60	61	61	61
15	58	57	57	57	57	1260	1950	1560	60	61	61	61
16	58	57	57	57	57	942	2020	1550	60	61	61	61
17	57	57	57	57	57	606	2010	1550	60	61	61	61
18	57	57	57	57	57	366	2000	949	60	61	61	61
19	57	57	57	57	57	366	1990	195	60	61	61	61
20	57	57	57	57	57	366	1980	61	60	61	61	61
21	57	57	57	57	57	753	1330	61	60	61	61	61
22	57	57	57	57	57	1050	742	61	60	61	61	61
23	57	57	57	57	57	943	898	61	60	61	61	61
24	58	57	57	57	57	728	1300	61	60	61	61	61
25	58	57	57	57	58	728	1090	61	60	61	61	61
26	58	57	57	57	58	471	446	61	61	61	61	61
27	58	57	57	57	58	263	174	61	61	61	61	61
28	57	57	57	57	59	205	137	61	61	61	61	61
29	57	57	57	57	---	210	574	61	61	61	61	61
30	58	57	57	57	---	211	635	61	61	61	61	61
31	58	---	57	57	---	211	---	61	---	61	61	---
TOTAL	1789	1712	1768	1767	1588	20486	35543	23442	1811	1891	1881	1830
MEAN	57.7	57.1	57.0	57.0	56.7	661	1185	756	60.4	61.0	60.7	61.0
MAX	58	58	58	57	59	1380	2020	1770	61	61	61	61
MIN	57	57	57	57	56	59	137	61	60	61	60	61
CAL YR 1976	TOTAL	108234	MEAN 296	MAX 2020	MIN 47							
WTR YR 1977	TOTAL	95508	MEAN 262	MAX 2020	MIN 56							

03373500 EAST FORK WHITE RIVER AT SHOALS, IN

LOCATION.--Lat 38°40'02", long 86°47'32", in SW¼ sec.30, T.3 N., R.3 W., Martin County, Hydrologic Unit 05120208, in first pier from left bank of bridge on U.S. Highway 50 at Shoals, 400 ft (122 m) upstream from Baltimore and Ohio Railroad bridge, 0.9 mile (1.4 km) upstream from Beaver Creek, and at mile 105.3 (169.4 km).

DRAINAGE AREA.--4,927 mi² (12,761 km²).

PERIOD OF RECORD.--June 1903 to July 1906, October 1908 to September 1916, June 1923 to current year. Monthly discharge only for some periods, published in WSP 1305. Published as East Branch White River at Shoals, 1903-6, 1908-16. Gage-height records collected at same site since May 1908 are contained in reports of the National Weather Service.

REVISED RECORDS.--WSP 353: 1912. WSP 1335: 1903-6. WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 442.25 ft (134.798 m) above mean sea level. See WSP 1725 for history of changes prior to Oct. 26, 1932.

REMARKS.--Records good except those for winter periods, which are fair. Flow partially regulated by upstream reservoirs.

AVERAGE DISCHARGE.--63 years (1903-5, 1909-16, 1923 to current year), 5,324 ft³/s (150.8 m³/s), 14.67 in/yr (373 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 160,000 ft³/s (4,530 m³/s) Mar. 28, 1913, gage height, 42.2 ft (12.86 m), from rating curve extended above 100,000 ft³/s (2,830 m³/s); minimum daily, 64 ft³/s (1.81 m³/s) Oct. 6, 1935, as a result of filling Williams Reservoir.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 20,000 ft³/s (566 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Mar. 05	0700	*17400 493	*11.91 3.630

Minimum daily discharge, 368 ft³/s (10.4 m³/s) Jan. 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FFB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	676	1460	1180	419	427	11300	10700	5270	1470	3730	1010	1770
2	725	1420	1200	425	434	10500	10500	4870	1500	4340	974	1500
3	680	1720	1070	428	438	10300	13700	4360	1490	4700	967	1340
4	625	1650	938	446	424	14500	13000	4300	1380	4840	920	1160
5	583	1310	844	470	403	16900	12300	5770	1290	4030	860	985
6	555	1060	787	486	392	14000	13900	8650	1250	3010	807	905
7	525	890	758	494	388	12800	15700	11000	1200	2320	818	969
8	511	789	730	487	385	13700	15900	13000	1160	1950	853	1020
9	516	718	693	465	383	14700	14200	12300	1150	1830	930	953
10	518	671	678	429	411	14300	11500	11900	1100	1860	983	915
11	505	645	688	404	410	12600	8740	12100	1080	3840	1040	883
12	495	610	690	414	669	10500	7500	11600	1060	5410	2260	858
13	498	587	686	427	2220	9430	6830	8910	1070	6610	3500	840
14	492	573	672	450	3060	8780	6330	6940	1080	6430	4160	810
15	484	555	666	473	2590	9130	5920	5940	1060	6280	4520	793
16	468	549	656	450	3190	9130	5640	5370	1010	5850	4310	799
17	460	547	637	420	4370	8460	5430	4970	959	4600	4060	850
18	447	537	630	393	4100	7710	5220	4650	915	3100	3840	914
19	438	543	622	368	3430	7550	5030	4010	936	2220	3020	1150
20	450	535	618	378	3040	7510	4870	2970	963	1830	2710	1660
21	450	535	606	396	2920	7710	4600	2420	923	1700	2260	1480
22	454	530	566	410	2820	7670	4300	2200	936	1970	2520	1250
23	466	527	483	423	3450	7500	6170	2100	1010	2020	3780	1270
24	602	529	462	438	6200	6750	9700	2000	1140	1680	3790	1310
25	1050	522	483	450	8540	6030	9500	1870	1200	1500	3190	1200
26	1100	600	511	455	8410	5430	8740	1800	1420	1320	2520	1080
27	1160	905	539	448	11300	4780	7320	1770	1900	1290	2040	942
28	1420	1130	566	434	13200	9510	5790	1700	2110	1280	1780	829
29	1230	980	569	417	---	15300	4900	1600	3900	1220	1650	751
30	1050	973	500	406	---	13000	5080	1600	4000	1160	2530	696
31	1230	---	446	410	---	11000	---	1590	---	1170	2170	---
TOTAL	20863	24600	21174	13413	88004	318480	259010	169530	41662	95090	70772	31882
MEAN	673	820	683	433	3143	10270	8634	5469	1389	3067	2283	1063
MAX	1420	1720	1200	494	13200	16900	15900	13000	4000	6610	4520	1770
MIN	438	522	446	368	383	4780	4300	1590	915	1160	807	696
CFSM	.14	.17	.14	.09	.64	2.08	1.75	1.11	.28	.62	.46	.22
IN.	.16	.19	.16	.10	.66	2.40	1.96	1.28	.31	.72	.53	.24

CAL YR 1976	TOTAL	1260359	MEAN	3444	MAX	22500	MIN	434	CFSM	.70	IN	9.52
WTR YR 1977	TOTAL	1154480	MEAN	3163	MAX	16900	MIN	368	CFSM	.64	IN	8.72

03373700 LOST RIVER NEAR WEST BADEN SPRINGS, IN

LOCATION.--Lat 38°35'10", long 86°38'03", in SW¼SE¼ sec.21, T.2 N., R.2 W., Orange County, Hydrologic Unit 05120208, on left bank 20 ft (6 m) downstream from bridge on U.S. Highway 150, 1.7 miles (2.7 km) northwest of West Baden Springs, 3.8 miles (6.1 km) downstream from Lick Creek, and at mile 34.8 (56.0 km).

DRAINAGE AREA.--287 mi² (743 km²).

PERIOD OF RECORD.--December 1964 to current year. Prior to October 1965, published as Lost River near West Baden.

GAGE.--Water-stage recorder. Datum of gage is 457.92 ft (139.574 m) above mean sea level (levels by State of Indiana, Department of Natural Resources).

REMARKS.--Records good except those for winter periods and period of no-gage height record, Nov. 26 to Jan. 14, which are poor.

AVERAGE DISCHARGE.--12 years, 340 ft³/s (9.629 m³/s), 16.09 in/yr (409 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,020 ft³/s (199 m³/s) July 22, 1973, gage height, 25.35 ft (7.727 m); minimum daily, 7.5 ft³/s (0.21 m³/s) Oct. 8, 1966.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1964 reached a stage of 28.1 ft (8.56 m), from floodmarks.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 2,000 ft³/s (56.6 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Mar. 05	0800	2450 69.4	20.52 6.254	Apr. 03	1400	2370 67.1	20.32 6.194
Mar. 29	0200	*2530 71.6	*20.71 6.312				

Minimum daily discharge, 15 ft³/s (0.42 m³/s) Jan. 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30	287	62	24	16	764	731	348	84	590	91	230
2	28	175	58	24	17	562	1140	306	72	512	75	180
3	25	111	54	23	18	594	2280	272	67	334	65	150
4	23	86	50	22	20	2040	2130	527	64	258	59	120
5	22	73	47	21	23	2410	1600	910	62	216	56	140
6	26	63	44	21	22	2030	1170	1150	60	173	48	200
7	26	57	46	20	21	1400	784	1210	74	143	47	160
8	28	52	49	19	20	776	606	1070	70	127	119	137
9	29	48	46	19	19	531	503	716	69	130	460	123
10	29	46	43	18	25	443	448	526	64	176	375	113
11	28	42	43	18	100	388	403	432	58	325	371	103
12	26	40	46	17	500	804	352	362	54	440	1280	94
13	25	38	46	17	974	1270	313	306	53	300	1310	89
14	25	36	44	17	808	844	285	268	51	193	1450	89
15	26	35	43	17	536	582	261	238	50	145	900	90
16	25	34	41	16	355	475	238	209	48	131	550	104
17	25	32	40	15	251	394	216	187	47	112	700	111
18	25	31	39	16	206	776	199	168	47	101	450	104
19	24	30	38	17	217	976	186	153	55	93	300	93
20	28	29	40	17	276	723	195	141	61	86	220	155
21	31	28	39	17	264	587	230	130	54	81	180	144
22	33	27	38	17	237	550	360	120	73	183	1400	101
23	34	25	36	17	422	527	1590	111	114	189	750	88
24	186	25	34	17	1170	453	1670	103	384	115	1000	83
25	228	23	32	17	991	386	1230	96	532	120	700	83
26	123	30	30	17	601	339	774	124	342	152	500	79
27	76	100	29	17	1470	326	592	141	258	118	350	74
28	56	150	28	17	1300	1930	501	100	403	95	260	69
29	49	100	27	16	---	2460	526	89	1490	92	320	66
30	92	75	26	16	---	1980	416	85	954	123	400	63
31	439	---	25	16	---	1330	---	102	---	96	290	---
TOTAL	1870	1928	1263	562	10879	29650	21929	10700	5814	5949	15076	3435
MEAN	60.3	64.3	40.7	18.1	389	956	731	345	194	192	486	115
MAX	439	287	62	24	1470	2460	2280	1210	1490	590	1450	230
MIN	22	23	25	15	16	326	186	85	47	81	47	63
CFSM	.21	.22	.14	.06	1.36	3.33	2.55	1.20	.68	.67	1.69	.40
IN.	.24	.25	.16	.07	1.41	3.84	2.84	1.39	.75	.77	1.95	.45

CAL YR 1976	TOTAL	81756	MEAN 223	MAX 2630	MIN 18	CFSM .78	IN 10.60
WTR YR 1977	TOTAL	109055	MEAN 299	MAX 2460	MIN 15	CFSM 1.04	IN 14.14

03373980 WHITE RIVER ABOVE PETERSBURG, IN

LOCATION.--Lat 38°31'42", long 87°15'14", in NE¼SW¼ sec.12, T.1 N., R.8 W., Pike County, Hydrologic Unit 05120202, on left bank 100 ft (30 m) upstream from intake structure of Indianapolis Power and Light Company's generating plant, 1.5 miles (2.4 km) downstream from East Fork White River, 2.2 miles (3.5 km) upstream from State Highway 61, 2.8 miles (4.5 km) northeast of Petersburg, and at mile 48.0 (77.2 km).

DRAINAGE AREA.--11,123 mi² (28,809 km²).

PERIOD OF RECORD.--October 1976 to current year.

GAGE.--Water-stage recorder. Datum of gage is 401.52 ft (122.383 m) above mean sea level.

REMARKS.--Records fair. Discharges below 5,000 ft³/s based on relation between discharge measurements made "above Petersburg" with discharge measurements made "at Petersburg" (sta 03374000). Discharges above 5,000 ft³/s are the same as "at Petersburg" (sta 03374000).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 33,900 ft³/s (960 m³/s) Mar. 30, 1977, gage height, 17.58 ft (5.358 m); minimum daily, 870 ft³/s (24.6 m³/s) Jan. 11, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 33,900 ft³/s (960 m³/s) Mar. 30, gage height, 17.58 ft (5.358 m); minimum daily, 870 ft³/s (24.6 m³/s) Jan. 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1750	3110	2300	1040	950	26300	33200	8900	3630	7110	2770	4810
2	1780	3270	2230	1080	950	26600	32800	8770	3510	6690	2470	4240
3	1860	3090	2190	1100	970	25800	32300	8300	3420	6640	2280	3630
4	1820	3050	2090	1150	1020	28600	31700	8400	3400	7960	2170	3200
5	1690	2890	1980	1180	1070	31600	31800	8750	3320	7460	2080	2950
6	1620	2580	1880	1260	1030	33200	31200	10900	3190	6220	2000	3340
7	1530	2320	1820	1270	1000	32700	30900	16200	3040	5140	1930	2660
8	1490	2100	1770	1150	1010	30900	30300	20700	2930	4180	2020	2490
9	1450	1950	1710	1200	1120	28000	28100	23300	2950	3790	2310	2490
10	1460	1860	1670	960	1090	25500	24800	23400	2890	3730	2630	2410
11	1480	1780	1670	870	1120	23400	21100	21500	2810	5490	2820	2320
12	1450	1690	1680	1020	1750	21800	17500	19700	2860	7770	5380	2210
13	1430	1660	1680	1040	3540	21200	14900	18000	2970	7860	6760	2160
14	1390	1620	1670	1050	5490	20300	13500	15200	2850	8410	9300	2110
15	1370	1570	1640	1090	7760	19100	12500	12700	2830	8130	9040	2100
16	1340	1540	1610	1050	7870	18000	11400	11100	2790	7610	8490	2280
17	1320	1500	1590	890	6940	16900	10400	9920	2700	7030	8260	2110
18	1320	1480	1550	1010	6600	16600	9660	8850	2590	6010	8000	2140
19	1310	1480	1540	1010	6420	16100	9180	8090	2540	4490	6880	2290
20	1340	1470	1580	1000	5980	15100	8800	7290	2510	3980	5690	2750
21	1310	1460	1580	990	5710	14100	8480	6260	2470	3540	4720	3920
22	1270	1460	1400	1000	5810	13800	8380	5600	2590	3420	5830	3670
23	1290	1430	1430	1010	5870	13800	8450	5530	2790	3530	5260	3120
24	1780	1400	1260	1040	8100	13500	10500	5370	3100	3720	7540	3020
25	2220	1360	1410	1070	12300	12600	13800	4720	3140	4130	7380	2980
26	2510	1520	1370	1090	14500	11500	14400	4530	3570	4030	6220	2760
27	2490	2030	1320	1050	17400	10700	13500	4280	3920	3210	5260	2580
28	2420	2470	1460	1070	22900	22200	11900	4130	5440	2950	4530	2420
29	2370	2600	1270	870	---	30900	10300	4070	6120	2860	4350	2280
30	2430	2450	1050	1020	---	33100	9160	3850	6810	2720	4990	2120
31	3180	---	883	1010	---	33700	---	3720	---	2830	4790	---
TOTAL	53470	60190	50283	32640	156270	687600	544910	322030	99680	162640	154150	83560
MEAN	1725	2006	1622	1053	5581	22180	18160	10390	3323	5246	4973	2785
MAX	3180	3270	2300	1270	22900	33700	33200	23400	6810	8410	9300	4810
MIN	1270	1360	883	870	950	10700	8380	3720	2470	2720	1930	2100
CFSM	.16	.18	.15	.10	.50	1.99	1.63	.93	.30	.47	.45	.25
IN.	.18	.20	.17	.11	.52	2.30	1.82	1.08	.33	.54	.52	.28
WTR YR 1977 TOTAL	2407423		MEAN 6596		MAX 33700	MIN 870	CFSM .59	IN 8.05				

WABASH RIVER BASIN

03374000 WHITE RIVER AT PETERSBURG, IN

LOCATION.--Lat 38°30'39", long 87°17'22", in SE¼SW¼ sec.15, T.1 N., R.8 W., Pike County, Hydrologic Unit 05120202, on left bank 300 ft (91 m) downstream from bridge on State Highway 61, 0.4 mile (0.6 km) upstream from Prides Creek, 1.4 miles (2.3 km) north of Petersburg, and at mile 45.7 (73.5 km).

DRAINAGE AREA.--11,125 mi² (28,814 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1927 to current year. Monthly discharge only for October 1927, published in WSP 1305. Published as "at Hazleton" October 1927 to September 1938. Records published for both sites October 1937 to September 1938. Gage-height records collected at present site and datum since January 1935 are contained in reports of National Weather Service.

REVISED RECORDS.--WSP 1305: 1930(M). WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 400.00 ft (121.920 m) above mean sea level. See WSP 1725 for history of changes prior to Apr. 1, 1941.

REMARKS.--Records good. Flow partially regulated by upstream reservoirs.

AVERAGE DISCHARGE.--50 years, 11,390 ft³/s (322.6 m³/s), 13.90 in/yr (353 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 183,000 ft³/s (5,180 m³/s) Jan 22, 1937, gage height, 28.3 ft (8.63 m) present datum, 31.58 ft (9.626 m) site and datum then in use; minimum daily, 573 ft³/s (16.2 m³/s) Oct. 1, 1941.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913, reached a stage of 29.5 ft (8.99 m), present site and datum, from floodmarks by Corps of Engineers. Discharge, 235,000 ft³/s (6,660 m³/s).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 33,900 ft³/s (960 m³/s) Mar. 31, gage height, 17.70 ft (5.395 m); minimum daily, 787 ft³/s (22.3 m³/s) Jan. 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1730	3190	2320	970	874	26300	33200	8900	3760	7110	2850	4830
2	1760	3370	2250	1010	869	26600	32800	8770	3620	6690	2500	4350
3	1850	3170	2200	1030	895	25800	32300	8300	3530	6640	2300	3750
4	1810	3130	2100	1090	942	28600	31700	8400	3500	7960	2180	3290
5	1670	2960	1980	1120	998	31600	31800	8750	3420	7460	2090	3020
6	1590	2620	1870	1200	954	33200	31200	10900	3280	6220	2000	3440
7	1500	2340	1810	1210	924	32700	30900	16200	3120	5140	1930	2750
8	1450	2110	1750	1090	938	30900	30300	20700	3000	4340	2020	2540
9	1410	1950	1690	1140	1050	28000	28100	23300	3020	3930	2330	2500
10	1420	1850	1650	882	1020	25500	24800	23400	2960	3860	2680	2430
11	1440	1760	1650	787	1050	23400	21100	21500	2870	5490	3960	2330
12	1410	1670	1660	944	1730	21800	17500	19700	2930	7770	5380	2220
13	1390	1630	1660	966	3660	21200	14900	18000	3040	7860	6760	2150
14	1340	1590	1650	982	5490	20300	13500	15200	2910	8410	9300	2120
15	1320	1540	1610	1020	7760	19100	12500	12700	2890	8130	9040	2070
16	1290	1500	1580	977	7870	18000	11400	11100	2850	7610	8490	2220
17	1270	1460	1560	807	6940	16900	10400	9920	2750	7030	8260	2160
18	1270	1440	1520	937	6600	16600	9660	8850	2630	6010	8000	2150
19	1260	1440	1500	933	6420	16100	9180	8090	2580	4860	6880	2310
20	1290	1430	1550	921	5980	15100	8800	7290	2550	4260	5690	2810
21	1260	1420	1550	913	5710	14100	8480	6260	2510	3800	4920	4070
22	1220	1420	1350	924	5810	13800	8380	5600	2630	3590	5830	3800
23	1240	1390	1390	933	5870	13800	8450	5530	2850	3660	5260	3210
24	1760	1350	1200	967	8100	13500	10500	5370	3180	3920	7540	3130
25	2240	1310	1370	1000	12300	12600	13800	4960	3230	4250	7380	3190
26	2550	1480	1320	1020	14500	11500	14400	4750	3690	4180	6220	2880
27	2530	2030	1270	983	17400	10700	13500	4470	4070	3300	5260	2680
28	2450	2510	1420	999	22900	22200	11900	4320	5440	3010	4600	2480
29	2400	2650	1210	787	---	30900	10300	4250	6120	2910	4450	2300
30	2460	2480	976	945	---	33100	9160	4030	6810	2730	4990	2130
31	3270	---	799	935	---	33700	---	3860	---	2770	4800	---
TOTAL	52850	60190	49415	30422	155554	687600	544910	323370	101740	164900	155890	85310
MEAN	1705	2006	1594	981	5556	22180	18160	10430	3391	5319	5029	2844
MAX	3270	3370	2320	1210	22900	33700	33200	23400	6810	8410	9300	4830
MIN	1220	1310	799	787	869	10700	8380	3860	2510	2730	1930	2070
CFSM	.15	.18	.14	.09	.50	1.99	1.63	.94	.31	.48	.45	.26
IN.	.18	.20	.17	.10	.52	2.30	1.82	1.08	.34	.55	.52	.29
CAL YR 1976	TOTAL	2875875	MEAN	7858	MAX	46400	MIN	799	CFSM	.71	IN	9.62
WTR YR 1977	TOTAL	2412151	MEAN	6609	MAX	33700	MIN	787	CFSM	.59	IN	8.07

03374000 WHITE RIVER AT PETERSBURG, IN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

WATER TEMPERATURE: June 1964 to current year.

INSTRUMENTATION.--Temperature recorder.

REMARKS.--Two powerplants above station circulate river water for cooling of generators.

EXTREMES FOR PERIOD OF RECORD.--

WATER TEMPERATURE: Maximum, 34.5°C Aug. 27, 28, 1976; minimum, freezing point on many days during most winter periods prior to 1967.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 32.5°C Aug. 5-6; minimum, 9.0°C Dec. 5, Jan. 13, 14.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	25.5	23.5	14.0	13.5	10.5	10.0	11.5	10.5	13.0	10.5	---	---
2	25.5	23.5	14.5	13.5	10.5	10.0	11.5	10.5	12.0	10.5	---	---
3	25.5	24.5	13.5	13.0	11.0	10.0	12.0	11.0	13.0	10.5	---	---
4	24.5	23.5	13.5	12.0	11.0	9.5	11.5	11.0	11.5	10.5	---	---
5	24.5	24.0	12.0	11.5	10.5	9.0	11.5	10.5	11.5	11.0	---	---
6	24.0	23.0	12.0	11.5	12.0	9.5	11.0	10.5	12.0	11.0	---	---
7	23.0	21.5	13.5	12.0	12.0	11.5	11.0	10.0	13.0	10.5	---	---
8	21.5	20.0	13.0	11.5	12.0	11.0	11.5	10.5	13.5	10.5	---	---
9	20.5	20.0	13.5	12.0	11.5	10.0	11.5	10.0	11.5	11.0	---	---
10	20.0	19.5	14.0	11.5	12.0	11.0	11.5	9.5	---	---	---	---
11	20.5	19.5	14.0	13.5	12.0	11.5	12.0	11.0	---	---	---	---
12	21.5	19.5	14.0	13.5	12.0	11.5	12.0	10.0	---	---	---	---
13	22.0	20.5	13.5	11.5	12.0	11.0	11.0	9.0	---	---	---	---
14	22.0	20.5	11.5	10.5	11.5	11.0	12.0	9.0	---	---	---	---
15	21.5	20.5	11.0	10.5	12.0	11.0	11.5	10.5	---	---	---	---
16	21.0	20.0	12.0	11.0	12.0	11.5	11.0	9.5	---	---	---	---
17	20.5	19.5	13.0	11.5	12.0	11.0	12.0	10.5	---	---	12.0	12.0
18	20.5	19.0	14.0	11.5	13.0	11.5	11.5	10.5	---	---	13.0	12.0
19	20.5	19.5	11.5	10.5	13.5	11.5	11.5	10.0	---	---	12.0	11.5
20	20.0	19.5	13.5	11.0	13.5	12.0	12.0	11.0	---	---	11.5	11.0
21	19.5	18.0	14.0	13.5	12.0	10.5	12.0	11.0	---	---	11.0	10.5
22	19.5	18.0	13.5	12.0	11.5	10.0	12.0	11.0	---	---	10.5	10.5
23	19.5	19.0	14.0	13.0	11.0	10.0	11.5	11.0	---	---	10.5	10.5
24	19.5	18.5	14.5	13.5	13.0	10.5	12.0	11.0	---	---	10.5	10.0
25	18.5	16.5	14.5	13.5	11.0	10.5	12.0	11.0	---	---	11.0	10.5
26	16.5	16.0	16.5	14.5	11.5	10.0	11.5	11.0	---	---	12.0	11.0
27	16.5	16.0	16.5	15.0	11.5	10.5	11.5	10.5	---	---	12.0	12.0
28	16.0	15.0	15.0	11.0	11.5	10.5	11.0	10.5	---	---	12.0	12.0
29	15.5	14.5	11.0	10.5	11.0	10.0	12.0	10.5	---	---	12.0	12.0
30	15.0	14.5	10.5	10.0	13.0	10.0	12.0	10.5	---	---	13.5	12.0
31	14.5	14.0	---	---	13.5	10.5	11.5	10.5	---	---	13.5	13.5

WABASH RIVER BASIN

03374000 WHITE RIVER AT PETERSBURG, IN--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	13.5	13.5	18.0	16.5	28.5	26.5	27.5	26.0	31.0	29.5	30.0	28.0
2	14.0	13.5	19.0	17.0	27.5	26.0	28.0	26.5	31.0	29.0	31.0	29.0
3	14.0	14.0	19.0	18.0	27.5	25.5	28.0	27.0	31.5	29.5	31.5	29.5
4	14.0	14.0	19.0	18.0	27.5	25.5	28.5	27.5	32.0	30.0	31.0	29.5
5	14.0	13.0	19.5	18.5	27.5	26.0	29.5	28.0	32.5	31.0	30.5	29.5
6	13.0	12.0	20.0	19.5	28.5	27.0	30.5	29.0	32.5	31.0	29.5	28.5
7	12.0	11.5	19.5	19.5	27.5	25.0	31.5	30.5	32.5	31.0	30.0	28.5
8	11.5	11.0	20.0	19.5	26.5	24.5	32.0	31.0	31.5	30.5	30.5	28.5
9	11.0	10.5	20.0	19.5	25.0	23.0	31.0	29.5	31.5	30.0	30.0	28.0
10	12.0	11.0	20.0	19.0	25.0	23.5	30.0	29.5	31.0	30.0	29.5	28.0
11	13.5	12.0	20.0	19.0	26.0	23.0	29.5	28.0	30.5	29.5	28.5	26.5
12	15.5	13.5	19.5	19.0	27.0	25.0	28.5	27.5	29.5	27.0	27.5	26.5
13	17.0	15.0	20.0	19.0	26.5	25.5	29.5	28.0	27.5	26.5	27.0	25.5
14	18.5	16.5	20.5	19.5	27.0	25.5	30.0	29.0	26.5	25.5	26.5	25.0
15	19.5	18.0	21.5	20.0	27.0	25.5	30.5	29.0	27.5	26.0	26.5	24.5
16	20.5	19.5	22.5	21.0	28.0	26.0	30.5	29.5	28.0	27.0	27.0	25.5
17	21.0	20.5	23.5	22.0	28.0	27.0	31.0	29.5	28.0	27.0	28.0	26.0
18	21.0	20.5	24.5	22.5	29.0	28.0	31.5	30.5	28.0	26.5	28.0	27.0
19	21.0	21.0	25.0	23.5	28.5	27.5	32.0	31.0	27.5	26.0	27.5	26.5
20	21.5	21.0	25.5	24.0	28.5	27.0	32.5	31.5	28.0	26.0	27.0	25.0
21	21.5	21.0	26.0	24.5	28.0	27.0	33.0	31.5	27.5	26.5	25.0	23.5
22	21.0	21.0	26.0	25.0	27.5	26.5	33.0	31.5	26.5	25.5	26.0	24.0
23	21.0	20.0	26.0	24.5	27.0	25.0	31.5	30.5	27.0	26.0	27.0	24.5
24	20.0	18.5	26.5	24.5	27.0	25.5	31.0	30.0	26.0	24.5	26.5	24.5
25	18.5	17.0	26.5	25.5	27.5	25.5	31.0	30.0	25.5	24.0	25.0	24.0
26	17.0	16.5	27.0	25.5	28.0	26.5	30.0	28.5	26.5	24.0	26.0	24.5
27	16.5	16.0	27.5	26.0	28.0	27.0	30.0	28.5	28.0	26.0	26.0	25.0
28	16.5	16.5	28.0	26.5	27.0	26.5	30.0	28.5	29.5	27.0	25.5	24.5
29	17.0	16.5	27.5	27.0	27.5	26.0	30.5	29.0	28.5	27.5	25.0	24.0
30	17.0	16.5	28.5	26.5	27.5	26.5	31.0	29.0	28.0	27.0	24.5	24.0
31	---	---	29.0	27.5	---	---	31.0	30.0	29.0	27.0	---	---
MONTH	21.5	10.5	29.0	16.5	29.0	23.0	33.0	26.0	32.5	24.0	31.5	23.5

03374100 WHITE RIVER AT HAZLETON, IN
(National stream-quality accounting network station)

LOCATION.--Lat 38°29'23", long 87°33'00", in SE¼NW¼ sec.29, T.1 N., R.10 W., Gibson County, Hydrologic Unit 05120202, on down-stream side of county road bridge (Old U.S. 41) at Hazleton, and at mile 18.7 (30.1 km).

DRAINAGE AREA.--11,305 mi² (29,280 km²).

PERIOD OF RECORD.--

CHEMICAL ANALYSES: February 1973 to current year.

WATER TEMPERATURE: October 1973 to current year.

SEDIMENT DISCHARGE: October 1973 to current year.

WATER DISCHARGE: October 1927 to September 1938.

REMARKS.--Water discharge obtained from station White River at Petersburg (See sta 03374000).

EXTREMES FOR PERIOD OF RECORD.--

WATER TEMPERATURE: Maximum, 33.5°C Aug. 14, 1976; freezing point on several days during winter period 1975-76.
SPECIFIC CONDUCTANCE: Maximum, 882 micromhos July 21, 1977; minimum, 192 micromhos Nov. 6, 1974.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 32.0°C July 21; minimum, 0.5°C Feb. 15-17.

SPECIFIC CONDUCTANCE: Maximum, 882 micromhos July 21; minimum, 346 micromhos Mar. 4.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	19.5	18.0	---	---	4.5	3.5	2.5	1.0	2.5	1.5	7.5	3.5
2	20.5	17.5	---	---	4.5	3.5	2.5	1.0	4.5	2.0	8.0	3.5
3	19.5	16.5	---	---	4.5	3.5	4.0	1.5	7.0	4.5	4.5	3.5
4	22.0	16.5	---	---	5.0	3.5	5.5	4.0	7.5	6.0	5.5	4.5
5	18.5	17.5	17.5	8.5	5.0	4.0	5.5	5.0	6.0	4.5	5.5	5.0
6	---	---	9.5	8.5	4.5	3.5	5.5	5.0	4.0	2.5	6.0	5.5
7	---	---	9.5	8.5	4.5	3.5	5.0	3.0	3.5	1.5	6.5	5.5
8	---	---	8.5	8.0	4.5	4.0	3.0	2.0	4.5	1.5	7.0	6.0
9	---	---	9.0	7.5	5.0	3.5	3.0	2.0	7.0	3.5	7.5	6.5
10	---	---	9.5	8.5	5.0	4.5	2.0	1.0	8.5	6.0	8.0	7.5
11	---	---	9.0	7.5	5.5	5.0	2.0	1.0	9.0	8.0	8.5	8.0
12	---	---	8.0	7.5	6.0	5.5	2.0	1.0	8.5	6.0	10.0	8.5
13	---	---	8.0	7.0	5.5	5.0	2.0	1.0	7.5	5.0	10.5	10.0
14	---	---	7.5	6.5	5.5	4.5	3.5	1.5	5.0	2.5	10.5	10.0
15	---	---	7.5	6.0	6.0	5.0	3.0	2.0	2.5	.5	11.5	10.5
16	---	---	7.5	6.0	6.0	5.5	2.5	1.0	1.0	.5	11.5	11.0
17	---	---	8.0	6.0	6.0	5.0	2.0	1.0	1.5	.5	11.5	11.0
18	---	---	8.5	7.5	7.5	6.0	2.0	1.0	3.0	1.5	11.0	10.5
19	---	---	10.0	8.5	8.5	7.0	2.5	1.5	3.0	1.5	10.5	10.0
20	---	---	9.0	8.0	8.5	5.0	2.5	1.5	2.0	1.5	10.5	9.5
21	---	---	8.0	6.5	5.0	2.5	3.0	1.5	2.5	1.5	10.5	9.0
22	---	---	7.0	6.0	3.0	2.0	3.0	2.0	3.5	1.5	10.0	9.0
23	---	---	7.0	6.0	3.0	2.0	3.5	2.5	7.5	3.5	10.0	9.0
24	---	---	8.5	6.5	3.0	2.0	5.0	3.5	6.5	5.0	10.0	9.0
25	---	---	10.0	7.5	4.5	3.0	6.0	4.5	5.5	4.5	10.5	9.5
26	---	---	11.0	10.0	5.0	4.0	6.0	5.0	5.5	4.0	11.0	10.0
27	---	---	11.0	10.5	4.5	3.0	5.0	3.5	4.0	3.5	11.5	10.5
28	---	---	10.5	7.5	7.0	4.5	3.5	3.0	7.5	4.0	12.5	11.5
29	---	---	7.0	4.5	5.0	2.5	3.0	2.5	---	---	13.0	12.5
30	---	---	4.5	3.5	2.5	2.0	2.5	2.0	---	---	13.5	12.5
31	---	---	---	---	2.5	1.0	2.0	1.5	---	---	13.0	12.5
MONTH	22.0	16.5	17.5	3.5	8.5	1.0	6.0	1.0	9.0	.5	13.5	3.5

03374100 WHITE RIVER AT HAZLETON, IN--Continued
(National stream-quality accounting network station)

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

[illegible]

03374100 WHITE RIVER AT HAZLETON, IN--Continued
(National stream-quality accounting network station)

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	593	544	---	---	530	501	630	548	807	732	330	---
2	608	560	---	---	562	530	648	558	801	722	315	---
3	615	577	---	---	582	546	622	543	788	745	342	---
4	617	504	---	---	582	537	602	542	763	692	373	346
5	581	566	504	481	593	554	624	536	772	713	330	---
6	---	---	513	477	611	585	617	572	771	736	315	---
7	---	---	525	497	605	547	605	554	809	750	320	---
8	---	---	535	517	560	522	630	569	824	754	335	---
9	---	---	538	525	549	514	602	536	810	730	348	---
10	---	---	537	506	544	519	603	528	799	737	364	349
11	---	---	538	495	548	523	631	569	795	696	352	---
12	---	---	532	488	570	541	624	558	739	589	352	---
13	---	---	517	495	570	549	595	541	715	578	353	---
14	---	---	532	501	575	547	615	581	562	492	390	358
15	---	---	547	504	573	544	627	564	527	495	378	361
16	---	---	564	538	569	529	618	570	502	486	401	362
17	---	---	569	535	554	533	655	591	507	481	403	372
18	---	---	564	538	566	517	677	637	485	476	382	365
19	---	---	587	560	575	528	669	630	485	472	359	---
20	---	---	597	571	580	547	713	656	486	467	389	363
21	---	---	587	568	570	529	763	688	479	463	388	365
22	---	---	612	583	579	527	726	695	487	469	404	382
23	---	---	617	589	591	539	711	655	476	457	409	381
24	---	---	604	585	619	547	686	622	491	454	403	381
25	---	---	621	571	597	545	756	648	454	445	512	373
26	---	---	591	566	594	546	769	696	419	366	401	377
27	---	---	608	575	590	540	776	714	386	357	526	380
28	---	---	593	562	631	547	773	718	345	---	479	391
29	---	---	612	558	616	553	767	717	---	---	370	---
30	---	---	621	504	585	532	787	737	---	---	371	---
31	---	---	---	---	600	538	781	714	---	---	372	---
MONTH	617	504	621	477	631	501	787	528	824	357	526	346

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	385	---	485	466	732	691	726	697	796	759	774	716
2	400	2220	480	461	711	658	737	679	785	715	791	741
3	473	419	504	464	706	649	743	700	795	734	804	758
4	420	---	502	498	714	656	754	708	814	749	799	759
5	380	---	531	498	717	676	778	733	824	771	795	756
6	370	---	541	523	719	678	814	757	844	789	771	725
7	370	---	533	523	671	624	856	794	824	794	761	728
8	393	377	538	514	648	600	865	829	796	768	757	706
9	407	390	528	516	628	570	841	802	786	761	745	694
10	406	383	516	504	615	586	807	748	783	749	734	685
11	404	394	514	504	653	573	752	658	795	763	702	648
12	414	395	513	499	693	632	752	684	758	699	682	638
13	416	402	515	501	687	652	793	730	691	668	637	615
14	415	408	527	508	694	640	825	786	683	653	628	598
15	414	400	547	518	723	668	822	780	686	657	622	580
16	414	387	570	540	734	687	826	797	720	684	659	615
17	545	388	590	562	754	712	821	785	713	697	685	636
18	550	487	615	582	751	719	857	796	699	679	683	659
19	486	455	642	601	744	726	859	824	689	661	678	657
20	462	444	658	620	745	708	857	817	692	657	659	619
21	463	443	673	632	736	692	882	841	679	642	636	583
22	458	444	668	643	716	661	866	834	682	638	621	577
23	462	443	656	624	694	634	843	793	671	621	646	604
24	455	441	690	635	691	665	828	787	648	573	646	570
25	449	366	706	655	712	668	800	757	640	613	627	599
26	359	---	714	658	738	692	754	717	659	619	636	601
27	389	370	718	665	737	711	758	687	691	640	645	619
28	400	3110	741	680	724	691	776	702	731	681	642	589
29	462	436	746	692	726	672	795	740	726	699	617	581
30	471	452	757	706	737	691	827	749	710	672	609	580
31	---	---	761	715	---	---	809	756	745	696	---	---
MONTH	550	366	761	461	754	570	882	658	844	573	804	570
YEAR	882	346										

WABASH RIVER BASIN

03374100 WHITE RIVER AT HAZLETON, IN--Continued
(National stream-quality accounting network station)

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	SPF- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	IMME- DIATE COLI- FORM (COL. PER 100 ML)	FECAL COLI- FORM (COL. PER 100 ML)	FECAL STREP- TOCOCCI KF AGAR (COL. PER 100 ML)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)
NOV												
05...	1030	2790	495	8.3	9.0	8	--	3440	210	290	260	87
DEC												
01...	1515	1940	530	7.8	4.5	9	11.0	20000	2600	43	240	69
JAN												
14...	0900	514	610	--	2.0	2	--	1200	--	207	320	92
FEB												
05...	1200	574	770	9.0	5.7	5	12.0	600	40	79	260	21
MAR												
02...	1600	25000	340	10.0	4.0	7	14.2	44000	1060	8050	120	24
APR												
05...	1530	31200	375	8.0	12.0	85	9.5	5450	420	--	150	50
MAY												
04...	1400	8090	440	8.2	19.0	1	9.9	5440	2800	2300	240	96
JUN												
04...	1100	3100	565	8.3	26.5	5	11.2	19000	71	143	220	59
04...	1250	3100	--	--	--	--	--	--	--	--	--	--
27...	1130	3440	660	8.2	28.0	2	7.4	22000	1160	389	250	78
AUG												
05...	1500	1680	450	8.7	31.0	4	--	8400	200	179	210	82
SEP												
12...	1700	1810	550	8.7	25.0	45	8.4	8140	--	1800	230	71

DATE	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NESIUM (MG)	DIS- SOLVED SODIUM (NA) (MG/L)	PERCENT SODIUM	SODIUM AND SULF- TATION RATIO	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
NOV												
05...	70	20	20	14	.5	4.3	207	0	170	1.7	70	30
DEC												
01...	63	20	23	17	.6	4.4	208	0	171	5.3	82	31
JAN												
14...	82	29	36	19	.9	3.6	283	--	232	--	88	52
FEB												
05...	86	11	15	11	.4	1.5	292	0	239	.5	83	56
MAR												
02...	32	8.8	8.4	13	.3	3.6	112	0	92	.0	35	17
APR												
05...	43	10	7.1	9	.3	2.4	120	0	98	1.9	38	15
MAY												
04...	65	18	13	11	.4	2.7	176	0	144	1.8	50	24
JUN												
04...	48	25	18	15	.5	2.8	200	0	160	1.6	56	30
04...	--	--	--	--	--	--	--	--	--	--	--	--
27...	63	23	21	15	.6	3.5	210	0	172	2.1	65	30
AUG												
05...	49	22	7.0	7	.2	3.5	160	0	130	.5	56	29
SEP												
12...	61	20	21	16	.6	3.5	200	0	160	.6	56	29

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	TOTAL KJEL- DAHL NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (NO3) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	SUS- PENDE SEDIM- ENT (MG/L)	SUS- PENDE SEDIM- ENT DIS- CHARGE (T/DAY)
NOV											
05...	.2	6.1	320	323	.44	2410	.88	8.3	.29	46	347
DEC											
01...	.2	3.1	353	329	.48	1890	.93	9.4	.31	24	128
JAN											
14...	.3	3.4	467	434	.64	648	2.1	16	.66	--	--
FEB											
05...	.3	4.2	439	401	.60	680	1.6	14	.47	43	67
MAR											
02...	.1	5.7	145	166	.25	12500	2.2	19	.43	430	29000
APR											
05...	.2	6.2	203	181	.28	17100	.80	11	.20	176	14800
MAY											
04...	.2	4.0	308	264	.42	6730	1.1	13	.21	111	2430
JUN											
04...	.2	.1	279	279	.38	2340	1.3	5.8	.16	--	--
04...	--	--	--	--	--	--	--	--	--	79	661
27...	.2	2.3	362	311	.49	3360	1.6	14	.14	161	1500
AUG											
05...	.2	.2	276	246	.38	1250	1.5	6.7	.18	76	345
SEP											
12...	.1	1.7	299	291	.41	1460	1.2	5.4	.24	101	494

03374100 WHITE RIVER AT HAZLETON, IN--Continued
(National stream-quality accounting network station)

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	TOTAL ARSENIC (AS) (UG/L)	SUS- PENDED ARSENIC (AS) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	TOTAL CAD- MIUM (CD) (UG/L)	SUS- PENDED CAD- MIUM (CD) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	SUS- PENDED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)
NOV 05...	1030	2	0	2	1	1	0	<10	0	<10	0
FEB 05...	1200	2	0	2	1	0	1	<10	0	<10	0
MAY 04...	1400	1	0	1	0	0	0	<10	0	10	2
AUG 05...	1500	1	0	1	0	0	0	<10	<8	2	0

DATE	SUS- PENDED COBALT (CO) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	SUS- PENDED COPPER (CU) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	SUS- PENDED LEAD (PB) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	SUS- PENDED MAN- GANESE (MN) (UG/L)
NOV 05...	0	1	10	0	10	980	9	7	2	100	10
FEB 05...	0	0	0	0	0	450	7	1	6	180	20
MAY 04...	2	0	9	7	2	2900	5	3	2	220	210
AUG 05...	0	0	9	5	4	1800	2	0	3	190	180

DATE	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	SUS- PENDED MERCURY (HG) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	TOTAL SELE- NIUM (SE) (UG/L)	SUS- PENDED SELE- NIUM (SE) (UG/L)	DIS- SOLVED SELE- NIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	SUS- PENDED ZINC (ZN) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
NOV 05...	90	<.5	.0	<.5	0	0	0	10	0	10	9.4
FEB 05...	160	<.5	.0	<.5	1	0	1	10	0	10	5.9
MAY 04...	10	.0	.0	.0	0	0	0	50	40	10	7.5
AUG 05...	10	.0	.0	.0	0	0	0	20	10	10	5.2

WABASH RIVER BASIN

03374100 WHITE RIVER AT HAZLETON, IN--Continued
(National stream-quality accounting network station)

WATER QUALITY DATA. WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	TOTAL ALDRIN (UG/L)	ALDRIN IN BOTTOM MA- TERIAL (UG/KG)	TOTAL CHLOR- DANE (UG/L)	CHLOR- DANE IN BOTTOM MA- TERIAL (UG/KG)	TOTAL ODD (UG/L)	DDD IN BOTTOM MA- TERIAL (UG/KG)	TOTAL DDE (UG/L)	DDE IN BOTTOM MA- TERIAL (UG/KG)	TOTAL DDT (UG/L)	DDT IN BOTTOM MA- TERIAL (UG/KG)
NOV 05...	1320	ND	--	ND	--	ND	--	ND	--	ND	--
FEB 05...	1400	ND	--	ND	--	ND	--	ND	--	ND	--
MAY 04...	1400	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
AUG 05...	1500	ND	--	ND	--	ND	--	ND	--	ND	--

DATE	TOTAL DI- AZINON (UG/L)	DI- AZINON IN BOTTOM MA- TERIAL (UG/KG)	TOTAL DI- ELDRIN (UG/L)	DI- ELDRIN IN BOTTOM MA- TERIAL (UG/KG)	TOTAL ENDRIN (UG/L)	ENDRIN IN BOTTOM MA- TERIAL (UG/KG)	TOTAL ETHION (UG/L)	ETHION IN BOTTOM MA- TERIAL (UG/KG)	TOTAL HEPTA- CHLOR (UG/L)	HEPTA- CHLOR IN BOTTOM MA- TERIAL (UG/KG)
NOV 05...	ND	--	ND	--	ND	--	ND	--	ND	--
FEB 05...	ND	--	ND	--	ND	--	ND	--	ND	--
MAY 04...	ND	ND	ND	2.0	ND	ND	ND	ND	ND	ND
AUG 05...	ND	--	ND	--	ND	--	ND	--	ND	--

DATE	TOTAL HEPTA- CHLOR EPOXIDE (UG/L)	HEPTA- CHLOR EPOXIDE IN BOT- TOM MA- TERIAL (UG/KG)	TOTAL LINDANE (UG/L)	LINDANE IN BOTTOM MA- TERIAL (UG/KG)	TOTAL MALA- THION (UG/L)	MALA- THION IN BOTTOM MA- TERIAL (UG/KG)	TOTAL METH- OXY- CHLOR (UG/L)	TOTAL METHYL PARA- THION (UG/L)	METHYL PARA- THION IN BOT- TOM MA- TERIAL (UG/KG)	TOTAL METHYL TRI- THION (UG/L)
NOV 05...	ND	--	ND	--	ND	--	ND	ND	--	ND
FEB 05...	ND	--	ND	--	ND	--	ND	ND	--	ND
MAY 04...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
AUG 05...	ND	--	ND	--	ND	--	ND	ND	--	ND

DATE	METHYL TRI- THION IN BOT- TOM MA- TERIAL (UG/KG)	TOTAL PARA- THION (UG/L)	PARA- THION IN BOTTOM MA- TERIAL (UG/KG)	TOTAL TOX- APHENE (UG/L)	TOX- APHENE IN BOTTOM MA- TERIAL (UG/KG)	TOTAL TRI- THION (UG/L)	TRI- THION IN BOTTOM MA- TERIAL (UG/KG)	TOTAL 2,4-D (UG/L)	TOTAL 2,4,5-T (UG/L)	TOTAL SILVEX (UG/L)
NOV 05...	--	ND	--	ND	--	ND	--	ND	ND	ND
FEB 05...	--	ND	--	ND	--	ND	--	ND	ND	ND
MAY 04...	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
AUG 05...	--	ND	--	ND	--	ND	--	ND	ND	ND

03374455 PATOKA RIVER NEAR HARDINSBURG, IN

LOCATION.--Lat 38°26'41", long 86°23'14", in NW¼SF¼ sec.10, T.1 S., R.1 E., Orange County, Hydrologic Unit 05120209, on downstream edge of center pier of county road bridge, 0.3 mile (0.5 km) downstream from Fudge Creek, 0.7 mile (1.1 km) northeast of Valeene, 6.0 miles (9.7 km) southwest of Hardinsburg, and at mile 158.0 (254.2 km).

DRAINAGE AREA.--12.8 mi² (33.2 km²).

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 606.89 ft (184.980 m) above mean sea level.

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

AVERAGE DISCHARGE.--9 years, 24.1 ft³/s (0.682 m³/s), 25.59 in/yr (650 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,960 ft³/s (55.5 m³/s) May 31, 1976, gage height, 8.22 ft (2.505 m); no flow for several days in 1971, 1972, 1975.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 500 ft³/s (14.2 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Mar. 04	0315	586 16.6	4.85 1.478	Apr. 22	1800	*1740 49.3	*7.77 2.368
Mar. 28	0930	560 15.9	4.76 1.451	May 07	0145	624 17.7	4.98 1.518
Apr. 02	1715	671 19.0	5.13 1.564	Aug. 12	1145	1350 38.2	6.92 2.109

Minimum daily discharge, 0.28 ft³/s (0.01 m³/s) Oct. 13, 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.43	13	4.3	1.3	.93	32	18	28	1.1	41	1.4	12
2	.38	8.3	3.4	1.1	.96	24	226	20	1.0	10	1.2	9.1
3	.33	5.5	3.0	1.0	.90	103	139	25	.95	5.3	1.2	7.5
4	.38	4.5	2.7	.90	.83	398	65	129	.88	3.5	1.1	5.4
5	.43	3.8	2.5	.80	.78	110	50	53	.85	2.7	1.0	5.9
6	.80	3.2	2.4	.84	.85	51	42	56	.78	2.2	.88	8.1
7	.73	2.9	2.7	.90	.89	33	32	198	.66	1.8	.80	5.1
8	.67	2.5	2.5	.98	.94	24	24	55	.66	1.6	1.2	4.1
9	.60	2.4	2.4	.96	1.0	18	18	31	1.0	1.6	1.9	3.5
10	.49	2.4	2.4	.94	1.2	15	15	20	.67	4.5	2.0	3.0
11	.43	2.1	2.9	.92	1.4	13	12	15	.66	17	5.8	2.6
12	.33	1.9	3.2	.89	4.0	165	9.8	12	.64	17	281	2.5
13	.28	1.8	3.2	.87	52	86	8.3	9.9	.60	7.3	48	5.0
14	.28	1.8	3.0	.85	44	42	7.3	7.7	.59	4.5	172	14
15	.33	1.8	2.9	.83	23	29	6.4	6.2	.54	3.4	29	20
16	.33	1.7	2.9	.82	15	20	5.5	5.1	.49	2.9	39	67
17	.33	1.6	2.7	.82	11	16	5.0	4.3	.48	2.4	66	23
18	.33	1.6	2.5	.81	10	62	4.5	3.7	.59	2.2	19	13
19	.33	1.6	2.4	.80	14	40	4.3	3.5	.83	1.9	11	27
20	.49	1.5	2.4	.80	21	36	4.5	3.1	.61	1.8	8.4	17
21	.49	1.5	2.2	.80	15	29	4.5	2.7	.50	1.6	13	11
22	.38	1.5	1.9	.80	23	54	492	2.5	1.1	1.8	73	7.9
23	.80	1.4	1.7	.83	101	38	339	2.3	1.2	1.5	20	6.3
24	22	1.4	1.6	.86	208	27	87	1.9	9.6	2.4	30	5.8
25	9.4	1.4	1.5	.90	55	21	48	1.8	5.9	2.9	17	5.2
26	5.0	3.8	1.5	.84	34	15	31	1.7	3.0	2.9	10	4.6
27	3.6	17	1.5	.80	102	15	23	1.6	2.0	2.1	7.4	3.9
28	2.9	8.3	1.5	.78	45	333	46	1.5	13	1.7	5.9	3.5
29	2.5	5.8	1.5	.82	---	94	86	1.4	32	1.8	107	3.2
30	25	5.0	1.6	.85	---	46	42	1.3	12	1.7	40	3.1
31	33	---	1.5	.89	---	25	---	1.2	---	1.5	19	---
TOTAL	113.77	113.0	74.4	27.30	787.68	2014	1895.1	705.4	94.88	156.5	1034.18	309.3
MEAN	3.67	3.77	2.40	.88	28.1	65.0	63.2	22.8	3.16	5.05	33.4	10.3
MAX	33	17	4.3	1.3	208	398	492	198	32	41	281	67
MIN	.28	1.4	1.5	.78	.78	13	4.3	1.2	.48	1.5	.80	2.5
CFSM	.29	.30	.19	.07	2.20	5.08	4.94	1.78	.25	.40	2.61	.81
IN.	.33	.33	.22	.08	2.29	5.85	5.51	2.05	.28	.45	3.01	.90
CAL YR 1976	TOTAL	6693.92	MEAN	18.3	MAX	719	MIN	.22	CFSM	1.43	IN	19.45
WTR YR 1977	TOTAL	7325.51	MEAN	20.1	MAX	492	MIN	.28	CFSM	1.57	IN	21.29

WARASH RIVER BASIN

03374500 PATOKA RIVER NEAR FILLSWORTH, IN

LOCATION.--Lat 38°26'29", long 86°43'31", in SW¼SE¼ sec.10, T.1 S., R.3 W., Dubois County, Hydrologic Unit 05120209, on right bank 200 ft (61 m) upstream from county road bridge, 1.0 mile (1.6 km) northwest of Fillsworth, 2.8 miles (4.5 km) upstream from Dillon Creek, 4 miles (6 km) east of Dubois, and at mile 116.1 (186.8 km).

DRAINAGE AREA.--171 mi² (443 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 477.00 ft (145.390 m) above mean sea level (levels by State of Indiana, Department of Natural Resources). Prior to Oct. 1, 1961, nonrecording gage on downstream side of bridge, 200 ft (61 m) downstream at same datum.

REMARKS.--Records good. Patoka Lake, 2.2 miles (3.5 km) upstream, under construction.

AVERAGE DISCHARGE.--16 years, 220 ft³/s (6.230 m³/s), 17.48 in/yr (444 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,700 ft³/s (416 m³/s) Mar. 10, 1964, gage height, 20.02 ft (6.102 m); no flow Oct. 30, 1964.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of 19.1 ft (5.82 m) according to information by local resident, discharge, 12,300 ft³/s (348 m³/s).

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 1,200 ft³/s (34.0 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)	
Mar. 07	0200	*1300	36.8	*10.72	3.267
Mar. 28	2300	1240	35.1	10.41	3.173

Minimum daily discharge, 0.30 ft³/s (0.01 m³/s) Sept. 21, 22.

DISCHARGE* IN CUBIC FEET PER SECOND* WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.7	527	78	16	15	981	1010	420	8.8	188	24	169
2	6.3	284	64	13	14	793	995	228	7.1	199	20	98
3	7.7	139	56	12	15	665	1200	162	6.3	112	16	66
4	5.4	97	49	13	17	1150	1130	340	4.7	57	13	48
5	4.3	74	44	14	14	1290	1090	540	3.7	34	11	38
6	3.6	59	39	15	15	1290	980	499	6.5	22	9.3	33
7	3.0	50	41	17	14	1280	824	653	6.9	17	9.1	28
8	3.9	42	45	18	15	1160	653	625	5.9	16	9.4	24
9	5.8	37	40	17	16	950	438	556	7.6	15	26	24
10	5.8	34	38	17	18	694	244	312	7.1	13	22	22
11	5.0	31	45	17	39	384	177	158	6.6	33	20	19
12	4.3	29	58	17	355	465	147	113	6.3	167	114	16
13	3.9	26	60	16	758	877	127	87	6.3	157	555	11
14	5.8	24	55	15	848	925	109	70	5.8	86	864	3.1
15	7.2	23	50	15	800	834	96	56	4.8	48	934	7.3
16	5.4	22	47	15	670	642	84	46	4.1	35	926	29
17	4.6	21	43	15	570	377	74	38	3.9	31	997	.72
18	5.4	21	40	15	300	394	65	32	6.9	23	845	.51
19	7.7	21	38	15	184	531	59	28	7.5	18	689	.88
20	10	21	37	15	224	489	61	25	11	15	345	.51
21	11	19	36	15	234	380	65	21	18	14	126	.30
22	18	18	29	15	216	377	126	19	25	13	527	.30
23	30	18	28	15	370	418	636	17	54	11	676	33
24	286	17	25	15	768	364	878	15	99	10	730	243
25	415	16	24	15	885	260	1070	15	94	13	661	243
26	241	42	24	16	907	195	1110	16	62	28	372	192
27	114	200	24	15	1110	179	951	17	49	42	143	97
28	70	235	25	14	1100	1050	742	15	99	35	88	44
29	50	169	24	15	---	1230	641	13	293	25	76	27
30	138	109	22	16	---	1220	580	11	254	27	328	27
31	534	---	19	15	---	1180	---	9.8	---	30	358	---
TOTAL	2018.8	2425	1247	473	10491	23024	16362	5156.8	1174.8	1534	10533.8	1544.62
MEAN	65.1	80.8	40.2	15.3	375	743	545	166	39.2	49.5	340	51.5
MAX	534	527	78	18	1110	1290	1200	653	293	199	997	243
MIN	3.0	16	19	12	14	179	59	9.8	3.7	10	9.1	.30
CFSM	.38	.47	.24	.09	2.19	4.35	3.19	.97	.23	.29	1.99	.30
IN.	.44	.53	.27	.10	2.28	5.01	3.56	1.12	.26	.33	2.29	.34
CAL YR 1976	TOTAL	70927.70	MEAN 194	MAX 1490	MIN 3.0	CFSM 1.14	IN 15.43					
WTR YR 1977	TOTAL	75984.82	MEAN 208	MAX 1290	MIN .30	CFSM 1.22	IN 16.53					

03375500 PATOKA RIVER AT JASPER, IN

LOCATION.--Lat 38°24'49", long 86°52'36", in NW¼SE¼ sec.20, T.1 S., R.4 W., Dubois County, Hydrologic Unit 05120209, on left bank 0.3 mile (0.5 km) upstream from unnamed outlet of Jasper Lake, 1.0 mile (1.6 km) downstream from Coon Seitz bridge, 1.2 miles (1.9 km) downstream from Beaver Creek, 3.3 miles (5.3 km) northeast of Jasper, and at mile 91.5 (147.2 km).

DRAINAGE AREA.--262 mi² (679 km²).

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

REVISED RECORDS.--WSP 1909: 1958. WSP 2109: Drainage area.

GAGE.--Water-gage recorder. Datum of gage is 446.00 ft (135.941 m) (revised) above mean sea level (levels by State of Indiana, Department of Natural Resources). Nonrecording gage at bridge 5.6 miles (9.0 km) downstream, used for high-water periods when flow exceeds about 2,500 ft³/s (70.8 m³/s), at datum 0.34 ft (0.104 m) lower. Prior to Sept. 18, 1956, nonrecording gage at bridge 5.6 miles (9.0 km) downstream at datum 0.34 ft (0.104 m) lower.

REMARKS.--Records good except those for winter periods, which are fair. Flow partially regulated by Beaver Creek Reservoir.

AVERAGE DISCHARGE.--29 years (1948 to current year), 359 ft³/s (10.17 m³/s), 18.61 in/yr (473 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,100 ft³/s (399 m³/s) Mar. 11, 1964, gage height, 15.17 ft (4.624 m) at downstream gage; maximum gage height at upstream gage, 21.20 ft (6.462 m) Mar. 11, 1964, from floodmarks; no flow at times during 1948, 1952-56, 1963-65.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1913 reached a stage of 15.9 ft (4.85 m) at downstream site, from floodmark furnished by local residents, discharge 16,000 ft³/s (453 m³/s).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,810 ft³/s (51.3 m³/s) Mar. 7, gage height, 14.53 ft (4.429 m); minimum daily, 3.0 ft³/s (0.085 m³/s) Oct. 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.0	681	146	20	27	1320	1450	794	24	425	52	456
2	6.0	579	104	21	25	1350	1700	517	21	347	42	280
3	4.5	361	79	22	24	1320	1720	314	19	304	35	157
4	3.5	208	65	23	23	1480	1780	455	17	179	31	96
5	3.0	137	54	23	24	1600	1760	668	16	87	28	64
6	3.5	101	46	22	24	1790	1680	812	16	51	25	48
7	3.9	78	44	22	24	1780	1610	1050	14	37	22	41
8	5.6	63	56	22	23	1740	1520	1330	13	31	30	34
9	7.6	53	78	22	24	1650	1280	1220	17	28	59	29
10	8.8	48	74	22	30	1600	820	906	19	51	48	27
11	6.0	45	76	21	68	1420	453	518	20	61	122	26
12	5.0	41	87	23	288	1030	315	305	19	169	366	23
13	4.4	38	102	24	961	1090	253	212	18	283	423	21
14	4.1	36	102	25	1170	1170	214	168	18	224	1050	22
15	3.9	34	96	25	1080	1200	173	129	17	126	1130	21
16	3.8	32	87	24	1100	1150	142	101	17	69	1140	23
17	3.7	30	67	23	990	918	119	78	16	50	1180	43
18	3.6	28	43	23	820	776	99	62	15	47	1220	28
19	6.0	27	39	24	410	856	84	53	16	45	1200	29
20	11	26	37	24	450	805	79	47	23	48	1010	23
21	13	25	34	23	420	699	102	43	43	35	567	17
22	14	24	32	23	430	614	132	40	38	42	984	15
23	21	23	30	23	561	598	604	36	72	38	884	12
24	196	22	25	24	980	574	1010	34	278	29	1010	81
25	472	21	24	24	1110	486	1120	32	322	50	1050	329
26	456	33	23	24	1110	382	1220	32	206	147	902	328
27	289	185	23	25	1200	343	1290	33	124	63	516	272
28	148	331	23	25	1280	1420	1340	32	146	52	272	158
29	88	297	22	26	---	1560	1250	30	625	50	243	64
30	138	216	22	27	---	1770	1030	28	616	42	286	36
31	569	---	19	27	---	1720	---	26	---	51	488	---
TOTAL	2510.9	3823	1759	726	14676	36211	26549	10105	2825	3261	16415	2803
MEAN	81.0	127	56.7	23.4	524	1168	885	326	94.2	105	530	93.4
MAX	569	681	146	27	1280	1790	1780	1330	625	425	1220	456
MIN	3.0	21	19	20	23	343	79	26	13	28	22	12
CFSM	.31	.49	.22	.09	2.00	4.46	3.38	1.24	.36	.40	2.02	.36
IN.	.36	.54	.25	.10	2.08	5.14	3.77	1.43	.40	.46	2.33	.40

CAL YR 1976 TOTAL 109052.4 MEAN 298 MAX 2080 MIN 3.0 CFSM 1.14 IN 15.48
WTR YR 1977 TOTAL 121663.9 MEAN 333 MAX 1790 MIN 3.0 CFSM 1.27 IN 17.27

03375800 HALL CREEK NEAR ST. ANTHONY, IN

LOCATION.--Lat 38°21'45", long 86°49'43", in NW¼NW¼ sec.11, T.2 S., R.4 W., Dubois County, Hydrologic Unit 05120209, on downstream side of right pier of bridge on County Road 125 South, 0.7 mile (1.1 km) upstream from Grassy Fork, 3.3 miles (5.3 km) north of St. Anthony, and at mile 4.1 (6.6 km).

DRAINAGE AREA.--21.8 mi² (56.5 km²).

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

REVISED RECORDS.--WDR IN-75-1: 1971-74.

GAGE.--Water-stage recorder. Datum of the gage is 459.22 ft (139.969 m) above mean sea level (levels by State of Indiana, Department of Natural Resources).

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

AVERAGE DISCHARGE.--7 years, 28.0 ft³/s (0.793 m³/s), 17.42 in/yr (442 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,400 ft³/s (125 m³/s) Apr. 24, 1975, gage height, 12.35 ft (3.764 m); maximum gage height, 12.38 ft (3.773 m) Feb. 23, 1975; minimum daily, no flow for many days in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 950 ft³/s (26.9 m³/s) (revised) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Feb. 27	0700	1140 32.3	10.81 3.295	Mar. 28	1000	*2130 60.3	*11.44 3.487
Mar. 04	0400	1970 55.8	11.36 3.462	Aug. 24	0800	1350 38.2	10.98 3.347

Minimum daily discharge, no flow Oct. 13-19, Jan. 10 to Feb. 1, and Aug. 5-7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.05	15	5.2	.47	.00	41	21	18	.57	8.4	.19	6.4
2	.10	9.5	4.5	.55	.02	26	353	12	.53	2.6	.17	5.2
3	.05	6.9	4.2	.66	.05	145	138	29	.52	1.4	.04	4.4
4	.02	5.2	3.9	.80	.10	895	68	88	.48	1.2	.01	3.9
5	.05	3.9	3.6	.78	.05	115	71	28	.48	.81	.00	3.5
6	.12	3.1	3.4	.67	.03	49	59	30	.56	.63	.00	3.3
7	.50	2.5	5.0	.47	.02	31	40	94	.43	.58	.00	3.1
8	.25	2.1	3.9	.40	.03	22	29	33	.33	.44	11	2.8
9	.10	2.2	3.9	.60	.50	17	23	19	.60	.35	4.7	2.5
10	.04	2.0	3.3	.00	22	15	19	14	.50	3.3	2.2	2.4
11	.02	1.8	6.5	.00	48	13	16	11	.38	9.4	113	1.9
12	.01	1.6	6.2	.00	202	225	13	9.0	.35	12	26	1.7
13	.00	1.5	4.9	.00	201	85	12	7.6	.35	1.6	289	9.4
14	.00	1.5	4.6	.00	115	45	10	6.3	.35	1.2	31	13
15	.00	1.5	4.3	.00	68	34	9.6	5.4	.34	.69	12	24
16	.00	1.4	3.9	.00	52	29	8.6	4.2	.31	.53	14	22
17	.00	1.3	3.6	.00	51	28	7.6	3.6	.27	.39	13	7.9
18	.00	1.5	3.4	.00	50	72	6.5	3.2	.27	.35	6.3	28
19	.00	1.5	2.9	.00	40	36	6.4	2.9	.48	.28	4.4	19
20	.01	1.5	2.6	.00	26	31	9.5	2.5	.48	.22	3.1	9.2
21	.25	1.4	2.4	.00	19	24	6.9	2.2	.94	.20	18	6.4
22	.14	1.3	2.1	.00	32	46	39	1.9	7.2	.63	318	5.1
23	18	1.2	1.9	.00	76	30	75	1.4	2.8	.44	32	4.1
24	59	1.3	1.8	.00	199	23	47	1.3	13	.12	568	10
25	13	1.3	2.1	.00	45	19	26	1.1	4.8	6.6	61	8.4
26	5.7	20	2.2	.00	57	17	18	1.3	2.6	4.0	29	6.3
27	3.2	25	2.0	.00	482	24	14	1.0	1.4	.44	17	5.4
28	2.3	11	1.4	.00	65	958	156	.92	6.8	.17	11	4.2
29	2.0	7.9	.90	.00	---	95	137	.83	8.4	.21	15	3.5
30	66	6.2	.60	.00	---	45	32	.77	2.8	.19	14	13
31	46	---	.40	.00	---	27	---	.68	---	.17	8.7	---
TOTAL	216.91	144.1	101.60	5.40	1850.80	3262	1471.1	434.10	59.32	59.54	1621.81	240.0
MEAN	7.00	4.80	3.28	.17	66.1	105	49.0	14.0	1.98	1.92	52.3	8.00
MAX	66	25	6.5	.80	482	958	353	94	13	12	568	28
MIN	.00	1.2	.40	.00	.00	13	6.4	.68	.27	.12	.00	1.7
CFSM	.32	.22	.15	.008	3.03	4.82	2.25	.64	.09	.09	2.40	.37
IN.	.37	.25	.17	.01	3.16	5.57	2.51	.74	.10	.10	2.77	.41

CAL YR 1976 TOTAL 7648.24 MEAN 20.9 MAX 1250 MIN .00 CFSM .96 IN 13.05
WTR YR 1977 TOTAL 9466.68 MEAN 25.9 MAX 958 MIN .00 CFSM 1.19 IN 16.15

03376260 FLAT CREEK NEAR OTWELL, IN

LOCATION.--Lat 38°26'12", long 87°07'52", in SE¼SE¼ sec.12, T.1 S., R.7 W., Pike County, Hydrologic Unit 05120209, on right bank at upstream side of bridge on State Highway 56, 2.2 miles (3.5 km) west of intersection of State Highways 56 and 257, 2.5 miles (4.0 km) southeast of Otwell, 6.2 miles (10.0 km) east of intersection of State Highways 56 and 61, and at mile 10.9 (17.5 km).

DRAINAGE AREA.--21.3 mi² (55.2 km²).

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

REVISED RECORDS.--WSP 2109: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 448.00 ft (136.550 m) above mean sea level.

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

AVERAGE DISCHARGE.--13 years, 20.6 ft³/s (0.583 m³/s), 13.14 in/yr (334 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,440 ft³/s (40.8 m³/s) Mar. 28, 1977, gage height, 11.98 ft (3.652 m); no flow at times most years.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1964 reached a stage of 12.58 ft (3.834 m), 30 ft (9 m) downstream from bridge.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 450 ft³/s (12.7 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Mar. 04	0100	788 22.3	10.96 3.341	Jun. 28	2100	630 17.8	10.58 3.225
Mar. 28	0600	*1440 40.8	*11.98 3.652	Aug. 24	0300	482 13.6	10.10 3.078

Minimum daily discharge, no flow Oct. 4, 5, 15-20, and Jan. 10-31.

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.05	5.0	1.0	.12	.02	13	11	5.8	1.8	41	.24	4.2
2	.06	2.5	1.0	.14	.03	11	98	5.5	1.2	11	.24	2.9
3	.01	1.9	.90	.16	.04	131	42	39	1.2	7.2	.14	2.3
4	.00	1.8	.84	.20	.12	359	37	89	.96	5.2	.10	2.2
5	.00	1.5	.74	.18	.03	56	38	30	.42	4.5	.05	4.9
6	.08	1.2	.74	.15	.03	24	25	16	.46	4.3	.03	24
7	.74	.96	1.0	.12	.03	15	13	58	.74	4.2	.06	5.5
8	.20	.74	1.1	.10	.03	12	8.5	19	.51	7.0	2.7	2.9
9	.05	.61	.79	.15	.50	8.3	6.1	11	1.0	6.8	.74	2.1
10	.03	.56	.79	.00	2.0	6.6	5.8	7.9	1.3	4.0	.17	1.8
11	.01	.67	1.8	.00	79	5.8	5.3	5.6	.67	15	.10	1.5
12	.03	.79	2.4	.00	144	98	4.2	4.8	.42	15	.34	1.7
13	.03	.61	1.5	.00	88	36	3.8	3.9	.61	2.8	1.1	4.8
14	.01	.51	1.2	.00	39	17	3.3	3.4	1.1	1.8	80	7.9
15	.00	.42	1.0	.00	20	11	2.8	3.3	.74	1.2	5.6	23
16	.00	.42	1.1	.00	16	6.4	2.3	3.5	.46	.84	2.1	27
17	.00	.51	1.0	.00	16	4.9	2.2	3.1	.31	.67	2.0	6.3
18	.00	.56	.90	.00	16	105	2.4	2.9	.14	.79	1.5	12
19	.00	.56	.80	.00	14	20	3.3	2.3	.08	.84	.84	17
20	.00	.56	.70	.00	14	23	3.3	2.1	.20	.96	.51	5.8
21	.06	.56	.62	.00	13	14	2.1	1.9	.96	1.8	4.3	2.9
22	.31	.51	.56	.00	8.9	19	7.3	2.2	29	2.6	45	2.1
23	2.1	.46	.50	.00	17	9.3	168	2.9	53	1.1	5.6	1.8
24	59	.42	.41	.00	36	6.3	57	3.0	53	.34	173	29
25	6.6	.34	.43	.00	9.5	5.0	24	2.9	15	13	16	19
26	2.3	14	.50	.00	7.3	4.0	15	3.6	5.9	2.8	6.3	7.7
27	1.2	15	.56	.00	79	49	9.3	2.8	19	.42	3.9	5.2
28	.74	4.2	.35	.00	15	1040	17	2.7	166	.20	3.0	4.9
29	.46	2.0	.24	.00	---	74	11	2.8	106	.20	41	3.9
30	25	1.2	.15	.00	---	26	6.6	2.8	23	.20	27	12
31	28	---	.10	.00	---	14	---	2.7	---	.17	8.3	---
TOTAL	127.07	61.07	25.72	1.32	634.53	2223.6	634.6	346.4	485.18	157.93	431.96	248.3
MEAN	4.10	2.04	.83	.043	22.7	71.7	21.2	11.2	16.2	5.09	13.9	8.28
MAX	59	15	2.4	.20	144	1040	168	89	166	41	173	29
MIN	.00	.34	.10	.00	.02	4.0	2.1	1.9	.08	.17	.03	1.5
CFSM	.19	.10	.04	.002	1.07	3.37	1.00	.53	.76	.24	.65	.39
IN.	.22	.11	.04	.00	1.11	3.88	1.11	.60	.85	.28	.75	.43
CAL YR 1976	TOTAL	4209.48	MEAN	11.5	MAX	429	MIN	.00	CFSM	.54	IN	7.35
WTR YR 1977	TOTAL	5377.68	MEAN	14.7	MAX	1040	MIN	.00	CFSM	.69	IN	9.39

03376350 SOUTH FORK PATOKA RIVER NEAR SPURGEON, IN

LOCATION.--Lat 38°17'50", long 87°15'39", in SE¼NE¼ sec.35, T.2 S., R.8 W., Pike County, Hydrologic Unit 05120209, on right bank at downstream side of bridge on State Highway 61, 0.5 mile (0.8 km) north of Enos Corner, 3.1 miles (5.0 km) north of Spurgeon, and at mile 8.0 (12.9 km).

DRAINAGE AREA.--42.8 mi² (110.9 km²).

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

REVISED RECORDS.--WSP 2109: Drainage area. WDR IN-75-1: 1965-74(P).

GAGE.--Water-stage recorder. Datum of gage is 420.88 ft (128.284 m) above mean sea level.

REMARKS.--Records fair except those for winter periods, which are poor. Regulation by coal-washing operation and strip-mining above gage.

AVERAGE DISCHARGE.--13 years, 46.2 ft³/s (1.308 m³/s), 14.66 in/yr (372 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,600 ft³/s (102 m³/s) Apr. 28, 1970, gage height, 12.79 ft (3.898 m); no flow Jan. 20-31, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1964 reached a stage of 13.09 ft (3.99 m), from floodmarks, discharge 4,000 ft³/s (113 m³/s).

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 1,000 ft³/s (28.32 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Mar. 03	2200	1040 29.5	8.70 2.652	Aug. 24	0300	1280 36.2	9.72 2.963
Mar. 28	0500	*2810 79.6	*12.18 3.712				

Minimum daily discharge, no flow Jan. 20-31.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.6	17	9.4	1.2	.20	52	46	49	8.5	16	9.1	17
2	6.2	12	8.4	1.5	.50	38	307	38	9.1	9.7	7.4	17
3	5.8	9.7	7.6	1.8	1.0	220	172	201	9.3	9.9	7.4	13
4	6.2	9.9	6.6	2.0	1.0	371	105	247	8.0	8.9	7.8	14
5	6.0	11	7.6	2.1	1.0	129	96	111	8.6	8.8	8.2	17
6	8.1	7.7	6.6	2.0	.80	67	69	96	8.1	9.4	7.3	17
7	8.7	7.2	8.9	1.8	1.0	49	53	245	7.0	9.0	7.3	14
8	7.1	6.5	10	1.6	1.2	39	41	84	8.2	9.0	17	12
9	7.1	6.6	7.7	1.4	2.5	33	35	50	16	18	16	12
10	6.4	6.3	5.4	1.2	8.0	30	33	40	11	23	11	11
11	6.4	6.3	10	.90	70	30	29	37	8.5	17	40	12
12	6.1	6.1	7.1	1.1	403	173	26	30	8.3	14	44	12
13	5.9	6.3	5.3	1.3	400	82	24	24	9.2	9.5	23	15
14	5.5	7.0	5.0	1.4	326	46	25	22	11	7.7	79	21
15	6.1	6.4	4.7	1.3	255	37	23	20	9.1	6.9	15	56
16	6.2	6.3	4.4	1.1	203	29	21	18	10	8.9	48	36
17	6.2	6.0	4.1	.70	154	27	20	15	8.3	9.2	37	18
18	6.0	6.2	3.8	.40	147	139	22	16	8.9	6.4	14	16
19	5.9	6.6	3.4	.20	171	59	31	16	9.2	8.3	9.9	17
20	13	6.4	3.0	.00	160	51	27	15	8.0	7.5	7.9	14
21	7.9	6.4	2.7	.00	130	39	25	12	7.2	14	71	13
22	6.5	6.7	2.5	.00	139	52	53	41	18	17	165	13
23	63	6.1	2.3	.00	122	34	242	27	15	7.1	40	11
24	92	6.1	2.0	.00	121	28	122	19	27	6.1	420	34
25	21	5.9	2.2	.00	56	25	58	16	15	23	48	22
26	12	40	2.3	.00	54	22	42	20	11	9.4	27	20
27	9.6	31	2.1	.00	171	92	32	16	34	6.6	20	21
28	8.6	13	1.5	.00	68	1320	143	13	68	7.6	17	12
29	8.0	11	1.3	.00	---	171	184	12	22	13	93	11
30	67	10	1.2	.00	---	86	70	12	14	9.0	40	14
31	39	---	1.0	.00	---	55	---	11	---	24	22	---
TOTAL	470.1	293.7	150.1	25.00	3167.20	3625	2176	1573	415.5	353.9	1379.3	532
MEAN	15.2	9.79	4.84	.81	113	117	72.5	50.7	13.9	11.4	44.5	17.7
MAX	92	40	10	2.1	403	1320	307	247	68	24	420	56
MIN	5.5	5.9	1.0	.00	.20	22	20	11	7.0	6.1	7.3	11
CFSM	.36	.23	.11	.02	2.64	2.73	1.69	1.19	.33	.27	1.04	.41
IN.	.41	.26	.13	.02	2.75	3.15	1.89	1.37	.36	.31	1.20	.46

CAL YR 1976	TOTAL	13866.90	MEAN	37.9	MAX	978	MIN	1.0	CFSM	.89	IN	12.05
WTR YR 1977	TOTAL	14160.80	MEAN	38.8	MAX	1320	MIN	.00	CFSM	.91	IN	12.31

03376500 PATOKA RIVER NEAR PRINCETON, IN

LOCATION.--Lat 38°23'30", long 87°32'55", in Location 107, T.1 S., R.10 W., Gibson County, Hydrologic Unit 05120209, on left bank 75 ft (23 m) upstream from dam of Princeton Water and Lighting Co., 0.1 mile (0.2 km) downstream from bridge on State Highway 65, 0.6 mile (1.0 km) downstream from Indian Creek, 2 miles (3 km) northeast of Princeton, and at mile 21.5 (34.6 km).

DRAINAGE AREA.--822 mi² (2,129 km²).

PERIOD OF RECORD.--August 1934 to current year. Published as "at Patoka" August 1934 to September 1940. Records published for both sites October 1939 to September 1940 (monthly discharge only at present site, for October, November 1939, published in WSP 1305).

REVISED RECORDS.--WSP 1275: 1952. WSP 1335: 1935-36, 1938-39, 1949(M), 1949-50. WSP 1385: 1951-52. WSP 2109: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 394.14 ft (120.134 m) above mean sea level (levels by State of Indiana, Department of Natural Resources). See WSP 1725 for history of changes prior to Jan. 21, 1941.

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

AVERAGE DISCHARGE.--43 years, 984 ft³/s (27.87 m³/s), 16.26 in/yr (413 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 18,700 ft³/s (530 m³/s) Jan. 26, 1937, gage height, 26.80 ft (8.169 m), site and datum then in use; no flow Aug. 29 to Sept. 12, 1936.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,360 ft³/s (95.2 m³/s) Mar. 28, gage height, 13.66 ft (4.164 m); minimum daily, 16 ft³/s (0.45 m³/s) Oct. 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	49	520	493	52	56	1470	3300	1580	85	1040	146	2280
2	46	660	439	45	54	1490	3280	1630	79	971	128	2240
3	42	713	312	46	51	1600	3230	1700	70	897	136	2180
4	41	745	236	47	48	1940	3240	1830	61	747	113	2090
5	37	688	190	47	50	1970	3250	1900	51	569	82	1950
6	32	579	165	47	51	2050	3240	1970	46	373	63	1730
7	34	369	155	47	51	2140	3280	2080	40	255	52	1360
8	31	230	142	47	50	2210	3290	2130	36	172	123	946
9	30	182	130	46	49	2280	3260	2130	38	140	523	618
10	28	149	133	45	54	2340	3210	2100	49	500	455	367
11	28	126	141	46	75	2420	3140	2050	48	577	330	197
12	28	112	166	49	310	2680	3070	1970	43	420	405	131
13	27	102	176	50	852	2830	2980	1890	40	374	546	102
14	26	94	178	52	1020	2910	2890	1800	43	369	1160	117
15	25	87	183	52	1050	2940	2790	1680	46	296	1210	142
16	21	81	186	50	1080	2910	2680	1490	43	274	1270	500
17	18	77	178	48	1080	2870	2520	1130	40	237	1390	572
18	16	73	176	49	1100	2890	2310	700	36	176	1390	669
19	21	70	165	50	1180	2860	2050	442	33	116	1410	715
20	24	67	151	50	1280	2830	1710	286	36	91	1410	574
21	20	66	128	49	1380	2770	1260	234	35	76	1440	533
22	36	63	107	49	1380	2690	867	202	57	225	1550	371
23	70	61	133	49	1330	2600	943	323	121	231	1620	192
24	140	61	126	49	1400	2500	1070	203	284	191	1990	666
25	270	60	118	50	1370	2400	1130	137	684	185	2040	706
26	370	72	95	50	1370	2280	1200	134	809	395	2120	482
27	520	180	83	51	1520	2250	1260	123	823	615	2180	501
28	400	232	82	52	1450	3260	1360	116	860	635	2200	529
29	280	385	74	54	---	3200	1430	94	1070	528	2260	468
30	340	472	65	56	---	3260	1500	93	1020	314	2320	331
31	410	---	58	57	---	3310	---	89	---	148	2300	---
TOTAL	3460	7376	5164	1531	20741	78150	70740	34236	6726	12137	34362	24259
MEAN	112	246	167	49.4	741	2521	2358	1104	224	392	1108	809
MAX	520	745	493	57	1520	3310	3300	2130	1070	1040	2320	2280
MIN	16	60	58	45	48	1470	867	89	33	76	52	102
CFSM	.14	.30	.20	.06	.90	3.07	2.87	1.34	.27	.48	1.35	.98
IN.	.16	.33	.23	.07	.94	3.54	3.20	1.55	.30	.55	1.56	1.10
CAL YR 1976	TOTAL	269057	MEAN 735	MAX 2870	MIN 16	CFSM .89	IN 12.18					
WTR YR 1977	TOTAL	298882	MEAN 819	MAX 3310	MIN 16	CFSM 1.00	IN 13.53					

03377500 WABASH RIVER AT MOUNT CARMEL, IL

LOCATION.--Lat 38°24'07", long 87°45'10", in SE¼NW¼ sec.28, T.1 S., R.12 W., Wabash County, Illinois, Hydrologic Unit 05120113, on right bank on downstream side of Southern Railway bridge at Mount Carmel, 0.2 mile (0.3 km) downstream from Patoka River, and at mile 94.4 (151.9 km).

DRAINAGE AREA.--28,635 mi² (74,165 km²).

PERIOD OF RECORD.--January 1908 to September 1913 (gage heights only), October 1927 to current year. Gage-height records collected in this vicinity November 1874 to December 1878, are contained in files of Louisville office of the Corps of Engineers and since June 1884, are contained in reports of National Weather Service.

REVISED RECORDS.--WRD Ind. 1973: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 369.46 ft (112.611 m) above mean sea level. Oct. 1, 1949 to Feb. 8, 1977, datum 2.00 ft. (0.610 m) higher. See WSP 1725 for history of changes prior to Sept. 30, 1949.

REMARKS.--Records good. Flow partially regulated by upstream reservoirs.

AVERAGE DISCHARGE.--50 years, 26,710 ft³/s (756.4 m³/s), 12.66 in/yr (322 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 305,000 ft³/s (8,640 m³/s) May 25, 1943, maximum gage height, 30.62 ft (9.333 m) Feb. 5, 6, 1969, present datum; minimum daily discharge, 1,650 ft³/s (46.7 m³/s) Sept. 27, 28, 1941. 1874-78, 1884 to current year: Maximum discharge, 428,000 ft³/s (12,100 m³/s), from rating curve extended above 310,000 ft³/s (8,780 m³/s) Mar. 30, 1913, gage height, 33.0 ft (10.06 m), present site and datum.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 77,200 ft³/s (2,186 m³/s) Apr. 3, gage height, 19.10 ft (5.822 m); minimum daily, 2,500 ft³/s (70.8 m³/s) Jan. 18.

DISCHARGE, IN CUBIC FEET PER SECOND* WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4330	6860	5500	2850	2900	37900	74000	19300	8930	12500	6090	15500
2	4440	6900	5090	2900	3000	37700	75700	18000	8680	12800	5820	15600
3	4450	7100	4890	3050	3050	37000	76900	17400	8400	13600	5410	14600
4	4400	7300	4670	3050	3100	40300	74500	18100	8050	13500	5190	13000
5	4390	7000	4300	2900	3100	44600	71200	18300	7970	13300	5150	11900
6	4280	6900	4000	2910	2900	46800	67400	18200	7720	12700	5000	11800
7	4050	6400	3990	2840	2850	49500	64600	22700	7440	12100	4850	12100
8	4040	6000	3880	2880	2810	52600	62800	33400	7380	10900	5210	11600
9	4170	5700	3760	2800	2800	53400	60000	42400	7310	9740	14000	10400
10	4300	5300	3650	2750	2780	51200	56200	46900	7290	9630	18200	9440
11	4370	4900	3580	2600	2880	46400	49900	47800	7330	14500	17700	8780
12	4420	4700	3580	2600	3230	43300	41700	45600	7440	16000	18600	8330
13	4350	4500	3610	2700	4680	43100	34700	41900	7380	14500	22200	8130
14	4240	4400	3610	2800	7930	41700	30600	38400	7380	13700	29800	7930
15	4100	4400	3430	2800	11000	38500	28000	33100	7240	13400	33300	7860
16	4050	4300	3520	2750	12900	34100	26000	27500	7330	12700	31300	12700
17	3960	4300	3370	2700	12900	31300	24200	24000	7340	12100	27400	21200
18	3900	4200	3330	2500	11800	29900	22300	21100	7260	11200	24400	24600
19	3900	4100	3370	2600	11200	29100	20900	18700	7150	10000	22100	26300
20	4000	4100	3360	2700	10900	28100	19600	16900	7050	8720	20800	26500
21	4030	4100	3370	2850	10400	28400	18300	15200	6760	8010	18700	25100
22	4010	4100	3470	3000	10200	29900	17100	13900	6920	7370	18200	23500
23	4270	4100	3300	3100	10300	31700	16900	13000	7200	7110	18200	21100
24	4720	4100	3130	3150	11300	32300	17600	12700	7810	7170	21600	19900
25	5450	4000	2930	3150	14200	31600	20200	12300	8200	7830	22500	19500
26	5860	4200	2940	3150	18800	30100	23500	11400	8360	8380	19800	17600
27	6160	4500	3030	3100	25000	28800	23800	10800	9180	7930	16800	16300
28	6150	5000	2990	2950	34100	41300	23200	10400	10300	7200	14900	15300
29	5950	5400	3130	2900	---	61200	22800	10100	11700	6840	13800	14400
30	6130	5600	3050	2800	---	68800	21300	9790	12000	6620	15900	13300
31	6390	---	2650	2850	---	71700	---	9340	---	6270	16100	---
TOTAL	143260	154460	112480	88680	253010	1272300	1185900	698630	240500	328320	519020	464270
MEAN	4621	5149	3628	2861	9036	41040	39530	22540	8017	10590	16740	15480
MAX	6390	7300	5500	3150	34100	71700	76400	47800	12000	16000	33300	26500
MIN	3900	4000	2650	2500	2780	28100	16900	9340	6760	6270	4850	7860
CFSM	.16	.18	.13	.10	.32	1.43	1.38	.79	.28	.37	.59	.54
IN.	.19	.20	.15	.12	.33	1.65	1.54	.91	.31	.43	.67	.60
CAL YR 1976	TOTAL	7232280	MEAN	19760	MAX	105000	MIN	2650	CFSM	.69	IN	9.40
WTR YR 1977	TOTAL	5460830	MEAN	14960	MAX	76900	MIN	2500	CFSM	.52	IN	7.09

03378000 BONPAS CREEK AT BROWNS, IL

LOCATION.--Lat 38°23'11", long 87°58'32", in NW¼SE¼ sec.33, T.1 S., R.14 W., Wabash County, Hydrologic Unit 05120114, near center of span on downstream side of bridge on State Highway 15, 0.5 mi (0.8 km) north of Browns and 0.7 mi (1.1 km) upstream from Southern Railway bridge.

DRAINAGE AREA.--228 mi² (591 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 372.92 ft (113.666 m) above mean sea level. Prior to Dec. 11, 1968, water-stage recorder and concrete dam at site 0.4 mi (0.6 km) downstream at datum 2.0 ft (0.61 m) higher. Dec. 11, 1968 to Aug. 13, 1969, nonrecording gage at site 0.5 mi (0.8 km) downstream at datum 1.0 ft (0.30 m) lower. Auxiliary nonrecording gage near mouth on Wabash River at Grayville read twice daily.

REMARKS.--Records fair except those for period of no gage-height record, Jan. 3 to Feb. 10, which are poor. Several observations of water temperatures were made during the year.

AVERAGE DISCHARGE.--37 years, 217 ft³/s (6.145 m³/s), 12.92 in/yr (328 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,500 ft³/s (212 m³/s) May 9, 1961, gage height, 24.04 ft (7.327 m), site and datum then in use; no flow at times in most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,350 ft³/s (94.9 m³/s) Mar. 29, gage height, 19.87 ft (6.056 m); no flow for many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.8	9.9	4.7	.20	.00	331	2360	46	3.3	418	3.3	414
2	2.6	6.4	3.9	.18	.00	108	2010	25	3.2	94	2.4	71
3	2.5	3.3	3.3	.10	.00	283	1650	23	2.6	27	1.8	24
4	2.3	2.3	2.9	.10	.00	1120	1220	71	2.1	14	1.4	16
5	2.2	1.6	2.4	.10	.00	1020	640	81	1.8	8.7	1.1	15
6	3.3	1.1	2.1	.10	.00	851	241	99	1.3	6.2	.75	17
7	4.3	1.2	2.0	.10	.00	347	150	725	.94	4.5	.62	17
8	3.0	2.6	1.4	.00	.00	108	91	470	2.0	3.1	.50	13
9	2.5	2.8	1.0	.00	.00	54	50	132	2.9	11	.54	7.7
10	2.2	2.8	1.1	.00	.10	38	42	50	2.5	31	.46	5.8
11	1.8	2.6	1.4	.00	8.2	30	36	28	2.5	663	.79	4.3
12	1.5	2.3	1.1	.00	117	517	31	20	2.1	1330	186	3.5
13	1.2	1.8	.89	.00	574	778	28	16	1.9	1550	437	3.3
14	1.0	1.5	.73	.00	636	559	26	14	1.8	1520	602	3.6
15	1.0	1.2	.79	.00	417	170	24	12	1.6	1240	729	4.8
16	.80	.95	.84	.00	100	61	21	10	2.1	579	1160	6.3
17	.80	.89	.80	.00	60	40	20	8.8	3.8	91	1410	5.9
18	.60	.77	.79	.00	35	211	19	7.7	2.8	23	1190	5.0
19	.60	.74	.81	.00	30	255	18	6.8	1.9	13	543	5.3
20	.40	.63	.82	.00	28	160	19	6.2	1.4	11	55	4.7
21	.40	.62	.52	.00	26	141	19	6.1	.85	11	17	3.5
22	2.5	.55	.42	.00	25	86	19	6.8	3.1	8.2	14	2.6
23	17	.51	.38	.00	108	55	40	22	2.4	6.4	37	2.2
24	32	.49	.30	.00	443	39	62	15	3.3	5.0	569	263
25	11	.43	.32	.00	249	30	42	9.2	12	141	957	564
26	6.3	8.2	.34	.00	111	25	30	6.9	15	263	1470	289
27	3.8	9.4	.35	.00	613	458	23	4.8	122	42	1570	152
28	2.6	8.7	.40	.00	618	2850	22	3.5	686	13	1250	77
29	1.8	7.2	.36	.00	---	3190	163	3.0	872	8.4	666	28
30	6.3	5.6	.29	.00	---	3230	167	2.8	795	6.0	586	18
31	7.9	---	.23	.00	---	2850	---	3.8	---	4.5	617	---
TOTAL	129.00	89.08	37.68	.88	4198.30	19995	9283	1935.4	2556.19	8146.0	14078.66	2046.5
MEAN	4.16	2.97	1.22	.028	150	645	309	62.4	85.2	263	454	68.2
MAX	32	9.9	4.7	.20	636	3230	2360	725	872	1550	1570	564
MIN	.40	.43	.23	.00	.00	25	18	2.8	.85	3.1	.46	2.2
CFSM	.02	.01	.005	.000	.66	2.83	1.36	.27	.37	1.15	1.99	.30
IN.	.02	.01	.01	.00	.68	3.26	1.51	.32	.42	1.33	2.30	.33
CAL YR 1976	TOTAL	28296.59	MEAN	77.3	MAX	1410	MIN	.02	CFSM	.34	IN	4.62
WTR YR 1977	TOTAL	62495.69	MEAN	171	MAX	3230	MIN	.00	CFSM	.75	IN	10.20

WABASH RIVER BASIN

03378500 WABASH RIVER AT NEW HARMONY, IN
(National stream-quality accounting network station)

LOCATION.--Lat 38°07'55", long 87°56'25", in SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.35, T.4 S., R.14 W., Posey County, Hydrologic Unit 05120113, at bridge on U.S. Highway 460 at New Harmony, at Indiana-Illinois State Line, and at mile 51.5 (82.9 km).

DRAINAGE AREA.--29,234 mi² (75,716 km²). Flood of March 1913 reached a stage of 27.7 ft (8.44 m). Flood of Jan. 31, 1937, reached a stage of 24.4 ft (7.44 m).

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

CHEMICAL ANALYSES: October 1974 to current year.

WATER TEMPERATURE: October 1974 to current year.

SEDIMENT DISCHARGE: October 1974 to current year.

WATER DISCHARGE: October 1938 to September 1947.

REMARKS.--Water discharge obtained from station Wabash River at Mount Carmel, Ill. (See sta 03377500).

EXTREMES FOR PERIOD OF RECORD.--

WATER DISCHARGE: Maximum, 339,000 ft³/s (9,600 m³/s) May 26, 1943, gage height, 23.84 ft (7.266 m); minimum daily discharge, 1,800 ft³/s (51.0 m³/s) Sept. 29, 30, 1941.

SPECIFIC CONDUCTANCE: Maximum conductance, 805 micromhos Feb. 15, 1977; minimum, 300 micromhos Feb. 28, Mar. 1, 1975.

WATER TEMPERATURE: Maximum, 31.0°C July 18-20, 1977; minimum, freezing point on many days during 1976-77 winter periods.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum conductance, 805 micromhos, Feb. 15; minimum 360 micromhos Mar. 30, 31, Apr. 1, Aug. 15-17.

WATER TEMPERATURE: Maximum, 31.0°C July 18-20; minimum, freezing point on many days during winter period.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	585	555	725		---	425	360	540	540	490	510	445
2	580	600	650		---	425	380	540	540	490	540	470
3	595	690	650		---	425	425	490	540	490	540	470
4	615	600	625		---	425	425	540	540	490	540	470
5	630	580	670		---	425	425	540	540	490	510	470
6	630	560	670		---	400	425	490	540	490	510	540
7	640	600	650		---	425	425	425	560	470	510	540
8	640	600	650		---	425	490	425	560	470	540	510
9	630	600	670		---	425	470	425	540	470	490	540
10	615	650	670		---	425	470	425	560	470	540	540
11	595	635	670		785	425	470	560	580	470	380	510
12	595	625	670		785	425	470	580	580	470	400	540
13	585	650	650		785	445	470	580	580	445	400	560
14	605	625	650		725	445	510	445	580	445	400	580
15	590	625	700		805	445	510	490	580	445	360	600
16	595	625	725		600	445	510	490	580	445	360	600
17	595	650	670		560	445	510	510	560	445	360	600
18	595	650	725		540	470	510	560	580	470	400	400
19	625	650	725		570	470	540	560	560	470	400	400
20	630	650	725		470	470	540	560	560	470	400	445
21	615	650	725		490	470	540	560	560	470	490	490
22	630	650	700		540	470	540	560	560	470	425	400
23	600	650	725		540	380	540	560	560	490	425	540
24	585	670	725		540	510	540	560	560	510	445	510
25	540	670	650		540	510	540	560	600	510	445	540
26	690	670	785		560	490	540	510	560	510	425	510
27	690	670	785		490	400	510	540	580	490	425	580
28	600	670	785		490	400	470	540	490	540	445	560
29	560	670	---		---	425	470	540	540	510	445	580
30	570	670	---		---	360	490	540	540	510	490	580
31	690	---	---		---	360	---	540	---	510	490	---
MEAN	611	635	694		601	435	484	522	558	481	453	517
WTR YR 1977	MEAN	541		MAX	805		MIN	360				

03378500 WABASH RIVER AT NEW HARMONY, IN--Continued
(National stream-quality accounting network station)

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21.0	8.0	3.0		---	4.0	13.0	18.0	26.0	---	27.0	26.0
2	20.0	10.0	2.0		---	4.0	15.0	18.0	25.0	27.0	27.0	27.0
3	21.0	9.0	3.0		---	5.0	14.0	17.0	25.0	27.0	27.0	27.0
4	21.0	8.0	2.0		---	5.0	14.0	17.0	25.0	27.0	27.0	28.0
5	20.0	8.0	3.0		---	5.0	12.0	19.0	25.0	27.0	26.0	28.0
6	19.0	7.0	3.0		---	6.0	12.0	20.0	25.0	28.0	26.0	25.0
7	18.0	7.0	2.0		---	6.0	12.0	20.0	29.0	29.0	26.0	25.0
8	16.0	7.0	2.0		---	7.0	14.0	20.0	29.0	30.0	26.0	24.0
9	15.0	7.0	3.0		---	7.0	15.0	20.0	23.0	30.0	26.0	24.0
10	20.0	7.0	3.0		---	7.0	15.0	19.0	22.0	30.0	24.0	24.0
11	18.0	6.0	3.0		1.0	8.0	15.0	19.0	22.0	30.0	26.0	23.0
12	16.0	6.0	3.0		1.0	9.0	15.0	20.0	22.0	27.0	26.0	23.0
13	17.0	5.0	2.0		1.0	11.0	15.0	20.0	22.0	28.0	25.0	24.0
14	17.0	5.0	2.0		1.0	11.0	16.0	20.0	22.0	29.0	25.0	24.0
15	16.0	5.0	3.0		.0	13.0	17.0	20.0	22.0	31.0	25.0	24.0
16	16.0	6.0	4.0		.0	12.0	18.0	21.0	23.0	29.0	25.0	24.0
17	---	7.0	4.0		1.0	12.0	18.0	22.0	24.0	30.0	26.0	25.0
18	---	7.0	4.0		2.0	10.0	20.0	23.0	26.0	31.0	25.0	24.0
19	---	7.0	5.0		3.0	10.0	20.0	24.0	26.0	31.0	23.0	24.0
20	---	8.0	5.0		3.0	12.0	20.0	24.0	26.0	31.0	23.0	23.0
21	---	7.0	3.0		3.0	11.0	20.0	25.0	26.0	30.0	23.0	23.0
22	---	6.0	.0		4.0	9.0	20.0	25.0	26.0	30.0	25.0	22.0
23	---	6.0	1.0		6.0	10.0	19.0	25.0	26.0	30.0	25.0	23.0
24	---	5.0	.0		6.0	9.0	18.0	25.0	26.0	29.0	25.0	23.0
25	12.0	5.0	.0		6.0	10.0	18.0	25.0	26.0	29.0	25.0	23.0
26	11.0	5.0	1.0		6.0	11.0	17.0	25.0	26.0	26.0	25.0	23.0
27	11.0	5.0	2.0		5.0	13.0	16.0	25.0	25.0	27.0	25.0	23.0
28	10.0	4.0	2.0		4.0	13.0	16.0	25.0	26.0	26.0	25.0	20.0
29	10.0	3.0	---		---	13.0	17.0	25.0	26.0	27.0	25.0	23.0
30	10.0	4.0	---		---	14.0	17.0	25.0	26.0	27.0	25.0	23.0
31	9.0	---	---		---	13.0	---	27.0	---	27.0	25.0	---
MEAN	16.0	6.5	2.5		3.0	9.5	16.5	22.0	25.0	28.5	25.5	24.0
WTR YR 1977	MEAN	17.0		MAX	31.0		MIN	.0				

WABASH RIVER BASIN

03378500 WABASH RIVER AT NEW HARMONY, IN--Continued
(National stream-quality accounting network station)

WATER QUALITY DATA: WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

		INSTAN- TANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	IMME- DIATE COLI- FORM (COL. PER 100 ML)	FFCAL COLI- FORM (COL. PER 100 ML)	FECAL STREP- TOCOCCI KF AGAR (COL. PER 100 ML)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)
NOV 04...	1600	6990	600	8.1	9.5	22	11.4	28000	310	760	270	97
DEC 01...	1130	5360	720	7.9	3.5	8	15.5	7800	7300	50	310	100
FEB 02...	1800	3170	724	8.2	.3	10	12.6	500	21	129	350	150
MAR 02...	1130	37400	410	9.5	4.0	7	13.9	35500	786	8600	150	50
APR 05...	1045	64500	480	7.1	12.6	83	7.8	2200	171	--	190	79
MAY 04...	0900	18000	505	8.2	19.0	1	8.9	8600	1700	1310	250	99
JUN 03...	1330	7420	600	8.7	27.0	20	12.7	4000	58	71	240	91
27...	--	7860	695	8.4	27.0	--	10.8	--	--	--	--	--
27...	1500	--	--	--	--	--	--	36500	2150	1100	--	--
27...	1530	--	--	--	--	--	--	36500	2150	11000	--	--
AUG 03...	1230	4740	505	8.6	28.5	4	--	10200	126	36	190	52
SEP 12...	1200	6890	580	8.6	24.5	25	8.5	3480	--	960	270	130

DATE	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	RICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	ALKA- LINITY AS CACO3 (MG/L)	CARBON DIOXIDE (CO2) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
NOV 04...	72	23	26	17	.7	4.7	217	0	178	2.8	93	37
DEC 01...	75	30	35	19	.9	3.8	256	0	210	5.2	120	47
FEB 02...	89	32	38	19	.9	3.4	246	0	202	2.5	110	49
MAR 02...	42	12	13	15	.5	4.0	127	0	104	.1	50	21
APR 05...	53	15	9.9	10	.3	3.0	140	0	110	18	56	22
MAY 04...	64	23	16	12	.4	2.9	190	0	160	1.9	66	27
JUN 03...	51	27	21	16	.6	2.7	180	0	150	.6	67	34
27...	--	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 03...	52	15	25	22	.8	3.7	170	0	140	.7	63	37
SEP 12...	70	22	17	12	.5	3.5	175	0	144	.7	68	27

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED SOLIDS (RESI- DUE AT 180 C) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- TENTS) (MG/L)	DIS- SOLVED SOLIDS (TONS PER AC-FT)	DIS- SOLVED SOLIDS (TONS PER DAY)	TOTAL KJEL- DAHL- NITRO- GEN (N) (MG/L)	TOTAL NITRO- GEN (NO3) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	SUS- PENDED SEDIM- ENT DIS- CHARGE (T/DAY)
NOV 04...	.3	3.9	375	367	.51	7080	1.1	10	.27	61 1150
DEC 01...	.3	1.4	461	439	.63	6670	.98	9.7	.18	27 391
FEB 02...	.3	2.6	494	446	.67	4230	1.4	13	.30	56 479
MAR 02...	.2	5.7	232	211	.32	23400	2.5	18	.47	577 58300
APR 05...	.2	6.5	264	235	.36	46000	1.3	22	.24	187 32600
MAY 04...	.2	2.5	340	295	.46	16500	1.3	15	.19	118 5740
JUN 03...	.2	.1	351	292	.48	7030	1.5	7.3	.12	41 821
27...	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--
AUG 03...	.2	.2	293	280	.40	3750	1.0	4.4	.14	50 640
SEP 12...	.1	4.3	324	298	.44	6030	1.0	8.0	.17	56 1040

WABASH RIVER BASIN

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03378500 WABASH RIVER AT NEW HARMONY, IN--Continued
(National stream-quality accounting network station)

DATE	TIME	TOTAL ARSENIC (AS) (UG/L)	SUS- PENDE D ARSENIC (AS) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	TOTAL CAD- MIUM (CD) (UG/L)	SUS- PENDE D CAD- MIUM (CD) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	TOTAL CHRO- MIUM (CR) (UG/L)	SUS- PENDE D CHRO- MIUM (CR) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)
NOV 04...	1600	3	2	1	1	1	0	<10	0	<10	1
FEB 02...	1800	1	0	1	2	0	2	<10	0	<10	1
MAY 04...	0900	1	0	1	0	0	0	<10	<1	9	2
AUG 03...	1230	1	0	1	0	0	0	30	30	0	0

DATE	SUS- PENDE D COBALT (CO) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	SUS- PENDE D COPPER (CU) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	SUS- PENDE D LEAD (PB) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	TOTAL MAN- GANESE (MN) (UG/L)	SUS- PENDE D MAN- GANESE (MN) (UG/L)
NOV 04...	0	2	10	0	10	1600	12	10	2	240	230
FEB 02...	0	1	40	40	0	310	10	2	8	180	30
MAY 04...	2	0	8	3	5	3300	6	4	2	260	250
AUG 03...	0	0	17	13	4	1100	0	0	0	150	150

DATE	DIS- SOLVED MAN- GANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	SUS- PENDE D MERCURY (HG) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	TOTAL SELE- NIUM (SE) (UG/L)	SUS- PENDE D SELE- NIUM (SE) (UG/L)	DIS- SOLVED SELE- NIUM (SE) (UG/L)	TOTAL ZINC (ZN) (UG/L)	SUS- PENDE D ZINC (ZN) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
NOV 04...	10	<.5	.0	<.5	0	0	0	20	10	10	12
FEB 02...	150	<.5	.0	<.5	1	1	0	10	0	10	6.3
MAY 04...	10	.0	.0	.0	0	0	0	30	30	0	7.1
AUG 03...	0	.0	.0	.0	0	0	0	20	10	10	4.2

DATE	TIME	TOTAL PCB (UG/L)	PCB IN BOTTOM MA- TERIAL (UG/KG)	TOTAL ALDRIN (UG/L)	ALDRIN IN BOTTOM MA- TERIAL (UG/KG)	TOTAL CHLOR- DANE (UG/L)	CHLOR- DANE IN BOTTOM MA- TERIAL (UG/KG)	TOTAL DDD (UG/L)	DDD IN BOTTOM MA- TERIAL (UG/KG)	TOTAL DDE (UG/L)	DDE IN BOTTOM MA- TERIAL (UG/KG)
FEB 02...	1630	.0	0	.00	.0	.0	0	.00	.0	.00	.0

DATE	TOTAL DDT (UG/L)	DDT IN BOTTOM MA- TERIAL (UG/KG)	TOTAL DI- AZINON (UG/L)	DI- AZINON IN BOTTOM MA- TERIAL (UG/KG)	TOTAL DI- ELDRIN (UG/L)	DI- ELDRIN IN BOTTOM MA- TERIAL (UG/KG)	TOTAL ENDRIN (UG/L)	ENDRIN IN BOTTOM MA- TERIAL (UG/KG)	TOTAL ETHION (UG/L)	ETHION IN BOTTOM MA- TERIAL (UG/KG)	TOTAL HEPTA- CHLOR (UG/L)
FEB 02...	.00	.0	.00	.0	.00	.0	.00	.0	.00	.0	.00

DATE	HEPTA- CHLOR IN BOTTOM MA- TERIAL (UG/KG)	TOTAL HEPTA- CHLOR EPOXIDE IN BOT- TOM MA- TERIAL (UG/KG)	HEPTA- CHLOR EPOXIDE IN BOT- TOM MA- TERIAL (UG/KG)	TOTAL LINDANE (UG/L)	LINDANE IN BOTTOM MA- TERIAL (UG/KG)	TOTAL MALA- THION (UG/L)	MALA- THION IN BOTTOM MA- TERIAL (UG/KG)	TOTAL METH- OXY- CHLOR (UG/L)	TOTAL METHYL PARA- THION (UG/L)	METHYL PARA- THION IN BOT- TOM MA- TERIAL (UG/KG)	TOTAL METHYL TRI- THION (UG/L)
FEB 02...	.0	.00	.0	.00	.0	.00	.0	.00	.00	.0	.00

DATE	METHYL TRI- THION IN BOT- TOM MA- TERIAL (UG/KG)	TOTAL PARA- THION (UG/L)	PARA- THION IN BOTTOM MA- TERIAL (UG/KG)	TOTAL TOX- APHENE (UG/L)	TOX- APHENE IN BOTTOM MA- TERIAL (UG/KG)	TOTAL TRI- THION (UG/L)	TRI- THION IN BOTTOM MA- TERIAL (UG/KG)	TOTAL 2,4-D (UG/L)	TOTAL 2,4,5-T (UG/L)	TOTAL SILVEX (UG/L)
FEB 02...	.0	.00	.0	0	0	.00	.0	.00	.00	.03

WABASH RIVER BASIN

03378550 BIG CREEK NEAR WADESVILLE, IN

LOCATION.--Lat 38°04'58", long 87°46'10", in SW¼SW¼ sec.16, T.5 S., R.12 W., Posey County, Hydrologic Unit 05120113, on left bank at downstream side of bridge on U.S. Highway 460 (State Highway 66), 0.6 mile (1.0 km) northwest of Blairsville, and 1.6 miles (2.6 km) southeast of Wadesville.

DRAINAGE AREA.--104 mi² (269 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 370.00 ft (112.776 m) above mean sea level.

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

AVERAGE DISCHARGE.--12 years, 110 ft³/s (3.115 m³/s), 14.36 in/yr (365 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,610 ft³/s (216 m³/s) Apr. 24, 1975, gage height, 19.72 ft (6.011 m); no flow at times most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,400 ft³/s (68.0 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Mar. 28	0900	*4470 127	*18.94 5.773	July 29	Unknown	2600 73.6	17.94 5.468
June 28	1300	3650 103	18.56 5.657	Aug. 24	1600	3830 108	18.65 5.685

Minimum daily discharge, no flow Oct. 14-21, Jan. 1-3, 11, 17, 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.02	14	.40	.00	.07	25	57	24	4.1	102	40	22
2	.01	5.5	.32	.00	.25	18	566	19	3.9	47	25	18
3	.01	3.0	.24	.00	2.0	72	409	347	3.3	29	15	14
4	.01	2.0	.24	.03	4.0	698	111	853	3.0	20	10	13
5	.01	1.4	.25	.06	4.2	152	100	256	2.8	15	8.0	67
6	.01	1.0	.25	.07	3.2	69	77	147	2.8	12	6.0	96
7	.01	.61	.52	.08	1.0	46	58	86	2.5	9.7	5.0	22
8	.01	.45	.46	.09	.25	35	45	64	2.2	12	4.0	15
9	.01	.36	.31	.07	2.2	27	35	47	3.0	157	150	12
10	.01	.36	.29	.04	4.4	22	32	36	3.1	65	60	9.9
11	.01	.23	1.2	.00	14	19	27	29	2.4	224	25	7.8
12	.01	.20	1.5	.02	123	620	22	24	2.2	97	120	6.8
13	.01	.17	1.5	.04	319	164	20	22	5.8	23	80	7.6
14	.00	.17	.99	.10	191	69	19	20	6.1	13	65	27
15	.00	.19	.60	.05	79	49	17	18	2.6	9.0	300	45
16	.00	.20	.50	.02	48	32	15	15	2.0	6.9	43	53
17	.00	.18	.42	.00	30	26	13	14	1.8	5.8	27	20
18	.00	.17	.41	.03	18	139	12	13	1.6	4.7	19	15
19	.00	.16	.42	.04	26	60	13	12	1.5	3.5	14	17
20	.00	.14	.51	.06	22	49	21	11	1.4	3.4	11	28
21	.00	.16	.25	.10	14	38	12	10	1.3	3.2	22	15
22	.01	.24	.17	.15	16	36	18	98	8.4	16	97	12
23	31	.21	.10	.20	58	26	506	285	11	6.0	179	10
24	308	.13	.06	.30	127	21	264	108	27	3.5	3300	396
25	34	.11	.06	.41	36	19	132	23	9.0	60	1880	202
26	7.9	6.5	.07	.55	23	17	62	16	192	25	311	76
27	3.2	19	.08	1.0	99	105	42	12	313	11	61	92
28	1.6	7.9	.15	.30	38	3600	35	9.6	2860	8.0	31	83
29	.75	2.6	.17	.10	---	1930	51	7.7	1910	2000	113	45
30	49	.96	.10	.00	---	247	30	6.2	309	500	59	35
31	70	---	.03	.02	---	80	---	4.9	---	100	33	---
TOTAL	505.60	68.30	12.57	3.93	1302.57	8510	2821	2637.4	5698.8	3591.7	7113.0	1482.1
MEAN	16.3	2.28	.41	.13	46.5	275	94.0	85.1	190	116	229	49.4
MAX	308	19	1.5	1.0	319	3600	566	853	2860	2000	3300	396
MIN	.00	.11	.03	.00	.07	17	12	4.9	1.3	3.2	4.0	6.8
CFSM	.16	.02	.004	.001	.45	2.64	.90	.82	1.83	1.12	2.20	.48
IN.	.18	.02	.00	.00	.47	3.04	1.01	.94	2.04	1.28	2.54	.53
CAL YR 1976	TOTAL	15692.94	MEAN	42.9	MAX	2010	MIN	.00	CFSM	.41	IN	5.61
WTR YR 1977	TOTAL	33746.97	MEAN	92.5	MAX	3600	MIN	.00	CFSM	.89	IN	12.07

03381500 LITTLE WABASH RIVER AT CARM, IL

LOCATION.--Lat 38°03'40", long 88°09'35", near center of E½ sec.25, T.5 S., R.9 E., White County, Hydrologic Unit 05120114, on right bank at upstream side of Possum Bridge, 2.3 mi (3.7 km) south of Main Street Bridge in Carmi and 7.8 mi (12.6 km) downstream from Skillet Fork.

DRAINAGE AREA.--3,102 mi² (8,034 km²).

PERIOD OF RECORD.--October 1908 to December 1912 (gage heights only), October 1939 to current year.

REVISED RECORDS.--WDR IL-75: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 339.91 ft (103.605 m) above mean sea level. Prior to December 1912, nonrecording gage at site 3.1 mi (5.0 km) upstream at datum 0.4 ft (0.1 m) higher. Oct. 1 to Nov. 9, 1939, nonrecording gage at present site and datum. Since Nov. 14, 1939, auxiliary water-stage recorder 3.1 mi (5.0 km) upstream.

REMARKS.--Records good. There was no diversion through McHenry Slough during the year. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--38 years, 2,467 ft³/s (69.87 m³/s), 10.80 in/yr (274 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 46,900 ft³/s (1,330 m³/s) May 12, 1961; maximum gage height, 36.70 ft (11.186 m) May 13, 1961; no flow Sept. 16-17, 1952, result of temporary dam upstream; minimum unregulated discharge, 0.6 ft³/s (0.017 m³/s) Sept. 9, 1953, July 31, 1954.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 13,900 ft³/s (394 m³/s) Apr. 4, gage height, 28.86 ft (8.797 m); maximum gage height, 29.05 ft (8.854 m) Apr. 5; minimum discharge, 26 ft³/s (0.74 m³/s) Jan. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	79	319	44	29	30	5180	12500	1030	66	4700	308	3950
2	75	271	44	26	29	4700	13100	803	59	2860	207	3180
3	72	204	43	27	30	4270	13600	596	55	1300	165	2280
4	61	169	43	28	32	5980	13800	510	52	720	117	1360
5	51	150	44	30	34	6480	13800	510	49	526	88	706
6	54	128	43	30	34	6060	13600	648	45	450	67	484
7	45	121	47	31	34	5230	13300	1020	37	370	56	414
8	40	112	44	30	32	4190	12800	1140	32	290	63	352
9	39	107	42	35	34	3230	12100	1170	39	240	66	207
10	38	99	44	38	39	2080	11300	943	41	210	100	152
11	35	84	55	35	59	1220	10300	995	43	400	166	114
12	34	70	54	32	257	1890	9160	961	43	1000	272	98
13	54	61	54	30	1330	4070	7760	721	43	4130	555	105
14	77	55	51	35	2120	4970	5960	506	40	4290	1170	113
15	87	50	47	35	2160	5250	3800	352	37	3820	1910	102
16	74	46	46	31	1960	4920	1720	289	37	2810	2580	102
17	59	41	45	30	1820	4040	721	246	75	1510	2780	96
18	48	40	43	30	1760	3890	434	202	79	638	2640	123
19	45	39	41	29	1670	3740	378	180	66	329	1920	234
20	48	38	40	28	1380	2730	357	162	56	463	760	231
21	40	37	39	29	970	1800	340	148	51	294	325	189
22	34	35	37	28	663	1360	361	133	54	178	182	154
23	101	32	37	28	698	1060	910	124	63	118	147	125
24	394	31	36	30	1590	843	1750	114	142	110	904	220
25	376	30	36	30	1570	693	2400	108	320	136	2580	368
26	198	49	36	31	1300	582	1940	105	503	219	3030	598
27	113	65	36	31	3090	1190	1230	95	2010	218	2720	807
28	74	69	36	31	4810	8930	1050	87	3190	216	2560	960
29	76	59	37	30	---	10000	1040	88	5390	297	2430	802
30	265	48	35	31	---	11200	981	82	5170	525	3300	602
31	355	---	32	30	---	11700	---	75	---	440	4150	---
TOTAL	3141	2659	1311	948	29535	133478	182492	14143	17887	33807	38318	19228
MEAN	101	88.6	42.3	30.6	1055	4306	6083	456	596	1091	1236	641
MAX	394	319	55	38	4810	11700	13800	1170	5390	4700	4150	3950
MIN	34	30	32	26	29	582	340	75	32	110	56	96
CFSM	.03	.03	.01	.01	.34	1.39	1.96	.15	.19	.35	.40	.21
IN.	.04	.03	.02	.01	.35	1.60	2.19	.17	.21	.41	.46	.23
CAL YR 1976	TOTAL	350990	MEAN	959	MAX	7420	MIN	12	CFSM	.31	IN	4.21
WTR YR 1977	TOTAL	476947	MEAN	1307	MAX	13800	MIN	26	CFSM	.42	IN	5.72

STREAMS TRIBUTARY TO LAKE MICHIGAN

04093000 DEEP RIVER AT LAKE GEORGE OUTLET AT HOBART, IN

LOCATION.--Lat 41°32'10", long 87°15'25", in NW¼NW¼ sec.32, T.36 N., R.7 W., Lake County, Hydrologic Unit 04040001, on left bank at upstream side of bridge on Center Street in Hobart, 300 ft (91 m) upstream from Duck Creek, and 400 ft (122 m) downstream from Lake George Dam.

DRAINAGE AREA.--124 mi² (321 km²).

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

REVISED RECORDS.--WSP 1337: 1953, WSP 1507: 1956. WRD Ind. 1972: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 588.17 ft (179.274 m) above mean sea level (levels by State of Indiana, Department of Natural Resources). Prior to July 29, 1952, nonrecording gage, and July 30, 1952, to July 20, 1955, water-stage recorder at site 400 ft (122 m) upstream at datum 11.80 ft (3.597 m) higher.

REMARKS.--Records good except those for period of no gage-height record, Aug. 10 to Sept. 12, which are fair. Flow occasionally regulated by Lake George Dam.

AVERAGE DISCHARGE.--30 years, 101 ft³/s (2.860 m³/s), 11.06 in/yr (281 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,880 ft³/s (110 m³/s) Oct. 11, 1954, gage height, 19.48 ft (5.938 m) present datum, site then in use; minimum daily, 4.2 ft³/s (0.12 m³/s) Sept. 14, 1948.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 700 ft³/s (19.8 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Sept. 19	0300	*575 16.3	*7.77 2.368

Minimum daily discharge, 7.0 ft³/s (0.20 m³/s) Aug. 1, 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	25	21	11	11	83	223	46	8.9	130	7.0	66
2	13	24	19	12	12	82	190	40	7.5	135	7.0	136
3	13	21	18	12	13	82	192	39	9.4	78	8.0	123
4	13	20	17	12	13	118	186	41	13	56	8.0	80
5	12	30	16	12	13	239	197	77	19	39	11	58
6	28	27	17	12	13	202	187	94	20	29	14	44
7	31	24	19	12	12	138	157	82	19	21	36	38
8	24	23	18	11	12	105	133	66	15	17	57	32
9	20	21	17	11	12	94	114	52	19	18	45	30
10	18	18	17	11	12	94	99	46	18	17	40	27
11	16	17	17	10	22	86	87	41	43	22	34	26
12	16	17	16	10	52	101	74	38	61	24	30	27
13	15	18	15	10	148	161	66	33	47	28	27	44
14	15	17	14	10	154	174	60	29	31	29	24	63
15	15	15	14	10	101	154	56	28	23	21	22	99
16	15	15	15	10	90	117	34	27	19	18	24	173
17	16	16	15	10	80	87	31	27	17	24	26	139
18	17	16	15	10	76	101	41	24	24	24	26	346
19	18	15	16	10	76	142	43	21	31	24	26	526
20	19	16	20	10	83	144	68	21	26	21	24	310
21	19	16	19	11	74	160	202	32	19	16	27	178
22	18	17	17	11	62	186	215	40	17	14	34	123
23	17	14	15	11	92	208	163	25	17	11	34	81
24	18	14	14	11	204	217	120	19	17	10	32	69
25	18	17	14	11	237	183	94	17	15	8.5	26	59
26	18	23	15	11	168	149	82	17	15	8.0	24	58
27	18	39	14	11	116	126	72	15	17	7.6	22	50
28	19	48	13	10	92	140	55	14	18	8.0	22	43
29	17	34	12	10	---	341	57	12	19	10	32	40
30	17	25	12	10	---	448	51	11	43	7.6	44	36
31	21	---	11	11	---	337	---	12	---	7.2	42	---
TOTAL	549	642	492	334	2050	4999	3349	1086	667.8	882.9	835.0	3124
MEAN	17.7	21.4	15.9	10.8	73.2	161	112	35.0	22.3	28.5	26.9	104
MAX	31	48	21	12	237	448	223	94	61	135	57	526
MIN	12	14	11	10	11	82	31	11	7.5	7.2	7.0	26
CFSM	.14	.17	.13	.09	.59	1.30	.90	.28	.18	.23	.22	.84
IN.	.16	.19	.15	.10	.61	1.50	1.00	.33	.20	.26	.25	.94
CAL YR 1976	TOTAL	39944.6	MEAN	109	MAX	1730	MIN	9.6	CFSM	.88	IN	11.98
WTR YR 1977	TOTAL	19010.7	MEAN	52.1	MAX	526	MIN	7.0	CFSM	.42	IN	5.70

04093500 BURNS DITCH AT GARY, IN

LOCATION.--Lat 41°34'30", long 87°17'20", in SE¼NW¼ sec.13, T.36 N., R.8 W., Lake County, Hydrologic Unit 04040001, on left bank at downstream side of bridge on Central Avenue, 0.4 mile (0.6 km) east of Gary, and 0.4 mile (0.6 km) downstream from confluence of Deep River and Little Calumet River.

DRAINAGE AREA.--160 mi² (414 km²). During times of floods flow may leave the basin by flowing west through Little Calumet River into the western portion of Calumet River basin; or during times of floods on Hart ditch, flow may enter the basin from western portion of the Little Calumet River basin.

PERIOD OF RECORD.--October 1943 to current year (October 1950 to September 1955, and October 1973 to September 1976, high-water records only).

REVISED RECORDS.--WSP 1034: 1944. WSP 1337: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 577.04 ft (175.882 m) above mean sea level. Prior to July 28, 1955, nonrecording gage at same site and datum.

REMARKS.--Records fair except those below 50 ft³/s, which are poor. Burns ditch is an artificial channel which reverses the direction of flow of part of Little Calumet River and flows into Lake Michigan at Ogden Dunes (corrected). During high stages on Lake Michigan, only periods free from backwater are shown.

AVERAGE DISCHARGE.--26 years (1943-50, 1955-73, 1977), 136 ft³/s (3.853 m³/s), 11.58 in/yr (294 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,430 ft³/s (97.1 m³/s) Oct. 11, 1954; maximum gage height, 16.44 ft (5.011 m) Mar. 16, 1944, from graph based on gage readings; minimum daily discharge, 2.6 ft³/s (0.074 m³/s) Oct. 14, 1946.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 700 ft³/s (19.8 m³/s) Sept. 19, gage height, 7.75 ft (2.362 m); minimum daily, 9.0 ft³/s (0.26 m³/s) Aug. 1-3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	42	30	18	18	107	353	56	14	162	9.0	85
2	21	39	28	18	18	90	291	60	11	182	9.0	175
3	21	35	25	18	19	83	284	58	14	113	9.0	160
4	21	35	24	19	20	144	277	65	19	65	9.5	100
5	20	50	23	19	20	286	303	90	25	45	13	80
6	47	44	25	18	19	292	280	118	30	30	17	56
7	50	40	28	18	19	197	231	119	30	23	39	49
8	36	37	26	17	19	139	189	93	24	21	81	41
9	31	34	24	17	18	122	149	80	30	21	60	38
10	29	31	26	16	18	124	128	70	28	23	50	35
11	27	29	25	16	31	116	114	60	60	27	44	33
12	26	28	24	15	80	135	98	55	90	22	39	34
13	25	30	23	15	210	213	91	50	60	25	35	60
14	24	28	22	15	220	240	88	45	40	25	32	110
15	24	26	22	15	160	222	84	40	29	27	30	166
16	25	26	22	15	130	159	72	40	24	24	30	240
17	27	26	23	15	115	123	48	40	21	30	34	219
18	29	26	23	15	101	150	63	40	28	31	30	471
19	30	26	24	16	103	185	69	33	34	32	30	682
20	31	27	27	16	112	203	89	30	34	24	30	570
21	30	28	30	16	95	220	257	43	26	19	28	397
22	29	28	25	17	79	281	302	60	21	17	33	304
23	28	25	23	17	118	289	254	40	21	14	37	232
24	28	24	21	17	284	299	185	33	21	12	37	196
25	29	24	21	17	350	262	145	28	18	11	32	159
26	29	37	21	16	265	208	108	25	17	10	28	134
27	30	60	21	16	189	165	90	23	20	10	27	116
28	31	67	21	15	127	190	85	20	20	10	28	95
29	29	50	20	15	---	386	78	19	25	12	40	82
30	28	34	19	16	---	522	76	17	55	11	57	79
31	33	---	18	17	---	491	---	18	---	9.5	54	---
TOTAL	891	1036	734	510	2957	6643	4881	1568	889	1087.5	1031.5	5198
MEAN	28.7	34.5	23.7	16.5	106	214	163	50.6	29.6	35.1	33.3	173
MAX	50	67	30	19	350	522	353	119	90	182	81	682
MIN	20	24	18	15	18	83	48	17	11	9.5	9.0	33
CFSM	.18	.22	.15	.10	.66	1.34	1.02	.32	.19	.22	.21	1.08
IN.	.21	.24	.17	.12	.69	1.54	1.13	.36	.21	.25	.24	1.21

WTR YR 1977 TOTAL 27426.0 MEAN 75.1 MAX 682 MIN 9.0 CFSM .47 IN 6.38

STREAMS TRIBUTARY TO LAKE MICHIGAN

04094000 LITTLE CALUMET RIVER AT PORTER, IN

LOCATION.--Lat 41°37'18", long 87°05'13", in NE¼NE¼ sec.34, T.37 N., R.6 W., Porter County, Hydrologic Unit 04040001, on right bank at downstream end of county road bridge, 200 ft (61 m) upstream from bridge on U.S. Highway 20, 0.8 mile (1.3 km) north-west of Porter, and 4.5 miles (7.2 km) upstream from Salt Creek.

DRAINAGE AREA.--66.2 mi² (171.5 km²).

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

REVISED RECORDS.--WSP 1084: 1945. WSP 1337: 1946-47. WRD Ind. 1972: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 603.48 ft (183.941 m) above mean sea level. Prior to June 26, 1952, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--32 years, 71.2 ft³/s (2.016 m³/s), 14.60 in/yr (371 mm/yr).

REMARKS.--Records good except those for winter periods and no gage-height record, Dec. 3 to Jan. 4, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,110 ft³/s (88.1 m³/s) Oct. 10, 1954, gage height, 11.66 ft (3.554 m); minimum daily, 17 ft³/s (0.48 m³/s) Aug. 24, 1965.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 700 ft³/s (19.8 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Mar. 29	2200	*453 12.8	*6.76 2.060

Minimum daily discharge, 22 ft³/s (0.62 m³/s) Aug. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	44	39	27	27	82	105	43	26	228	23	68
2	28	39	36	29	28	74	105	45	27	133	22	91
3	28	37	33	33	29	73	132	45	27	53	25	52
4	28	37	40	34	28	151	103	45	26	42	25	38
5	28	49	38	34	27	270	117	72	30	37	26	47
6	68	52	38	32	26	161	98	65	50	33	27	38
7	58	50	40	30	27	104	83	52	39	31	29	34
8	40	45	40	28	28	91	74	46	34	32	40	31
9	36	41	36	27	33	92	68	42	40	50	41	31
10	35	40	41	26	40	88	64	41	33	34	34	29
11	33	39	41	26	50	80	61	40	62	34	31	28
12	32	39	38	26	70	102	57	38	70	33	30	28
13	32	37	35	26	100	248	55	37	45	36	28	59
14	31	37	34	25	75	248	55	36	38	29	26	71
15	31	36	40	24	64	141	53	35	34	28	25	70
16	31	35	38	23	60	98	51	34	31	27	26	117
17	32	36	37	23	56	81	49	33	30	28	27	77
18	33	37	38	24	52	106	48	34	52	28	25	181
19	32	37	39	24	51	135	47	35	42	27	25	335
20	40	37	50	25	50	110	47	33	33	26	25	153
21	44	37	44	26	48	148	47	32	29	25	26	82
22	38	38	40	27	48	136	48	33	28	25	27	65
23	36	37	35	28	111	181	49	31	27	24	25	55
24	36	36	32	28	327	163	47	30	27	24	25	58
25	36	37	30	28	335	113	47	29	26	25	24	63
26	36	52	29	27	179	93	53	28	26	24	24	59
27	35	88	28	26	117	82	47	27	25	23	24	53
28	33	73	27	25	92	109	45	28	25	23	25	47
29	35	47	26	25	---	338	48	27	30	24	44	44
30	36	39	26	25	---	344	45	28	57	24	32	43
31	48	---	26	26	---	168	---	27	---	23	29	---
TOTAL	1118	1288	1114	837	2178	4410	1948	1171	1069	1233	865	2147
MEAN	36.1	42.9	35.9	27.0	77.8	142	64.9	37.8	35.6	39.8	27.9	71.6
MAX	68	88	50	34	335	344	132	72	70	228	44	335
MIN	28	35	26	23	26	73	45	27	25	23	22	28
CFSM	.55	.65	.54	.41	1.18	2.15	.98	.57	.54	.60	.42	1.08
IN.	.63	.72	.63	.47	1.22	2.48	1.09	.66	.60	.69	.49	1.21
CAL YR 1976	TOTAL	28328	MEAN 77.4	MAX	1040	MIN 24	CFSM 1.17	IN 15.92				
WTR YR 1977	TOTAL	19378	MEAN 53.1	MAX	344	MIN 22	CFSM .80	IN 10.89				

STREAMS TRIBUTARY TO LAKE MICHIGAN

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04094500 SALT CREEK NEAR MCCOOL, IN

LOCATION.--Lat 41°35'48", long 87°08'40", in SE¼SE¼ sec.6, T.36 N., R.6 W., Porter County, Hydrologic Unit 04040001, on left bank on downstream side of highway bridge, 50 ft (15 m) downstream from New York Central Railroad bridge, 1.2 miles (1.9 km) north of McCool, 1.5 miles (2.4 km) upstream from Little Calumet River, and at mile 1.6 (2.6 km).

DRAINAGE AREA.--74.6 mi² (193.2 km²).

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

REVISED RECORDS.--WSP 1337: 1946-48(M), 1950(M). WSP 1911: 1958. WRD Ind. 1972: Drainage area.

GAGE.--Nonrecording gage. Datum of gage is 594.10 ft (181.082 m) above mean sea level (levels by State of Indiana, Department of Natural Resources). Prior to July 25, 1955, nonrecording gage at same site and datum. July 25, 1955 to Apr. 28, 1977, recording gage at same site and datum. No gage Apr. 29, 1977 to July 28, 1977.

REMARKS.--Records good except those for winter periods and periods of no gage-height record, Feb. 13 to Mar. 3, and Apr. 28 to July 28, which are poor.

AVERAGE DISCHARGE.--32 years, 71.8 ft³/s (2.033 m³/s), 13.07 in/yr (332 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,180 ft³/s (90.1 m³/s) Oct. 11, 1954, gage height, 14.12 ft (4.304 m); minimum daily, 14 ft³/s (0.40 m³/s) Sept. 8, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 600 ft³/s (17.0 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Sept. 19	0300	*398 11.3	*5.00 1.524

Minimum daily discharge, 21 ft³/s (0.595 m³/s) Aug. 1, 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32	50	39	26	26	66	92	40	25	210	21	124
2	32	45	38	27	27	62	102	42	27	130	21	143
3	30	42	32	30	28	58	113	42	26	60	24	57
4	30	42	39	34	27	112	92	42	25	40	26	41
5	30	50	37	32	26	175	111	68	30	35	28	106
6	87	51	37	30	25	107	91	60	50	31	28	52
7	74	46	38	28	26	76	76	48	38	29	43	39
8	51	41	38	27	28	68	68	43	33	30	66	33
9	42	40	35	26	31	70	62	40	38	47	54	32
10	40	40	39	25	40	72	59	39	32	32	37	31
11	38	40	39	25	50	69	56	38	50	32	32	28
12	37	39	37	25	66	95	54	36	66	31	30	30
13	36	34	34	25	100	205	51	35	44	34	27	89
14	34	33	33	24	70	189	49	34	36	28	26	91
15	33	38	38	23	62	123	48	33	32	27	23	138
16	33	37	37	22	58	92	47	32	29	26	28	167
17	35	37	36	22	54	75	46	31	28	27	34	83
18	39	38	36	23	52	111	44	34	50	26	25	277
19	40	38	37	23	50	123	45	38	38	25	24	350
20	43	38	50	24	48	103	50	33	31	24	24	164
21	43	38	40	25	47	132	57	36	27	23	29	80
22	38	38	35	26	47	124	50	47	26	23	43	61
23	36	37	30	27	80	159	49	39	25	23	30	50
24	37	37	29	27	220	133	45	35	25	22	27	50
25	38	37	28	27	150	100	45	32	24	23	26	49
26	38	47	27	26	90	84	49	31	24	23	26	48
27	38	85	27	25	76	76	44	29	24	22	26	42
28	36	71	27	24	70	122	41	29	24	22	25	39
29	37	44	25	24	---	294	45	27	29	23	88	38
30	42	43	25	24	---	284	42	28	54	24	38	37
31	58	---	25	25	---	137	---	26	---	23	31	---
TOTAL	1257	1296	1067	801	1674	3696	1823	1167	1010	1175	1010	2569
MEAN	40.5	43.2	34.4	25.8	59.8	119	60.8	37.6	33.7	37.9	32.6	85.6
MAX	87	85	50	34	220	294	113	68	66	210	88	350
MIN	30	33	25	22	25	58	41	26	24	22	21	28
CFSM	.54	.58	.46	.35	.80	1.60	.82	.50	.45	.51	.44	1.15
IN.	.63	.65	.53	.40	.83	1.84	.91	.58	.50	.59	.50	1.28
CAL YR 1976	TOTAL	29642	MEAN 81.0	MAX 1270	MIN 25	CFSM 1.09	IN 14.78					
WTR YR 1977	TOTAL	18545	MEAN 50.8	MAX 350	MIN 21	CFSM .68	IN 9.25					

STREAMS TRIBUTARY TO LAKE MICHIGAN

04095300 TRAIL CREEK AT MICHIGAN CITY, IN

LOCATION.--Lat 41°43'00", long 86°51'35", in SW¼NE¼ sec.27, T.38 N., R.4 W., LaPorte County, Hydrologic Unit 04040001, on left downstream wingwall of bridge on Springland Avenue in Michigan City, 1.0 mile (1.6 km) upstream from Otter Creek, and 4.2 miles (6.8 km) upstream from mouth.

DRAINAGE AREA.--54.1 mi² (140.1 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 584.02 ft (178.009 m) above mean sea level.

REMARKS.--Records good except those for winter periods and those for period of no gage-height record, Aug. 17 to Sept. 21, which are fair.

AVERAGE DISCHARGE.--8 years, 67.5 ft³/s (1.912 m³/s), 16.95 in/yr (431 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,200 ft³/s (34.0 m³/s) Apr. 25, 1976, gage height, 10.57 ft (3.222 m); maximum gage height, 10.66 ft (3.249 m) Apr. 22, 1973; minimum daily discharge, 20 ft³/s (0.57 m³/s) Aug. 1, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 200 ft³/s (5.66 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)		Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)	
Feb. 24	0400	237	6.71	4.45	1.356	June 30	2300	235	6.66	4.58	1.396
Mar. 29	1100	*324	9.18	*5.41	1.649	Sept. 19	Unknown	227	6.43	4.36	1.329

Minimum daily discharge, 20 ft³/s (0.57 m³/s) Aug. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31	40	45	39	39	62	77	45	29	135	20	70
2	30	36	40	43	40	57	98	64	32	50	22	100
3	30	35	40	48	41	63	106	60	30	39	28	60
4	29	46	45	52	40	159	90	62	29	35	24	40
5	31	64	45	49	39	153	103	129	48	32	25	50
6	98	56	45	45	37	91	89	96	45	29	26	40
7	53	53	45	43	38	74	78	66	35	28	45	38
8	42	46	40	41	40	67	69	56	37	31	67	35
9	41	43	40	38	45	64	64	52	41	39	47	33
10	41	44	45	37	50	62	61	50	34	30	64	31
11	38	44	48	37	60	58	57	49	55	37	43	31
12	37	42	45	37	80	94	55	46	43	38	39	30
13	36	41	42	36	130	158	53	44	39	35	33	45
14	35	40	47	35	100	110	57	42	36	28	30	55
15	34	39	42	35	80	80	56	40	33	27	28	52
16	34	38	42	33	70	66	52	38	32	26	31	90
17	35	38	43	33	62	57	51	38	37	26	31	60
18	36	39	43	34	58	103	49	37	83	25	30	100
19	37	39	45	35	57	97	49	36	44	25	28	170
20	38	37	71	36	56	89	49	36	35	23	27	90
21	38	38	60	37	55	101	48	36	32	23	28	48
22	36	40	50	39	54	103	50	37	30	22	29	43
23	35	38	45	40	130	123	53	33	29	21	27	40
24	37	37	43	40	214	93	48	34	29	32	27	56
25	36	38	41	40	127	73	58	33	28	34	26	46
26	35	69	40	38	92	64	59	32	26	24	26	126
27	34	109	40	37	73	58	51	32	25	23	26	79
28	33	73	40	35	66	119	54	30	30	22	27	50
29	34	54	37	35	---	268	53	29	34	24	47	44
30	38	45	37	36	---	141	48	30	106	23	35	42
31	53	---	38	38	---	93	---	29	---	21	30	---
TOTAL	1195	1401	1369	1201	1973	3000	1885	1441	1166	1007	1016	1794
MEAN	38.5	46.7	44.2	38.7	70.5	96.8	62.8	46.5	38.9	32.5	32.8	59.8
MAX	98	109	71	52	214	268	106	129	106	135	67	170
MIN	29	35	37	33	37	57	48	29	25	21	20	30
CFSM	.71	.86	.82	.72	1.30	1.79	1.16	.86	.72	.60	.61	1.11
IN.	.82	.96	.94	.83	1.36	2.06	1.30	.99	.80	.69	.70	1.23
CAL YR 1976	TOTAL	26447	MEAN 72.3	MAX 815	MIN 25	CFSM 1.34	IN 18.19					
WTR YR 1977	TOTAL	18448	MEAN 50.5	MAX 268	MIN 20	CFSM .93	IN 12.68					

04096100 GALENA RIVER NEAR LAPORTE, IN

LOCATION.--Lat 41°44'54", long 86°40'30", in SE¼NW¼ sec.17, T.38 N., R.2 W., LaPorte County, Hydrologic Unit 04040001, on left bank at downstream side of bridge on County Road 125 East, 1.3 miles (2.1 km) upstream from Indiana-Michigan State line, and 9.8 miles (15.8 km) north of Courthouse in LaPorte.

DRAINAGE AREA.--17.2 mi² (44.5 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 625.00 ft (190.500 m) above mean sea level.

REMARKS.--Records good.

AVERAGE DISCHARGE.--8 years, 24.4 ft³/s (0.691 m³/s), 19.26 in/yr (489 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 200 ft³/s (5.66 m³/s) Feb. 5, 1971 (gage height, unknown); minimum daily, 6.7 ft³/s (0.19 m³/s) Sept. 13, 1973.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 75 ft³/s (2.12 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Feb. 24	0900	*105 2.97	*3.87 1.18
Mar. 29	0900	104 2.95	3.84 1.17

Minimum daily discharge, 9.0 ft³/s (0.25 m³/s) Aug. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	20	22	17	17	31	35	21	11	45	9.1	18
2	13	20	21	17	17	28	39	27	12	23	9.0	23
3	12	18	20	17	18	30	40	26	11	19	10	22
4	12	21	20	18	17	59	37	38	10	18	9.8	19
5	13	27	19	17	17	63	40	69	12	16	9.8	17
6	32	26	19	17	17	39	37	41	13	14	11	16
7	24	26	19	17	17	35	35	31	12	13	14	15
8	19	23	19	17	17	33	32	27	12	13	20	14
9	18	21	20	17	18	33	30	24	13	13	27	14
10	18	23	19	17	20	32	29	22	11	12	20	13
11	17	23	19	17	22	30	26	21	15	12	17	13
12	17	21	18	17	21	36	25	20	15	15	16	13
13	17	20	18	17	20	62	25	19	13	16	13	20
14	16	19	19	18	19	45	25	19	12	13	12	23
15	16	19	19	17	19	37	24	18	11	12	11	25
16	16	18	19	18	19	32	23	17	11	11	11	21
17	17	18	19	17	20	29	22	17	13	11	11	17
18	17	18	19	17	27	39	20	16	30	11	10	35
19	17	18	20	17	29	40	20	16	18	11	9.8	29
20	18	18	30	17	27	36	21	15	14	10	9.7	23
21	18	17	32	17	29	43	21	15	13	9.8	10	22
22	18	18	39	17	26	40	22	14	12	9.9	11	20
23	17	17	25	17	50	46	23	13	11	9.6	9.8	19
24	18	17	31	17	94	39	22	13	11	12	9.7	21
25	18	17	24	17	53	35	24	13	11	14	9.4	21
26	18	27	19	17	40	32	25	13	10	11	9.4	22
27	17	48	24	17	36	30	22	12	9.6	11	9.3	22
28	17	32	19	17	33	45	23	12	9.9	10	9.2	22
29	17	26	18	17	---	94	24	11	11	10	16	21
30	17	28	17	17	---	52	22	11	21	9.9	13	19
31	23	---	17	17	---	39	---	11	---	9.3	11	---
TOTAL	540	664	663	530	759	1264	813	642	388.5	424.5	378.0	599
MEAN	17.4	22.1	21.4	17.1	27.1	40.8	27.1	20.7	13.0	13.7	12.2	20.0
MAX	32	48	39	18	94	94	40	69	30	45	27	35
MIN	12	17	17	17	17	28	20	11	9.6	9.3	9.0	13
CFSM	1.01	1.29	1.24	.99	1.58	2.37	1.58	1.20	.76	.80	.71	1.16
IN.	1.17	1.44	1.43	1.15	1.64	2.73	1.76	1.39	.84	.92	.82	1.30
CAL YR 1976	TOTAL	8422.6	MEAN	23.0	MAX	174	MIN	7.7	CFSM	1.34	IN	18.22
WTR YR 1977	TOTAL	7665.0	MEAN	21.0	MAX	94	MIN	9.0	CFSM	1.22	IN	16.58

STREAMS TRIBUTARY TO LAKE MICHIGAN

04097970 LIME LAKE OUTLET AT PANAMA, IN

LOCATION.--Lat 41°42'46", long 85°07'10", in NW¼NW¼ sec.35, T.38 N., R.12 E., Steuben County, Hydrologic Unit 04050001, on right bank 10 ft (3 m) downstream from dam for Lime Lake, 30 ft (9 m) upstream from bridge on Orland Road, and 0.7 mile (1.1 km) northwest of Panama.

DRAINAGE AREA.--17.5 mi² (45.3 km²), of which 3.68 mi² (9.53 km²) does not contribute directly to surface runoff.

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

GAGE.--Water-stage recorder. Datum of gage is 950.00 ft (289.560 m) above mean sea level.

REMARKS.--Records poor. Occasional regulation by control structure for Lime Lake.

AVERAGE DISCHARGE.--8 years, 6.80 ft³/s (0.193 m³/s), 5.28 in/yr (134 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 34 ft³/s (0.96 m³/s) Mar. 5, 1976, gage height, 4.59 ft (1.399 m); no flow at times during 1971 and 1972.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 25 ft³/s (0.71 m³/s) Mar. 31, gage height, 4.48 ft (1.366 m); minimum daily discharge, 0.20 ft³/s (0.006 m³/s) Oct. 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.30	.48	3.4	3.8	3.1	6.2	23	9.6	.49	4.2	.82	1.8
2	.35	.48	3.6	3.7	3.0	6.0	22	9.7	.50	3.4	.84	1.8
3	.27	.47	3.6	3.7	3.2	6.3	21	9.3	.49	3.0	.89	1.8
4	.23	.47	3.8	3.6	3.3	9.4	20	8.0	.45	2.7	.96	1.8
5	.20	.46	3.9	3.6	3.4	11	18	7.0	.49	2.4	1.0	1.7
6	.45	.45	4.0	3.5	3.3	11	18	9.2	.52	2.2	1.1	1.2
7	1.1	.45	4.3	3.6	3.3	10	17	7.7	1.0	2.8	1.3	.96
8	1.0	.45	4.3	3.6	3.3	10	16	6.6	1.1	2.7	1.5	.73
9	.70	.45	4.4	3.5	3.2	11	15	5.5	1.7	2.4	1.6	.63
10	.53	.45	4.3	4.0	3.9	11	14	4.8	1.7	1.8	1.5	.59
11	.39	.44	4.3	4.0	4.4	11	14	4.0	1.8	1.2	2.1	.55
12	.26	.44	4.2	3.9	4.4	12	13	3.3	1.8	1.5	2.1	.54
13	.40	.44	4.2	3.9	4.5	13	13	2.8	1.8	1.6	2.2	.68
14	.30	.49	4.3	4.0	4.4	13	13	2.4	1.9	1.8	2.1	1.0
15	.40	.57	4.2	3.9	4.3	12	12	2.0	2.2	2.4	1.4	1.3
16	.33	.70	4.2	3.9	4.1	11	8.9	1.8	2.5	4.0	1.8	1.4
17	.35	.84	4.2	3.9	4.1	12	6.7	1.5	2.8	4.0	2.1	1.4
18	.34	1.0	4.1	3.8	3.9	14	7.0	1.7	2.9	3.5	1.6	1.8
19	.40	1.2	4.0	3.7	3.8	14	7.4	1.4	2.7	2.3	1.0	1.9
20	.47	1.4	4.2	3.6	3.7	14	7.9	1.1	2.5	2.1	.64	1.6
21	.55	1.6	4.0	3.6	3.7	14	8.0	.84	2.3	2.0	1.3	1.4
22	.64	1.6	3.9	3.5	3.6	14	9.1	.80	2.2	1.8	1.2	1.4
23	.74	1.6	3.9	3.5	3.8	14	11	.90	2.2	1.8	1.0	1.3
24	.60	1.6	3.9	3.4	5.0	13	11	.80	2.1	2.3	.86	2.3
25	.54	1.8	3.8	3.4	5.2	13	11	.73	3.8	2.1	.78	2.4
26	.52	2.8	3.8	3.5	5.5	13	11	.67	3.4	1.0	.52	2.5
27	.52	3.8	3.9	3.5	6.4	14	11	.60	2.9	.80	.60	2.4
28	.51	3.7	3.9	3.6	6.4	18	11	.55	2.8	.83	.82	2.1
29	.50	3.6	3.9	3.6	---	19	11	.50	3.0	.88	1.6	2.0
30	.50	3.6	3.9	3.5	---	18	11	.46	3.8	.92	1.4	1.9
31	.49	---	3.9	3.3	---	21	---	.47	---	.85	1.5	---
TOTAL	14.92	37.85	124.5	113.6	114.2	388.9	392.0	106.72	59.84	67.28	40.13	44.88
MEAN	.48	1.26	4.02	3.66	4.08	12.5	13.1	3.44	1.99	2.17	1.29	1.50
MAX	1.1	3.8	4.4	4.0	6.4	21	23	9.7	3.8	4.2	2.2	2.5
MIN	.20	.44	3.6	3.3	3.0	6.0	6.7	.46	.45	.80	.52	.54
CFSM	.03	.07	.23	.21	.23	.71	.75	.20	.11	.12	.07	.09
IN.	.03	.08	.26	.24	.24	.83	.83	.23	.13	.14	.09	.10
CAL YR 1976 TOTAL	2835.02	MEAN 7.75	MAX 33	MIN .05	CFSM .44	IN 6.03						
WTR YR 1977 TOTAL	1504.82	MEAN 4.12	MAX 23	MIN .20	CFSM .24	IN 3.20						

04099000 ST. JOSEPH RIVER AT MOTTVILLE, MICH.

LOCATION.--Lat 41°48'03", long 85°45'22", in SW¼ sec.6, T.8 S., R.12 W., Michigan meridian, St. Joseph County, Hydrologic Unit 04050001, on right bank 500 ft (152 m) upstream from bridge on U.S. Highway 12 at Mottville, 0.4 mi (0.6 km) downstream from Michigan Power Co. hydroelectric plant, 4 mi (6 km) upstream from Pigeon River, and at mile 96 (154 km).

DRAINAGE AREA.--1,866 mi² (4,833 km²).

PERIOD OF RECORD.--October 1923 to current year. Monthly discharge only for some periods, published in WSP 1307.

REVISED RECORDS.--WSP 1387: 1930, 1932, 1938, 1940-42, 1945. WSP 1911: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 755.3 ft (230.22 m) above mean sea level (Michigan Power Co. bench mark). Prior to Oct. 1, 1951, at site 0.4 mile (0.6 km) upstream at datum 4.2 ft (1.28 m) higher.

REMARKS.--Records good except those for the winter period, which are fair. Flow regulated by powerplants above station. Several observations of water temperature were made during the year. Corps of Engineers gage-height telemark at station.

AVERAGE DISCHARGE.--54 years, 1,531 ft³/s (43.36 m³/s), 11.14 in/yr (283 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,700 ft³/s (303 m³/s) Apr. 27, 1950, gage height, 6.56 ft (1.999 m), site and datum then in use; minimum daily, 39 ft³/s (1.10 m³/s) Oct. 19, 1963.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,580 ft³/s (101 m³/s) Mar. 31, gage height, 5.33 ft (1.625 m); minimum, 152 ft³/s (4.30 m³/s) May 17, gage height, 1.17 ft (0.357 m); minimum daily, 450 ft³/s (12.7 m³/s) Aug. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1350	1440	994	840	700	1910	3220	1950	756	976	474	812
2	677	1250	1310	820	700	1780	3230	2090	796	1170	468	1000
3	632	522	1240	800	700	1780	3230	1710	804	994	462	804
4	892	796	756	800	700	2060	3190	1810	748	949	456	900
5	884	1050	756	790	700	2040	3210	1720	732	900	456	892
6	900	932	1080	780	700	2610	3290	2050	852	924	450	1000
7	932	1100	1070	780	700	2660	3250	1850	748	900	456	852
8	967	1100	1090	770	700	2680	3110	1600	772	724	468	836
9	994	1100	1090	760	700	2590	2960	1830	916	716	522	820
10	1160	1190	1240	750	700	2750	2840	1770	1280	716	602	572
11	724	1010	892	750	700	2810	2930	1640	828	655	662	580
12	1260	852	515	740	700	2860	2550	1620	724	685	876	812
13	1090	625	916	740	700	2910	2410	1620	940	692	860	868
14	985	884	812	740	710	2830	2390	1310	952	647	868	967
15	958	1260	958	740	720	2790	2310	1450	780	640	868	1600
16	662	1010	958	730	720	2600	2030	1690	860	632	617	1770
17	670	958	1010	720	730	2520	1990	1260	1110	647	780	1370
18	1090	898	756	720	730	2540	2050	1060	949	640	796	1230
19	1060	844	828	720	730	2430	1710	1140	662	617	844	1220
20	976	595	1030	720	720	2410	1620	1270	836	617	685	1260
21	940	764	958	720	764	2420	1620	1210	756	557	655	1210
22	1060	949	924	720	748	2500	1800	985	740	550	572	1010
23	625	1150	994	720	876	2450	1760	1280	716	550	610	967
24	788	716	876	720	1510	2460	1910	1120	756	543	670	1140
25	1160	529	820	720	1610	2380	2030	1110	1150	543	700	1130
26	958	1250	836	710	1750	2400	2010	1050	932	536	852	1350
27	860	1020	828	700	2050	2500	2190	1020	617	522	640	1260
28	1000	1060	844	700	2000	2440	2260	876	543	501	580	1460
29	844	1450	884	700	---	2800	2390	1020	700	494	764	1560
30	617	1020	860	700	---	2960	1920	670	662	494	836	1200
31	836	---	850	700	---	3330	---	860	---	480	788	---
TOTAL	28551	29324	28975	23020	25468	78200	73410	43641	24617	21211	20337	32452
MEAN	921	977	935	743	910	2523	2447	1408	821	684	656	1082
MAX	1350	1450	1310	840	2050	3330	3290	2090	1280	1170	876	1770
MIN	617	522	515	700	700	1780	1620	670	543	480	450	572
CFSM	.49	.52	.50	.40	.49	1.35	1.31	.76	.44	.37	.35	.58
IN.	.57	.58	.58	.46	.51	1.56	1.46	.87	.49	.42	.41	.65
CAL YR 1976	TOTAL	699155	MEAN	1910	MAX	7150	MIN	304	CFSM	1.02	IN	13.94
WTR YR 1977	TOTAL	429206	MEAN	1176	MAX	3330	MIN	450	CFSM	.63	IN	8.56

04099510 PIGEON CREEK NEAR ANGOLA, IN

LOCATION.--Lat 41°38'04", long 85°06'35", in NW¼ sec.26, T.37 N., R.12 E., Steuben County, Hydrologic Unit 04050001, on left bank 5 ft (2 m) upstream from bridge on U.S. Highway 20, 1.3 miles (2.1 km) downstream from outlet of Hogback Lake 1.3 miles (2.1 km) southeast of Flint, and 5.8 miles (9.3 km) west of Angola.

DRAINAGE AREA,--106 mi² (275 km²), of which 22.5 mi² (58.3 km²) does not contribute directly to surface runoff.

PERIOD OF RECORD.--October 1945 to current year. Prior to October 1947, published as "near Flint". Published as Pigeon Creek at Hogback Lake Outlet near Angola, October 1947 to September 1971, and Pigeon Creek and Hogback Lake near Angola, October 1971 to September 1974.

REVISED RECORDS.--WSP 1144: 1948. WSP 2111: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 940.00 ft (286.512 m) above mean sea level. Prior to October 1947, nonrecording gage at site 0.3 mile (0.5 km) downstream at different datum. October 1947 to Aug. 3, 1953, nonrecording gage at site 1.2 miles (1.9 km) upstream at same datum. Aug. 4, 1953 to Apr. 3, 1974, recording gage at site 1.3 miles (2.1 km) upstream at same datum. Apr. 18, 1974 to Sept. 2, 1974, nonrecording gage at same site and datum.

REMARKS.--Records good.

AVERAGE DISCHARGE.--32 years, 74.4 ft³/s (2.107 m³/s), 9.53 in/yr (242 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 744 ft³/s (21.1 m³/s) Apr. 8, 1950, gage height, 14.95 ft (4.557 m); minimum daily, 3.4 ft³/s (0.096 m³/s) Oct. 25-27, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 328 ft³/s (9.29 m³/s) Mar. 8, gage height, 10.73 ft (3.270 m); minimum daily, 15 ft³/s (0.42 m³/s) Feb. 4-7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	24	34	21	16	143	288	151	36	36	20	29
2	26	24	34	21	16	178	294	144	35	41	20	29
3	25	24	34	21	16	179	292	137	34	45	20	29
4	25	25	33	20	15	166	287	134	33	46	19	28
5	25	25	33	20	15	197	277	132	33	45	20	28
6	25	25	32	20	15	263	267	134	32	44	21	27
7	24	25	31	20	15	304	254	134	30	41	21	27
8	26	25	31	20	16	324	239	133	30	38	24	26
9	28	25	30	19	16	330	224	135	32	35	33	25
10	29	24	29	19	16	319	207	133	33	33	35	25
11	29	24	29	19	17	305	192	128	34	32	37	24
12	29	24	28	19	18	290	180	122	34	32	38	24
13	28	24	27	19	19	276	168	115	34	32	38	25
14	27	24	27	19	20	261	157	107	34	32	37	26
15	26	24	26	18	19	247	146	98	33	31	36	27
16	25	23	25	18	18	228	136	90	33	31	36	28
17	24	23	25	18	18	210	129	83	32	31	39	30
18	24	23	24	18	18	200	121	78	32	31	41	32
19	24	23	24	18	18	184	114	73	31	31	44	35
20	24	23	24	17	19	173	109	69	30	31	44	38
21	23	23	24	17	20	165	103	66	30	30	43	40
22	22	23	23	17	21	162	100	62	29	29	41	41
23	22	23	23	17	27	163	106	58	28	28	40	40
24	24	23	23	17	41	163	124	55	27	28	38	41
25	24	23	23	17	63	163	149	53	29	26	37	41
26	24	24	23	17	91	160	167	51	29	25	35	45
27	24	27	22	17	122	157	173	48	30	24	33	49
28	24	29	22	16	140	167	172	45	31	23	31	54
29	24	32	22	16	---	194	168	42	31	22	31	57
30	24	33	22	16	---	236	160	40	33	22	30	58
31	24	---	22	16	---	270	---	38	---	21	29	---
TOTAL	778	741	829	567	865	6667	5503	2888	952	996	1011	1028
MEAN	25.1	24.7	26.7	18.3	30.9	215	183	93.2	31.7	32.1	32.6	34.3
MAX	29	33	34	21	140	330	294	151	36	46	44	58
MIN	22	23	22	16	15	129	100	38	27	21	19	24
CFSM	.24	.23	.25	.17	.29	2.03	1.73	.88	.30	.30	.31	.32
IN.	.27	.26	.29	.20	.30	2.34	1.93	1.01	.33	.35	.35	.36
CAL YR 1976	TOTAL	33748	MEAN	92.2	MAX	577	MIN	22	CFSM	.87	IN	11.84
WTR YR 1977	TOTAL	22825	MEAN	62.5	MAX	330	MIN	15	CFSM	.59	IN	8.01

04099610 PRETTY LAKE INLET NEAR STROH, IN

LOCATION.--41°34'49", long 85°14'59", in SW 1/4 sec.15, T.36 N., R.11 E., Lagrange County, Hydrologic Unit 04050001, on left bank 400 ft (122 m) upstream from mouth, 2.6 miles (4.2 km) west of Stroh.

DRAINAGE AREA.--1.96 mi² (5.08 km²), of which 1.32 mi² (3.42 km²) does not contribute directly to surface runoff.

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

REVISED RECORDS.--WSP 1911: Drainage area.

GAGE.--Water-stage recorder with steel V-notch weir, 0.5 ft³/s (0.014 m³/s) notch capacity. Datum of gage is 960.00 ft (292.608 m) above mean sea level.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--14 years, 0.48 ft³/s (0.014 m³/s), 3.33 in/yr (85 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 33 ft³/s (0.93 m³/s) Feb. 5, 1971, gage height, 9.30 ft (2.835 m); maximum gage height, 9.46 ft (2.883 m) Feb. 4, 1971 (backwater from ice); no flow at times during 1963-65.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4.9 ft³/s (0.14 m³/s) Mar. 28, gage height, 6.88 ft (2.097 m); minimum daily, 0.09 ft³/s (0.002 m³/s) June 22, 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.25	.21	.28	.12	.10	.68	1.0	.51	.21	.73	.12	.16
2	.25	.21	.28	.11	.10	.54	1.5	.57	.21	.44	.12	.24
3	.23	.21	.28	.11	.10	.72	1.4	.61	.20	.26	.12	.18
4	.20	.21	.27	.11	.10	3.0	1.2	.64	.18	.22	.12	.16
5	.33	.21	.27	.11	.10	2.5	1.2	.61	.15	.20	.12	.15
6	1.1	.21	.26	.11	.10	1.5	1.0	.57	.13	.18	.12	.13
7	.59	.22	.26	.10	.10	1.3	1.0	.57	.13	.18	.13	.15
8	.41	.22	.25	.10	.10	1.1	.90	.61	.16	.20	.25	.13
9	.34	.23	.24	.10	.10	1.1	.90	.57	.20	.18	.18	.13
10	.32	.22	.24	.10	.10	1.1	.86	.51	.13	.16	.22	.13
11	.30	.21	.23	.10	.11	1.1	.81	.40	.16	.16	.17	.12
12	.27	.21	.22	.10	.15	1.1	.81	.43	.15	.41	.16	.12
13	.25	.20	.21	.10	.41	1.3	.76	.36	.13	.38	.15	.22
14	.23	.20	.21	.10	.34	1.1	.76	.36	.13	.24	.13	.20
15	.21	.20	.20	.10	.21	.95	.57	.33	.12	.20	.13	.28
16	.21	.20	.19	.10	.15	.90	.54	.33	.12	.28	.30	.27
17	.21	.20	.19	.10	.14	.86	.57	.33	.15	.25	.26	.31
18	.23	.20	.18	.10	.18	1.1	.51	.40	.13	.21	.17	.54
19	.25	.20	.23	.11	.16	.95	.51	.36	.12	.20	.13	.41
20	.27	.19	.38	.11	.15	1.1	.51	.36	.10	.16	.13	.27
21	.22	.19	.27	.11	.14	1.1	.51	.33	.10	.13	.15	.23
22	.18	.19	.24	.12	.24	1.3	.85	.33	.09	.13	.14	.21
23	.20	.19	.22	.12	1.2	1.3	1.1	.30	.09	.13	.13	.18
24	.20	.19	.19	.12	2.9	1.1	.86	.26	.10	.13	.13	.68
25	.20	.19	.17	.13	1.5	.95	.76	.28	.30	.13	.12	.48
26	.20	.20	.16	.15	1.1	.86	.76	.26	.15	.13	.12	.82
27	.20	.22	.15	.13	.91	.82	.61	.26	.12	.13	.12	.59
28	.20	.24	.14	.12	.81	2.9	.68	.28	.15	.13	.11	.41
29	.21	.26	.13	.12	---	2.4	.68	.26	.20	.13	.21	.33
30	.21	.27	.12	.11	---	1.4	.57	.26	.66	.13	.13	.29
31	.21	---	.12	.11	---	1.1	---	.26	---	.12	.13	---
TOTAL	8.68	6.30	6.78	3.43	11.80	39.23	24.69	12.51	4.97	6.66	4.72	8.52
MEAN	.28	.21	.22	.11	.42	1.27	.82	.40	.17	.21	.15	.28
MAX	1.1	.27	.38	.15	2.9	3.0	1.5	.64	.66	.73	.30	.82
MIN	.18	.19	.12	.10	.10	.54	.51	.26	.09	.12	.11	.12
CFSM	.14	.11	.11	.06	.21	.65	.42	.20	.09	.11	.08	.14
IN.	.16	.12	.13	.07	.22	.74	.47	.24	.09	.13	.09	.16

CAL YR 1976 TOTAL 213.12 MEAN .58 MAX 6.9 MIN .05 CFSM .30 IN 4.04
WTR YR 1977 TOTAL 138.29 MEAN .38 MAX 3.0 MIN .09 CFSM .19 IN 2.62

STREAMS TRIBUTARY TO LAKE MICHIGAN
04099750 PIGEON RIVER NEAR SCOTT, IN

LOCATION.--Lat 41°44'56", long 85°34'35", in SE¼NW¼ sec.14, T.38 N., R.8 E., Lagrange County, Hydrologic Unit 04050001, on right bank 20 ft (6 m) downstream from bridge on County Road 750 North, 1,200 ft (366 m) downstream from Page ditch, 0.7 mile (1.1 km) south of Indiana-Michigan state line, and 1.2 miles (1.9 km) northwest of Scott.

DRAINAGE AREA.--361 mi² (935 km²), of which 53.9 mi² (139.6 km²) does not contribute directly to surface runoff.

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

REVISED RECORDS.--WSP 2111: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 815.00 ft (248.412 m) above mean sea level.

REMARKS.--Records good.

AVERAGE DISCHARGE.--9 years, 333 ft³/s (9.43 m³/s), 12.53 in/yr (318 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,780 ft³/s (50.4 m³/s) Mar. 5, 1976, gage height, 7.07 ft (2.155 m); minimum daily, 42 ft³/s (1.19 m³/s) Oct. 21, 1971.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 937 ft³/s (26.5 m³/s) Mar. 30, gage height, 5.22 ft (1.591 m); minimum daily, 102 ft³/s (2.89 m³/s) Aug. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	155	182	268	205	149	458	803	460	173	240	115	162
2	152	173	273	200	148	451	797	469	144	238	106	212
3	150	166	299	198	145	456	831	520	160	206	102	189
4	146	168	336	196	142	573	851	493	162	197	106	167
5	146	169	331	194	140	777	837	444	166	193	106	153
6	199	169	298	190	140	849	812	497	173	182	105	144
7	253	170	257	190	140	775	754	511	165	147	110	138
8	230	168	233	188	141	750	751	473	159	144	137	135
9	202	170	242	185	143	773	702	438	177	156	170	129
10	188	168	238	182	145	806	666	422	181	147	172	123
11	180	170	190	181	148	819	630	410	174	141	177	117
12	174	167	184	180	150	818	591	397	247	143	169	115
13	172	164	181	178	152	842	560	383	215	154	155	140
14	170	162	175	176	158	835	531	371	178	160	141	179
15	168	160	185	174	155	787	506	357	167	152	134	180
16	163	158	195	172	150	738	484	341	158	171	135	247
17	161	156	205	170	151	688	467	328	158	180	165	212
18	156	155	229	168	152	671	454	329	174	166	161	243
19	158	156	222	168	158	666	437	328	172	169	147	259
20	169	156	227	166	162	671	431	306	146	156	148	244
21	171	155	279	164	174	672	427	288	139	152	165	228
22	165	155	274	162	190	668	435	273	130	158	175	219
23	161	153	247	160	234	659	466	261	123	150	167	211
24	163	150	235	158	332	636	461	251	124	154	176	273
25	170	149	228	156	631	615	444	237	168	162	167	322
26	167	170	220	155	545	597	444	224	190	154	155	335
27	163	232	215	154	482	586	448	212	159	143	151	385
28	159	259	210	152	464	658	455	202	152	137	143	351
29	157	241	210	151	---	872	472	194	163	134	161	316
30	163	299	208	150	---	926	475	186	181	133	186	294
31	179	---	205	150	---	867	---	179	---	126	161	---
TOTAL	5310	5270	7299	5373	6021	21909	17422	10784	4968	5045	4568	6422
MEAN	171	176	235	173	215	707	581	348	166	163	147	214
MAX	253	299	336	205	631	926	851	520	247	240	186	385
MIN	146	149	175	150	140	451	427	179	123	126	102	115
CFSM	.47	.49	.65	.48	.60	1.96	1.61	.96	.46	.45	.41	.59
IN.	.55	.54	.75	.55	.62	2.26	1.80	1.11	.51	.52	.47	.66
CAL YR 1976	TOTAL	136184	MEAN 372	MAX 1650	MIN 118	CFSM 1.03	IN 14.03					
WTR YR 1977	TOTAL	100391	MEAN 275	MAX 926	MIN 102	CFSM .76	IN 10.34					

04100222 NORTH BRANCH ELKHART RIVER AT COSPERVILLE, IN

LOCATION.--Lat 41°28'54", long 85°28'32", in NE¼NW¼ sec.22, T.35 N., R.9 E., Noble County, Hydrologic Unit 04050001, on right bank at downstream side of bridge on County Road 900 North, 1,300 ft (396 m) downstream from Boyd ditch, 1.7 miles (2.7 km) upstream from Hustin ditch, and 3.1 miles (5.0 km) downstream from Waldron Lake.

DRAINAGE AREA.--142 mi² (368 km²).

PERIOD OF RECORD.--October 1971 to current year. October 1950 to September 1971 at site 3.1 miles (5.0 km) upstream, published as North Branch Elkhart River near Cosperville. Records may not be equivalent.

GAGE.--Water-stage recorder. Datum of gage is 880.12 ft (268.261 m) above mean sea level (levels by State of Indiana, Department of Natural Resources).

REMARKS.--Records good. Flow regulated at times by dam at Waldron Lake.

AVERAGE DISCHARGE.--6 years, 125 ft³/s (3.540 m³/s), 11.95 in/yr (304 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 587 ft³/s (16.6 m³/s) Mar. 6, 1976, gage height, 7.25 ft (2.210 m); minimum daily, 2.4 ft³/s (0.068 m³/s) Nov. 21, 1971.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 371 ft³/s (10.5 m³/s) Mar. 30, gage height, 5.84 ft (1.780 m); minimum daily, 10 ft³/s (0.28 m³/s) June 24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34	48	61	45	33	220	357	142	35	144	26	48
2	32	45	58	53	33	209	362	143	36	157	22	53
3	31	43	56	60	32	209	362	145	35	154	20	52
4	30	44	54	67	32	275	344	145	32	144	19	50
5	31	46	53	62	31	334	322	146	34	132	21	47
6	81	45	52	57	31	355	310	165	37	118	33	43
7	99	45	52	53	31	355	295	170	34	101	41	40
8	82	45	52	49	31	351	282	166	32	98	53	36
9	67	44	51	46	32	350	267	162	44	88	66	32
10	58	43	51	43	32	350	253	152	42	77	68	28
11	53	45	51	41	33	348	238	142	43	67	69	25
12	50	42	51	40	34	352	226	127	43	67	65	23
13	46	41	48	39	37	354	211	111	42	66	60	38
14	45	41	48	38	43	353	200	103	41	62	55	51
15	39	40	47	37	49	345	185	97	38	59	49	59
16	38	39	45	36	60	333	171	88	36	62	50	69
17	37	38	44	36	55	326	162	83	38	62	63	72
18	36	37	43	36	50	330	150	87	39	61	61	87
19	37	37	43	36	49	327	136	86	34	62	54	105
20	41	39	43	36	49	334	124	81	24	62	49	102
21	39	39	41	36	51	339	114	76	18	59	46	91
22	38	37	40	36	60	339	119	73	15	56	45	81
23	40	35	40	36	105	333	140	75	12	50	43	73
24	47	37	40	37	209	327	142	69	10	47	41	81
25	48	37	40	37	242	317	138	64	43	47	36	91
26	45	53	39	38	249	306	137	60	58	41	33	101
27	43	89	39	37	242	297	134	55	58	36	30	101
28	39	97	40	36	231	329	139	50	57	32	28	94
29	37	86	40	35	---	360	145	48	64	32	47	89
30	41	74	41	35	---	366	145	45	86	35	51	84
31	48	---	43	34	---	361	---	40	---	31	48	---
TOTAL	1432	1431	1446	1307	2166	10084	6310	3196	1160	2309	1392	1946
MEAN	46.2	47.7	46.6	42.2	77.4	325	210	103	38.7	74.5	44.9	64.9
MAX	99	97	61	67	249	366	362	170	86	157	69	105
MIN	30	35	39	34	31	209	114	40	10	31	19	23
CFSM	.33	.34	.33	.30	.55	2.29	1.48	.73	.27	.53	.32	.46
IN.	.38	.37	.38	.34	.57	2.64	1.65	.84	.30	.60	.36	.51
CAL YR 1976	TOTAL	43300	MEAN	118	MAX	585	MIN	18	CFSM	.83	IN	11.34
WTR YR 1977	TOTAL	34179	MEAN	93.6	MAX	366	MIN	10	CFSM	.66	IN	8.95

STREAMS TRIBUTARY TO LAKE MICHIGAN

04100252 FORKER CREEK NEAR BURR OAK, IN

LOCATION.--Lat 41°19'58", long 85°25'25", in SE¼NE¼ sec.12, T.33 N., R.9 E., Noble County, Hydrologic Unit 04050001, on right bank 300 ft (91 m) downstream from bridge on State Highway 9, 400 ft (122 m) downstream from Miller Lake outlet, 0.8 mile (1.3 km) northeast of Burr Oak, and 4.5 miles (7.2 km) south of Albion.

DRAINAGE AREA.--19.2 mi² (49.7 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 889.00 ft (270.967 m) above mean sea level (Indiana State Highway Commission bench mark).

REMARKS.--Records good. Occasional regulation at Miller Lake outlet.

AVERAGE DISCHARGE.--8 years, 15.7 ft³/s (0.445 m³/s), 11.10 in/yr (282 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 179 ft³/s (5.07 m³/s) Feb. 18, 1976, gage height, 4.82 ft (1.469 m); minimum daily, 0.13 ft³/s (0.004 m³/s) Sept. 10, 1972.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 115 ft³/s (3.26 m³/s) Mar. 6, gage height, 3.83 ft (1.167 m); minimum daily, 0.26 ft³/s (0.007 m³/s) Oct. 1-3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.26	.98	3.3	1.8	1.0	38	78	19	1.6	38	3.2	5.9
2	.26	.98	3.3	1.7	1.0	31	73	18	1.5	68	3.0	7.4
3	.26	.92	3.3	1.6	1.0	26	72	17	1.4	78	2.8	7.4
4	.30	.87	3.4	1.4	1.1	53	69	14	1.5	69	2.7	7.0
5	2.6	.77	3.3	1.3	1.1	93	62	12	1.6	54	3.0	6.7
6	5.5	.68	3.3	1.3	1.1	112	56	12	1.3	43	11	6.2
7	4.5	.68	3.5	1.3	1.1	94	50	12	.90	33	23	5.0
8	3.5	.68	3.3	1.3	1.1	77	47	11	.96	27	39	4.4
9	2.9	.75	3.2	1.4	1.1	64	42	9.6	1.3	21	48	4.3
10	2.5	.68	3.0	1.3	1.3	54	37	8.6	1.1	17	50	3.9
11	2.2	.70	3.0	1.3	1.8	46	31	8.0	1.3	14	47	3.7
12	2.0	.68	2.8	1.3	1.9	41	26	7.4	1.3	13	41	3.5
13	1.9	.68	2.7	1.3	2.0	37	22	6.7	1.3	13	35	4.2
14	1.7	.68	2.6	1.2	2.0	33	20	6.3	1.1	11	28	6.0
15	1.6	.68	2.5	1.1	2.0	30	16	6.0	1.1	9.5	22	8.9
16	1.4	.63	2.4	.98	2.0	26	12	5.5	1.0	8.6	17	13
17	1.1	.67	2.3	.97	2.0	23	11	5.2	1.5	10	13	23
18	.99	.68	2.2	.98	2.0	25	9.6	4.8	2.7	11	10	43
19	1.0	.68	2.2	.99	2.0	24	8.4	4.2	2.9	11	8.5	66
20	1.1	.68	2.3	1.1	2.2	30	7.8	3.1	2.9	10	7.3	75
21	1.0	.74	2.2	1.2	2.6	37	7.2	2.5	2.5	10	7.7	72
22	.81	.77	2.2	1.2	3.3	43	8.0	2.1	2.3	9.3	9.3	63
23	.81	.70	2.1	1.1	7.1	43	12	1.8	2.9	8.2	8.9	52
24	1.1	.73	2.0	.98	24	42	17	1.6	1.9	7.3	8.3	47
25	1.1	.77	2.0	.98	44	39	23	1.6	2.6	6.9	7.6	43
26	.97	1.7	2.0	.87	59	35	26	1.6	2.9	5.7	7.1	39
27	.86	3.3	2.0	1.1	58	31	25	1.4	3.1	4.3	6.8	35
28	.77	3.3	2.1	1.1	48	43	23	1.4	2.9	3.6	6.3	31
29	.72	3.3	2.0	1.3	---	73	22	1.6	3.1	3.4	6.7	26
30	.85	3.3	1.9	1.2	---	98	21	1.7	9.0	3.5	6.3	21
31	1.1	---	1.9	1.1	---	93	---	1.8	---	3.3	5.8	---
TOTAL	47.66	33.36	80.3	37.75	276.8	1534	934.0	209.5	62.56	624.6	495.3	733.5
MEAN	1.54	1.11	2.59	1.22	9.89	49.5	31.1	6.76	2.09	20.1	16.0	24.5
MAX	5.5	3.3	3.5	1.8	59	112	78	19	9.0	78	50	75
MIN	.26	.63	1.9	.87	1.0	23	7.2	1.4	.90	3.3	2.7	3.5
CFSM	.08	.06	.14	.06	.52	2.58	1.62	.35	.11	1.05	.83	1.28
IN.	.09	.06	.16	.07	.54	2.97	1.81	.41	.12	1.21	.96	1.42
CAL YR 1976	TOTAL	4220.69	MEAN	11.5	MAX	175	MIN	.26	CFSM	.60	IN	8.18
WTR YR 1977	TOTAL	5069.33	MEAN	13.9	MAX	112	MIN	.26	CFSM	.72	IN	9.82

04100465 TURKEY CREEK AT SYRACUSE, IN

LOCATION.--Lat 41°25'35", long 85°45'16", in NE¼SE¼ sec.6, T.34 N., R.7 E., Kosciusko County, Hydrologic Unit 04050001, on right bank 75 ft (23 m) upstream from Main Street bridge in Syracuse and 1,500 ft (457 m) downstream from dam at outlet of Syracuse Lake.

DRAINAGE AREA.--43.8 mi² (113.4 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 848.00 ft (258.470 m) above mean sea level.

REMARKS.--Records good. Flow occasionally regulated by dam on Syracuse Lake.

AVERAGE DISCHARGE.--8 years, 33.8 ft³/s (0.957 m³/s), 10.48 in/yr (266 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 129 ft³/s (3.65 m³/s) Mar. 8, 1974, gage height, 4.54 ft (1.384 m); maximum gage height, 4.59 ft (1.399 m) May 24, 1970; minimum daily discharge 1.4 ft³/s (0.040 m³/s) Oct. 17, 1971.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 103 ft³/s (2.92 m³/s) Mar. 29, gage height, 4.12 ft (1.256 m); minimum daily, 3.8 ft³/s (0.108 m³/s) May 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.6	43	17	14	14	37	88	35	4.6	28	4.7	22
2	4.1	43	17	14	14	36	90	34	4.7	30	4.5	35
3	3.9	43	17	15	14	35	88	34	4.8	27	4.4	37
4	5.0	43	16	15	14	35	88	35	4.9	23	4.4	37
5	6.1	43	16	15	14	49	87	38	5.1	19	5.5	33
6	7.9	41	16	15	14	43	87	48	4.8	14	4.9	21
7	6.6	41	17	15	14	53	87	52	4.9	15	4.2	22
8	6.3	42	16	15	14	65	85	49	7.3	17	8.8	20
9	5.6	42	16	14	14	66	83	48	5.6	16	8.1	16
10	4.9	41	16	15	15	65	75	41	4.8	16	27	16
11	6.0	41	16	15	16	66	65	34	5.5	15	33	14
12	6.3	41	15	15	16	72	64	33	4.1	16	32	14
13	6.2	41	16	15	15	73	63	30	4.8	20	31	21
14	6.2	40	16	15	15	73	60	17	4.7	20	19	29
15	6.3	40	16	15	15	72	51	15	4.6	18	14	55
16	5.8	40	16	14	15	71	46	14	4.9	22	22	61
17	5.2	40	16	15	16	70	39	13	6.1	53	33	60
18	6.5	40	15	15	15	73	40	13	4.6	66	27	69
19	7.2	40	15	14	14	77	35	13	4.4	64	26	78
20	20	31	16	14	14	86	29	13	5.8	52	25	76
21	45	16	16	14	15	87	26	12	4.4	42	20	74
22	45	17	16	14	16	86	24	12	4.4	27	20	72
23	44	17	16	14	25	85	32	12	4.6	20	18	72
24	44	16	15	14	50	84	32	8.9	4.7	12	17	81
25	44	16	15	14	49	83	31	5.6	5.9	7.8	18	80
26	44	18	15	14	44	82	30	5.5	4.3	6.3	17	74
27	44	18	15	14	40	82	29	4.6	4.7	6.2	13	60
28	44	17	15	14	39	93	40	3.9	7.4	5.7	12	59
29	43	17	15	13	---	102	52	4.0	6.6	6.4	17	59
30	44	17	15	13	---	98	47	3.8	16	5.8	21	59
31	43	---	15	13	---	92	---	4.0	---	4.8	17	---
TOTAL	614.7	985	489	445	570	2191	1693	685.3	164.0	695.0	528.5	1426
MEAN	19.8	32.8	15.8	14.4	20.4	70.7	56.4	22.1	5.47	22.4	17.0	47.5
MAX	45	43	17	15	50	102	90	52	16	66	33	81
MIN	3.9	16	15	13	14	35	24	3.8	4.1	4.8	4.2	14
CFSM	.45	.75	.36	.33	.47	1.61	1.29	.51	.13	.51	.39	1.08
IN.	.52	.84	.42	.38	.48	1.86	1.44	.58	.14	.59	.45	1.21
CAL YR 1976	TOTAL	11442.0	MEAN	31.3	MAX	121	MIN	3.9	CFSM	.72	IN	9.72
WTR YR 1977	TOTAL	10486.5	MEAN	28.7	MAX	102	MIN	3.8	CFSM	.66	IN	8.91

STREAMS TRIBUTARY TO LAKE MICHIGAN

04100500 ELKHART RIVER AT GOSHEN, IN

LOCATION.--Lat 41°35'36", long 85°50'55", in NE¼NE¼ sec.8, T.36 N., R.6 E., Elkhart County, Hydrologic Unit 04050001, on right bank 20 ft (6 m) downstream from River Avenue bridge at Goshen, 0.4 mile (0.6 km) upstream from Rock Run, and at mile 16.1 (25.9 km).

DRAINAGE AREA.--594 mi² (1,538 km²).

WATER DISCHARGE RECORDS

PERIOD OF RECORD.--

WATER DISCHARGE: April 1931 to current year.

REVISED RECORDS.--WSP 1337: 1939(M). WSP 1557: 1954. WSP 2111: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 769.43 ft (234.522 m) above mean sea level. Prior to Nov. 20, 1931, nonrecording gage at same site and datum.

REMARKS.--Records good.

AVERAGE DISCHARGE.--46 years, 501 ft³/s (14.19 m³/s), 11.45 in/yr (291 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,440 ft³/s (154 m³/s) Apr. 4, 1950, gage height, 10.15 ft (3.094 m); maximum gage height, 10.33 ft (3.149 m) July 10, 1951; minimum daily discharge, 7.0 ft³/s (0.20 m³/s) Aug. 11, 1964, result of extreme regulation.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 1,800 ft³/s (51.0 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)	
Mar. 5	1700	1,990	56.4	5.74	1.750
Mar. 29	1200	*2,550	72.2	*6.69	2.039

Minimum daily discharge, 140 ft³/s (3.96 m³/s) Feb. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	232	254	253	202	152	793	1380	507	197	1120	178	250
2	220	256	248	212	150	753	1310	500	196	1270	169	281
3	214	250	245	223	148	752	1320	499	190	875	160	265
4	207	251	242	223	144	1160	1280	493	183	613	160	245
5	214	251	240	218	142	1870	1320	491	185	507	157	235
6	299	246	238	215	140	1710	1300	568	190	458	157	225
7	400	243	235	210	142	1340	1220	715	187	442	157	208
8	368	241	232	202	142	1230	1150	605	182	463	178	200
9	337	239	230	198	144	1210	1060	533	191	454	216	193
10	313	240	235	192	146	1190	991	499	197	412	245	182
11	293	227	230	188	148	1140	930	474	202	388	264	171
12	275	237	224	180	150	1100	861	453	212	396	272	167
13	269	234	221	174	156	1140	808	427	203	388	268	212
14	248	230	206	172	158	1150	758	404	194	352	272	266
15	233	227	215	170	166	1080	708	384	182	328	276	307
16	225	223	215	168	178	996	662	376	175	344	304	404
17	217	223	211	166	190	932	629	376	190	352	344	429
18	211	223	205	166	188	952	589	401	215	340	332	450
19	211	223	200	166	184	1040	563	394	206	332	320	544
20	219	220	195	166	182	1230	547	376	185	312	304	541
21	219	219	190	168	188	1360	526	354	167	300	312	476
22	231	216	185	170	205	1350	526	326	160	324	296	445
23	236	209	180	172	500	1210	562	306	152	264	261	433
24	246	204	180	174	1190	1170	569	290	150	245	239	533
25	252	201	180	180	1630	1170	554	278	191	245	221	571
26	252	227	180	182	1280	1160	531	254	255	219	208	589
27	249	286	180	170	994	1130	510	241	219	203	196	540
28	243	353	180	168	853	1730	512	217	209	190	188	509
29	253	337	182	162	---	2490	528	206	313	187	222	474
30	242	245	188	160	---	2110	521	223	439	184	231	456
31	249	---	192	158	---	1670	---	209	---	178	223	---
TOTAL	7881	7235	6537	5675	9990	39318	24725	12379	6117	12685	7330	10801
MEAN	254	241	211	183	357	1268	824	399	204	409	236	360
MAX	400	353	253	223	1630	2490	1380	715	439	1270	344	589
MIN	207	201	180	158	140	752	510	206	150	178	157	167
CFSM	.43	.41	.36	.31	.60	2.14	1.39	.67	.34	.69	.40	.61
IN.	.49	.45	.41	.36	.63	2.46	1.55	.78	.38	.79	.46	.68

CAL YR 1976	TOTAL	194119	MEAN 530	MAX 3040	MIN 180	CFSM .89	IN 12.16
WTR YR 1977	TOTAL	150673	MEAN 413	MAX 2490	MIN 140	CFSM .70	IN 9.44

STREAMS TRIBUTARY TO LAKE MICHIGAN

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04100500 ELKHART RIVER AT GOSHEN, IN--Continued

WATER QUALITY RECORDS

PERIOD OF RECORD.--

SEDIMENT DISCHARGE: October 1963 to current year (partial-record station).

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	SUS- PENDE SUS- PENDE SEDI- MENT (MG/L)	SUS- PENDE SEDI- MENT DIS- CHARGE (T/DAY)
MAR 30...	1400	2040	33	182

STREAMS TRIBUTARY TO LAKE MICHIGAN
04101000 ST. JOSEPH RIVER AT ELKHART, IN

LOCATION.--Lat 41°41'30", long 85°58'30", in SW¼NE¼ sec.5, T.37 N., R.5 E., Elkhart County, Hydrologic Unit 04050001, on left bank 200 ft (61 m) downstream from mouth of Elkhart River, 200 ft (61 m) upstream from Main Street bridge in Elkhart, 2,000 ft (610 m) downstream from Christiana Creek, and 0.5 mile (0.8 km) downstream from Elkhart Hydroelectric Plant.

DRAINAGE AREA.--3,370 mi² (8,728 km²).

PERIOD OF RECORD.--August 1947 to current year. Gage heights at site 0.8 mile (1.3 km) downstream at different datum from September 1924 to March 1926 are available in the district office.

REVISED RECORDS.--WSP 2111: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 700.00 ft (213.360 m) above mean sea level.

REMARKS.--Records good. The flow is regulated by Elkhart Hydroelectric Plant.

AVERAGE DISCHARGE.--30 years, 3,061 ft³/s (86.7 m³/s), 12.33 in/yr (313 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 18,400 ft³/s (521 m³/s) Apr. 5, 1950, gage height, 27.82 ft (8.480 m); minimum daily, 336 ft³/s (9.52 m³/s) Aug. 5, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 7,560 ft³/s (214 m³/s) Mar. 29, gage height, 22.54 ft (6.870 m); minimum daily, 927 ft³/s (26.3 m³/s) Aug. 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2150	2040	1760	1380	1110	3150	6060	3420	1080	2560	959	1640
2	1530	2170	1700	1450	1110	3120	5860	3720	1550	3210	957	1810
3	1310	1310	1900	1500	1110	3130	5880	3320	1470	2530	931	1570
4	2310	1360	1400	1560	1110	3940	5750	3400	1410	2300	927	1670
5	1990	1910	1570	1640	1120	5130	5960	3310	1480	2100	929	1630
6	2110	1540	1910	1660	1130	5320	5950	3590	1600	1950	991	1720
7	1950	1930	2000	1640	1140	5210	5820	3720	1390	1860	956	1490
8	1570	1840	1780	1590	1150	4980	5530	3400	1530	1760	1140	1440
9	2020	1850	1850	1520	1160	4830	5370	3390	1630	1700	1150	1430
10	1890	1910	1970	1480	1180	4860	5010	3320	1790	1680	1490	1110
11	1690	1770	2090	1420	1200	4910	4950	3100	1830	1560	1390	1120
12	1990	1630	1360	1390	1220	4990	4670	2980	1380	1660	1620	1300
13	1910	1410	1370	1350	1260	5150	4240	2980	1770	1690	1610	1540
14	1940	1390	1310	1310	1280	5110	4200	2580	1790	1530	1600	1610
15	930	2080	1300	1290	1320	4980	3970	2720	1480	1510	1560	2170
16	938	1700	1250	1260	1380	4750	3850	2950	1550	1460	1410	2750
17	1320	1630	1220	1220	1450	4430	3510	2580	1770	1560	1450	2560
18	1680	1590	1280	1200	1590	4490	3590	2150	1840	1500	1520	2420
19	1760	1600	1450	1190	1900	4440	3300	2290	1450	1470	1580	2660
20	1660	1100	1900	1180	1670	4700	2980	2380	1460	1410	1410	2370
21	1640	1590	1770	1170	1280	4790	3040	2120	1350	1320	1390	2390
22	1720	1680	1380	1160	1400	5070	3180	2160	1300	1300	1320	2260
23	1400	1840	1350	1150	1870	4880	3360	2310	1280	1240	1290	1880
24	1450	1420	1310	1140	3400	4650	3460	2090	1130	1220	1320	2600
25	1940	1170	1300	1130	4340	4550	3620	2000	1740	1230	1340	2900
26	1650	1760	1290	1150	4110	4600	3500	1910	1730	1150	1470	3370
27	1620	2000	1290	1150	3730	4830	3630	1840	1320	1100	1300	2810
28	1690	2050	1290	1140	3680	5280	3700	1490	1570	1030	1210	2890
29	1540	2400	1300	1120	---	6930	3830	1950	1140	1020	1470	3020
30	1370	1830	1310	1110	---	6700	3620	1430	1930	1020	1480	2720
31	1510	---	1330	1110	---	6440	---	1950	---	990	1460	---
TOTAL	52178	51500	47490	40760	49400	150340	131390	82550	45740	49620	40630	62850
MEAN	1683	1717	1532	1315	1764	4850	4380	2663	1525	1601	1311	2095
MAX	2310	2400	2090	1660	4340	6930	6060	3720	1930	3210	1620	3370
MIN	930	1100	1220	1110	1110	3120	2980	1430	1080	990	927	1110
CFSM	.50	.51	.46	.39	.52	1.44	1.30	.79	.45	.48	.39	.62
IN.	.58	.57	.52	.45	.55	1.66	1.45	.91	.50	.55	.45	.69
CAL YR 1976 TOTAL	1274118			3481		13300		930		1.03		14.06
WTR YR 1977 TOTAL	804448			2204		6930		927		.65		8.88

04101500 ST. JOSEPH RIVER AT NILES, MI

LOCATION.--Lat 41°49'45", long 86°15'35", in SW¼ sec.26, T.7 S., R.17 W., Berrien County, Hydrologic Unit 04050001, on right bank 100 ft (30 m) upstream from Main Street Bridge at Niles 0.6 mi (1.0 km) downstream from dam at French Paper Co., 1 mi (2 km) upstream from Dowagiac River, at mile 44 (71 km).

DRAINAGE AREA.--3,666 mi² (9,495 km²).

PERIOD OF RECORD.--October 1930 to current year. Monthly discharge only for some periods, published in WSP 1307.

REVISED RECORDS.--WSP 1387: 1931, 1933-36, 1940-43, 1945-46(M), 1949(M). WSP 1911: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 633.02 ft (192.944 m) above mean sea level. Prior to Oct. 1, 1968, at datum 2.00 ft (0.610 m) higher. Oct. 1, 1930 to Feb. 11, 1931, nonrecording gage on Main Street Bridge, and Feb. 12 to June 30, 1931, nonrecording gage 50 ft (15 m) upstream from present site (gage heights referred to mean sea level). Since Apr. 13, 1970, auxiliary water-stage recorder at sewage-treatment plant, 1.1 mi (1.8 km) downstream from base gage at same datum. Oct. 1, 1943 to Apr. 12, 1970, auxiliary gage was headwater gage at hydroelectric plant at Buchanan Dam, 8 mi (13 km) downstream from base gage at different datum.

REMARKS.--Records good except those for the winter period, which are fair. Flow regulated by powerplants above station. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--47 years, 2,650 ft³/s (75.05 m³/s), 11.66 in/yr (296 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 20,200 ft³/s (572 m³/s) Apr. 5, 1950, gage height, 15.10 ft (4.602 m), present datum; minimum daily, 420 ft³/s (11.9 m³/s) Aug. 30, 1931.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 9,640 ft³/s (273 m³/s) Mar. 30, gage height, 9.66 ft (2.944 m); minimum daily, 1,010 ft³/s (28.6 m³/s) Sept. 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2270	2100	1940	1600	1700	4210	7500	3040	2100	3380	1230	2220
2	2000	2370	2120	1500	1600	3870	7000	3590	1700	3420	1160	2410
3	1490	1980	2440	1970	1500	4260	6980	3640	1700	3130	1350	2250
4	2030	1500	2020	1880	1600	4710	6890	2870	1900	2690	1160	1890
5	2430	1790	1900	1950	1610	6850	7100	3380	1800	2500	1180	2100
6	2460	1810	1970	1730	1440	6290	7300	3310	1600	2310	1180	1940
7	1940	2130	2160	1720	1270	6610	6790	3740	2000	2100	1310	1960
8	2280	1770	2300	1750	1530	6180	6720	3420	1600	2220	1610	1890
9	1900	1970	2190	1680	1700	6140	5980	2490	1920	1840	1490	1780
10	2250	2060	2270	1500	1700	6090	6120	3580	2030	1900	1860	2110
11	2210	2070	2430	1400	1300	5920	5520	3500	2750	2060	2070	1540
12	2210	1750	2010	1500	1300	6130	5410	3710	1880	2170	1850	1010
13	2030	1840	1740	1700	1300	6440	4870	2860	2000	2030	1920	2050
14	2440	1330	1910	1700	1600	6460	4750	3400	2090	1900	2100	2370
15	1700	1910	2030	1760	1890	6270	4630	2760	2090	1860	1790	1870
16	1060	1950	2180	1930	1790	5850	4530	3050	1750	2000	2140	3090
17	1550	1770	2100	1300	1770	5640	3410	3380	2020	1890	1630	2990
18	1640	1950	2140	1100	1940	5740	3640	2940	2660	1870	2010	3310
19	1780	1910	2070	2000	1940	5670	3480	1990	2020	1840	1620	2760
20	1970	1760	2180	1910	2090	5780	2690	2140	2010	1790	1910	3030
21	1700	1690	2500	1630	1950	6270	2740	2520	2320	1860	1760	2670
22	1780	1940	1800	1500	1650	6170	2970	2380	1880	1570	1570	3010
23	1920	1960	2170	1670	2110	6420	3680	2000	1610	1780	1700	2210
24	1450	2010	1820	1690	3890	6090	3430	2500	1670	1530	1540	2740
25	1760	1860	1960	1500	6380	5620	3870	2200	2030	1650	1760	3610
26	2140	1770	2160	1820	5370	5710	3510	2100	2020	1580	1770	3760
27	1810	2600	2030	1770	4960	6100	3640	2000	1660	1330	1740	3680
28	1830	2270	2010	1500	4560	6800	3990	2000	1260	1490	1560	2970
29	1870	2400	1860	1500	---	8960	4280	1700	2150	1070	1950	3050
30	1940	2590	1500	1500	---	8860	3980	2100	2280	1310	2020	3210
31	1890	---	1600	1700	---	7850	---	1800	---	1190	1850	---
TOTAL	59730	58810	63510	51360	63440	189960	147400	86090	58500	61260	51790	75480
MEAN	1927	1960	2049	1657	2266	6128	4913	2777	1950	1976	1671	2516
MAX	2460	2600	2500	2000	6380	8960	7500	3740	2750	3420	2140	3760
MIN	1060	1330	1500	1100	1270	3870	2690	1700	1260	1070	1160	1010
CFSM	.53	.54	.56	.45	.62	1.67	1.34	.76	.53	.54	.46	.69
IN.	.61	.60	.64	.52	.64	1.93	1.50	.87	.59	.62	.53	.77
CAL YR 1976 TOTAL	1371480			MEAN 3747	MAX 14400	MIN 1060	CFSM 1.02	IN 13.92				
WTR YR 1977 TOTAL	967330			MEAN 2650	MAX 8960	MIN 1010	CFSM .72	IN 9.82				

04177720 FISH CREEK AT HAMILTON, IN

LOCATION.--Lat 41°31'55", long 84°54'12", in SE¼SW¼ sec.34, T.36 N., R.14 E., Steuben County, Hydrologic Unit 04100003 on left bank 6 ft (2 m) upstream from bridge on County Road 775 South, 0.5 mile (0.8 km) downstream from Hamilton Lake outlet, and 0.5 mile (0.8 km) southeast of Hamilton.

DRAINAGE AREA.--37.5 mi² (97.1 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 876.00 ft (267.005 m) above mean sea level.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--8 years, 28.5 ft³/s (0.807 m³/s), 10.32 in/yr (262 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 452 ft³/s (12.8 m³/s) Feb. 17, 1976, gage height, 10.34 ft (3.152 m); minimum daily, 0.52 ft³/s (0.015 m³/s) Aug. 31, 1971.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 140 ft³/s (3.96 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)		Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)	
Feb. 25	0100	140	3.96	6.44	1.963	Mar. 29	1500	184	5.21	7.41	2.259
Mar. 05	0800	*311	8.81	*8.99	2.740	Apr. 24	0700	250	7.08	8.20	2.499

Minimum daily discharge, 1.6 ft³/s (0.045 m³/s) Oct. 4, 196.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.9	3.8	10	6.4	5.2	47	77	48	2.6	27	2.5	10
2	2.2	3.9	9.6	6.4	5.2	35	92	65	2.7	18	2.6	18
3	1.9	3.9	9.1	6.4	5.2	36	113	84	2.6	14	2.7	15
4	1.6	3.9	8.7	6.4	5.2	207	88	74	2.5	12	3.0	12
5	1.9	4.2	8.4	6.3	5.2	304	103	69	2.9	10	4.2	13
6	5.2	4.2	8.2	6.3	5.1	247	88	78	3.1	8.2	6.1	12
7	4.6	4.2	8.0	6.2	5.0	178	70	63	2.9	7.0	5.2	9.4
8	3.5	4.0	7.7	6.2	5.1	129	54	49	3.1	6.6	13	7.4
9	3.1	4.1	7.5	6.2	5.2	109	42	36	5.5	5.9	18	4.9
10	3.4	4.0	7.4	6.2	5.4	93	36	28	4.5	4.8	17	5.0
11	2.2	3.7	7.2	6.1	6.0	76	31	23	4.1	4.4	16	4.6
12	2.1	3.7	7.0	6.1	7.0	77	27	20	4.2	5.2	17	4.5
13	2.3	3.6	6.8	6.1	9.0	87	24	17	4.1	6.8	13	7.6
14	1.8	3.5	6.7	6.0	7.5	73	20	15	4.5	5.9	11	11
15	2.0	3.4	6.6	6.0	6.5	58	18	13	5.0	5.8	8.8	12
16	1.6	3.3	6.6	6.0	6.0	44	15	9.9	4.0	6.4	24	18
17	1.7	3.4	6.5	6.0	6.0	33	15	9.4	4.5	6.4	114	18
18	1.8	3.4	6.4	6.0	6.1	49	14	10	4.9	5.5	100	36
19	2.0	3.5	6.4	5.9	6.1	41	13	9.3	4.2	5.2	64	49
20	2.3	3.3	7.0	5.9	6.2	45	13	6.0	3.6	4.6	40	43
21	2.5	3.4	6.8	5.9	6.5	48	12	4.9	3.0	4.2	31	35
22	2.3	3.5	6.8	5.8	7.5	68	30	4.5	2.8	3.6	25	26
23	2.4	3.2	6.7	5.8	25	63	188	5.2	2.9	3.2	19	21
24	3.3	3.1	6.7	5.8	127	60	244	4.8	3.7	2.8	15	24
25	3.4	3.2	6.7	5.8	140	52	206	4.6	10	2.9	12	24
26	3.2	6.0	6.6	5.7	111	45	157	4.0	8.6	2.5	9.4	34
27	2.9	11	6.6	5.6	92	40	110	3.5	7.2	2.3	9.0	30
28	3.0	10	6.6	5.5	65	108	87	3.1	16	2.3	8.6	23
29	3.1	8.6	6.5	5.4	---	178	74	2.9	14	2.4	10	19
30	3.4	5.9	6.5	5.3	---	160	58	2.5	12	2.6	10	17
31	4.1	---	6.4	5.2	---	115	---	2.5	---	2.4	9.0	---
TOTAL	83.7	132.9	224.7	184.9	692.2	2905	2119	769.1	155.7	200.9	640.1	563.4
MEAN	2.70	4.43	7.25	5.96	24.7	93.7	70.6	24.8	5.19	6.48	20.6	18.8
MAX	5.2	11	10	6.4	140	304	244	84	16	27	114	49
MIN	1.6	3.1	6.4	5.2	5.0	33	12	2.5	2.5	2.3	2.5	4.5
CFSM	.07	.12	.19	.16	.66	2.50	1.88	.66	.14	.17	.55	.50
IN.	.08	.13	.22	.18	.69	2.88	2.10	.76	.15	.20	.63	.56

CAL YR 1976	TOTAL	10642.4	MEAN 29.1	MAX 434	MIN 1.6	CFSM .78	IN 10.56
WTR YR 1977	TOTAL	8671.6	MEAN 23.8	MAX 304	MIN 1.6	CFSM .64	IN 8.60

04178000 ST. JOSEPH RIVER NEAR NEWVILLE, IN

LOCATION.--Lat 41°23'08", long 84°48'06", in SW¼SW¼ sec.18, T.5 N., R.1 E., Defiance County, Ohio, Hydrologic Unit 04100003 on left bank at bridge on Ohio State Highway 249, 3.5 miles (5.6 km) northeast of Newville and 6.5 miles (10.5 km) northwest of Hicksville, Ohio.

DRAINAGE AREA.--610 mi² (1,580 km²).

PERIOD OF RECORD.--October 1946 to current year. Monthly discharge only for some periods, published in WSP 1307.

REVISED RECORDS.--WSP 2112: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 795.40 ft (242.438 m) above mean sea level. Prior to Oct. 22, 1947, nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter periods and those for period of no gage-height record, Aug. 15 to Sept. 18, which are fair.

AVERAGE DISCHARGE.--31 years, 501 ft³/s (14.2 m³/s), 11.15 in/yr (283 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,710 ft³/s (275 m³/s) Apr. 6, 1950, gage height, 17.05 ft (5.197 m); minimum daily, 14 ft³/s (0.40 m³/s) Sept. 10, 16, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum discharge 3,240 ft³/s (91.8 m³/s) Mar. 7, gage height, 12.84 ft (3.914 m); minimum daily, 33 ft³/s (0.93 m³/s) Aug. 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	72	117	112	58	62	900	2400	652	74	748	37	65
2	66	117	107	60	62	825	2290	526	71	716	36	72
3	59	114	100	62	62	700	2220	918	69	452	35	63
4	54	111	96	62	60	1500	2020	1180	67	252	33	57
5	49	107	92	60	60	2500	1960	1210	68	176	36	52
6	59	102	88	56	60	3040	1860	1140	68	179	53	48
7	66	97	85	52	60	3210	1710	1010	77	163	66	45
8	85	93	82	50	60	3220	1520	1090	95	125	93	42
9	106	89	80	50	60	3050	1240	1010	104	104	162	40
10	96	85	78	50	60	2610	945	724	114	92	137	38
11	84	82	76	50	66	2140	752	541	171	82	115	36
12	75	79	75	52	76	1790	631	440	152	76	156	35
13	67	76	74	53	86	1640	550	374	136	73	171	80
14	61	73	74	54	98	1520	482	375	131	71	124	110
15	58	70	74	54	94	1380	425	301	119	70	97	100
16	58	67	72	52	90	1180	380	247	112	69	80	150
17	55	67	70	50	90	954	349	222	105	69	150	400
18	54	70	70	50	90	825	317	209	95	83	500	380
19	53	70	70	50	92	793	261	199	89	92	350	410
20	62	68	70	50	92	894	220	194	85	78	230	414
21	76	65	70	52	90	1040	209	181	78	70	200	347
22	77	64	70	54	92	1250	239	164	72	64	220	250
23	75	63	70	54	200	1300	1350	151	65	56	130	165
24	77	56	70	55	500	1360	2060	141	61	50	100	134
25	75	59	70	56	800	1290	2140	135	116	48	90	131
26	75	63	70	58	900	1180	2080	127	133	45	80	253
27	94	79	66	58	980	1080	1850	119	128	43	70	539
28	128	101	66	58	1000	1460	1500	112	94	42	66	399
29	123	143	60	58	---	2100	1170	104	85	41	74	288
30	120	121	60	62	---	2330	890	96	153	42	68	214
31	121	---	58	62	---	2440	---	80	---	41	62	---
TOTAL	2380	2568	2375	1702	6042	51501	36020	13972	2987	4312	3821	5357
MEAN	76.8	85.6	76.6	54.9	216	1661	1201	451	99.6	139	123	179
MAX	128	143	112	62	1000	3220	2400	1210	171	748	500	539
MIN	49	56	58	50	60	700	209	80	61	41	33	35
CFSM	.13	.14	.13	.09	.35	2.72	1.97	.74	.16	.23	.20	.29
IN.	.15	.16	.14	.10	.37	3.14	2.20	.85	.18	.26	.23	.33

CAL YR 1976 TOTAL 183826 MEAN 502 MAX 6480 MIN 30 CFSM .82 IN 11.21
WTR YR 1977 TOTAL 133037 MEAN 364 MAX 3220 MIN 33 CFSM .60 IN 8.11

04179000 ST. JOSEPH RIVER AT CEDARVILLE, IN

LOCATION.--Lat 41°11'46", long 85°01'27", in J. Hackley Reserve, T.32 N., R.13 E., Allen County, Hydrologic Unit 04100003, on left bank 700 ft (213 m) upstream from highway bridge, 0.4 mile (0.6 km) south of Cedarville, 0.5 mile (0.8 km) upstream from Cedar Creek, 0.6 mile (1.0 km) downstream from Cedarville Dam, and at mile 13.9 (22.4 km).

DRAINAGE AREA.--763 mi² (1,976 km²).

PERIOD OF RECORD.--January 1931 to May 1932, October 1955 to current year.

REVISED RECORDS.--WSP 1912: 1956. WSP 2112: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 757.94 ft (231.020 m) above mean sea level. Jan. 1, 1931, to May 31, 1932, non-recording gage on downstream side of highway bridge 700 ft (213 m) downstream from present site at datum approximately 20 ft (6 m) lower.

REMARKS.--Records fair prior to June and good thereafter. Flow regulated by Cedarville Reservoir and some flow diverted into storage of Hurshtown Reservoir. Stage-discharge relation affected at times by backwater from Cedar Creek.

AVERAGE DISCHARGE.--22 years (1955 to current year), 602 ft³/s (17.05 m³/s), 10.72 in/yr (272 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,100 ft³/s (286 m³/s) May 1, 1956, gage height, 18.07 ft (5.508 m), from floodmarks; minimum daily, 1.6 ft³/s (0.045 m³/s) May 22, 27, 1958.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 3,600 ft³/s (102 m³/s) Mar. 8, maximum gage height, 12.15 ft (3.703 m) Mar. 5; minimum daily discharge, 42 ft³/s (1.19 m³/s) Dec. 8, 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	115	156	142	70	76	1320	2630	800	90	2440	70	97
2	85	152	138	72	76	1130	2640	650	73	1460	52	97
3	78	152	163	74	76	1220	2600	1100	91	852	53	98
4	81	150	86	76	73	2710	2340	1230	80	639	55	81
5	80	148	100	76	72	3330	2200	1480	72	321	75	111
6	129	140	76	70	75	3420	2100	1040	108	387	132	98
7	102	136	49	64	70	3480	2180	1250	113	277	125	78
8	73	127	42	62	72	3600	1900	1010	70	255	113	78
9	80	123	42	60	70	3550	1500	936	129	176	173	81
10	119	119	46	60	70	3350	1200	924	154	150	269	72
11	134	117	50	60	76	2830	950	576	161	148	205	56
12	106	111	55	62	93	2340	800	618	212	163	257	53
13	97	108	63	64	104	2040	720	399	199	248	213	113
14	85	104	70	66	109	1680	640	315	165	167	206	180
15	72	102	78	66	113	1810	560	424	109	115	177	165
16	332	100	80	63	117	1220	490	336	132	115	139	219
17	525	95	73	60	115	1070	440	265	152	117	223	669
18	305	93	64	60	111	940	400	267	144	111	663	606
19	88	97	62	60	113	900	340	248	134	191	483	672
20	90	98	70	62	113	1100	280	237	90	176	320	725
21	85	97	83	64	111	1270	270	206	90	88	288	564
22	97	85	81	65	119	1500	300	210	98	91	295	453
23	104	81	72	66	355	1600	1800	221	95	91	162	261
24	109	80	78	68	642	1700	2500	180	76	83	119	261
25	106	65	84	68	1030	1550	2700	176	507	80	103	242
26	102	59	84	70	1110	1400	2600	140	546	72	127	246
27	100	64	80	70	1250	1300	2200	148	275	49	100	480
28	115	65	80	70	1480	2000	1800	146	261	70	93	531
29	161	72	75	70	---	2940	1400	142	150	69	106	405
30	161	187	72	76	---	2390	1100	132	738	62	102	283
31	161	---	70	76	---	2670	---	106	---	64	97	---
TOTAL	4077	3283	2408	2070	7891	63360	43580	15912	5314	9327	5595	8075
MEAN	132	109	77.7	66.8	282	2044	1453	513	177	301	180	269
MAX	525	187	163	76	1480	3600	2700	1480	738	2440	663	725
MTN	72	59	42	60	70	900	270	106	70	49	52	53
CFSM	.17	.14	.10	.09	.37	2.68	1.90	.67	.23	.39	.24	.35
IN.	.20	.16	.12	.10	.38	3.09	2.12	.78	.26	.45	.27	.39
CAL YR 1976	TOTAL	228955	MEAN 626	MAX 6900	MIN 29	CFSM .82	IN 11.16					
WTR YR 1977	TOTAL	170892	MEAN 468	MAX 3600	MIN 42	CFSM .61	IN 8.33					

04180000 CEDAR CREEK NEAR CEDARVILLE, IN

LOCATION.--Lat 41°13'08", long 85°04'35", in NW¼ sec.19, T.32 N., R.13 E., Allen County, Hydrologic Unit 04100003, on left bank at downstream side of bridge on State Highway 427, 3 miles (5 km) northwest of Cedarville, 5.8 miles (9.3 km) upstream from mouth, and 10 miles (16 km) south of Auburn.

DRAINAGE AREA.--270 mi² (699 km²).

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

REVISED RECORDS.--WSP 1912: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 780.09 ft (237.771 m) above mean sea level. Prior to Nov. 4, 1947, nonrecording gage at same site and datum.

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

AVERAGE DISCHARGE.--31 years, 234 ft³/s (6.627 m³/s), 11.77 in/yr (299 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,870 ft³/s (138 m³/s) Apr. 5, 1950, gage height, 11.67 ft (3.557 m); minimum daily, 13 ft³/s (0.37 m³/s) Oct. 3, 1949.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 2,000 ft³/s (56.6 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Mar. 05	1500	*2300 65.1	*7.21 2.198

Minimum daily discharge, 21 ft³/s (0.59 m³/s) Oct. 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	33	32	36	37	285	534	241	47	1470	36	37
2	23	32	30	37	39	228	694	230	47	980	34	46
3	22	32	30	36	40	230	959	252	45	508	34	49
4	21	34	31	34	37	1200	635	257	42	316	34	48
5	22	38	31	34	35	2180	846	286	41	221	41	41
6	42	35	32	35	35	1760	726	320	44	168	88	37
7	50	32	32	34	37	1070	658	282	41	132	122	36
8	38	30	32	35	40	746	526	227	40	142	102	35
9	34	30	32	35	45	611	406	194	73	113	157	33
10	32	31	34	34	50	530	337	171	58	90	122	32
11	31	30	35	32	60	432	288	155	52	80	111	30
12	31	29	35	32	80	396	252	141	50	83	105	30
13	31	28	35	32	94	502	225	129	46	97	86	53
14	28	27	35	37	81	399	205	122	45	82	67	173
15	25	27	32	35	75	327	188	117	43	70	53	133
16	24	27	31	31	68	268	170	110	41	65	49	155
17	25	28	29	29	75	223	163	105	41	70	98	422
18	24	28	29	31	70	268	153	102	51	70	140	478
19	25	28	29	32	63	421	151	97	44	84	99	691
20	31	28	32	34	56	722	151	91	39	75	74	456
21	31	27	37	35	50	694	142	84	37	72	84	307
22	27	26	35	36	51	623	173	77	34	71	105	218
23	27	26	35	37	215	553	992	72	33	55	77	168
24	33	26	35	37	850	574	1270	69	32	48	61	154
25	35	26	33	37	894	465	818	65	185	46	53	219
26	31	33	32	36	602	378	565	62	210	43	47	194
27	31	54	31	34	461	320	421	59	141	40	43	231
28	30	41	32	32	385	854	340	55	109	38	39	174
29	28	37	35	33	---	1690	337	52	94	40	42	135
30	29	34	34	34	---	1410	283	50	238	44	44	115
31	37	---	35	36	---	810	---	47	---	39	39	---
TOTAL	924	937	1012	1062	4625	21169	13608	4321	2043	5452	2286	4930
MEAN	29.8	31.2	32.6	34.3	165	683	454	139	68.1	176	73.7	164
MAX	50	54	37	37	894	2180	1270	320	238	1470	157	691
MIN	21	26	29	29	35	223	142	47	32	38	34	30
CFSM	.11	.12	.12	.13	.61	2.53	1.68	.52	.25	.65	.27	.61
IN.	.13	.13	.14	.15	.64	2.92	1.87	.60	.28	.75	.31	.68

CAL YR 1976	TOTAL	72762	MEAN 199	MAX 3270	MIN 21	CFSM .74	IN 10.02
WTR YR 1977	TOTAL	62369	MEAN 171	MAX 2180	MIN 21	CFSM .63	IN 8.59

04181500 ST. MARYS RIVER AT DECATUR, IN

LOCATION.--Lat 40°50'55", long 84°56'16", in SW¼SW¼ sec.27, T.28 N., R.14 E., Adams County, Hydrologic Unit 04100004, on right bank 10 ft (3 m) downstream from bridge on U.S. Highway 27, 0.5 mile (0.8 km) upstream from Hothouse ditch, 1.3 miles (2.1 km) north of Decatur, and at mile 29.1 (46.8 km).

DRAINAGE AREA.--621 mi² (1,608 km²).

PERIOD OF RECORD.--October 1946 to current year. Monthly discharge only for some periods, published in WSP 1307. Gage-height records collected at site 0.5 mile (0.8 km) upstream January 1932 to November 1954, and at present site thereafter are contained in reports of National Weather Service.

REVISED RECORDS.--WSP 1174: 1948. WSP 1337: 1947. WSP 1627: 1950. WSP 1912: 1955, drainage area.

GAGE.--Water-stage recorder. Datum of gage is 760.44 ft (231.782 m) above mean sea level. Prior to July 27, 1948, nonrecording gage at same site and datum.

REMARKS.--Records good. Flow regulated by Grand Lake. Slight diversion from or into Wabash River basin and into Miami and Erie Canal.

AVERAGE DISCHARGE.--31 years, 488 ft³/s (13.82 m³/s), 10.67 in/yr (271 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,300 ft³/s (320 m³/s) Feb. 10, 11, 1959; maximum gage height, 24.22 ft (7.382 m) Feb. 10, 1959 (ice jam); minimum daily discharge, 5.4 ft³/s (0.15 m³/s) Oct. 18, 1960.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 2,900 ft³/s (82.1 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Mar. 5	0300	*3280 92.9	*16.93 5.160

Minimum daily discharge, 17 ft³/s (0.48 m³/s) Oct. 18, Aug. 3, 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	58	21	22	23	2010	816	143	36	48	20	22
2	27	40	21	23	24	1730	1220	189	31	62	18	23
3	26	32	21	22	25	1690	2190	264	29	138	17	24
4	24	28	21	21	24	2750	1580	989	29	143	17	26
5	23	28	20	21	23	3180	1030	1620	28	105	33	23
6	40	29	20	22	23	2380	871	1070	28	70	31	21
7	105	30	20	21	24	1450	857	697	28	58	30	23
8	48	28	19	22	25	1190	740	533	30	167	27	25
9	30	27	18	22	28	1090	508	382	76	186	25	21
10	24	25	19	21	34	824	328	257	94	75	32	19
11	24	25	20	20	54	547	229	187	63	42	161	19
12	27	24	20	20	90	377	179	145	73	36	340	19
13	25	23	20	20	160	314	153	119	100	32	155	51
14	23	21	19	23	162	256	138	104	80	28	70	324
15	20	21	20	21	147	247	121	92	56	24	83	284
16	18	20	20	18	113	280	107	81	44	22	81	291
17	18	20	20	18	117	241	101	73	39	22	60	273
18	17	20	20	19	176	1250	95	64	36	22	45	307
19	21	20	21	20	191	1910	88	58	33	21	34	425
20	23	21	27	21	168	1250	87	56	30	21	29	433
21	26	22	27	21	139	1110	78	51	28	21	29	369
22	23	22	22	22	131	1080	152	47	27	23	40	224
23	22	21	22	22	367	1220	1890	44	26	24	95	127
24	26	18	22	23	883	1390	1920	42	24	23	51	83
25	34	23	22	23	821	1150	919	39	24	44	36	56
26	37	23	22	23	662	1060	478	37	24	26	36	43
27	33	24	22	21	1500	984	315	35	24	25	32	35
28	30	23	21	20	2250	1630	241	52	24	21	26	30
29	35	21	22	21	---	1770	206	67	38	24	29	27
30	41	19	21	21	---	1150	166	53	51	29	27	25
31	49	---	21	22	---	863	---	43	---	25	25	---
TOTAL	945	756	651	656	8384	38373	17803	7633	1253	1607	1734	3672
MEAN	30.5	25.2	21.0	21.2	299	1238	593	246	41.8	51.8	55.9	122
MAX	105	58	27	23	2250	3180	2190	1620	100	186	340	433
MIN	17	18	18	18	23	241	78	35	24	21	17	19
CFSM	.05	.04	.03	.03	.48	1.99	.96	.40	.07	.08	.09	.20
IN.	.06	.05	.04	.04	.50	2.30	1.07	.46	.08	.10	.10	.22
CAL YR 1976	TOTAL	148112	MEAN 405	MAX 7990	MIN 17	CFSM .65	IN 8.87					
WTR YR 1977	TOTAL	83467	MEAN 229	MAX 3180	MIN 17	CFSM .37	IN 5.00					

04182000 ST. MARYS RIVER NEAR FORT WAYNE, IN

LOCATION.--Lat 40°59'16", long 85°06'03", in A. LaFontaine Reserve, T.29 N., R.12 E., Allen County, Hydrologic Unit 04100004, on left bank 130 ft (40 m) downstream from highway bridge on Anthony Boulevard, 5 miles (8 km) south of Fort Wayne, and 10.8 miles (17.4 km) upstream from mouth.

DRAINAGE AREA.--762 mi² (1,974 km²).

PERIOD OF RECORD.--October 1930 to current year. Monthly discharge only for some periods, published in WSP 1307. Fragmentary gage-height records for period November 1924 to October 1927 are available in the District office.

REVISED RECORDS.--WSP 974: 1942. WSP 1337: 1933, 1947. WSP 1912: 1954, 1955, 1960, drainage area.

GAGE.--Water-stage recorder. Datum of gage is 748.97 ft (228.286 m) above mean sea level (levels by State of Indiana, Department of Natural Resources). Prior to Apr. 13, 1939, nonrecording gage on highway bridge at same datum.

REMARKS.--Records good. The flow is sometimes regulated by Grand Lake. Slight diversion from or into Wabash River basin and into Miami and Erie Canal.

AVERAGE DISCHARGE.--47 years, 564 ft³/s (15.97 m³/s), 10.05 in/yr (255 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,600 ft³/s (385 m³/s) Feb. 11, 1959; maximum gage height, 19.42 ft (5.919 m) Feb. 11, 1959 (ice jam); minimum daily discharge, 3.4 ft³/s (0.10 m³/s) Oct. 19, 1934.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 4,000 ft³/s (113 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Mar. 04	2100	*5130 145	*11.96 3.645

Minimum daily discharge, 12 ft³/s (0.34 m³/s) Oct. 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	47	20	22	23	2900	1050	229	53	111	35	39
2	20	56	21	23	24	2500	1270	278	45	76	29	38
3	21	44	21	22	25	2300	2620	406	40	85	25	43
4	22	35	21	21	24	4000	2470	1090	38	149	24	39
5	21	29	20	21	23	4500	1520	2390	37	137	35	40
6	24	26	20	22	23	3660	1140	1870	38	100	65	37
7	43	26	20	21	24	2130	1060	1070	36	72	62	34
8	83	28	19	22	25	1440	988	784	36	87	49	34
9	47	27	18	22	30	1290	732	567	45	232	41	37
10	31	25	19	21	35	1070	483	396	92	160	52	35
11	22	23	19	20	45	744	339	288	94	80	165	32
12	20	23	19	20	60	508	257	218	72	56	550	30
13	23	22	19	20	130	412	209	172	87	47	358	86
14	23	21	19	23	230	344	184	144	100	42	162	561
15	22	20	21	21	230	292	164	125	82	37	92	550
16	18	19	22	18	200	305	144	110	65	32	112	461
17	15	20	22	18	160	305	132	97	54	31	102	395
18	12	20	22	19	170	1230	125	91	48	33	81	325
19	13	19	23	20	230	2600	116	82	45	33	63	450
20	16	20	26	21	250	1810	110	75	41	31	50	499
21	22	17	27	22	220	1350	106	72	38	34	45	444
22	21	16	22	22	200	1240	255	66	35	32	43	336
23	23	17	22	23	400	1320	3300	61	33	30	62	207
24	22	15	22	23	800	1710	3500	58	33	32	96	128
25	23	17	22	23	1200	1530	1930	55	31	33	63	91
26	27	19	22	22	950	1380	920	51	29	52	49	71
27	34	22	22	21	1500	1260	552	49	29	37	48	59
28	32	23	21	20	2900	2310	393	45	33	33	45	50
29	28	20	22	21	---	2720	340	65	35	30	47	45
30	30	19	21	22	---	1700	279	76	63	29	43	41
31	38	---	21	23	---	1170	---	63	---	39	41	---
TOTAL	816	735	655	659	10131	52030	26688	11143	1507	2012	2734	5237
MEAN	26.3	24.5	21.1	21.3	362	1678	890	359	50.2	64.9	88.2	175
MAX	83	56	27	23	2900	4500	3500	2390	100	232	550	561
MIN	12	15	18	18	23	292	106	45	29	29	24	30
CFSM	.04	.03	.03	.03	.48	2.20	1.17	.47	.07	.09	.12	.23
IN.	.04	.04	.03	.03	.49	2.54	1.30	.54	.07	.10	.13	.26

CAL YR 1976	TOTAL	179205	MEAN 490	MAX 8760	MIN 12	CFSM .64	IN 8.75
WTR YR 1977	TOTAL	114347	MEAN 313	MAX 4500	MIN 12	CFSM .41	IN 5.58

STREAMS TRIBUTARY TO LAKE ERIE

04182590 HARBOR DITCH AT FORT WAYNE, IN

LOCATION.--Lat 41°00'27", long 85°10'58", in NE¼SW¼ sec.33, T.30 N., R.12 E., Allen County, Hydrologic Unit 04100004, on left bank 50 ft (15 m) upstream from bridge on Baer Road, at Fort Wayne, 3.2 miles (5.1 km) upstream from mouth. The stream name changes to Fairfield ditch 0.7 mile (1.1 km) downstream at bridge on Lower Huntington Road.

DRAINAGE AREA.--21.9 mi² (56.7 km²).

PERIOD OF RECORD.--May 1964 to current year. Discharge measurements available October 1960 to May 1964 and gage heights January 1961 to May 1964 at site 0.7 mile (1.1 km) downstream.

GAGE.--Water-stage recorder. Datum of gage is 757.00 ft (230.734 m) above mean sea level.

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

AVERAGE DISCHARGE.--13 years, 18.2 ft³/s (0.515 m³/s), 11.31 in/yr (287 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 728 ft³/s (20.6 m³/s) Feb. 20, 1971, gage height, 11.55 ft (3.520 m); minimum daily, 0.06 ft³/s (0.002 m³/s) Oct. 27, 1974.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 250 ft³/s (7.08 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Mar. 04	1400	354 10.0	7.66 2.335	Aug. 11	1600	*426 12.1	*8.19 2.496
Apr. 23	1000	318 9.01	7.37 2.246				

Minimum daily discharge, 0.10 ft³/s (0.003 m³/s) Oct. 3, 17, Jan. 3, 17, 18, 28 to Feb. 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.16	.82	.39	.12	.10	25	20	9.6	.87	22	.87	2.3
2	.13	.68	.25	.11	.10	12	47	28	.74	4.0	.40	6.4
3	.10	.45	.23	.10	.10	27	34	24	.74	2.1	.35	2.0
4	.44	.45	.21	.16	.10	270	30	73	.56	1.3	1.9	1.4
5	3.6	.45	.20	.30	.10	88	28	53	1.3	1.0	7.7	1.3
6	24	.35	.40	.15	.10	32	17	29	.94	.80	22	1.3
7	1.4	.35	.30	.14	.10	20	14	16	.74	1.5	6.2	1.2
8	.68	.45	.24	.13	.31	26	16	9.6	3.2	1.0	3.0	1.0
9	.35	.40	.20	.13	.35	14	13	5.9	1.4	.62	1.7	.94
10	.31	.45	.50	.12	2.2	12	14	4.6	2.8	.45	53	.87
11	.40	.68	.36	.12	6.2	9.1	9.6	3.8	2.8	14	157	.80
12	.48	.31	.30	.12	12	13	3.7	3.2	1.6	4.9	80	1.3
13	.23	.23	.40	.11	16	16	3.2	3.0	1.8	1.8	23	67
14	.23	.19	.34	.11	12	12	3.3	2.8	2.3	1.1	10	141
15	.16	.40	.32	.11	3.0	8.1	3.2	2.6	1.5	.68	5.9	79
16	.27	.31	.29	.11	1.4	5.1	2.8	2.1	1.0	.56	6.2	59
17	.10	.23	.35	.10	1.2	4.4	2.8	2.1	.87	2.3	4.9	31
18	.39	.27	.28	.10	.87	114	2.6	2.1	1.0	13	2.8	20
19	2.7	.27	.24	.12	1.1	44	2.8	1.8	1.0	2.3	2.6	21
20	2.4	.35	.80	.13	.87	30	3.2	1.7	.94	1.0	4.2	19
21	.68	.27	.30	.13	.80	22	2.2	1.5	.68	21	3.5	7.7
22	.56	.24	.20	.13	3.8	21	57	1.3	.62	3.0	2.7	5.8
23	.96	.22	.18	.13	32	26	232	1.3	.40	1.2	2.3	4.5
24	3.0	.20	.16	.13	50	38	108	1.3	.35	.80	2.6	3.6
25	1.3	.20	.15	.13	27	40	56	1.4	.45	2.1	2.2	2.9
26	.68	2.7	.13	.12	24	44	32	1.2	.23	.68	2.3	2.5
27	.56	1.3	.20	.11	53	52	19	1.2	.19	.68	1.5	2.1
28	.62	.59	.18	.10	44	174	20	1.2	5.2	.40	1.4	1.8
29	.40	.40	.16	.10	---	106	14	1.1	3.0	.40	21	1.4
30	.32	.30	.15	.10	---	47	11	1.1	21	.40	4.2	1.6
31	1.6	---	.14	.10	---	35	---	1.0	---	1.0	3.8	---
TOTAL	49.21	14.51	8.55	3.87	292.80	1386.7	821.4	291.5	60.22	108.07	441.22	491.71
MEAN	1.59	.48	.28	.12	10.5	44.7	27.4	9.40	2.01	3.49	14.2	16.4
MAX	24	2.7	.80	.30	53	270	232	73	21	22	157	141
MIN	.10	.19	.13	.10	.10	4.4	2.2	1.0	.19	.40	.35	.80
CFSM	.07	.02	.01	.005	.48	2.04	1.25	.43	.09	.16	.65	.75
IN.	.08	.02	.01	.01	.50	2.36	1.40	.50	.10	.18	.75	.84
CAL YR 1976	TOTAL	5860.52	MEAN	16.0	MAX	437	MIN	.09	CFSM	.73	IN	9.95
WTR YR 1977	TOTAL	3969.76	MEAN	10.9	MAX	270	MIN	.10	CFSM	.50	IN	6.74

04183000 MAUMEE RIVER AT NEW HAVEN, IN

LOCATION.--Lat 41°05'06", long 85°01'20", in SE¼NE¼ sec.2, T.30 N., R.13 E., Allen County, Hydrologic Unit 04100005, on left bank 600 ft (183 m) upstream from bridge on Landin Road, 1,400 ft (427 m) upstream from the Wabash Railroad bridge, 1.1 miles (1.8 km) northwest of New Haven, 2.8 miles (4.5 km) upstream from Sixmile Creek.

DRAINAGE AREA.--1,967 mi² (5,095 km²).

PERIOD OF RECORD.--December 1946 to September 1956 (high-water records only), October 1956 to current year.

REVISED RECORDS.--WSP 2112: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 724.51 ft (220.831 m) above mean sea level. Prior to Sept. 7, 1956, nonrecording gage and Sept. 7, 1956, to Sept. 14, 1965, water-stage recorder at site 500 ft (152 m) downstream at same datum.

REMARKS.--Records good. Flow regulated by hydro-powerplant on the St. Joseph River 10.3 miles (16.6 km) upstream from station. Flow slightly regulated by upstream reservoirs.

AVERAGE DISCHARGE.--21 years (1956 to current year), 1,570 ft³/s (44.5 m³/s), 10.84 in/yr (275 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 19,100 ft³/s (541 m³/s) Feb. 16, 1950, gage height, 21.4 ft (6.523 m) at site then in use; minimum daily, 48 ft³/s (1.36 m³/s) Oct. 6, 13, 1963.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 9,500 ft³/s (269 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Mar. 05	1500	*10200 289	*16.05 4.892	Apr. 23	0100	9510 269	15.47 4.715

Minimum daily discharge, 85 ft³/s (2.41 m³/s) Dec. 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	190	242	189	130	140	4170	4460	1650	257	5440	174	207
2	190	244	195	140	140	3510	4960	1750	176	3520	102	395
3	162	241	176	140	135	3420	6160	1550	144	2010	136	312
4	156	222	147	150	125	7650	6110	2820	186	1210	87	244
5	156	217	144	150	125	10000	5250	4280	199	932	705	171
6	455	211	141	140	130	9530	4620	4100	232	609	1680	249
7	274	204	153	120	130	7500	4060	2840	208	565	856	187
8	254	196	123	119	120	6070	3940	2390	192	595	484	131
9	222	189	108	113	125	5570	2900	2140	353	560	427	203
10	193	186	108	112	130	5270	2560	1680	260	488	1830	139
11	209	185	101	113	150	4450	1910	1470	416	467	2620	143
12	206	179	90	120	342	3820	1440	910	413	560	3410	152
13	177	172	85	125	388	3260	1390	1100	350	396	1800	473
14	174	169	101	128	348	2910	1030	459	353	414	1140	1230
15	156	168	129	127	336	2590	1170	767	350	376	634	1180
16	229	157	145	120	317	2230	633	677	240	376	410	1150
17	569	156	144	115	281	2020	922	505	274	419	325	1540
18	597	152	141	115	270	3500	815	513	292	1000	801	1690
19	162	152	132	116	287	4560	755	326	222	509	853	1820
20	205	152	158	119	322	4340	686	385	245	565	626	1940
21	159	158	145	121	304	3890	600	387	190	407	385	1530
22	153	145	147	125	313	3580	1020	441	175	507	560	1130
23	162	124	151	128	784	3690	7050	281	223	216	401	767
24	233	147	140	129	2540	4200	9060	331	140	236	311	584
25	189	152	163	130	3260	4100	6880	329	249	275	226	566
26	178	191	161	135	2950	3610	4720	281	1030	199	259	526
27	175	232	153	135	3260	3310	3760	273	463	209	232	637
28	178	182	154	135	4060	5910	3330	253	543	102	179	879
29	193	167	142	135	---	7640	2620	242	539	250	438	652
30	247	149	140	140	---	6650	2180	264	1050	147	251	517
31	282	---	130	140	---	5160	---	247	---	133	175	---
TOTAL	7085	5441	4336	3965	21812	148110	96991	35641	9964	23692	22517	21344
MEAN	229	181	140	128	779	4778	3233	1150	332	764	726	711
MAX	597	244	195	150	4060	10000	9060	4280	1050	5440	3410	1940
MIN	153	124	85	112	120	2020	600	242	140	102	87	131
CFSM	.12	.09	.07	.07	.40	2.43	1.64	.59	.17	.39	.37	.36
IN.	.13	.10	.08	.07	.41	2.80	1.83	.67	.19	.45	.43	.40

CAL YR 1976	TOTAL	525022	MEAN	1434	MAX	17600	MIN 85	CFSM .73	IN 9.93
WTR YR 1977	TOTAL	400898	MEAN	1098	MAX	10000	MIN 85	CFSM .56	IN 7.58

STREAMS TRIBUTARY TO LAKE ERIE

04183500 MAUMEE RIVER AT ANTWERP, OH

LOCATION.--Lat 41°11'56", long 84°44'40", in sec.22, T.3 N., R.1 E., Paulding County, Hydrologic Unit 04100005, on left bank 425 ft (130 m) downstream from bridge on State Highway 49, 1 mi (2 km) north of Antwerp, 7 mi (11 km) downstream from Indiana State line and 10 mi (16 km) upstream from Marie DeLarme Creek.

DRAINAGE AREA.--2,129 mi² (5,514 km²).

PERIOD OF RECORD.--Septmeber 1921 to December 1935, April 1939 to current year.

REVISED RECORDS.--WSP 1174: 1927, 1933, 1940. WSP 1387: 1922-23, 1925-27, 1934. WRD Ohio 1970: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 694.90 ft (211.805 m) above mean sea level. Prior to Sept. 13, 1925, nonrecording gage at site 400 ft (122 m) upstream at same datum.

REMARKS.--Records good except those for winter periods and June 18 to Aug. 9, which are fair. Low flow slightly regulated by powerplant at Fort Wayne, Indiana, 32 mi (51.5 km) upstream. Flow slightly regulated by upstream reservoirs.

AVERAGE DISCHARGE.--52 years, 1,672 ft³/s (47.35 m³/s), 10.67 in/yr (271 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 26,200 ft³/s (742 m³/s) May 20, 1943, gage height, 20.29 ft (6.184 m); minimum daily, 26 ft³/s (0.74 m³/s) July 24, 1933.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 27, 1913, estimated as 40,000 ft³/s (1,130 m³/s).

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 8,000 ft³/s (227 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Mar. 6	0100	10900 309	13.68 4.170	Apr. 24	1000	*11300 320	*13.99 4.264
Mar. 29	1200	8560 242	11.88 3.621				

Minimum daily discharge, 130 ft³/s (3.68 m³/s) Feb. 8-10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	151	324	190	150	150	5000	4730	1930	265	4700	139	232
2	205	288	190	160	140	3800	4740	1830	259	4610	197	250
3	218	287	180	160	140	3000	5720	2020	215	2760	144	457
4	190	284	180	160	140	6410	6380	2610	154	1770	163	364
5	180	269	170	170	140	10500	5580	4180	207	1270	142	280
6	215	261	170	170	140	10700	4970	4640	197	853	493	230
7	457	256	160	160	140	9100	4110	3330	236	671	869	271
8	302	249	160	160	130	6690	4040	2810	223	642	522	239
9	274	241	160	170	130	5760	3420	2320	242	587	363	176
10	250	235	150	170	130	5440	2630	1920	351	583	352	214
11	216	231	150	160	150	4920	2310	1750	289	487	1010	198
12	229	230	150	160	260	4050	1690	1320	393	564	1940	158
13	227	224	140	160	440	3470	1570	1110	398	542	1480	224
14	200	216	140	160	540	3150	1290	994	357	414	892	832
15	189	212	140	160	470	2590	1230	553	354	417	617	1320
16	179	210	170	150	420	2520	1020	840	346	330	433	1420
17	238	202	200	150	360	1980	812	686	257	297	380	1390
18	609	196	210	150	330	3150	999	549	277	319	366	2140
19	566	195	200	150	310	4620	856	504	289	606	922	1710
20	233	192	190	150	290	4580	817	366	239	385	843	2170
21	245	191	190	160	290	4290	737	414	250	380	606	1910
22	204	195	180	160	300	3670	699	403	166	315	495	1530
23	189	192	180	160	450	3620	6090	443	203	348	589	1200
24	203	161	170	170	1500	4010	11100	313	205	240	421	795
25	269	182	170	170	3600	4410	9170	347	168	239	345	628
26	238	200	170	160	4200	4050	6000	354	426	233	278	602
27	209	235	160	160	3800	3520	4010	298	878	171	291	556
28	214	280	160	160	4200	5080	3750	292	417	231	267	754
29	217	232	160	160	---	8340	2890	276	621	154	259	897
30	232	200	150	150	---	7750	2550	264	500	182	472	684
31	298	---	150	150	---	5730	---	283	---	216	301	---
TOTAL	7846	6870	5240	4940	23290	155900	105910	39949	9382	25516	16591	23831
MEAN	253	229	169	159	832	5029	3530	1289	313	823	535	794
MAX	609	324	210	170	4200	10700	11100	4640	878	4700	1940	2170
MIN	151	161	140	150	130	1980	699	264	154	154	139	158
CFSM	.12	.11	.08	.08	.39	2.36	1.66	.61	.15	.39	.25	.37
IN.	.14	.12	.09	.09	.41	2.72	1.85	.70	.16	.45	.29	.42

CAL YR 1976	TOTAL	569690	MEAN	1557	MAX	18100	MIN	98	CFSM	.73	IN	9.95
WTR YR 1977	TOTAL	425265	MEAN	1165	MAX	11100	MIN	130	CFSM	.55	IN	7.43

05515000 KANKAKEE RIVER NEAR NORTH LIBERTY, IN

LOCATION.--Lat 41°33'50", long 86°29'50", in NW¼NE¼ sec.23, T.36 N., R.1 W., St. Joseph County, Hydrologic Unit 07120001, on left bank at downstream side of bridge on county highway named "New Road", 2.7 miles (4.3 km) upstream from Little Kankakee River, 4 miles (6 km) northwest of North Liberty, and at mile 126.9 (204.2 km).

DRAINAGE AREA.--174 mi² (451 km²), of which 58.2 mi² (150.7 km²) does not contribute directly to surface runoff.

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

REVISED RECORDS.--WSP 1915: 1952, 1956-59. WSP 2115: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 680.04 ft (207.276 m) above mean sea level (levels by State of Indiana, Department of Natural Resources). Prior to June 26, 1956, nonrecording gage at same site and datum.

REMARKS.--Records good.

AVERAGE DISCHARGE.--26 years, 146 ft³/s (4.135 m³/s), 11.39 in/yr (289 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 686 ft³/s (19.4 m³/s) Oct. 10, 1954; maximum gage height, 9.04 ft (2.755 m) June 27, 1968; minimum daily discharge, 46 ft³/s (1.30 m³/s) Sept. 9, 10, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 507 ft³/s (14.4 m³/s) Mar. 29, gage height, 6.96 ft (2.121 m); minimum daily, 64 ft³/s (1.81 m³/s) Aug. 25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	89	95	145	90	90	210	287	136	76	236	69	118
2	86	95	135	89	90	200	276	138	79	180	65	253
3	85	94	127	89	89	185	258	142	77	157	70	206
4	85	100	123	88	88	225	245	140	73	142	70	174
5	88	100	117	89	86	275	265	146	99	127	77	160
6	117	101	115	88	84	260	252	150	108	112	76	150
7	133	106	116	88	80	245	238	141	96	111	82	140
8	120	108	111	86	76	230	223	131	99	110	99	133
9	113	109	109	84	73	225	212	126	99	107	112	128
10	107	112	108	82	72	220	203	123	98	100	105	122
11	103	119	108	83	80	210	194	119	119	100	100	117
12	102	121	107	85	92	205	186	116	129	124	99	113
13	99	123	104	86	113	215	183	114	117	181	93	132
14	97	120	101	88	109	245	178	111	105	149	89	160
15	96	116	102	90	102	225	173	109	116	130	80	159
16	94	110	101	90	98	210	167	107	94	119	81	197
17	93	107	99	89	93	200	160	106	97	115	80	181
18	92	107	98	88	91	205	158	105	107	109	72	240
19	95	113	98	86	90	210	158	99	104	99	73	284
20	96	121	106	86	90	220	156	98	92	93	72	227
21	95	120	109	86	92	235	154	98	87	91	72	199
22	93	115	123	87	105	260	152	97	85	86	75	182
23	92	110	106	89	130	275	152	94	83	84	73	171
24	94	106	134	90	300	270	151	92	79	86	69	183
25	92	105	104	93	340	270	147	88	82	93	64	195
26	90	129	103	87	280	280	145	84	77	84	69	190
27	89	210	101	86	255	290	139	82	80	80	66	187
28	89	215	100	86	230	350	138	82	77	77	67	170
29	90	180	98	86	---	495	143	87	85	76	99	159
30	91	158	95	88	---	413	137	85	123	75	99	151
31	98	---	92	89	---	339	---	76	---	72	90	---
TOTAL	3003	3625	3395	2711	3518	7897	5630	3422	2842	3505	2507	5181
MEAN	96.9	121	110	87.5	126	255	188	110	94.7	113	80.4	173
MAX	133	215	145	93	340	495	287	150	129	236	112	284
MIN	85	94	92	82	72	185	137	76	73	72	64	113
CFSM	.56	.70	.63	.50	.72	1.47	1.08	.63	.54	.65	.47	.99
IN.	.64	.77	.73	.58	.75	1.69	1.20	.73	.61	.75	.54	1.11
CAL YR 1976	TOTAL	57953	MEAN 158	MAX 636	MIN 70	CFSM .91	IN 12.39					
WTR YR 1977	TOTAL	47236	MEAN 129	MAX 495	MIN 64	CFSM .74	IN 10.10					

ILLINOIS RIVER BASIN

05515400 KINGSBURY CREEK NEAR LAPORTE, IN

LOCATION.--Lat 41°32'49", long 86°43'48", in SW¼SE¼ sec.23, T.36 N., R.3 W., LaPorte County, Hydrologic Unit 07120001, on left bank at upstream side of bridge on County Road 400 South, 0.5 mile (0.8 km) east of State Highway 39, 1.5 miles (2.4 km) west of U.S. Highway 35, and 3 miles (5 km) south of LaPorte city limits.

DRAINAGE AREA.--7.08 mi² (18.34 km²), of which 4.07 mi² (10.54 km²) does not contribute directly to surface runoff.

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

GAGE.--Water-stage recorder. Datum of gage is 753.00 ft (229.514 m) above mean sea level.

REMARKS.--Records good.

AVERAGE DISCHARGE.--7 years, 4.25 ft³/s (0.120 m³/s), 8.15 in/yr (207 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 44 ft³/s (1.25 m³/s) Apr. 22, 1973, gage height, 5.44 ft (1.658 m); minimum daily, 0.83 ft³/s (0.024 m³/s) Dec. 3, 1971.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 15 ft³/s (0.425 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)	
Feb. 23	2000	18	0.51	4.24	1.29
June 30	1700	21	0.59	4.51	1.37
Sept. 01	1800	*26	0.74	*4.73	1.44

Minimum daily discharge, 1.1 ft³/s (0.031 m³/s) Sept. 10.

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.5	3.1	2.7	2.6	2.9	4.5	5.4	3.7	2.0	4.5	1.5	5.8
2	1.5	3.0	2.6	2.7	2.8	4.3	5.6	3.7	2.0	3.0	1.7	3.1
3	1.5	3.0	2.6	2.8	3.0	4.6	5.2	3.7	1.9	3.0	1.8	2.0
4	1.5	3.2	2.6	2.8	3.0	8.3	5.6	3.7	1.9	2.5	1.7	1.5
5	1.7	3.1	2.4	2.8	2.9	6.0	6.1	5.2	2.6	2.4	1.7	1.4
6	6.6	3.3	2.6	2.8	2.8	5.0	5.6	6.2	2.6	2.1	1.7	1.3
7	4.5	3.3	2.6	2.9	2.8	4.8	5.2	4.2	2.3	2.2	1.7	1.2
8	4.1	3.2	2.5	2.8	2.9	4.6	5.0	3.7	2.4	2.3	2.3	1.2
9	4.0	3.2	2.4	2.9	3.0	4.6	4.8	3.5	2.3	2.2	1.8	1.2
10	3.8	3.4	2.5	2.9	3.1	4.4	4.8	3.4	2.2	2.0	1.7	1.1
11	3.7	3.3	2.5	2.9	3.3	4.4	4.7	3.2	3.0	2.3	1.6	1.2
12	3.6	3.2	2.5	2.9	3.8	5.8	4.5	3.0	2.6	3.1	1.5	1.2
13	3.5	3.0	2.3	3.0	4.4	6.9	4.5	2.8	2.4	2.7	1.4	2.4
14	3.5	3.0	2.3	3.1	3.9	5.5	4.5	2.7	2.3	1.9	1.3	2.0
15	3.5	2.9	2.4	3.0	3.6	4.8	4.4	2.5	2.2	1.8	1.2	3.1
16	3.4	2.8	2.4	2.9	3.5	4.4	4.3	2.4	2.2	1.7	1.4	2.5
17	3.4	2.9	2.5	3.2	3.4	4.3	4.3	2.4	2.5	1.7	1.3	2.0
18	3.4	3.0	2.4	3.0	3.5	5.6	4.2	2.4	3.2	1.7	1.2	5.1
19	3.6	3.1	2.7	2.9	3.5	5.1	4.1	2.3	2.5	1.6	1.2	2.9
20	3.5	3.0	3.0	3.0	3.5	5.3	4.0	2.3	2.2	1.6	1.2	2.2
21	3.4	2.9	2.8	2.9	3.5	5.3	4.0	2.2	2.1	1.6	1.4	2.0
22	3.3	2.7	2.9	2.9	3.8	5.3	4.0	2.2	2.1	1.5	1.4	1.8
23	3.4	2.7	2.7	2.9	10	5.3	4.0	2.1	2.1	1.5	1.3	1.7
24	3.4	2.7	2.7	2.9	9.5	4.9	3.9	2.7	2.3	1.6	1.2	2.6
25	3.3	3.1	2.8	2.9	5.9	4.6	3.8	2.7	2.4	1.6	1.2	2.1
26	3.2	6.2	2.7	2.9	5.6	4.5	3.8	2.3	2.1	1.5	1.2	2.0
27	3.1	5.2	2.9	2.9	5.0	4.5	3.8	2.3	2.0	1.4	1.2	1.7
28	3.1	3.6	2.8	2.9	4.6	9.1	3.7	2.2	2.1	1.4	1.3	1.6
29	3.1	3.1	2.7	2.9	---	9.6	3.7	2.1	2.2	1.5	1.6	1.5
30	3.4	2.7	2.8	2.9	---	6.8	3.7	2.0	9.9	1.5	1.5	1.5
31	3.5	---	2.7	2.9	---	5.9	---	1.9	---	1.6	1.5	---
TOTAL	102.0	96.9	81.0	89.8	113.5	169.0	135.2	91.7	76.6	63.0	45.7	62.9
MEAN	3.29	3.23	2.61	2.90	4.05	5.45	4.51	2.96	2.55	2.03	1.47	2.10
MAX	6.6	6.2	3.0	3.2	10	9.6	6.1	6.2	9.9	4.5	2.3	5.8
MIN	1.5	2.7	2.3	2.6	2.8	4.3	3.7	1.9	1.9	1.4	1.2	1.1
CFSM	.47	.46	.37	.41	.57	.77	.64	.42	.36	.29	.21	.30
IN.	.54	.51	.43	.47	.60	.89	.71	.48	.40	.33	.24	.33

CAL YR 1976	TOTAL	1546.5	MEAN 4.23	MAX 23	MIN 1.5	CFSM .60	IN 8.12
WTR YR 1977	TOTAL	1127.3	MEAN 3.09	MAX 10	MIN 1.1	CFSM .44	IN 5.92

05515500 KANKAKEE RIVER AT DAVIS, IN

LOCATION.--Lat 41°24'00", long 86°42'04", in SE¼NE¼ sec.13, T.34 N., R.3 W., Starke County, Hydrologic Unit 07120001, on left bank at downstream side of bridge on U.S. Highway 30 at Davis, 0.5 mile (0.8 km) downstream from Mill Creek, 4 miles (6 km) east of Hanna, and at mile 110.9 (178.4 km).

DRAINAGE AREA.--537 mi² (1,391 km²), of which 137 mi² (355 km²) does not contribute directly to surface runoff.

PERIOD OF RECORD.--July 1905 to July 1906 and October 1924 to current year. Monthly discharge only for some periods, published in WSP 1308.

REVISED RECORDS.--WSP 1338: 1953. WSP 2115: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 664.68 ft (202.594 m) above mean sea level. July 13, 1905, to July 21, 1906, nonrecording gage at site 50 ft (15 m) downstream at different datum. July 28, 1925, to May 18, 1929, nonrecording gage on bridge 0.5 mile (0.8 km) downstream at different datum. Apr. 19, 1931, to Nov. 3, 1953, nonrecording gage at present site and datum.

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

AVERAGE DISCHARGE.--53 years, 1924 to current year, 492 ft³/s (13.93 m³/s), 12.44 in/yr (316 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,700 ft³/s (48.1 m³/s) Dec. 15, 1927, gage height, 9.50 ft (2.896 m), site and datum then in use, from rating curve extended above 520 ft³/s (14.7 m³/s); maximum gage height at present site and datum, 12.11 ft (3.691 m) Jan. 4, 1973; minimum daily discharge, 154 ft³/s (4.36 m³/s) Aug. 30 to Sept. 3, 1941.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,380 ft³/s (39.1 m³/s) Mar. 30, gage height, 11.85 ft (3.612 m); minimum daily, 244 ft³/s (6.91 m³/s) Aug. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	346	355	507	330	350	740	1220	520	370	674	249	362
2	339	354	474	335	355	678	1170	520	373	659	244	569
3	333	345	445	345	360	649	1130	520	367	534	264	568
4	335	354	451	350	360	732	1070	530	360	468	262	488
5	332	367	435	350	360	968	1060	535	373	424	268	447
6	409	369	429	350	350	929	1050	782	403	388	273	420
7	462	381	430	350	370	827	994	744	381	367	278	402
8	429	387	421	345	400	770	934	658	367	358	292	384
9	411	384	415	330	430	744	873	599	372	362	322	364
10	393	390	400	325	480	727	818	569	365	346	316	337
11	381	400	395	325	500	706	769	543	388	335	312	322
12	372	403	390	325	540	694	730	526	424	376	309	316
13	367	400	385	330	580	778	710	509	404	487	299	354
14	360	396	380	335	640	829	700	497	390	462	281	407
15	358	387	379	340	670	788	680	485	375	413	266	412
16	352	376	384	335	640	728	650	473	363	385	264	482
17	346	370	381	330	560	684	630	467	356	371	273	479
18	342	372	382	325	500	706	610	467	388	358	259	612
19	348	373	406	320	450	717	600	458	387	342	253	879
20	358	382	400	320	420	733	590	451	363	324	254	794
21	363	387	387	325	421	875	580	440	342	314	257	669
22	360	381	435	330	427	912	560	436	333	301	267	594
23	354	372	432	340	550	919	560	427	328	290	260	551
24	349	374	430	345	1060	915	545	418	325	284	253	621
25	346	374	403	345	1160	906	535	417	329	292	262	793
26	348	441	395	340	1060	936	530	404	328	280	287	724
27	340	616	370	335	938	938	520	395	316	271	289	645
28	333	666	355	330	819	1100	530	386	306	266	285	582
29	331	598	345	330	---	1350	540	379	312	265	338	540
30	336	546	335	335	---	1360	520	379	360	265	353	512
31	355	---	330	340	---	1320	---	375	---	257	335	---
TOTAL	11188	12300	12506	10390	15750	26658	22408	15309	10848	11518	8724	15629
MEAN	361	410	403	335	563	860	747	494	362	372	281	521
MAX	462	666	507	350	1160	1360	1220	782	424	674	353	879
MIN	331	345	330	320	350	649	520	375	306	257	244	316
CFSM	.67	.76	.75	.62	1.05	1.60	1.39	.92	.67	.69	.52	.97
IN.	.78	.85	.87	.72	1.09	1.85	1.55	1.06	.75	.80	.60	1.08
CAL YR 1976	TOTAL	209642	MEAN 573	MAX 1530	MIN 299	CFSM 1.07	IN 14.52					
WTR YR 1977	TOTAL	173228	MEAN 475	MAX 1360	MIN 244	CFSM .89	IN 12.00					

ILLINOIS RIVER BASIN

05516500 YELLOW RIVER AT PLYMOUTH, IN

LOCATION.--Lat 41°20'25", long 86°18'16", in SE¼NW¼ sec.13, T.33 N., R.2 E., Marshall County, Hydrologic Unit 07120001, on left bank 50 ft (15 m) upstream from LaPorte Street footbridge in Plymouth, 1.1 miles (1.8 km) downstream from Elmer Seltenright (formerly Baker) ditch, 8.1 miles (13.0 km) upstream from Wolf Creek, and at mile 40.3 (64.8 km).

DRAINAGE AREA.--294 mi² (761 km²), of which 22 mi² (57 km²) does not contribute directly to surface runoff.

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

REVISED RECORDS.--WSP 1338: 1950-51. WSP 2115: Drainage area. WRD Ind. 1973: 1972(M).

GAGE.--Water-stage recorder. Datum of gage is 764.78 ft (233.105 m) above mean sea level (levels by State of Indiana, Department of Natural Resources). Prior to Aug. 27, 1959, nonrecording gage at same site and datum.

REMARKS.--Records good.

AVERAGE DISCHARGE.--29 years, 249 ft³/s (7.052 m³/s), 11.50 in/yr (292 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,390 ft³/s (153 m³/s) Oct. 12, 13, 1954, gage height, 17.13 ft (5.221 m); minimum daily, 13 ft³/s (0.37 m³/s) Dec. 3, 7, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,180 ft³/s (61.7 m³/s) Mar. 31, gage height, 13.00 ft (3.962 m); minimum daily, 35 ft³/s (0.99 m³/s) Jan 29, 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	48	53	88	45	42	839	1720	115	72	807	44	102
2	47	71	80	45	40	560	1150	113	72	1080	41	175
3	46	72	74	45	39	479	895	158	70	1040	42	147
4	42	66	69	45	38	765	711	158	65	607	46	93
5	47	69	69	45	38	1170	754	120	69	252	47	77
6	89	69	67	45	38	1350	816	400	76	170	51	60
7	130	68	67	45	38	1090	761	434	68	133	51	54
8	98	65	66	45	39	785	617	298	70	116	58	51
9	75	62	62	45	40	596	440	230	70	106	63	48
10	66	58	63	45	44	529	376	190	67	92	60	45
11	60	56	62	45	48	438	324	160	97	83	56	42
12	57	54	60	45	61	423	277	143	105	89	56	39
13	54	51	57	45	72	623	245	130	90	125	52	69
14	50	48	54	45	82	679	221	122	80	119	47	110
15	47	46	57	45	83	564	196	114	72	91	46	126
16	45	46	57	45	79	438	174	108	68	80	48	270
17	46	45	57	45	78	353	159	104	76	92	68	280
18	43	45	55	46	82	407	149	104	216	103	58	348
19	45	46	54	47	88	754	140	100	221	145	48	859
20	49	45	57	47	91	914	137	95	128	98	46	711
21	48	46	57	48	92	1030	136	91	100	78	47	362
22	46	47	58	49	113	1010	133	88	84	73	60	230
23	46	46	58	50	271	834	162	84	77	60	54	179
24	46	42	58	51	958	783	174	82	75	58	47	263
25	46	46	58	49	1300	774	156	82	162	57	44	722
26	46	64	57	47	1570	836	149	83	234	51	42	453
27	46	124	55	40	1560	912	137	78	125	48	39	728
28	45	190	52	40	1240	1180	127	75	93	46	45	279
29	44	119	49	35	---	1850	131	73	126	46	77	210
30	46	103	45	35	---	2090	122	78	318	46	72	177
31	50	---	45	39	---	2140	---	77	---	46	57	---
TOTAL	1693	1962	1867	1388	8264	27195	11689	4287	3246	6037	1612	7309
MEAN	54.6	65.4	60.2	44.8	295	877	390	138	108	195	52.0	244
MAX	130	190	88	51	1570	2140	1720	434	318	1080	77	859
MIN	42	42	45	35	38	353	122	73	65	46	39	39
CFSM	.19	.22	.21	.15	1.00	2.98	1.33	.47	.37	.66	.18	.83
IN.	.21	.25	.24	.18	1.05	3.44	1.48	.54	.41	.76	.20	.92
CAL YR 1976	TOTAL	99775	MEAN 273	MAX 2230	MIN 42	CFSM .93	IN 12.62					
WTR YR 1977	TOTAL	76549	MEAN 210	MAX 2140	MIN 35	CFSM .71	IN 9.69					

05517000 YELLOW RIVER AT KNOX, IN

LOCATION.--Lat 41°18'10", long 86°37'14", in SW¼SW¼ sec.14, T.33 N., R.2 W., Starke County, Hydrologic Unit 07120001, on right bank 40 ft (12 m) upstream from bridge on U.S. Highway 35 in Knox, 1.4 miles (2.3 km) downstream from Eagle Creek, and 11.6 miles (18.7 km) upstream from mouth.

DRAINAGE AREA.--435 mi² (1,127 km²), of which 51 mi² (132 km²) does not contribute directly to surface runoff.

PERIOD OF RECORD.--August 1905 to July 1906, August 1943 to current year.

REVISED RECORDS.--WSP 1278: 1952. WSP 2115: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 679.93 ft (207.243 m) above mean sea level (levels by State of Indiana, Department of Natural Resources). August 1905 to July 1906, nonrecording gage at same site at different datum. August 1943 to July 17, 1952, nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter periods and those for periods of no gage-height record, Apr. 11 to May 26, which are fair.

AVERAGE DISCHARGE.--34 years (1943 to current year), 385 ft³/s (10.90 m³/s), 12.02 in/yr (305 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,660 ft³/s (160 m³/s) Oct. 15, 16, 1954, gage height, 13.75 ft (4.191 m); minimum daily, 50 ft³/s (1.42 m³/s) Jan. 21-31, 1963.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,190 ft³/s (62.0 m³/s) Apr. 2, gage height, 8.98 ft (2.737 m); minimum daily, 92 ft³/s (2.61 m³/s) Jan. 30. Peak discharges above a base of 1,600 ft³/s (45.3 m³/s) will no longer be listed since crests are so flat that the peaks generally are either the same as, or not more than 5 percent greater than, the daily mean discharge.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	133	137	211	114	108	1250	2090	260	177	589	120	172
2	126	138	203	114	105	1100	2180	240	173	807	116	243
3	125	146	141	120	102	1000	2140	275	170	911	115	266
4	121	156	174	118	100	900	2030	300	166	978	115	243
5	122	158	165	114	97	1000	1760	330	168	743	116	194
6	148	158	168	114	95	1200	1490	365	177	421	123	167
7	186	162	163	114	95	1400	1240	440	170	328	128	151
8	203	162	154	114	96	1300	1090	435	169	277	127	141
9	185	159	151	114	97	1100	1020	390	172	251	134	131
10	167	158	157	114	104	980	940	370	166	228	140	124
11	154	156	150	114	116	870	840	355	176	210	139	118
12	146	153	149	114	125	800	770	340	208	201	133	115
13	139	150	142	114	136	750	680	310	203	200	128	137
14	134	147	137	114	154	840	620	285	186	223	123	183
15	131	143	146	114	190	900	560	255	173	214	117	215
16	128	140	142	115	174	840	500	242	164	193	115	260
17	128	139	140	118	160	760	460	235	163	188	118	371
18	126	138	138	120	152	720	415	230	241	193	127	419
19	127	137	138	120	172	800	375	225	328	203	124	486
20	132	135	138	120	190	900	335	215	300	231	115	653
21	135	136	136	123	218	1100	310	205	228	191	113	667
22	133	137	133	128	250	1150	285	202	197	169	114	445
23	131	135	133	126	365	1200	315	200	179	155	119	341
24	133	135	136	124	540	1200	340	200	170	146	116	301
25	136	133	140	123	843	1180	320	198	163	141	108	367
26	134	146	140	122	1020	1150	300	195	236	136	104	612
27	132	193	140	121	1230	1200	285	191	279	132	101	673
28	129	250	130	113	1350	1350	270	185	210	126	99	506
29	128	274	114	105	---	1500	275	181	185	125	130	371
30	130	233	114	92	---	1720	280	184	245	125	152	311
31	135	---	114	96	---	1970	---	181	---	122	141	---
TOTAL	4317	4744	4537	3586	8384	34130	24515	8219	5942	9157	3770	9383
MEAN	139	158	146	116	299	1101	817	265	198	295	122	313
MAX	203	274	211	128	1350	1970	2180	440	328	978	152	673
MIN	121	133	114	92	95	720	270	181	163	122	99	115
CFSM	.32	.36	.34	.27	.69	2.53	1.88	.61	.46	.68	.28	.72
IN.	.37	.41	.39	.31	.72	2.92	2.10	.70	.51	.78	.32	.80
CAL YR 1976	TOTAL	154438	MEAN 422	MAX 2710	MIN 114	CFSM .97	IN 13.21					
WTR YR 1977	TOTAL	120684	MEAN 331	MAX 2180	MIN 92	CFSM .76	IN 10.32					

05517500 KANKAKEE RIVER AT DUNNS BRIDGE, IN

LOCATION.--Lat 41°13'17", long 86°57'52", in NE¼SE¼ sec.15, T.32 N., R.5 W., Jasper County, Hydrologic Unit 07120001, on left bank at downstream side of county highway bridge at Dunns Bridge, 1.8 miles (2.9 km) north of Tefft, 3.6 miles (5.8 km) upstream from Davis ditch, and at mile 90.8 (146.1 km).

DRAINAGE AREA.--1,352 mi² (3,502 km²), of which 192 mi² (497 km²) does not contribute directly to surface runoff.

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

REVISED RECORDS.--WSP 1728: 1954(m). WSP 2115: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 649.65 ft (198.013 m) above mean sea level (levels by State of Indiana, Department of Natural Resources). Prior to July 17, 1956, nonrecording gage at same site and datum.

REMARKS.--Records good except those for period of no gage-height record, Dec. 11 to Jan. 25, which are fair.

AVERAGE DISCHARGE.--29 years, 1,286 ft³/s (36.42 m³/s), 12.92 in/yr (328 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,300 ft³/s (150 m³/s) Oct. 22, 1954, gage height, 13.20 ft (4.023 m); minimum daily, 280 ft³/s (7.93 m³/s) Jan. 25-29, 1963.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,670 ft³/s (104 m³/s) Apr. 4, gage height, 10.94 ft (3.334 m); minimum daily, 486 ft³/s (13.8 m³/s) Aug. 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	630	635	971	620	660	2570	3460	1320	821	1220	546	710
2	619	629	920	630	680	2510	3590	1290	809	1640	526	982
3	606	624	870	640	700	2300	3670	1300	805	1750	523	1120
4	601	628	840	650	690	2210	3660	1300	784	1800	529	1060
5	596	649	820	660	670	2360	3550	1370	785	1770	528	932
6	682	678	800	660	650	2530	3350	1510	862	1460	547	844
7	803	695	780	650	680	2620	3140	1610	875	1160	556	790
8	821	705	760	640	730	2690	2980	1620	828	1030	572	740
9	798	735	750	630	780	2710	2880	1630	836	943	601	707
10	765	739	750	620	819	2600	2750	1600	822	896	643	666
11	731	751	750	610	862	2430	2600	1500	837	843	652	633
12	710	767	740	600	978	2320	2440	1420	927	828	644	618
13	698	770	740	610	1110	2300	2280	1350	948	889	616	665
14	683	770	735	630	1210	2340	2150	1300	897	946	591	751
15	672	767	730	640	1240	2380	2050	1240	866	908	556	811
16	663	741	740	630	1220	2350	1930	1190	822	846	529	928
17	651	722	740	620	1150	2240	1830	1170	798	819	533	1050
18	636	719	730	610	1030	2170	1760	1150	808	795	524	1220
19	630	720	720	600	807	2170	1690	1130	895	768	509	1620
20	636	710	740	600	742	2270	1630	1110	946	759	499	1870
21	638	719	740	600	730	2400	1600	1080	871	739	496	1940
22	640	724	740	620	730	2540	1570	1040	800	704	502	1820
23	639	717	740	640	831	2620	1560	1000	766	664	501	1560
24	654	690	730	650	1310	2680	1550	985	742	635	497	1530
25	661	686	740	660	1700	2690	1520	961	722	629	488	1750
26	653	703	740	650	2000	2680	1490	939	707	620	486	1880
27	643	866	730	640	2250	2680	1440	922	773	594	495	1950
28	630	1080	720	620	2550	2780	1420	896	759	576	489	1900
29	619	1110	690	610	---	3010	1390	873	711	556	570	1680
30	612	1040	660	620	---	3180	1360	864	745	588	612	1500
31	616	---	630	640	---	3310	---	852	---	571	602	---
TOTAL	20636	22489	23486	19500	29509	78640	68290	37522	24567	28946	16962	36227
MEAN	666	750	758	629	1054	2537	2276	1210	819	934	547	1208
MAX	821	1110	971	660	2550	3310	3670	1630	948	1800	652	1950
MIN	596	624	630	600	650	2170	1360	852	707	556	486	618
CFSM	.49	.56	.56	.47	.78	1.88	1.68	.90	.61	.69	.41	.89
IN.	.57	.62	.65	.54	.81	2.16	1.88	1.03	.68	.80	.47	1.00
CAL YR 1976	TOTAL	521662	MEAN	1425	MAX	4310	MIN	516	CFSM	1.05	IN	14.35
WTR YR 1977	TOTAL	406774	MEAN	1114	MAX	3670	MIN	486	CFSM	.82	IN	11.19

05517530 KANKAKEE RIVER NEAR KOUTS, IN

LOCATION.--Lat 41°15'14", long 87°02'02", in SW¼NE¼ sec.6, T.32 N., R.5 W., Jasper County, Hydrologic Unit 07120001 on left bank, 20 ft (6 m) downstream from bridge on State Highway 49, 4.5 miles (7.2 km) south of Kouts, 0.7 mile (1.1 km) upstream from Cook ditch, and at mile 86.7 (139.5 km).

DRAINAGE AREA.--1,376 mi² (3,564 km²), of which 194 mi² (502 km²) does not contribute directly to surface runoff.

PERIOD OF RECORD.--October 1974 to current year.

REVISED RECORDS.--The peak stage for the 1975 water year has been revised to 11.42 ft (3.481 m), superseding figure published in WDR IN-75-1.

GAGE.--Water-stage recorder. Datum of gage is 645.00 ft (196.596 m) above mean sea level.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,340 ft³/s (123 m³/s) Mar. 6, 1976, gage height, 12.49 ft (3.807 m); minimum daily, 460 ft³/s (13.0 m³/s) Oct. 11, 1975.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,030 ft³/s (114 m³/s) Apr. 4, gage height, 11.33 ft (3.453 m); minimum daily, 485 ft³/s (13.7 m³/s) Aug. 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	628	595	892	620	680	2450	3470	1450	900	1110	503	775
2	615	592	860	630	700	2390	3580	1420	880	1520	526	1020
3	603	585	840	640	700	2210	3630	1440	870	1630	516	1160
4	593	585	820	660	680	2170	3650	1430	850	1660	485	1070
5	588	604	780	670	660	2330	3590	1550	850	1640	491	988
6	652	630	760	660	640	2470	3440	1730	930	1390	561	932
7	737	647	750	650	670	2560	3290	1970	988	1100	537	833
8	762	653	730	640	720	2660	3150	2010	938	984	538	786
9	746	679	730	620	760	2710	3030	1900	931	936	559	752
10	723	686	718	620	800	2580	2920	1730	923	867	624	706
11	694	698	721	620	900	2380	2750	1620	936	805	692	669
12	669	737	720	620	1000	2290	2580	1530	1010	782	681	649
13	650	743	711	630	1100	2290	2430	1460	1020	838	631	698
14	638	733	709	640	1230	2350	2290	1400	991	902	612	834
15	621	721	697	640	1240	2380	2190	1330	940	872	577	902
16	615	708	718	630	1240	2340	2070	1300	867	792	559	1010
17	609	686	694	620	1190	2220	1960	1270	821	765	596	1090
18	595	681	683	620	1000	2170	1890	1240	827	743	576	1260
19	582	681	680	610	800	2150	1800	1220	907	731	536	1630
20	592	672	700	610	740	2240	1750	1200	953	737	529	1890
21	593	669	702	620	740	2370	1720	1170	899	734	500	2000
22	593	673	674	630	750	2500	1700	1140	826	721	500	1890
23	605	669	725	640	941	2590	1690	1100	784	659	490	1620
24	624	647	740	660	1390	2670	1690	1080	759	593	508	1620
25	618	646	760	660	1950	2690	1660	1050	738	576	531	1840
26	603	678	760	640	2240	2690	1630	1020	714	573	492	1920
27	596	808	740	640	2350	2700	1600	1000	751	557	492	1980
28	599	969	720	620	2410	2860	1560	970	755	526	490	1960
29	601	985	700	620	---	3200	1520	950	704	508	563	1750
30	591	949	640	630	---	3320	1490	930	727	532	620	1590
31	586	---	620	640	---	3370	---	920	---	523	631	---
TOTAL	19521	21009	22694	19650	30221	78300	71720	41530	25989	27306	17146	37824
MEAN	630	700	732	634	1079	2526	2391	1340	866	881	553	1261
MAX	762	985	892	670	2410	3370	3650	2010	1020	1660	692	2000
MIN	582	585	620	610	640	2150	1490	920	704	508	485	649
CFSM	.46	.51	.53	.46	.78	1.84	1.74	.97	.63	.64	.40	.92
IN.	.53	.57	.61	.53	.82	2.12	1.94	1.12	.70	.74	.46	1.02

CAL YR 1976 TOTAL 532895 MEAN 1456 MAX 4280 MIN 528 CFSM 1.06 IN 14.41
WTR YR 1977 TOTAL 412910 MEAN 1131 MAX 3650 MIN 485 CFSM .82 IN 11.16

05517900 COBB DITCH NEAR KOUTS, IN

LOCATION.--Lat 41°19'08", long 87°04'55", in SW¼SW¼ sec.11, T.33 N., R.6 W., Porter County, Hydrologic Unit 07120001, on left bank 15 ft (4.6 m) upstream from bridge on State Highway 8, 700 ft (213 m) upstream from mouth, and 3 miles (5 km) west of Kouts.

DRAINAGE AREA.--31.7 mi² (82.1 km²).

PERIOD OF RECORD.--July 1968 to current year. Prior to October 1971, published as State ditch near Kouts.

GAGE.--Water-stage recorder. Datum of gage is 652.00 ft (198.730 m) above mean sea level (State Highway Commission bench mark).

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

AVERAGE DISCHARGE.--9 years, 33.6 ft³/s (0.951 m³/s), 14.37 in/yr (365 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 777 ft³/s (22.0 m³/s) Mar. 5, 1976, gage height, 9.85 ft (3.002 m) from flood mark; minimum daily discharge, 8.9 ft³/s (0.25 m³/s) Sept. 11, 12, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 150 ft³/s (4.25 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Feb. 23	2300	ice jam	*9.82 2.993	Mar. 29	0100	*220 6.23	5.53 1.686
Mar. 04	1900	217 6.15	5.50 1.676				

Minimum daily discharge, 8.9 ft³/s (0.25 m³/s) Sept. 11, 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	16	19	11	11	25	44	19	13	57	10	13
2	17	15	18	12	12	23	47	19	13	22	10	15
3	16	14	18	13	12	23	46	17	13	19	10	12
4	16	14	20	13	12	155	40	17	13	17	10	11
5	16	17	17	13	11	92	49	21	14	16	11	11
6	30	17	16	13	11	40	40	27	14	15	11	11
7	25	16	16	12	11	33	34	21	14	15	17	11
8	20	14	16	11	12	30	31	18	13	15	26	11
9	17	14	15	11	14	29	29	18	14	15	20	11
10	16	14	17	11	17	27	28	17	13	14	14	9.4
11	15	14	17	11	23	24	26	16	32	14	13	8.9
12	14	13	16	11	30	34	24	15	20	18	12	8.9
13	14	13	15	11	44	93	23	15	15	16	11	9.5
14	13	13	14	10	30	53	23	14	15	15	10	9.8
15	13	13	16	10	27	35	22	14	14	14	9.0	11
16	13	13	16	9.5	25	27	22	14	14	15	11	13
17	13	13	16	9.5	23	23	22	14	14	15	13	12
18	14	13	16	10	22	34	21	14	15	14	9.9	21
19	15	13	16	10	21	33	21	13	14	15	10	21
20	16	13	20	10	21	30	20	13	14	15	10	17
21	14	13	17	11	20	42	20	14	13	15	12	15
22	15	13	15	11	20	39	20	14	13	16	17	14
23	15	12	14	12	34	49	20	13	13	16	12	14
24	15	13	13	12	100	44	19	13	13	16	11	15
25	15	13	12	12	70	31	20	14	13	16	10	14
26	15	13	12	11	50	26	19	13	13	17	9.4	14
27	15	15	11	11	36	24	19	13	12	14	9.7	14
28	15	14	11	10	29	83	19	13	12	13	9.8	13
29	15	24	11	10	---	201	19	13	12	12	11	13
30	15	20	11	10	---	80	19	13	35	12	10	13
31	16	---	11	10	---	53	---	13	---	11	10	---
TOTAL	495	432	472	342.0	748	1535	806	482	450	514	369.8	386.5
MEAN	16.0	14.4	15.2	11.0	26.7	49.5	26.9	15.5	15.0	16.6	11.9	12.9
MAX	30	24	20	13	100	201	49	27	35	57	26	21
MIN	13	12	11	9.5	11	23	19	13	12	11	9.0	8.9
CFSM	.51	.45	.48	.35	.84	1.56	.85	.49	.47	.52	.38	.41
IN.	.58	.51	.55	.40	.88	1.80	.95	.57	.53	.60	.43	.45
CAL YR 1976	TOTAL	13285.0	MEAN	36.3	MAX	600	MIN	11	CFSM	1.15	IN	15.59
WTR YR 1977	TOTAL	7032.3	MEAN	19.3	MAX	201	MIN	8.9	CFSM	.61	IN	8.25

05518000 KANKAKEE RIVER AT SHELBY, IN

LOCATION.--Lat 41°10'58", long 87°20'33", in SW 1/4 sec. 33, T.32 N., R.8 W., Lake County, Hydrologic Unit 0712001, on right bank 25 ft (7.6 m) upstream from Monon Railroad bridge, 1 mile (2 km) south of Shelby, 7.7 miles (12.4 km) upstream from Beaver Lake ditch, and at mile 67.9 (109.2 km).

DRAINAGE AREA.--1,779 mi² (4,608 km²), of which 201 mi² (521 km²) does not contribute directly to surface runoff.

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WSP 1005: 1928(M). WSP 2115: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 628.13 ft (191.454 m) above mean sea level. Prior to Dec. 19, 1934, nonrecording gage at highway bridge about 400 ft (122 m) upstream. Dec. 19, 1934, to Oct. 4, 1965, water-stage recorder on left bank 50 ft (15 m) downstream, and Oct. 5, 1965, to Sept. 21, 1966, nonrecording gage on right bank 200 ft (61 m) upstream. All at same datum.

REMARKS.--Records good except those for parts of December, January, and February, which are fair.

AVERAGE DISCHARGE.--55 years, 1,577 ft³/s (44.66 m³/s), 12.04 in/yr (306 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,200 ft³/s (204 m³/s) Dec. 21, 1927, gage height, 11.40 ft (3.475 m), site then in use, from rating curve extended above 3,000 ft³/s (85.0 m³/s) by gage-height relation study with site below railroad bridge; minimum daily, 260 ft³/s (7.36 m³/s) Jan. 13-15, 1954.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,250 ft³/s (120 m³/s) Apr. 5, gage height, 10.08 ft (3.072 m); minimum daily, 543 ft³/s (15.4 m³/s) Aug. 28.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

SEDIMENT DISCHARGE: October 1963 to current year (partial-record station).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	826	765	1160	700	770	2780	4050	1790	1100	1240	644	749
2	806	776	1100	710	790	2790	4100	1740	1080	1610	627	1060
3	790	767	1040	730	800	2750	4170	1730	1060	1840	645	1270
4	774	761	1020	750	790	2760	4210	1740	1020	1920	626	1310
5	774	783	1000	750	760	2990	4240	1930	1020	1920	615	1200
6	866	812	970	750	730	3020	4210	2240	1100	1800	652	1120
7	1010	837	940	740	780	3070	4100	2530	1150	1490	668	1040
8	1060	842	920	720	840	3120	4000	2650	1120	1250	652	936
9	1040	871	890	700	900	3200	3880	2650	1090	1160	673	880
10	1020	899	870	700	960	3250	3770	2520	1090	1080	727	833
11	979	897	860	700	1040	3170	3650	2340	1100	1020	785	777
12	940	891	850	700	1120	3070	3510	2160	1160	995	812	741
13	899	921	850	710	1270	3080	3380	2030	1190	1000	773	801
14	879	940	840	720	1440	3130	3230	1900	1180	1040	723	904
15	849	907	840	730	1530	3110	3070	1790	1150	1050	687	1010
16	832	903	860	720	1500	3060	2930	1710	1070	1000	648	1150
17	809	886	840	700	1400	2990	2780	1650	1010	960	665	1290
18	800	871	830	700	1300	2940	2650	1600	1020	924	672	1460
19	777	874	820	700	1000	2920	2540	1570	1040	886	619	1860
20	777	870	820	700	880	2910	2420	1530	1080	889	598	2130
21	786	856	840	710	850	3000	2340	1500	1080	895	590	2270
22	783	863	820	720	850	3130	2270	1480	1010	879	593	2330
23	786	859	820	730	1100	3230	2220	1440	974	857	589	2190
24	812	843	830	740	1500	3320	2180	1410	948	781	586	2130
25	819	863	850	750	2100	3370	2130	1370	920	749	605	2370
26	785	905	850	740	2610	3370	2080	1330	886	726	594	2500
27	773	994	840	730	2690	3350	2020	1250	880	709	559	2620
28	764	1150	820	700	2750	3460	1970	1190	923	689	543	2620
29	772	1210	780	710	---	3830	1920	1160	876	666	566	2540
30	771	1190	740	730	---	4060	1850	1140	886	662	613	2340
31	774	---	700	750	---	4060	---	1120	---	663	629	---
TOTAL	26132	26806	27230	22340	35050	98290	91870	54190	31213	33350	19978	46431
MEAN	843	894	878	721	1252	3171	3062	1748	1040	1076	644	1548
MAX	1060	1210	1160	750	2750	4060	4240	2650	1190	1920	812	2620
MIN	764	761	700	700	730	2750	1850	1120	876	662	543	741
CFSM	.47	.50	.49	.41	.70	1.78	1.72	.98	.59	.61	.36	.87
IN.	.55	.56	.57	.47	.73	2.06	1.92	1.13	.65	.70	.42	.97
CAL YR 1976	TOTAL	692181	MEAN	1891	MAX	5180	MIN	698	CFSM	1.06	IN	14.47
WTR YR 1977	TOTAL	512880	MEAN	1405	MAX	4240	MIN	543	CFSM	.79	IN	10.72

ILLINOIS RIVER BASIN

05519000 SINGLETON DITCH AT SCHNEIDER, IN

LOCATION.--Lat 41°12'44", long 87°26'44", in SW¼NW¼ sec.22, T.32 N., R.9 W., Lake County, Hydrologic Unit 07120001, on left bank 15 ft (5 m) upstream from bridge on Ackerman Avenue, 0.5 mile (0.8 km) upstream from Bruce ditch, 1.5 miles (2.4 km) downstream from Cedar Creek, and 1.6 miles (2.6 km) north of Schneider.

DRAINAGE AREA.--123 mi² (319 km²).

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

REVISED RECORDS.--WSP 1915: 1956-59. WSP 2115: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 623.67 ft (190.095 m) above mean sea level. Prior to Oct. 1, 1949, nonrecording gage at same site at datum 2.00 ft (0.610 m) higher. Oct. 1, 1949, to Aug. 13, 1951, nonrecording gage at same site and datum.

REMARKS.--Records good except those for period of no gage-height record, Jan. 4 to Apr. 5, which are poor.

AVERAGE DISCHARGE.--29 years, 103 ft³/s (2.917 m³/s), 11.37 in/yr (289 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,550 ft³/s (101 m³/s) Mar. 5, 1976; maximum gage height, 12.37 ft (3.770 m) June 25, 1975; minimum daily, 3.6 ft³/s (0.102 m³/s) Sept. 7, 8, 10, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 730 ft³/s (20.7 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Feb. 24	Unknown	*370 10.5	Unknown

Minimum daily discharge, 11 ft³/s (0.31 m³/s) Aug. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	36	27	21	15	130	150	45	34	85	15	42
2	20	33	27	21	15	120	160	46	33	47	11	127
3	28	31	26	20	15	110	150	46	30	35	12	70
4	27	30	26	20	15	200	160	47	29	32	12	53
5	26	29	26	20	14	180	172	67	33	28	13	46
6	32	29	26	20	14	120	160	84	33	25	17	43
7	39	29	26	20	14	100	134	83	31	23	17	40
8	35	26	26	20	14	97	115	85	30	22	20	37
9	33	29	26	20	14	97	103	69	29	22	22	35
10	31	28	26	20	15	90	97	64	28	21	30	33
11	29	27	27	20	28	88	91	61	35	23	28	31
12	28	26	27	19	74	100	83	62	37	23	25	31
13	27	25	26	19	90	110	78	56	32	23	22	37
14	26	25	25	18	100	100	75	54	30	21	21	38
15	25	25	25	17	102	90	72	50	29	20	20	51
16	24	26	24	16	96	83	68	48	28	20	19	87
17	23	26	24	16	91	82	65	46	28	20	20	74
18	23	26	25	15	90	90	62	45	34	19	19	87
19	23	26	25	15	91	90	60	45	30	19	18	113
20	23	26	26	14	93	99	61	44	28	20	19	90
21	23	26	28	14	96	110	66	42	27	17	22	76
22	23	25	27	14	150	120	67	44	26	15	20	68
23	23	29	25	15	270	130	67	42	26	14	19	63
24	23	24	24	15	360	120	64	43	23	15	18	76
25	24	26	24	16	250	110	65	46	23	23	17	82
26	23	30	23	16	200	100	62	39	23	19	17	76
27	22	36	23	17	170	140	59	38	22	17	17	69
28	22	29	24	16	150	230	58	37	21	18	17	63
29	22	28	24	16	---	220	55	36	22	15	26	58
30	25	28	23	16	---	200	49	35	33	13	23	56
31	38	---	22	15	---	170	---	34	---	13	19	---
TOTAL	811	839	783	541	2646	3826	2728	1583	867	727	595	1852
MEAN	26.2	28.0	25.3	17.5	94.5	123	90.9	51.1	28.9	23.5	19.2	61.7
MAX	39	36	28	21	360	230	172	85	37	85	30	127
MIN	20	24	22	14	14	82	49	34	21	13	11	31
CFSM	.21	.23	.21	.14	.77	1.00	.74	.42	.24	.19	.16	.50
IN.	.25	.25	.24	.16	.80	1.16	.83	.48	.26	.22	.18	.56
CAL YR 1976	TOTAL	48557	MEAN	133	MAX	2990	MIN	20	CFSM	1.08	IN	14.69
WTR YR 1977	TOTAL	17798	MEAN	48.8	MAX	360	MIN	11	CFSM	.40	IN	5.38

05520000 SINGLETON DITCH AT ILLINOI, ILL

LOCATION.--Lat 41°11'20", long 87°31'35", in SW¼NW¼ sec.8, T.31 N., R.15 E., Kankakee County, Illinois, Hydrologic Unit 07120001, 50 ft (15 m) downstream from county highway bridge and Indiana-Illinois State line, at Illinois, and beside the Cleveland, Cincinnati, Chicago, and St. Louis Railway.

DRAINAGE AREA.--220 mi² (570 km²).

PERIOD OF RECORD.--October 1944 to September 1977 (discontinued).

REVISED RECORDS.--WSP 1338: 1948(M). WSP 2115: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 620.33 ft (189.077 m) above mean sea level. Prior to Aug. 28, 1953, nonrecording gage at same site and datum.

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

AVERAGE DISCHARGE.--33 years, 179 ft³/s (5.069 m³/s), 11.07 in/yr (281 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,610 ft³/s (102 m³/s) Mar. 5, 1976, gage height, 10.51 ft (3.203 m); minimum daily discharge, 6.0 ft³/s (0.17 m³/s) Sept. 8, 9, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 1,100 ft³/s (31.2 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Feb. 25	0100	*915 25.9	*4.34 1.323

Minimum daily discharge, 15 ft³/s (0.42 m³/s) Aug. 3, 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33	46	35	26	18	363	396	120	80	143	18	103
2	32	44	35	25	18	309	366	117	76	96	16	289
3	35	42	34	25	18	273	377	119	71	79	15	186
4	33	40	34	24	18	264	345	117	67	64	15	138
5	32	39	34	24	18	496	389	123	70	55	16	119
6	42	39	34	24	17	402	382	166	83	47	19	105
7	48	39	34	24	17	280	336	224	81	41	19	96
8	43	37	34	24	17	243	306	204	80	36	22	91
9	40	40	34	25	17	234	275	185	77	37	24	84
10	38	39	35	25	18	235	255	166	73	33	38	80
11	35	37	36	24	19	220	243	157	72	31	46	74
12	34	35	36	23	45	208	224	149	81	32	38	72
13	33	34	35	22	172	252	207	141	75	32	32	80
14	31	34	34	21	225	273	196	133	69	30	30	94
15	30	34	33	21	244	247	186	127	65	27	28	116
16	29	34	33	20	242	222	176	120	61	29	27	197
17	28	35	32	19	230	198	170	116	59	27	27	174
18	28	36	33	19	218	194	162	114	69	26	27	199
19	27	36	34	18	215	218	156	112	72	24	27	265
20	29	36	36	18	220	214	154	109	66	23	29	226
21	29	35	34	17	227	234	176	106	63	22	31	192
22	29	35	32	17	230	265	182	105	61	20	32	170
23	28	37	31	18	253	302	172	102	60	18	31	156
24	28	41	30	18	641	323	164	98	58	18	30	189
25	29	39	29	19	842	295	157	111	55	28	28	201
26	28	38	28	20	630	258	156	97	50	23	27	193
27	27	45	28	20	494	232	149	91	47	21	26	174
28	27	40	29	20	416	258	143	88	45	20	25	159
29	28	38	29	19	---	561	138	85	45	20	34	149
30	28	36	28	19	---	533	129	83	57	18	38	142
31	37	---	27	19	---	476	---	80	---	17	34	---
TOTAL	998	1140	1010	657	5739	9082	6867	3865	1988	1137	849	4513
MEAN	32.2	38.0	32.6	21.2	205	293	229	125	66.3	36.7	27.4	150
MAX	48	46	36	26	842	561	396	224	83	143	46	289
MIN	27	34	27	17	17	194	129	80	45	17	15	72
CFSM	.15	.17	.15	.10	.93	1.33	1.04	.57	.30	.17	.13	.68
IN.	.17	.19	.17	.11	.97	1.54	1.16	.65	.34	.19	.14	.76
CAL YR 1976	TOTAL	79941	MEAN 218	MAX 3360	MIN 27	CFSM .99	IN 13.52					
WTR YR 1977	TOTAL	37845	MEAN 104	MAX 842	MIN 15	CFSM .47	IN 6.40					

ILLINOIS RIVER BASIN

05520500 KANKAKEE RIVER AT MOMENCE, IL

LOCATION.--Lat 41°09'36", long 87°40'07", in NE¼ sec.24, T.31 N., R.13 E., Kankakee County, Hydrologic Unit 07120001, on right bank at Hill Street in Momence, 0.2 mi (0.3 km) downstream from bridge on State Highways 1 and 17, and 1.2 mi (1.9 km) upstream from Tower Creek.

DRAINAGE AREA.--2,294 mi² (5,941 km²).

PERIOD OF RECORD.--February to December 1905, February to July 1906, December 1914 to current year.

REVISED RECORDS.--WSP 1238: 1916, 1930. WSP 1308: 1915(M), 1917(M), 1919(M), 1922(M), 1926(M), 1934-35(M), 1938(M). WDR IL-75: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 609.18 ft (185.678 m) above mean sea level. Prior to Aug. 1, 1938, nonrecording gage at site 0.2 mi (0.3 km) upstream at datum 1.00 ft (0.305 m) higher. Aug. 1, 1938, to Aug. 8, 1969, water-stage recorder at present site at datum 1.00 ft (0.305 m) higher.

REMARKS.--Water-discharge records good except those for winter periods, which are poor.

AVERAGE DISCHARGE.--62 years (water years 1916-77), 1,919 ft³/s (54.35 m³/s), 11.36 in/yr (289 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,900 ft³/s (337 m³/s) Mar. 5, 1976, gage height, 6.44 ft (1.963 m); maximum gage height observed, 8.09 ft (2.466 m) Jan. 25, 1930, site and datum then in use, ice jam; minimum discharge observed, 306 ft³/s (8.67 m³/s) Sept. 1, 16, 17, 1919.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,780 ft³/s (135 m³/s) Apr. 5, 1977, gage height, 3.78 ft (1.152 m); maximum gage height, 7.12 ft (2.170 m) Feb. 12, ice jam; minimum discharge, 601 ft³/s (17.0 m³/s) Aug. 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	816	810	900	800	680	4000	4600	1960	1050	1250	645	1270
2	798	805	900	800	680	3420	4580	1920	1040	1390	617	2130
3	784	803	900	820	680	3170	4620	1890	1010	1540	612	2040
4	763	792	900	850	680	3180	4620	1890	985	1660	623	1950
5	762	790	900	880	700	3420	4700	2120	996	1710	629	1850
6	831	811	870	880	700	3280	4680	2500	1050	1720	620	1710
7	922	840	840	850	700	3270	4620	2600	1070	1670	659	1580
8	1000	850	840	800	700	3310	4540	2720	1090	1480	687	1440
9	1020	870	840	800	700	3410	4360	2760	1050	1300	690	1320
10	1020	901	840	770	730	3470	4210	2710	1030	1180	1030	1220
11	998	914	840	720	760	3510	4070	2600	1050	1100	945	1140
12	963	900	840	700	800	3540	3940	2380	1100	1090	956	1060
13	929	907	840	700	900	3580	3790	2250	1140	1030	926	1090
14	893	934	840	700	950	3520	3640	1990	1150	1000	841	1220
15	868	942	840	700	1000	3480	3520	1840	1140	1080	800	1440
16	852	925	860	680	1000	3430	3390	1720	1080	1210	744	1770
17	826	923	860	680	1050	3380	3230	1690	996	1040	709	1800
18	822	916	860	680	1050	3410	3080	1640	1160	978	717	1970
19	816	906	860	680	1050	3370	2930	1590	1070	936	708	2070
20	795	917	860	680	1000	3370	2860	1540	1040	895	687	2080
21	803	900	840	700	1050	3410	2800	1490	1050	885	673	2170
22	804	894	840	700	1050	3480	2660	1450	1020	878	668	2200
23	798	882	840	700	1200	3620	2540	1430	962	860	661	2200
24	820	880	840	700	1500	3700	2450	1380	928	835	655	2350
25	830	890	840	720	2000	3710	2380	1350	895	883	646	2370
26	820	944	860	720	3000	3730	2320	1290	862	752	656	2760
27	809	1010	860	700	4000	3710	2240	1240	830	719	640	2990
28	775	1090	860	680	4500	3920	2190	1200	841	692	618	2960
29	787	1000	860	680	---	4500	2130	1160	852	680	648	2910
30	797	950	860	680	---	4580	2030	1130	928	659	669	2840
31	814	---	820	680	---	4640	---	1090	---	653	714	---
TOTAL	26335	26896	26550	22830	34810	111520	103720	56520	30465	33755	22093	57900
MEAN	850	897	856	736	1243	3597	3457	1823	1016	1089	713	1930
MAX	1020	1090	900	880	4500	4640	4700	2760	1160	1720	1030	2990
MIN	762	790	820	680	680	3170	2030	1090	830	653	612	1060
CFSM	.37	.39	.37	.32	.54	1.57	1.51	.80	.44	.48	.31	.84
IN.	.43	.44	.43	.37	.56	1.81	1.68	.92	.49	.55	.36	.94
CAL YR 1976	TOTAL	858476	MEAN	2346	MAX	11300	MIN 687	CFSM 1.02	IN 13.92			
WTR YR 1977	TOTAL	553394	MEAN	1516	MAX	4700	MIN 612	CFSM .66	IN 8.97			

05521000 IROQUOIS RIVER AT ROSEBUD, IN

LOCATION.--Lat 41°02'00", long 87°10'49", in NW¼SW¼ sec.24, T.30 N., R.7 W., Jasper County, Hydrologic Unit 07120002, on right bank 100 ft (30 m) downstream from bridge on county road, 0.5 mile (0.8 km) north of Rosebud, 0.5 mile (0.8 km) downstream from confluence of Swain and Dexter ditches, 1.5 miles (2.4 km) upstream from Davidson ditch, 2 miles (3 km) east of Parr, and at mile 93.5 (150.4 km).

DRAINAGE AREA.--35.6 mi² (92.2 km²).

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

REVISED RECORDS.--WSP 1338: 1950-53. WSP 1728: 1959-60(M). WSP 1915: 1949-60. WSP 2115: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 661.47 ft (201.616 m) above mean sea level (levels by State of Indiana, Department of Natural Resources). Prior to Oct. 1, 1953, nonrecording gage on downstream side of county road bridge at same datum.

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

AVERAGE DISCHARGE.--29 years, 25.8 ft³/s (0.731 m³/s), 9.84 in/yr (250 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 435 ft³/s (12.3 m³/s) May 17, 1974; maximum gage height, 8.86 ft (2.700 m) Feb. 10, 1959; minimum daily discharge, 0.5 ft³/s (0.014 m³/s) Oct. 11, 12, 19, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 150 ft³/s (4.25 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Mar. 29	0200	*238 6.74	*6.15 1.875

Minimum daily discharge, 3.3 ft³/s (0.093 m³/s) Feb. 5-8.

DISCHARGE, IN CURIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.5	7.8	8.6	4.7	3.5	19	74	22	9.3	13	5.4	14
2	5.5	7.8	8.0	4.8	3.5	27	94	28	9.1	9.8	5.3	34
3	5.4	7.2	7.5	4.8	3.4	24	83	39	8.4	8.8	5.2	28
4	5.2	6.7	7.2	5.0	3.4	108	74	41	7.8	8.1	5.1	18
5	6.1	7.0	7.0	5.2	3.3	96	77	90	14	7.1	5.2	38
6	45	6.5	6.8	5.4	3.3	55	65	109	22	6.0	6.7	39
7	37	6.0	6.6	5.3	3.3	44	59	95	14	5.4	6.4	23
8	22	6.1	6.6	5.1	3.3	41	53	66	12	5.9	6.2	17
9	22	6.0	6.6	5.0	3.5	41	49	52	9.9	9.2	6.5	15
10	15	5.7	6.6	4.8	4.0	38	46	44	8.8	7.9	55	12
11	13	5.1	6.7	4.6	7.0	34	43	40	13	7.2	61	11
12	14	5.1	6.8	4.4	15	47	40	37	14	10	31	10
13	12	5.6	6.5	4.2	60	54	39	33	15	12	19	29
14	11	6.0	6.3	4.1	40	47	36	32	11	8.2	14	54
15	10	6.3	6.0	3.9	30	40	36	29	9.9	7.3	11	51
16	9.0	5.1	6.1	3.8	24	32	33	27	9.0	7.9	11	71
17	8.3	4.5	6.4	3.7	20	29	32	25	8.4	7.9	10	57
18	8.0	4.3	6.6	3.6	17	73	31	24	42	7.3	8.7	64
19	8.8	4.3	6.8	3.5	22	59	31	23	41	7.3	7.7	78
20	9.0	4.2	6.2	3.5	20	62	30	22	22	6.9	8.2	51
21	9.6	4.2	5.8	3.6	18	61	30	21	16	6.9	8.0	38
22	7.3	4.0	5.4	3.8	30	64	30	21	13	6.8	7.3	31
23	7.4	4.2	5.3	3.9	45	76	28	19	12	5.7	6.8	28
24	8.3	6.5	5.0	4.0	70	94	27	18	11	6.5	6.3	34
25	7.6	4.2	4.8	4.0	87	79	26	17	9.8	20	5.9	36
26	7.0	6.9	4.7	3.9	70	68	24	16	9.1	9.1	5.6	31
27	6.4	25	4.8	3.8	49	64	23	15	8.7	7.6	5.3	28
28	6.2	18	4.9	3.8	35	190	24	15	8.4	6.9	5.5	23
29	6.5	11	5.2	3.7	---	219	22	13	7.6	6.6	7.6	22
30	7.6	9.6	5.0	3.6	---	145	22	11	13	6.2	6.4	21
31	8.8	---	4.8	3.6	---	96	---	9.9	---	5.8	5.5	---
TOTAL	354.5	210.9	191.6	131.1	693.5	2126	1281	1053.9	409.2	251.3	358.8	1006
MEAN	11.4	7.03	6.18	4.23	24.8	68.6	42.7	34.0	13.6	8.11	11.6	33.5
MAX	45	25	8.6	5.4	87	219	94	109	42	20	61	78
MIN	5.2	4.0	4.7	3.5	3.3	19	22	9.9	7.6	5.4	5.1	10
CFSM	.32	.20	.17	.12	.70	1.93	1.20	.96	.38	.23	.33	.94
IN.	.37	.22	.20	.14	.72	2.22	1.34	1.10	.43	.26	.37	1.05
CAL YR 1976	TOTAL	10827.5	MEAN 29.6	MAX 250	MIN 3.1	CFSM .83	IN 11.31					
WTR YR 1977	TOTAL	8067.8	MEAN 22.1	MAX 219	MIN 3.3	CFSM .62	IN 8.43					

05522000 IROQUOIS RIVER NEAR NORTH MARION, IN

LOCATION.--Lat 40°58'12", long 87°06'50", in NE¼NW¼ sec.16, T.29 N., R.6 W., Jasper County, Hydrologic Unit 07120002, on downstream side of county highway bridge, 1.2 miles (1.9 km) upstream from Ryan ditch, 2 miles (3 km) east of North Marion, 3.5 miles (5.6 km) northeast of Rensselaer, and at mile 87.7 (141.1 km).

DRAINAGE AREA.--144 mi² (373 km²).

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

REVISED RECORDS.--WSP 2115: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 646.68 ft (197.108 m) above mean sea level. Prior to Sept. 6, 1955, nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter periods and period of no gage-height record, Jan. 15 to Feb. 17, which are fair. Water from Oliver ditch, an upstream tributary, can be diverted to Ryan ditch and thus enter the Iroquois River below station.

AVERAGE DISCHARGE.--28 years (1949 to current year), 125 ft³/s (3.540 m³/s), 11.79 in/yr (299 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,040 ft³/s (57.8 m³/s) June 10, 1958, gage height, 15.09 ft (4.599 m); minimum daily, 1.6 ft³/s (0.045 m³/s) Sept. 15, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 420 ft³/s (11.9 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Mar. 05	1400	478 13.5	7.43 2.265
Mar. 30	0400	*793 22.5	*10.69 3.258
May 07	0900	504 14.3	7.47 2.277

Minimum daily discharge, 8.3 ft³/s (0.24 m³/s) Aug. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	33	35	19	13	122	594	60	42	87	16	31
2	23	32	33	18	13	101	487	80	39	57	9.4	84
3	23	31	31	18	13	97	447	150	30	44	8.3	99
4	19	29	29	18	13	317	378	179	32	36	11	72
5	22	34	28	18	13	467	331	289	50	29	13	67
6	99	31	27	18	13	404	290	448	74	22	18	87
7	152	31	27	18	13	287	242	497	49	20	25	66
8	98	24	27	18	13	227	206	432	44	20	26	51
9	75	31	27	18	14	216	181	316	39	23	32	45
10	63	31	27	18	15	198	168	214	36	27	110	40
11	53	27	27	17	17	173	146	173	62	22	181	37
12	50	25	28	16	25	182	129	152	74	26	100	34
13	46	24	27	15	130	249	117	136	58	42	60	63
14	43	26	26	15	150	242	109	121	42	26	44	152
15	42	26	25	14	120	208	112	111	36	20	34	154
16	39	29	24	14	100	163	107	103	33	22	33	209
17	36	27	25	14	87	128	101	101	33	27	32	210
18	34	29	26	13	70	215	95	97	139	24	24	204
19	36	26	27	13	72	311	91	89	133	18	23	259
20	37	25	27	13	80	280	88	85	72	13	21	265
21	36	22	25	13	79	276	87	83	47	11	31	195
22	35	22	24	14	77	263	89	81	38	17	34	144
23	33	17	22	15	110	286	87	72	36	13	30	120
24	36	38	22	15	280	360	85	68	38	17	26	115
25	35	25	21	15	350	367	77	68	31	60	22	131
26	33	30	21	15	355	325	75	61	27	48	17	128
27	31	66	22	15	215	271	61	52	26	27	16	113
28	29	73	22	14	153	461	64	54	22	20	17	94
29	29	46	22	14	---	731	71	54	20	22	31	88
30	30	38	21	14	---	786	65	48	27	24	32	84
31	36	---	20	13	---	734	---	46	---	21	24	---
TOTAL	1379	948	795	482	2603	9447	5180	4520	1429	885	1100.7	3441
MEAN	44.5	31.6	25.6	15.5	93.0	305	173	146	47.6	28.5	35.5	115
MAX	152	73	35	19	355	786	594	497	139	87	181	265
MIN	19	17	20	13	13	97	61	46	20	11	8.3	31
CFSM	.31	.22	.18	.11	.65	2.12	1.20	1.01	.33	.20	.25	.80
IN.	.36	.24	.21	.12	.67	2.44	1.34	1.17	.37	.23	.28	.89
CAL YR 1976	TOTAL	56176.5	MEAN	153	MAX	1050	MIN	9.5	CFSM	1.06	IN	14.51
WTR YR 1977	TOTAL	32209.7	MEAN	88.2	MAX	786	MIN	8.3	CFSM	.61	IN	8.32

05522500 IROQUOIS RIVER AT RENSSELAER, IN

LOCATION.--Lat 40°56'00", long 87°07'44", in NW¼SE¼ sec.29, T.29 N., R.6 W., Jasper County, Hydrologic Unit 07120002, on right bank 20 ft (6 m) downstream from bridge on State Highway 114, 0.8 mile (1.3 km) east of Rensselaer, 1.5 miles (2.4 km) downstream from Ryan ditch, 5.5 miles (8.8 km) upstream from Slough Creek, and at mile 84.9 (136.6 km).

DRAINAGE AREA.--203 mi² (526 km²).

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

REVISED RECORDS.--WSP 2115: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 642.29 ft (195.770 m) above mean sea level (levels by State of Indiana, Department of Natural Resources). Prior to July 8, 1949, nonrecording gage at same site and datum.

REMARKS.--Records good.

AVERAGE DISCHARGE.--29 years, 162 ft³/s (4.588 m³/s), 10.84 in/yr (275 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,550 ft³/s (72.2 m³/s) June 10, 1958, gage height, 16.54 ft (5.041 m); minimum daily, 2.2 ft³/s (0.062 m³/s) Sept. 9, 15, 16, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,030 ft³/s (29.2 m³/s) Mar. 30, gage height, 11.15 ft (3.399 m); minimum daily, 10 ft³/s (0.28 m³/s) Aug. 2, 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	35	40	19	14	133	711	77	48	92	16	40
2	20	32	36	19	14	110	592	97	46	68	10	93
3	20	31	34	18	14	105	541	195	35	51	10	115
4	16	30	32	18	13	384	450	229	39	43	12	84
5	20	34	30	19	13	562	387	367	58	31	14	81
6	97	32	28	19	13	472	335	547	84	23	20	97
7	132	31	28	20	14	322	280	583	60	20	28	73
8	90	26	27	20	14	244	233	495	53	20	29	57
9	73	35	27	19	14	230	203	353	47	21	34	50
10	61	37	27	19	15	212	196	235	41	25	118	45
11	52	33	28	18	20	179	166	182	62	21	180	43
12	50	30	29	17	30	191	149	156	80	30	100	40
13	46	26	28	16	160	269	137	137	64	53	62	88
14	42	26	27	15	180	262	128	120	48	30	46	227
15	41	29	26	15	150	223	130	109	41	21	37	223
16	39	33	25	14	118	172	126	100	37	21	36	302
17	36	32	25	14	90	136	120	97	36	28	36	274
18	34	35	26	14	72	263	113	93	167	25	29	271
19	36	31	27	14	78	380	108	85	142	19	27	354
20	39	30	28	13	88	337	104	81	84	15	26	330
21	37	27	26	13	83	330	102	79	59	14	38	238
22	35	26	25	14	83	308	104	77	48	19	43	171
23	34	20	23	14	185	351	104	69	44	16	35	141
24	36	23	22	15	391	450	102	66	46	18	29	136
25	36	32	22	16	447	449	94	66	38	57	25	151
26	34	35	22	16	403	397	92	61	32	55	21	139
27	31	73	22	16	238	325	78	53	31	33	20	121
28	29	81	23	15	165	635	81	53	26	23	21	106
29	29	47	23	15	---	976	85	58	24	23	38	97
30	30	43	22	15	---	1000	81	55	32	24	41	92
31	37	---	20	14	---	889	---	53	---	21	31	---
TOTAL	1335	1035	828	503	3119	11296	6132	5028	1652	960	1212	4279
MEAN	43.1	34.5	26.7	16.2	111	364	204	162	55.1	31.0	39.1	143
MAX	132	81	40	20	447	1000	711	583	167	92	180	354
MIN	16	20	20	13	13	105	78	53	24	14	10	40
CFSM	.21	.17	.13	.08	.55	1.79	1.01	.80	.27	.15	.19	.70
IN.	.24	.19	.15	.09	.57	2.07	1.12	.92	.30	.18	.22	.78
CAL YR 1976	TOTAL	65411	MEAN 179	MAX 1420	MIN 12	CFSM .88	IN 11.99					
WTR YR 1977	TOTAL	37379	MEAN 102	MAX 1000	MIN 10	CFSM .50	IN 6.85					

ILLINOIS RIVER BASIN

05523000 BICE DITCH NEAR SOUTH MARION, IN

LOCATION.--Lat 40°52'00", long 87°05'32", in NE¼NW¼ sec.22, T.28 N., R.6 W., Jasper County, Hydrologic Unit 07120002, on left bank at upstream side of bridge on State Highway 16, 2.3 miles (3.7 km) upstream from mouth, 3 miles (5 km) southeast of South Marion, and 5 miles (8 km) southeast of Rensselaer.

DRAINAGE AREA.--21.8 mi² (56.5 km²).

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

REVISED RECORDS.--WSP 1508: 1956. WSP 2115: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 651.30 ft (198.516 m) above mean sea level. Prior to Aug. 5, 1955, nonrecording gage, and Aug. 5, 1955, to Sept. 30, 1965, water-stage recorder at present site at datum 2.00 ft (0.610 m) higher.

REMARKS.--Records good.

AVERAGE DISCHARGE.--28 years (1949 to current year), 16.5 ft³/s (0.467 m³/s), 10.29 in/yr (261 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 958 ft³/s (27.1 m³/s) Dec. 21, 1967, gage height, 10.89 ft (3.319 m); no flow at times during 1952, 1955, and 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 340 ft³/s (9.63 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Aug. 10	1700	*559 15.8	*8.23 2.508

Minimum daily discharge, 0.19 ft³/s (0.005 m³/s) Jan. 31, Feb. 1-3, 6-8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.45	.73	.50	.31	.19	2.4	12	2.8	2.1	1.4	.54	4.9
2	.42	.69	.50	.31	.19	2.0	37	9.6	2.1	1.2	.50	25
3	.42	.68	.46	.31	.19	2.5	25	29	2.0	1.3	.52	42
4	.43	.67	.43	.29	.21	47	19	26	2.0	1.2	.59	28
5	.58	.67	.42	.28	.21	32	15	63	22	1.2	.80	20
6	4.8	.68	.42	.28	.19	12	9.6	77	37	1.3	28	14
7	1.8	.68	.41	.28	.19	7.6	8.9	55	16	1.5	19	10
8	.86	.64	.38	.28	.19	7.3	6.5	30	10	2.8	17	7.8
9	.72	.69	.38	.27	.21	7.9	6.0	18	8.4	5.7	23	6.8
10	.68	.70	.38	.25	.25	6.2	6.0	13	5.5	1.6	257	5.3
11	.64	.70	.38	.25	.50	5.0	5.5	9.8	5.0	1.5	257	4.3
12	.63	.69	.38	.25	5.0	7.6	4.6	8.0	4.4	3.7	163	4.4
13	.61	.66	.38	.25	10	6.2	4.6	6.9	3.3	2.2	69	118
14	.58	.67	.38	.25	7.0	4.6	4.2	6.0	2.9	1.1	40	232
15	.58	.67	.38	.25	4.0	3.6	4.2	5.2	2.4	.95	30	154
16	.58	.66	.36	.22	2.5	2.8	4.0	4.4	2.2	1.1	25	131
17	.61	.70	.34	.23	1.4	2.8	3.8	4.1	2.1	1.4	19	75
18	.61	.70	.34	.25	1.1	36	3.5	3.8	13	1.1	11	87
19	.66	.73	.34	.24	1.0	17	3.5	3.5	7.4	.81	7.5	84
20	.72	.69	.34	.23	.99	23	3.6	3.4	4.0	.67	6.3	55
21	.64	.68	.34	.22	1.1	16	3.5	3.4	2.5	.62	6.3	39
22	.63	.67	.34	.22	1.4	16	3.5	3.6	2.0	.57	8.0	30
23	.65	.64	.34	.22	14	26	3.6	3.0	1.8	.49	6.3	24
24	.73	.64	.34	.22	29	24	3.5	2.8	1.6	.49	5.0	24
25	.72	.70	.34	.22	9.8	14	3.5	2.8	1.4	1.8	3.6	22
26	.67	.81	.31	.22	5.3	11	3.1	2.7	1.2	1.2	3.2	17
27	.63	1.1	.31	.22	3.0	10	3.0	2.6	1.2	.68	3.0	10
28	.63	.92	.31	.21	2.6	92	3.0	2.6	1.2	.57	2.7	13
29	.63	.58	.31	.22	---	77	2.7	2.5	1.1	.57	8.4	9.5
30	.72	.47	.31	.20	---	35	2.7	2.3	1.1	.59	8.7	9.1
31	.90	---	.31	.19	---	18	---	2.1	---	.58	5.7	---
TOTAL	24.93	20.91	11.46	7.64	101.71	574.5	218.6	408.9	168.9	41.89	1035.65	1306.1
MEAN	.80	.70	.37	.25	3.63	18.5	7.29	13.2	5.63	1.35	33.4	43.5
MAX	4.8	1.1	.50	.31	.29	92	37	77	37	5.7	257	232
MIN	.42	.47	.31	.19	.19	2.0	2.7	2.1	1.1	.49	.50	4.3
CFSM	.04	.03	.02	.01	.17	.85	.33	.61	.26	.06	1.53	2.00
IN.	.04	.04	.02	.01	.17	.98	.37	.70	.29	.07	1.77	2.23
CAL YR 1976	TOTAL	4844.82	MEAN	13.2	MAX	328	MIN	.31	CFSM	.61	IN	8.27
WTR YR 1977	TOTAL	3921.19	MEAN	10.7	MAX	257	MIN	.19	CFSM	.49	IN	6.69

05523500 SLOUGH CREEK NEAR COLLEGEVILLE, IN

LOCATION.--Lat 40°53'30", long 87°09'17", in SE¼NE¼ sec.12, T.28 N., R.7 W., Jasper County, Hydrologic Unit 07120002, on right bank at downstream side of bridge on State Highway 53, 1.5 miles (2.4 km) south of Collegeville, 2.2 miles (3.5 km) downstream from Bice ditch, 2.9 miles (4.7 km) upstream from Carpenter Creek, and 3.2 miles (5.1 km) upstream from mouth.

DRAINAGE AREA.--83.7 mi² (216.8 km²).

PERIOD OF RECORD.--July 1948 to December 1951, October 1952 to current year. Prior to October 1965, published as Big Slough Creek near Collegeville.

REVISED RECORDS.--WSP 1558: 1955(M), 1956(M), 1957. WSP 2115: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 634.75 ft (193.472 m) above mean sea level. Prior to Aug. 5, 1955, nonrecording gage and Aug. 5, 1955, to Oct. 8, 1958, water-stage recorder at same site at datum 3.00 ft (0.914 m) higher.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--28 years (1948-51, 1952 to current year), 70.0 ft³/s (1.982 m³/s), 11.35 in/yr (288 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,390 ft³/s (67.7 m³/s) Dec. 22, 1967, gage height, 16.88 ft (5.145 m); minimum daily, 0.7 ft³/s (0.020 m³/s) Dec. 20-26, 1963.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 936 ft³/s (26.5 m³/s) Aug. 11, gage height, 11.61 ft (3.539 m); minimum daily, 1.2 ft³/s (0.034 m³/s) Jan. 31, Feb. 1, 2, 3, 6, 7, 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.5	6.0	2.8	2.0	1.2	11	60	6.4	11	8.9	4.3	16
2	3.2	5.5	3.0	2.0	1.2	8.0	150	15	11	7.9	4.3	47
3	3.2	5.2	2.6	2.0	1.2	9.7	110	77	10	7.0	4.2	106
4	3.4	5.0	2.8	1.9	1.3	136	80	91	9.7	6.7	4.2	72
5	6.4	5.2	2.8	1.8	1.3	164	62	246	19	6.3	4.5	51
6	16	5.0	2.9	1.8	1.2	85	50	344	64	6.6	32	34
7	8.6	4.8	2.9	1.7	1.2	42	40	341	31	6.0	39	26
8	5.5	4.7	3.1	1.6	1.2	35	32	240	22	5.7	27	21
9	5.5	4.5	3.0	1.6	1.3	40	27	166	19	6.8	51	18
10	5.2	4.4	3.3	1.5	1.5	30	24	85	16	6.9	348	15
11	4.7	4.2	3.2	1.5	5.0	23	22	53	14	6.3	725	12
12	4.4	4.1	3.1	1.5	20	27	19	42	15	6.3	476	12
13	4.5	4.0	2.9	1.5	40	36	18	36	13	6.8	273	132
14	4.6	4.0	2.7	1.5	30	25	17	33	12	5.8	126	602
15	4.4	4.0	2.5	1.5	20	18	17	29	10	5.4	70	478
16	4.7	4.0	2.3	1.3	12	11	14	26	9.6	5.7	58	528
17	4.9	4.0	2.1	1.4	9.0	12	13	25	9.7	6.0	49	386
18	4.9	4.0	2.1	1.5	8.0	94	12	24	35	5.9	32	342
19	5.3	4.0	2.1	1.5	7.2	80	11	22	31	5.4	23	383
20	5.3	3.9	2.1	1.4	6.5	76	12	22	19	5.1	21	311
21	5.1	3.9	2.1	1.4	6.0	70	11	20	14	5.1	20	219
22	4.9	3.8	2.1	1.4	9.0	61	11	20	11	5.0	20	135
23	5.2	3.4	2.1	1.4	44	97	11	18	10	4.6	19	86
24	6.3	3.5	2.1	1.4	145	124	9.7	16	9.8	4.6	15	78
25	6.0	3.7	2.1	1.4	77	92	8.8	15	9.1	7.5	13	74
26	5.5	4.2	2.0	1.4	42	66	8.2	14	8.5	6.1	12	64
27	5.0	5.6	2.0	1.4	20	40	7.2	13	8.1	5.0	11	52
28	5.0	4.6	2.0	1.4	17	257	7.2	12	8.0	4.7	11	43
29	5.0	3.7	2.0	1.4	---	346	6.9	12	7.7	4.7	19	37
30	6.0	2.7	2.0	1.3	---	150	6.4	12	7.5	4.6	25	46
31	7.0	---	2.0	1.2	---	100	---	11	---	4.5	18	---
TOTAL	169.2	129.6	76.8	47.6	530.3	2365.7	877.4	2106.4	474.7	183.9	2554.5	4426
MEAN	5.46	4.32	2.48	1.54	18.9	76.3	29.2	67.9	15.8	5.93	82.4	148
MAX	16	6.0	3.3	2.0	145	346	150	344	64	8.9	725	602
MIN	3.2	2.7	2.0	1.2	1.2	8.0	6.4	6.4	7.5	4.5	4.2	12
CFSM	.07	.05	.03	.02	.23	.91	.35	.81	.19	.07	.98	1.77
IN.	.08	.06	.03	.02	.24	1.05	.39	.94	.21	.08	1.14	1.97
CAL YR 1976	TOTAL	21368.1	MEAN	58.4	MAX	1600	MIN	2.0	CFSM	.70	IN	9.50
WTR YR 1977	TOTAL	13942.1	MEAN	38.2	MAX	725	MIN	1.2	CFSM	.46	IN	6.20

05524000 CARPENTER CREEK AT EGYPT, IN

LOCATION.--Lat 40°51'58", long 87°12'20", in SE¼SW¼ sec.15, T.28 N., R.7 W., Jasper County, Hydrologic Unit 07120002, on left bank at downstream side of bridge on State Highway 16, 0.5 mile (0.8 km) north of Egypt, 4 miles (6 km) southwest of Collegeville, and at mile 4.0 (6.4 km).

DRAINAGE AREA.--44.8 mi² (116.0 km²).

PERIOD OF RECORD.--July 1948 to December 1951, October 1952 to current year.

REVISED RECORDS.--WSP 1175: 1949(M). WSP 1558: 1955-57. WSP 1728: 1951(M). WSP 2115: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 641.79 ft (195.618 m) above mean sea level. Prior to Sept. 6, 1955, nonrecording gage at same site and datum.

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

AVERAGE DISCHARGE.--28 years, 37.0 ft³/s (1.048 m³/s), 11.22 in/yr (285 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,720 ft³/s (105 m³/s) June 10, 1958, gage height, 11.66 ft (3.554 m); no flow at times during 1953, 1955, 1956, 1959, 1963-66, 1970.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 600 ft³/s (17.0 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Aug. 10	2000	*973 27.6	*10.08 3.072
Sept. 14	0700	745 21.1	9.83 2.996

Minimum daily discharge, 0.12 ft³/s (0.003 m³/s) Dec. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.41	.97	.42	.20	.16	7.0	34	5.0	4.5	2.4	.65	11
2	.42	.75	.40	.18	.16	6.2	69	11	4.3	2.0	.50	53
3	.39	.67	.38	.19	.16	32	69	40	4.0	1.6	.57	204
4	.37	.65	.36	.21	.16	115	50	33	3.5	1.3	.57	91
5	.49	.78	.35	.22	.15	126	40	111	5.8	1.1	1.0	52
6	8.9	.73	.34	.22	.15	64	27	168	10	1.0	73	32
7	3.8	.62	.33	.22	.16	42	22	155	6.4	1.0	55	23
8	1.5	.64	.32	.22	.16	27	19	86	5.4	1.1	46	17
9	1.1	.63	.32	.22	.16	27	18	55	20	4.9	59	16
10	.80	.67	.32	.21	.20	26	17	40	9.2	1.8	279	14
11	.65	.64	.33	.20	1.0	23	15	32	6.7	1.1	533	11
12	.63	.62	.33	.19	10	25	13	26	6.1	3.1	355	11
13	.55	.59	.33	.19	20	24	13	23	5.0	3.3	160	228
14	.52	.62	.32	.18	16	22	12	21	4.5	2.0	83	664
15	.59	.64	.30	.17	10	20	11	18	4.0	1.6	51	414
16	.50	.69	.30	.17	6.0	11	11	15	3.6	2.1	36	390
17	.52	.66	.30	.16	3.9	9.0	10	14	3.5	4.1	28	235
18	.55	.72	.31	.16	3.4	59	10	13	9.0	3.1	18	219
19	.60	.80	.32	.16	3.0	45	9.3	12	7.9	2.2	12	322
20	.87	.80	.33	.16	2.8	42	9.5	11	4.5	1.7	12	189
21	.86	.78	.31	.16	3.2	38	9.2	10	3.5	1.6	12	114
22	.67	.76	.29	.17	8.0	34	9.0	8.8	3.0	1.1	12	80
23	.72	.74	.27	.18	24	47	9.0	7.9	2.9	.86	11	63
24	.89	.74	.26	.18	68	58	8.3	7.4	2.8	.91	7.9	58
25	1.1	.75	.25	.19	26	43	7.6	9.3	2.6	5.5	4.7	49
26	.83	.82	.26	.18	14	36	7.1	9.2	2.2	2.8	5.1	42
27	.71	.98	.26	.18	11	31	6.2	7.3	2.0	1.4	4.5	34
28	.63	.78	.28	.18	8.8	132	6.0	6.7	2.3	.95	3.3	28
29	.61	.60	.21	.17	---	194	5.7	6.2	1.9	.95	14	25
30	.65	.46	.12	.17	---	85	5.1	5.5	1.9	.91	18	24
31	1.1	---	.14	.16	---	48	---	4.9	---	.86	12	---
TOTAL	32.93	21.30	9.36	5.75	240.72	1498.2	552.0	972.2	153.0	60.34	1907.79	3713
MEAN	1.06	.71	.30	.19	8.60	48.3	18.4	31.4	5.10	1.95	61.5	124
MAX	8.9	.98	.42	.22	68	194	69	168	20	5.5	533	664
MIN	.37	.46	.12	.16	.15	6.2	5.1	4.9	1.9	.86	.50	11
CFSM	.02	.02	.007	.004	.19	1.08	.41	.70	.11	.04	1.37	2.77
IN.	.03	.02	.01	.00	.20	1.24	.46	.81	.13	.05	1.58	3.08
CAL YR 1976	TOTAL	10746.50	MEAN	29.4	MAX	568	MIN	.12	CFSM	.66	IN	8.92
WTR YR 1977	TOTAL	9166.59	MEAN	25.1	MAX	664	MIN	.12	CFSM	.56	IN	7.61

05524500 IROQUOIS RIVER NEAR FORESMAN, IN

LOCATION.--Lat 40°52'14", long 87°18'24", in NE¼ sec.15, T.28 N., R.8 W., Newton County, Hydrologic Unit on right bank at downstream side of bridge on State Highway 55, 0.2 mile (0.3 km) north of intersection of State Highways 16 and 55, 0.5 mile (0.8 km) downstream from Mosquito Creek, 0.6 mile (1.0 km) west of Foresman, 3 miles (4 km) east of Brook, and at mile 72.7 (117.0 km).

DRAINAGE AREA.--449 mi² (1,163 km²).

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WSP 1338: 1953. WSP 1438: 1955. WSP 1508: 1956. WSP 2115: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 624.00 ft (190.195 m) above mean sea level. Prior to Sept. 7, 1955, nonrecording gage 2.5 miles (4.0 km) upstream at datum 3.54 ft (1.079 m) higher.

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

AVERAGE DISCHARGE.--28 years, 366 ft³/s (10.37 m³/s), 11.07 in/yr (281 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,930 ft³/s (168 m³/s) June 14, 1958, gage height, 24.42 ft (7.443 m); minimum daily, 6.3 ft³/s (0.18 m³/s) Sept. 10, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,580 ft³/s (44.7 m³/s) Mar. 30, gage height, 14.75 ft (4.496 m); minimum daily, 22 ft³/s (0.62 m³/s) Jan. 19-22, Feb. 5-9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	52	58	65	33	24	391	1490	203	95	107	33	116
2	49	56	60	32	23	300	1390	226	91	122	30	285
3	46	53	55	31	23	266	1320	371	84	87	26	379
4	46	51	52	31	23	345	1200	490	76	70	26	365
5	47	50	49	30	22	690	1060	634	108	58	28	286
6	158	53	48	31	22	812	895	928	221	48	62	254
7	255	52	47	31	22	768	750	1080	187	42	172	202
8	207	50	46	32	22	663	613	1120	143	40	124	154
9	145	47	46	32	22	552	504	974	135	45	159	126
10	113	49	46	32	24	478	449	802	120	49	455	110
11	94	51	47	30	26	427	408	611	110	44	1180	95
12	83	49	48	29	45	375	366	448	139	42	1350	89
13	78	45	46	28	140	403	336	348	129	60	1200	260
14	71	43	45	27	250	456	316	297	109	64	867	838
15	66	42	43	26	280	451	311	264	94	47	531	1130
16	62	44	42	25	260	376	307	238	83	41	275	1330
17	58	48	42	24	246	302	293	220	80	46	183	1330
18	54	47	43	23	203	420	282	210	224	49	142	1240
19	51	49	45	22	178	596	271	194	363	43	109	1270
20	53	46	47	22	180	633	263	186	247	37	96	1220
21	54	45	43	22	189	646	260	175	148	33	94	1040
22	52	42	41	22	183	631	259	169	103	33	102	819
23	51	40	39	23	224	640	261	157	87	34	100	614
24	52	34	38	24	469	706	256	149	80	32	85	454
25	53	40	37	25	642	744	246	150	76	51	73	386
26	53	48	37	27	674	724	237	143	64	86	63	343
27	50	77	37	26	644	667	224	128	58	63	58	296
28	47	116	38	25	528	805	209	117	55	43	56	257
29	45	89	38	25	---	1290	211	115	51	36	90	227
30	46	73	35	24	---	1540	210	107	53	37	120	215
31	53	---	34	24	---	1560	---	101	---	36	102	---
TOTAL	2344	1587	1379	838	5588	19657	15197	11355	3613	1625	7991	15730
MEAN	75.6	52.9	44.5	27.0	200	634	507	366	120	52.4	258	524
MAX	255	116	65	33	674	1560	1490	1120	363	122	1350	1330
MIN	45	34	34	22	22	266	209	101	51	32	26	89
CFSM	.17	.12	.10	.06	.45	1.41	1.13	.82	.27	.12	.58	1.17
IN.	.19	.13	.11	.07	.46	1.63	1.26	.94	.30	.13	.66	1.30
CAL YR 1976	TOTAL	136916	MEAN 374	MAX 2910	MIN 21	CFSM .83	IN 11.34					
WTR YR 1977	TOTAL	86904	MEAN 238	MAX 1560	MIN 22	CFSM .53	IN 7.20					

ILLINOIS RIVER BASIN

05524500 IROQUOIS RIVER NEAR FORESMAN, IN.--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

SEDIMENT DISCHARGE: July 1968 to current year (partial-record station).

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	SUS- PENDE SEDI- MENT (MG/L)	SUS- PENDE SEDI- MENT DIS- CHARGE (T/DAY)	DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CFS)	TEMPER- ATURE (DEG C)	SUS- PENDE SEDI- MENT (MG/L)	SUS- PENDE SEDI- MENT DIS- CHARGE (T/DAY)
OCT 20...	1035	53	7.0	12	1.7	JUN 15...	1025	95	18.0	71	18
NOV 23...	1020	40	.5	16	1.7	JUL 14...	1305	62	--	106	17
APR 06...	1700	737	6.0	12	23	AUG 26...	0855	64	--	87	15
MAY 04...	1555	504	--	48	65						

05525000 IROQUOIS RIVER AT IROQUOIS, IL

LOCATION.--Lat 40°49'25", long 87°34'55", in SE¼ sec.15, T.27 N., R.11 W., Iroquois County, Hydrologic Unit 07120002, on left bank at upstream side of bridge on U.S. Highway 52 in Iroquois, 500 ft (152 m) upstream from Penn Central bridge and 4.5 mi (7.2 km) downstream from Indiana-Illinois State line.

DRAINAGE AREA.--686 mi² (1,777 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 614.34 ft (187.251 m) above mean sea level. Prior to Aug. 5, 1945, nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter periods, which are poor. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--33 years, 531 ft³/s (15.04 m³/s), 10.51 in/yr (267 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,400 ft³/s (295 m³/s) June 13, 1958, gage height, 26.31 ft (8.019 m); minimum, 5.2 ft³/s (0.15 m³/s) Sept. 13, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,280 ft³/s (64.6 m³/s) Aug. 12, gage height, 15.37 ft (4.685 m); minimum daily, 22 ft³/s (0.62 m³/s) Jan. 16-20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	57	55	62	35	23	570	1820	198	131	90	39	225
2	50	61	60	35	23	446	1750	218	123	123	44	398
3	47	63	56	35	24	385	1640	346	113	126	38	577
4	42	58	54	35	25	488	1500	679	102	97	34	616
5	41	55	52	33	25	980	1360	1190	98	79	31	527
6	74	55	52	32	25	1200	1180	1630	152	67	95	435
7	180	54	52	30	25	1040	993	1760	242	55	283	371
8	232	53	52	28	25	845	823	1720	215	47	278	296
9	190	51	52	25	25	718	667	1580	187	87	292	236
10	141	52	54	25	25	614	563	1380	163	76	1100	194
11	114	52	54	24	27	536	501	1120	144	62	2200	164
12	96	52	54	23	37	495	448	866	132	55	2260	144
13	87	48	54	23	90	519	405	662	148	56	2110	451
14	82	45	52	23	150	549	376	538	141	72	1800	1520
15	77	44	50	23	270	542	355	461	121	79	1350	1790
16	69	45	54	22	300	486	346	403	102	64	856	2050
17	64	47	58	22	270	414	334	359	108	58	543	2070
18	62	48	60	22	250	491	318	329	109	60	402	2030
19	59	51	64	22	240	700	303	306	312	62	322	2130
20	56	50	66	22	230	787	292	285	359	56	271	2010
21	57	47	66	23	245	830	291	268	251	48	232	1810
22	58	48	56	23	270	839	285	250	164	44	266	1560
23	58	45	52	24	330	862	275	231	120	43	257	1270
24	57	42	48	24	700	976	272	218	112	43	218	996
25	57	50	45	24	900	998	263	276	90	51	174	788
26	57	60	45	24	940	971	251	249	83	66	143	675
27	57	86	45	23	900	925	238	211	72	99	123	587
28	55	90	42	23	735	1180	222	186	65	84	110	504
29	52	75	45	23	---	1660	202	166	63	62	157	469
30	50	65	37	23	---	1830	199	155	62	51	268	402
31	52	---	35	23	---	1870	---	142	---	47	261	---
TOTAL	2430	1647	1628	796	7129	25746	18472	18382	4284	2109	16557	27295
MEAN	78.4	54.9	52.5	25.7	255	831	616	593	143	68.0	534	910
MAX	232	90	66	35	940	1870	1820	1760	359	126	2260	2130
MIN	41	42	35	22	23	385	199	142	62	43	31	144
CFSM	.11	.08	.08	.04	.37	1.21	.90	.86	.21	.10	.78	1.33
IN.	.13	.09	.09	.04	.39	1.40	1.00	1.00	.23	.11	.90	1.48
CAL YR 1976	TOTAL	190885	MEAN 522	MAX 3850	MIN 25	CFSM .76	IN 10.35					
WTR YR 1977	TOTAL	126475	MEAN 347	MAX 2260	MIN 22	CFSM .51	IN 6.86					

ILLINOIS RIVER BASIN

05536190 HART DITCH AT MUNSTER, IN

LOCATION.--Lat 41°33'40", long 87°28'50", in SE¼ sec.20, T.36 N., R.9 W., Lake County, Hydrologic Unit 07120003, on left bank at city limits of Munster, 0.2 mile (0.3 km) downstream from Ridge Road, and 0.4 mile (0.6 km) upstream from mouth.

DRAINAGE AREA.--70.7 mi² (183.1 km²).

PERIOD OF RECORD.--September 1942 to current year.

REVISED RECORDS.--WRD Ind. 1972: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 591.27 ft (180.219 m) above mean sea level (levels by State of Indiana, Department of Natural Resources). Since Sept. 11, 1959, auxiliary water-stage recorder 1,200 ft (366 m) upstream from base gage, at same datum.

REMARKS.--Records good.

AVERAGE DISCHARGE.--35 years, 58.4 ft³/s (1.654 m³/s), 11.23 in/yr (285 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,670 ft³/s (75.6 m³/s) Apr. 28, 1959; maximum gage height, 7.83 ft (2.387 m) Oct. 11, 1954; minimum daily discharge, 1.6 ft³/s (0.045 m³/s) Dec. 24-26, 31, 1963, Jan. 1, 2, Sept. 4-9, 14-17, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 800 ft³/s (22.7 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Sept. 18	0500	*1200 34.0	*4.77 1.454

Minimum daily discharge, 3.1 ft³/s (0.088 m³/s) July 28, 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	7.8	7.8	4.0	3.9	30	72	14	5.5	77	3.6	197
2	9.6	7.8	7.0	4.0	4.0	29	124	18	7.0	33	3.6	111
3	7.8	6.2	7.0	4.0	4.2	40	124	13	7.0	18	4.2	42
4	7.0	6.2	6.2	4.0	4.1	103	84	38	7.0	12	7.0	28
5	33	9.6	6.2	4.0	4.0	149	100	135	26	9.6	7.8	23
6	56	6.2	7.0	4.0	3.8	66	84	84	7.8	7.8	14	29
7	22	5.5	7.8	4.0	4.0	56	56	66	6.2	7.8	12	14
8	10	6.2	7.0	4.0	4.5	46	46	42	10	9.6	45	14
9	7.0	7.8	7.0	4.0	6.0	46	38	32	6.2	8.7	12	9.6
10	6.2	7.8	9.6	3.8	20	43	36	24	5.5	7.8	24	7.8
11	5.5	7.0	7.0	3.7	51	38	34	20	67	9.6	10	7.0
12	5.5	7.0	6.2	3.6	67	72	32	18	19	29	7.8	17
13	4.8	7.8	5.5	3.5	95	103	29	16	9.6	10	6.2	75
14	4.2	8.7	4.8	3.5	64	70	25	16	7.8	7.0	6.2	56
15	4.2	7.0	5.5	3.5	37	52	23	14	7.0	5.5	5.5	103
16	4.2	7.8	6.2	3.5	34	38	19	13	7.0	6.2	10	108
17	26	8.7	5.5	3.5	30	30	18	11	11	7.0	8.7	56
18	9.6	7.0	5.5	3.5	28	88	19	11	16	8.7	7.0	808
19	7.8	6.2	6.2	3.5	26	81	19	10	10	6.2	6.2	360
20	7.0	7.0	10	3.5	25	81	24	8.7	7.0	4.2	6.2	140
21	5.5	7.8	7.8	3.7	24	103	25	7.0	6.2	4.2	28	90
22	5.5	15	5.5	3.8	23	129	23	6.2	6.2	4.2	12	66
23	6.2	17	4.8	4.0	111	155	20	11	4.8	3.6	7.0	56
24	6.2	17	4.5	4.0	241	135	19	12	4.8	4.8	6.2	60
25	6.2	16	4.3	4.0	127	88	24	7.8	4.8	4.2	4.8	50
26	7.0	44	4.2	4.0	70	64	19	8.7	4.2	3.6	6.2	49
27	9.6	43	4.1	3.8	48	54	16	8.7	3.6	3.6	7.0	36
28	5.5	27	4.0	3.7	42	160	20	6.2	6.2	3.1	35	33
29	4.8	14	4.0	3.6	---	381	16	6.2	4.2	4.8	30	30
30	16	9.6	4.0	3.5	---	208	15	6.2	157	3.1	15	28
31	10	---	4.0	3.7	---	111	---	5.5	---	5.5	8.7	---
TOTAL	329.9	355.7	186.2	116.9	1201.5	2849	1203	689.2	451.6	329.4	366.9	2703.4
MEAN	10.6	11.9	6.01	3.77	42.9	91.9	40.1	22.2	15.1	10.6	11.8	90.1
MAX	56	44	10	4.0	241	381	124	135	157	77	45	808
MIN	4.2	5.5	4.0	3.5	3.8	29	15	5.5	3.6	3.1	3.6	7.0
CFSM	.15	.17	.09	.05	.61	1.30	.57	.31	.21	.15	.17	1.27
IN.	.17	.19	.10	.06	.63	1.50	.63	.36	.24	.17	.19	1.42
CAL YR 1976	TOTAL	22660.8	MEAN	61.9	MAX	1200	MIN	4.0	CFSM	.88	IN	11.92
WTR YR 1977	TOTAL	10782.7	MEAN	29.5	MAX	808	MIN	3.1	CFSM	.42	IN	5.67

05536195 LITTLE CALUMET RIVER AT MUNSTER, IN

LOCATION.--Lat 41°34'07", long 87°31'18", in SE¼NW¼ sec.13, T.36 N., R.10 W., Lake County, Hydrologic Unit 07120003, on left bank 200 ft (61 m) upstream from Hohman Street bridge at north city limits of Munster, 0.4 mile (0.6 km) upstream from Indiana-Illinois State line, and 4.6 miles (7.4 km) upstream from mouth of Thorn Creek.

DRAINAGE AREA.--90.0 mi² (233 km²). During times of floods on Deep River, flow may enter basin from eastern portion of Little Calumet River basin; or during times of floods on Hart ditch, flow may leave the basin and enter eastern portion of the Little Calumet River basin.

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

GAGE.--Water-stage recorder. Datum of gage is 580.72 ft (177.003 m) above mean sea level.

REMARKS.--Records good except those for winter periods and no gage-height record, Jan. 20 to Feb. 22, which are fair. Flow from eastern portion of Little Calumet River basin is diverted to Lake Michigan by Burns ditch.

AVERAGE DISCHARGE.--19 years, 69.2 ft³/s (1.960 m³/s), 10.45 in/yr (265 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,510 ft³/s (42.8 m³/s) Apr. 28, 1959, gage height, 13.67 ft (4.167 m); maximum gage height, 14.43 ft (4.398 m) Dec. 25, 1965; minimum daily discharge, 1.9 ft³/s (0.054 m³/s) Aug. 20, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 642 ft³/s (18.2 m³/s) Sept. 19, gage height, 11.23 ft (3.423 m); minimum daily, 6.2 ft³/s (0.18 m³/s) Aug. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	22	16	8.7	7.5	46	126	22	8.1	173	6.6	349
2	12	18	15	8.8	7.8	38	158	32	8.4	80	6.2	322
3	11	15	14	8.9	8.0	40	147	25	8.2	47	6.6	117
4	10	13	14	9.0	8.0	100	125	37	8.1	33	12	62
5	22	20	13	9.2	8.0	150	136	148	42	28	10	84
6	92	17	14	9.2	8.0	100	120	113	16	23	18	56
7	40	17	16	9.1	7.5	70	97	87	12	21	14	44
8	25	15	15	8.8	7.2	56	82	64	14	18	80	36
9	18	17	12	8.4	7.2	60	68	49	14	27	25	31
10	15	17	12	8.0	10	56	59	37	9.8	19	36	28
11	14	16	14	7.4	30	54	54	30	118	21	21	24
12	13	16	12	7.2	80	140	48	25	44	58	15	27
13	12	15	11	7.0	100	160	43	21	28	27	12	129
14	10	16	11	7.0	70	130	41	19	23	18	10	91
15	11	14	11	7.0	48	90	37	17	19	14	7.9	162
16	9.8	17	11	7.0	44	70	29	16	17	12	12	180
17	24	18	10	7.0	39	52	26	15	16	11	10	113
18	27	14	10	7.0	36	104	24	14	33	14	9.4	550
19	22	12	10	7.0	33	101	25	13	18	12	8.6	609
20	18	12	14	7.0	32	98	29	14	14	9.6	7.5	416
21	16	11	16	7.2	30	114	34	11	12	9.6	27	261
22	14	13	14	7.4	30	133	32	10	11	8.8	16	191
23	14	12	12	7.6	88	152	30	14	10	8.2	9.6	152
24	16	12	11	7.8	208	142	28	17	9.6	8.4	8.6	146
25	16	12	11	8.0	152	115	34	11	8.6	7.9	7.7	120
26	16	22	11	8.0	95	93	31	11	8.2	7.5	11	112
27	24	61	10	8.0	70	78	28	10	7.3	7.1	12	92
28	17	34	10	7.5	54	132	31	9.2	10	6.6	34	84
29	14	20	9.5	7.0	---	319	27	8.1	11	7.9	67	74
30	23	18	8.6	7.0	---	253	25	7.9	162	6.6	24	69
31	33	---	8.6	7.3	---	165	---	8.1	---	7.7	21	---
TOTAL	621.8	536	376.7	241.5	1318.2	3411	1774	915.3	720.3	751.9	565.7	4731
MEAN	20.1	17.9	12.2	7.79	47.1	110	59.1	29.5	24.0	24.3	18.2	158
MAX	92	61	16	9.2	208	319	158	148	162	173	80	609
MIN	9.8	11	8.6	7.0	7.2	38	24	7.9	7.3	6.6	6.2	24
CFSM	.22	.20	.14	.09	.52	1.22	.66	.33	.27	.27	.20	1.76
IN.	.26	.22	.16	.10	.54	1.41	.73	.38	.30	.31	.23	1.96
CAL YR 1976	TOTAL	27147.1	MEAN	74.2	MAX	820	MIN	6.9	CFSM	.82	IN	11.22
WTR YR 1977	TOTAL	15963.4	MEAN	43.7	MAX	609	MIN	6.2	CFSM	.49	IN	6.60

ILLINOIS RIVER BASIN

05536290 LITTLE CALUMET RIVER AT SOUTH HOLLAND, IL

LOCATION.--Lat 41°36'05", long 87°34'38", in SW¼SW¼ sec.13, T.36 N., R.14 E., Cook County, Hydrologic Unit 07120003, on right bank at downstream side of bridge on U.S. Highway 6, 0.6 mi (1.0 km) downstream from Thorn Creek, 1.6 mi (2.6 km) east of South Holland, and at mile 21.66 (34.85 km).

DRAINAGE AREA.--205 mi² (531 km²).

PERIOD OF RECORD.--October 1947 to current year. Prior to October 1974, records published with those for streams in the St. Lawrence River basin (WSP 1307, 1727, 1911, 2111, WDR IL 1971-74).

REVISED RECORDS.--WSP 1507: 1950, 1953.

GAGE.--Water-stage recorder. Datum of gage is 575.00 ft (175.260 m) above mean sea level (Illinois Department of Transportation bench mark). Prior to Oct. 27, 1947, nonrecording gage at same site and datum. Nov. 17, 1947, to Nov. 19, 1970, auxiliary water-stage recorder at Dixmoor, 6.1 mi (9.8 km) downstream; prior to Nov. 17, 1947, nonrecording gage at same site read twice daily.

REMARKS.--Records good except those for winter periods, which are poor. Flow from upper Little Calumet River is diverted to Lake Michigan by Burns ditch. Calumet Sag Channel, 8 mi (13 km) below station, diverts the entire flow to the Mississippi River basin. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--30 years, 176 ft³/s (4.984 m³/s), 11.66 in/yr (296 mm/yr).

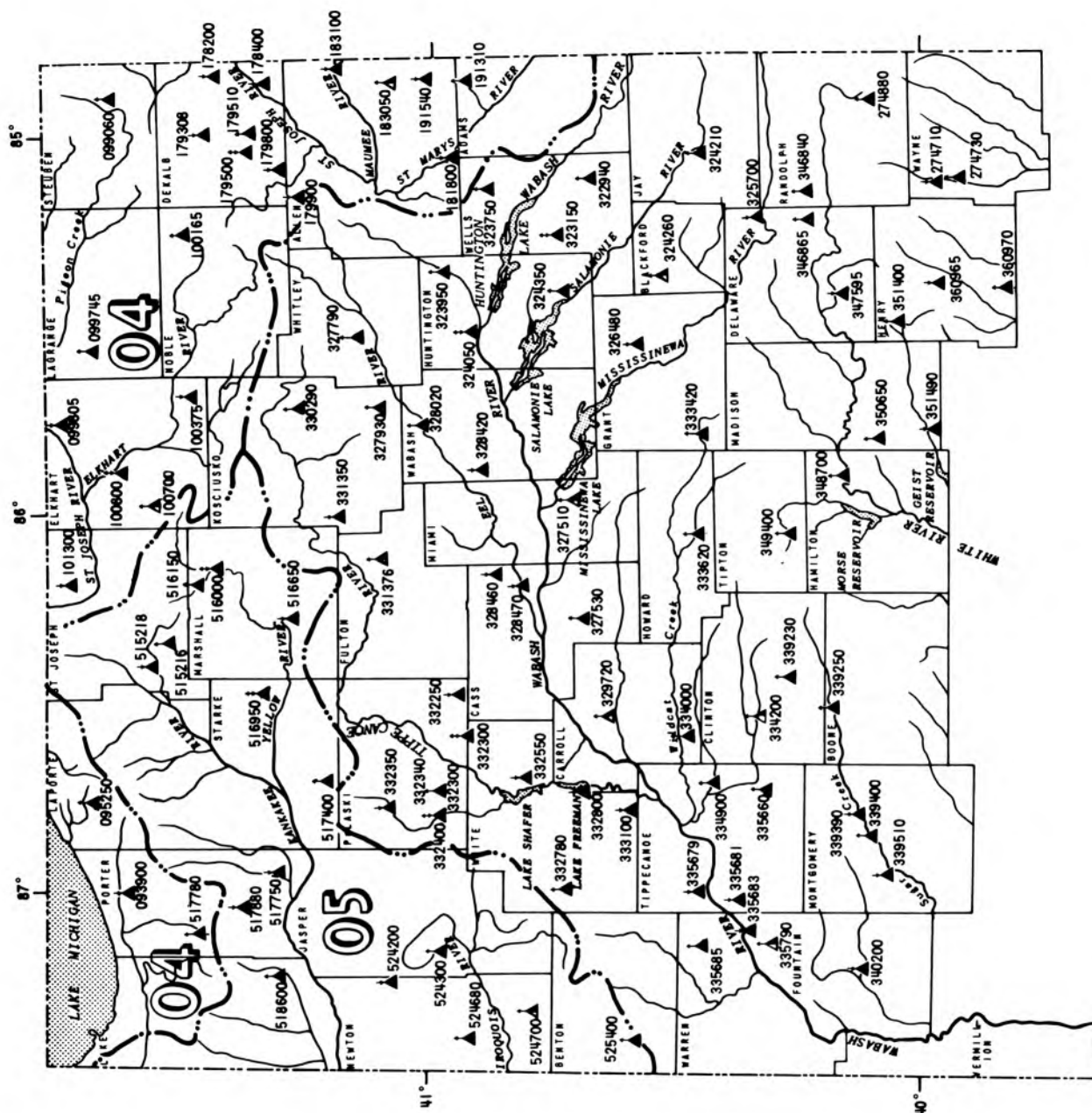
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,440 ft³/s (126 m³/s) July 14, 1957, gage height, 20.11 ft (6.130 m); minimum daily, 7.9 ft³/s (0.22 m³/s) Oct. 6, 1950.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Apr. 6, 1947, reached a stage of 19.24 ft (5.864 m), from floodmarks, discharge, 4,760 ft³/s (135 m³/s).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,050 ft³/s (58.1 m³/s) Sept. 19, gage height, 15.10 ft (4.602 m); minimum daily, 28 ft³/s (0.79 m³/s) Jan. 19, 20, July 25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40	61	52	31	32	103	249	61	43	614	32	1010
2	39	54	49	31	33	85	334	79	44	217	31	1030
3	38	47	48	31	34	87	354	67	43	111	31	355
4	37	44	46	32	32	194	293	65	42	79	47	162
5	51	46	44	33	31	299	320	376	119	63	59	478
6	248	49	41	32	30	200	257	379	88	53	62	246
7	108	50	42	30	29	153	200	209	53	47	70	138
8	68	46	43	30	34	129	164	147	49	60	187	103
9	55	48	42	30	43	131	139	110	48	106	122	86
10	49	48	41	30	56	129	124	93	40	58	126	73
11	46	47	39	29	82	120	111	78	300	45	85	63
12	43	47	38	29	200	278	102	71	175	150	60	63
13	42	46	37	29	250	302	95	66	79	123	48	288
14	38	46	37	29	154	205	97	59	65	62	44	276
15	38	43	38	29	111	161	87	54	57	47	37	410
16	37	40	37	29	95	133	80	49	53	38	44	508
17	53	44	36	29	84	115	71	49	54	37	52	277
18	65	45	35	29	76	255	66	50	130	45	46	1300
19	55	42	38	28	78	233	76	49	72	54	44	1920
20	50	42	45	28	70	224	158	52	55	38	44	1070
21	46	40	42	29	69	277	139	47	50	36	92	534
22	42	41	35	30	68	299	101	41	42	37	112	352
23	42	43	34	31	125	363	86	48	41	35	59	269
24	49	41	33	31	385	306	77	74	44	31	47	266
25	47	40	33	31	309	241	80	52	42	28	44	225
26	49	49	32	30	197	190	78	47	35	29	45	199
27	63	160	32	30	142	161	71	44	36	31	52	161
28	52	89	32	29	121	331	75	44	43	32	81	136
29	45	65	31	29	---	905	74	37	48	34	259	120
30	51	59	31	29	---	620	63	37	319	37	108	112
31	96	---	31	30	---	368	---	38	---	33	69	---
TOTAL	1778	1562	1194	927	2970	7597	4221	2672	2309	2410	2239	12230
MEAN	57.4	52.1	38.5	29.9	106	245	141	86.2	77.0	77.7	72.2	408
MAX	248	160	52	33	385	905	354	379	319	614	259	1920
MIN	33	40	31	28	29	85	63	37	35	28	31	63
CFSM	.28	.25	.19	.15	.52	1.20	.69	.42	.38	.38	.35	1.99
IN.	.32	.28	.22	.17	.54	1.38	.77	.48	.42	.44	.41	2.22
CAL YR 1976	TOTAL	72269	MEAN 197	MAX	2560	MIN 30	CFSM .96	IN 13.11				
WTR YR 1977	TOTAL	42109	MEAN 115	MAX	1920	MIN 28	CFSM .56	IN 7.64				



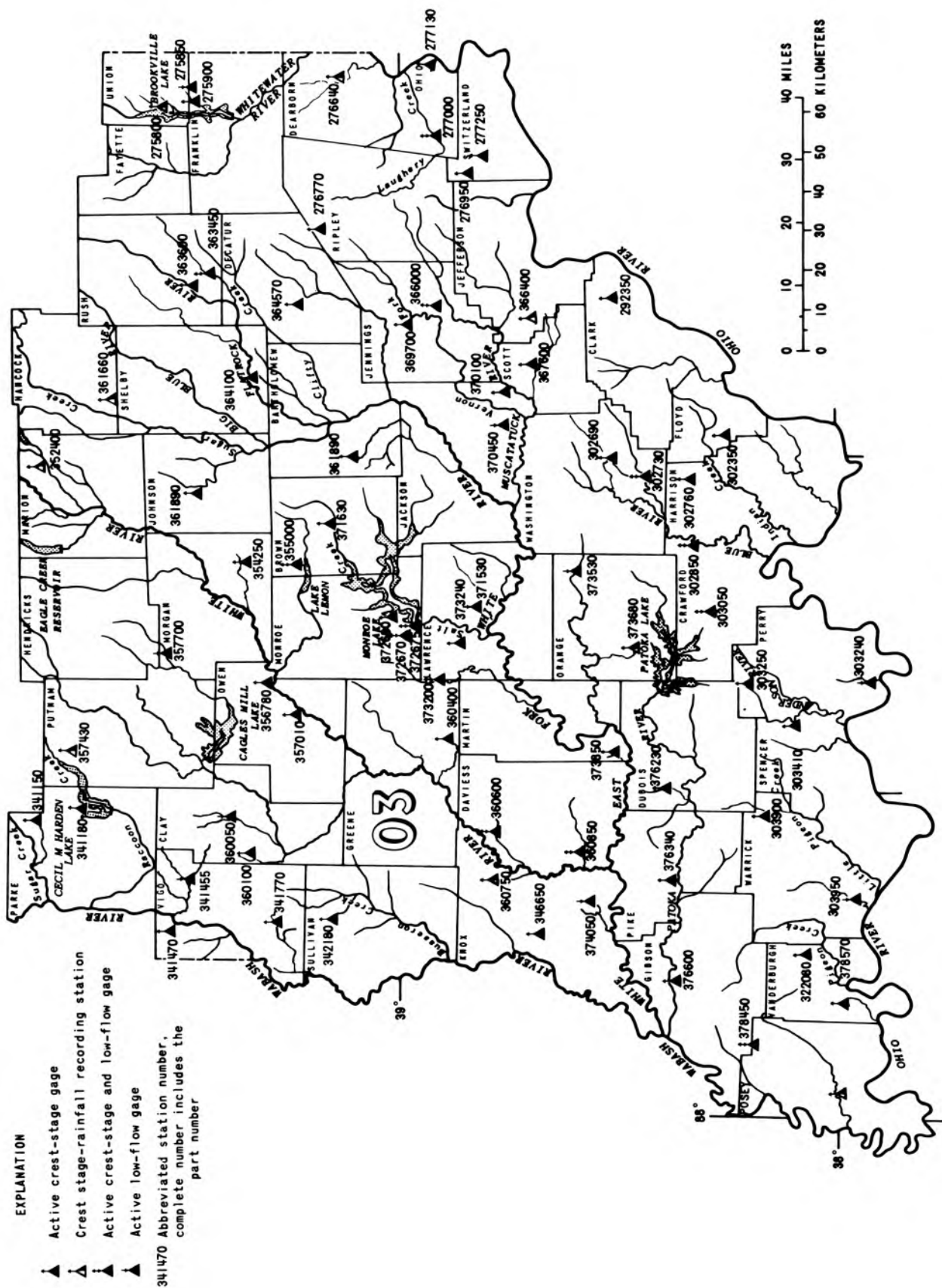


Figure 3.--Location of partial-record stations in Indiana.

As the number of streams on which streamflow information is likely to be desired far exceeds the number of stream-gaging stations feasible to operate at one time, the Geological Survey collects limited streamflow data at sites other than stream-gaging stations. When limited streamflow data are collected on a systematic basis over a period of years for use in hydrologic analyses, the site at which the data are collected is called a partial-record station. Data collected at these partial-record stations are usable in low-flow or flood-flow analyses, depending on the type of data collected. In addition, discharge measurements are made at other sites not included in the partial-record program. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

Low-flow partial-record stations

Measurements of streamflow in the area covered by this report made at low-flow partial-record stations are given in the following table. Most of these measurements were made during periods of base flow when streamflow is primarily from ground-water storage. These measurements, when correlated with the simultaneous discharge of a nearby stream where continuous records are available, will give a picture of the low-flow potentiality of the stream. The column headed "Period of record" shows the water years in which measurements were made at the same, or practically the same, site.

Discharge measurements made at low-flow partial-record stations during Water Year 1977

Discharge measurements made at low-flow partial-record stations during water year 1977					Measurements	
Station No.	Station name	Location	Drainage area (mi ²)	Period of record	Date	Discharge (ft ³ /s)
OHIO RIVER BASIN						
Great Miami River basin						
03275850	Hannah Creek near Roseburg, Ind.	Lat 39°34'58", long 84°56'48", in SW ¹ SW ⁴ sec.25, T.11 N., R.2 W., Union County, at bridge on State Highway 101, 0.5 mile south of Roseburg.	about 25	1976-77	11-03-76 04-19-77	3.0 11
Blue River basin						
03302850	Whiskey Run at Milltown, Ind.	Lat 86°21'08", long 86°17'01", in SE ¹ SW ⁴ sec.10, T.2 S., R.2 E., Crawford County, at county road bridge, 0.25 mile south of State Highway 64, and 0.8 mile north of intersection of Main Street and Station Street in Milltown.	39.8	1975-77	11-05-76 04-20-77 08-09-77	15 17 1.8
Deer Creek basin						
03303240	Deer Creek near Cannelton, Ind.	Lat 37°58'16", long 86°38'39", in SW ¹ SE ¹ SE ¹ sec.20, T.6 S., R.2 W., Perry County, at county road bridge, 6.8 miles northeast of Cannelton.	8.7	1975-77	11-05-76 04-21-77 08-10-77	.33 1.9 .01
Little Pigeon River basin						
03303950	Otter Creek near DeGonia Springs, Ind.	Lat 38°02'24", long 87°12'22", in SE ¹ SE ¹ NE ¹ sec.32, T.5 S., R.7 W., Warrick County, at bridge on State Highway 62, 1.5 miles southwest of DeGonia Springs.	about 30	1974-77	11-04-76 04-25-77 08-10-77	5.2 17 .79
Wabash River basin						
03322980	Six Mile Creek near Bluffton, Ind.	Lat 40°42'24", long 85°08'16", in NE ¹ NE ¹ SW ⁴ sec.14, T.26 N., R.12 E., on Wells County Road 250 South, about 3 miles southeast of Bluffton.	about 30	1977	11-04-76 04-19-77 08-02-77	.81 5.1 .51
03324280	Black Creek near Warren, Ind.	Lat 40°38'55", long 85°26'02", in NW ¹ SE ¹ NE ¹ sec.6, T.25 N., R.10 E., at bridge on Wells County Road 1120 West, about 2 miles south of Warren.	about 47	1977	11-04-76 04-19-77 08-02-77	.54 5.2 .50
03325700	Halfway Creek near Albany, Ind.	Lat 40°19'37", long 85°12'56", in NW ¹ NW ¹ SE ¹ sec.29, T.22 N., R.12 E., Delaware County, at bridge on County Road 15 East, 1.0 mile north of State Highway 67, 1.5 miles northeast of Albany.	about 19	1974-77	11-04-76 04-19-77	.15 1.5
03328420	Paw Paw Creek near Roann, Ind.	Lat 40°53'40", long 85°53'19", in SW ¹ NW ¹ NW ¹ sec.8, T.28 N., R.6 E., Wabash County, at bridge on State Highway 15, 3.5 miles northwest of intersection of State Highways 115 and 15.	about 31	1973-77	11-03-76 04-20-77	.96 6.3
03328460	East Branch Twelve-mile Creek near Twelve Mile, Ind.	Lat 40°50'16", long 86°12'22", on line between secs.28 and 29, T.28 N., R.3 E., Cass County, at bridge on County Road 900 East, 2 miles southeast of Twelve Mile.	about 24	1976-77	11-03-76 04-18-77	3.0 8.9
03328470	Twelvemile Creek near Hoover, Ind.	Lat 40°48'03", long 86°13'22", in NE ¹ SW ⁴ of Little Charlie's Reserve, T.27 N., R.3 E., Cass County, at bridge on County Road 300 North, 1.2 miles west of Hoover.	about 52	1976-77	11-03-76 04-18-77	9.0 21
03331350	Big Yellow Creek near Mentone, Ind.	Lat 41°10'18", long 86°07'16", in NW ¹ NE ¹ sec.6, T.31 N., R.4 E., Fulton County, at bridge on State Highway 25, 4.5 miles west of Mentone.	43.7	1969-77	04-19-77	25
03331750	Quigley Marsh ditch at Winamac, Ind.	Lat 42°31'10", long 86°36'12", on the line between secs.11 and 12, T.30 N., R.2 E., Pulaski County, at the north edge of Winamac at the Indiana Head Motel on U.S. 35 bridge 0.3 mile north of State Highway 14 east of Winamac.	about 12	1977	04-27-77	15

Station No.	Station name	Location	Drainage area (mi ²)	Period of record	Measurements	
					Date	Discharge (ft ³ /s)
OHIO RIVER BASIN--Continued						
Wabash River basin--Continued						
03331800	Mill Creek near Winamac, Ind.	Lat 42°01'00", long 86°34'07", in SW ¹ NE ¹ SE ¹ sec.30, T.30 N., R.1 W., at bridge on Pulaski County Road 175 East, about 3 miles southeast of Winamac.	about 80	1977	11-03-76 04-28-77	19 49
03332400	Honey Creek near Reynolds, Ind.	Lat 40°46'53", long 86°48'52", on line between secs.19 and 24, T.27 N., and on line between R.3 W., and 4 W., at bridge on White County Road 300 East, about 3 miles northwest of Monticello.	about 40	1977	11-03-76 04-27-77	1.5 7.1
03332550	Pike Creek near Norway, Ind.	Lat 40°46'51", long 86°44'42", in NE ¹ NE ¹ NW ¹ sec.22, T.27 N., R.3 W., White County, at bridge on State Highway 39, 2 miles north of U.S. Highway 24.	about 29	1974-77	11-03-76 04-20-77	3.7 13
03333100	Moots Creek near Brookston, Ind.	Lat 40°34'18", long 86°48'42", on line between sec.36, T.25 N., R.4 W., and sec. 31, T.25 N., R.3 W., White County, at bridge on County Road 300 East, 3.5 miles southwest of Brookston.	about 40	1976-77	11-04-76 04-20-77	1.0 7.9
03333800	Little Wildcat Creek near West Middleton, Ind.	Lat 40°26'47", long 86°13'17", in NW ¹ NW ¹ NW ¹ sec.17, T.23 N., R.3 E., at bridge on County Road 500 West, Howard County, about 0.5 mile north of Howard County South Road.	26.0	1977	11-03-76 04-21-77	1.5 6.4
03335679	Indian Creek near Greenhill, Ind.	Lat 40°25'03", long 87°02'31", in SE ¹ SW ¹ SE ¹ sec.24, T.23 N., R.6 W., Tippecanoe County, at bridge on South River Road, 6.5 miles west of West Lafayette.	about 30	1962-77	11-03-76 04-20-77	.17 .39
03335681	Flint Creek near West Point, Ind.	Lat 40°20'25", long 87°04'02", in SE ¹ NW ¹ sec.23, T.22 N., R.6 W., Tippecanoe County, at bridge on County Road 510 South, 1.2 miles west of State Highway 25 in West Point.	about 35	1976-77	11-03-76 04-21-77	.86 4.6
03335683	Kickapoo Creek near Attica, Ind.	Lat 40°19'27", long 87°14'05", in SE ¹ NW ¹ sec.29, T.22 N., R.7 W., Warren County, at bridge on Kickapoo Road, 0.5 mile north of Independence Road.	about 38	1976-77	11-03-76 04-20-77	3.6 4.2
03339390	Lye Creek near Darlington, Ind.	Lat 40°07'40", long 86°48'36", on line between sec.1, T.19 N., R.4 W., and sec.36, T.20 N., R.4 W., Montgomery County, at bridge on County Road 600 North, 3.0 miles northwest of State Highway 47 in Darlington.	about 75	1976-77	11-03-76 04-20-77	2.6 14
03339510	Black Creek near Crawfordsville, Ind.	Lat 40°03'40", long 86°56'58", in SW ¹ NE ¹ sec.26, T.19 N., R.5 W., Montgomery County, at bridge on U.S. Highway 136, 2.0 miles northwest of Crawfordsville.	about 25	1976-77	11-04-76 04-20-77	2.5 7.3
03340200	Mill Creek near Wallace, Ind.	Lat 39°58'03", long 87°10'28", in SW ¹ SW ¹ SE ¹ sec.26, T.18 N., R.7 W., Fountain County, at bridge on State Highway 234, 1.4 miles west of State Highway 341.	about 41	1974-77	11-04-76 04-20-77 08-04-77	3.0 9.7 .62
03341455	Sulphur Creek near Burnett, Ind.	Lat 39°31'26", long 87°17'25", in SW ¹ SW ¹ sec.34, T.13 N., R.8 W., Vigo County, at Triple Barrel Culvert on County Road 15 North, 1.5 miles south of Burnett.	about 25	1976-77	11-05-76 04-20-77	3.9 9.3
03347595	Bell Creek near Yorktown, Ind.	Lat 40°08'43", long 85°27'03", in SW ¹ NE ¹ sec.36, T.20 N., R.9 E., Delaware County, at bridge on Belle Creek Road, 0.2 mile west of County Road 325 West and 3 miles southeast of Yorktown.	about 44	1976-77	11-04-76 04-19-77	3.5 13
03357700	Mud Creek near Little Point, Ind.	Lat 39°34'34", long 86°37'54", on line between secs. 9 and 10, T.13 N., R.2 W., Morgan County, at bridge on County Road 1100 West, 0.8 mile north of Little Point and 1.7 miles south of the Hendricks-Morgan County line.	about 35	1976-77	11-05-76 04-19-77 08-05-77	2.6 11 2.7
03360050	Birch Creek near Ashboro, Ind.	Lat 39°24'14", long 87°06'41", in NE ¹ SE ¹ SE ¹ sec.7, T.11 N., R.6 W., Clay County, at bridge on State Highway 59, 0.5 mile northwest of Ashboro.	about 41	1974-77	11-05-76 04-19-77 08-04-77	4.1 9.2 .76
03360850	Veales Creek near Washington, Ind.	Lat 38°36'15", long 87°11'39", in NE ¹ NE ¹ SW ¹ sec.16, T.2 N., R.7 W., Daviess County, at bridge on State Highway 57, 3.7 miles southwest of Washington.	about 32	1974-77	11-04-76 04-21-77	4.0 3.4
03360965	Duck Creek at Greensboro, Ind.	Lat 39°52'46", long 85°28'03", in SW ¹ NE ¹ sec.35, T.17 N., R.9 E., Henry County, at bridge on County Road 350 South at west edge of Greensboro.	about 25	1976-77	11-04-76 04-19-77	3.2 7.0
03370450	Grassy Fork at Tampico, Ind.	Lat 38°47'48", long 85°57'12", in SE ¹ SW ¹ sec.10, T.4 N., R.5 E., Jackson County, at bridge on State Highway 39, 0.25 mile south of Tampico.	about 12.5	1976-77	11-03-76 04-19-77	8.5 9.7

Station No.	Station name	Location	Drainage area (mi ²)	Period of record	Measurements	
					Date	Discharge (ft ³ /s)
OHIO RIVER BASIN--Continued						
Wabash River basin--Continued						
03371530	Leatherwood Creek at Bedford, Ind.	Lat 38°50'23", long 86°28'38", in SE¼SW¼NW¼ sec.25, T.5 N., R.1 W., Lawrence County, at bridge on county road, 1.6 miles south- east of courthouse in Bedford.	about 39	1972-77	11-03-76 04-19-77 08-03-77	12 24 .69
03373530	Lost River near Orleans, Ind.	Lat 38°38'11", long 86°21'54", in NE¼SE¼ sec.2, T.2 N., R.1 E., Orange County, at bridge on County Road 400 East, 0.61 mile north of State Highway 337.	about 35	1976-77	11-03-76 04-20-77	11 20
03374050	Upper River Deshee near Monroe City, Ind.	Lat 38°37'16", long 87°23'53", in NW¼ of Survey 10, Vincennes Tract, T.2 N., R.9 W., Knox County, at bridge on State Highway 61, 1.9 miles west of inter- section of State Highways 61 and 241.	about 14.9	1976-77	11-04-76 04-25-77	1.3 2.6
STREAMS TRIBUTARY TO LAKE MICHIGAN						
Burns ditch basin						
04093900	Coffee Creek at Chesterton, Ind.	Lat 41°36'24", long 87°03'03", on line be- tween secs.1 and 36, T.37 N., R.6 W., in town of Chesterton, Porter County, at bridge on Porter Avenue, 0.5 mile east of State Highway 49.	about 15	1976-77	11-04-76 04-19-77 08-03-77	11 13 6.7
St. Joseph River basin						
04099805	Little Elkhart River near Middlebury, Ind.	Lat 41°39'15", long 85°40'14", on line between secs.13 and 24, T.37 N., R.7 E., Elkhart County, at bridge on U.S. Highway 20, 2.2 miles southeast of Middlebury.	60.6	1972-77	04-19-77 08-04-77	50 18
04100375	Solomon Creek near Syracuse, Ind.	Lat 41°27'03", long 85°42'43", in NE¼NE¼NE¼ sec.33, T.35 N., R.7 E., Elkhart County, at bridge on U.S. Highway 6, 0.75 mile west of State Highway 13.	about 34	1974-77	04-28-77 08-04-77	34 9.9
04101300	Judy Creek at Roseland, Ind.	Lat 41°43'18", long 86°15'02", in NE¼NW¼ sec.25, T.38 N., R.2 E., St. Joseph County, at bridge on U.S. Highway 31, 150 ft south of Interstates 80 and 90 at the north edge of Roseland.	about 37	1973-77	04-19-77 08-04-77	15 3.3
STREAMS TRIBUTARY TO LAKE ERIE						
Maumee River basin						
04178200	Metcalf ditch near Newville, Ind.	Lat 41°23'10", long 84°50'43", on line between secs.19 and 30, T.34 N., R.15 E., DeKalb County, at bridge on County Road 40, 1.25 miles east of State Highway 1, and 2.5 miles north of Newville.	about 18	1976-77	11-03-76 04-29-77 08-03-77	2.0 22 2.1
04179308	Dibbling ditch near Waterloo, Ind.	Lat 41°27'03", long 85°02'25", in NW¼NW¼ sec.33, T.35 N., R.13 E., DeKalb County, at bridge on County Road 22, 0.8 mile west of County Road 35, and 1.6 miles northwest of Waterloo.	about 18	1976-77	11-03-76 04-28-77 08-03-77	1.1 31 .52
04179800	Little Cedar Creek near Garrett, Ind.	Lat 41°16'08", long 85°08'07", on line between secs.33 and 34, T.33 N., R.12 E., DeKalb County, at bridge on U.S. Highway 27, 6.0 miles south of Garrett.	72.3	1972-77	11-03-76 04-28-77 08-03-77	4.5 68 6.3
04179900	Willow Creek near Huntertown, Ind.	Lat 41°14'37", long 85°10'03", in SE¼NW¼ sec.8, T.32 N., R.12 E., Allen County, at bridge on State Highway 3, about 300 ft north of Shoaf Road, and 1.1 miles north of Huntertown.	about 19	1976-77	11-03-76 04-28-77 08-03-77	.50 16 .62
04181800	Nickelsen Creek near Poe, Ind.	Lat 40°55'36", long 85°03'57", in SE¼NW¼ sec.33, T.29 N., R.13 E., Allen County, at bridge on Winchester Road, 1.0 mile southeast of Poe.	about 25	1976-77	11-04-76 04-19-77 06-24-77 08-02-77	.0 2.1 .0 .0
04183100	Black Creek near Woodburn, Ind.	Lat 41°10'06", long 84°51'41", on line between secs.5 and 8, T.31 N., R.15 E., Allen County, on Ward Road bridge, 0.6 mile west of State Highway 101, and 3.0 miles north of Woodburn.	about 19	1976-77	11-03-76 04-29-77 08-04-77	.18 12 .13
UPPER MISSISSIPPI RIVER BASIN						
Illinois River basin						
05515218	Potato Creek at North Liberty, Ind.	Lat 41°32'28", long 86°25'38", in NE¼NE¼SE¼ sec.29, T.36 N., R.1 E., St. Joseph County, at bridge on State Highway 23, 0.5 mile north of State Highway 4 in North Liberty.	about 27	1973-77	11-04-76 04-19-77 08-04-77	17 16 7.0

					Measurements	
Station No.	Station name	Location	Drainage area (mi ²)	Period of record	Date	Discharge (ft ³ /s)
UPPER MISSISSIPPI RIVER BASIN						
Illinois River basin						
05516650	Wolf Creek near Argos, Ind.	Lat 41°15'40", long 86°18'32", on line between secs.32 and 33, T.32 N., R.2 E., Marshall County, at bridge on Muckshaw Road, 1.6 miles north of State Highway 10, 3.3 miles west of U.S. Highway 31.	about 31	1976-77	04-19-77 08-04-77	18 6.9
05517750	Crooked Creek near Kouts, Ind.	Lat 41°17'20", long 87°00'05", on line between secs.21 and 28, T.33 N., R.5 W., Porter County, at bridge on County Road 1000 South, 0.55 mile east of intersection with County Road 275 East, 2.3 miles southeast of Kouts.	about 78	1976-77	11-04-76 04-20-77 08-03-77	36 55 28
05517880	Wolf Creek near Kouts, Ind.	Lat 41°21'44", long 87°04'59", in SW¼SW¼ sec. 26, T.34 N., R.6 W., Porter County, at culvert on County Road 100 West, 1.1 miles north of intersection with County Road 600 South, 4.2 miles northwest of Kouts.	about 14	1976-77	11-04-76 04-20-77 08-03-77	5.6 6.6 4.0
05524200	Curtis Creek near Parr, Ind.	Lat 41°00'47", long 87°17'52", on line between secs.26 and 35, T.30 N., R.8 W., Newton County, at bridge on State Highway 14, 1.05 miles west of Interstate 65, 5.2 miles west of Parr.	about 12.5	1976-77	08-03-77	4.2
05525300	Mud Creek near Earl Park, Ind.	Lat 40°38'44", long 87°29'05", in NW¼SE¼NW¼ sec.6, T.25 N., R.9 W., at bridge on State Highway 71, Benton County, about 4.5 miles southwest of Earl Park.	about 37	1977	11-04-76 04-27-77	2.0 5.4
05525650	Beaver Creek near Morocco, Ind.	Lat 41°57'57", long 87°27'00", in NW¼SW¼SW¼ sec.15, T.29 N., R.9 W., at bridge over Beaver Creek on U.S. Highway 41, Newton County, about 2 miles north of Morocco.	about 41	1977	04-27-77	22

Discharge measurements made at high-flow, low-flow partial-record stations
during Water Year 1977

Station No.	Station name	Location	Drainage area (mi ²)	Period of record	Measurements	
					Date	Discharge (ft ³ /s)
OHIO RIVER BASIN						
03277000	Laughery Creek near Farmers Retreat Ind.	Lat 38°57'08", long 85°04'15", in NW¼SE¼ sec.2, T.4 N., R.3 W., Ohio County, on right bank, 2.4 miles southeast of Farmers Retreat, and 3.8 miles downstream from Bear Creek.	248	1940-41 ^a 1941-73 ^b 1973-77 ^a	11-03-76 04-19-77	155 58
03302730	South Fork Blue River near Palmyra, Ind.	Lat 38°28'07", long 86°04'55", in NE¼NW¼ sec.4, T.15 N., R.4 E., Washington County, at bridge on Old Palmyra Road, 0.2 mile north of State Highway 135, and 4.7 miles north of the inter- section of U.S. Highway 150 and State Highway 135 in Palmyra.	64.3	1974-77	11-05-76 04-20-77 08-09-77	5.1 20 .82
03303050	Bird Hollow Creek at English, Ind.	Lat 38°21'02", long 86°28'01", in SE¼NE¼NW¼ sec. 13, T.2 S., R.1 W., Crawford County, at bridge on State Highway 37, 0.7 mile north of State Highway 64.	9.31	1974-77	11-05-76 04-20-77 08-09-77	4.5 5.7 .12
03323150	Rock Creek near Rockford, Ind.	Lat 40°44'31", long 85°18'24", in NW¼NE¼ sec.5, T.26 N., R.11 E., Wells County, at bridge on State Highway 124, 1.3 miles south of Rockford, and 3.5 miles east of State Highway 3.	77 ^c	1974-77	11-04-76 04-19-77 08-02-77	2.0 12 3.1
03324050	Clear Creek near Huntington, Ind.	Lat 40°54'57", long 85°32'42", in NW¼NW¼ sec.5, T.28 N., R.9 E., Huntington County, at bridge on State Highway 16, 0.8 mile west of State Highway 5, and 3.4 miles northwest of Huntington.	49 ^c	1974-77	11-03-76 04-20-77 08-05-77	.47 7.1 4.4
03332300	Little Indian Creek near Royal Center, Ind.	Lat 40°52'53", long 86°35'26", in NE¼NW¼ sec.13, T.28 N., R.2 W., White County, on right bank at downstream side of county road bridge, 2.9 miles upstream from mouth, 3.2 miles downstream from Fredericks ditch, and 4.8 miles northwest of Royal Center Post Office.	35	1959-73 ^b 1973-77 ^a	11-03-76 04-18-77	2.4 14
03332400	Big Monon Creek near Francesville, Ind.	Lat 40°59'03", long 86°51'43", in NW¼NE¼ sec.10, T.29 N., R.4 W., Pulaski County, on right bank at downstream side of county road bridge, 1.1 miles east of Francesville, 1.6 miles down- stream from right-bank tributary, and 10.2 miles upstream from mouth.	152	1959-73 ^b 1973-77 ^a	11-03-76 04-27-77	44 107
03334000	Wildcat Creek at Owasco, Ind.	Lat 40°27'50", long 86°38'15", in SE¼SE¼ sec.4, T.23 N., R.2 W., Carroll County, on left bank 500 ft downstream from bridge on State High- way 39, 0.5 mile northwest of Owasco, and 15 miles upstream from South Fork Wildcat Creek.	396	1943-73 ^b 1973-77 ^a	11-04-76 04-21-77	42 143
03349500	Cicero Creek near Arcadia, Ind.	Lat 40°10'34", long 85°59'43", in NW¼NW¼ sec.20, T.20 N., R.5 E., Hamilton County, on left bank at downstream side of bridge, 1.5 miles east of Arcadia, 12.5 miles upstream from Morse Dam, and at mile 17.2.	131	1954-76 ^b 1977 ^a	10-15-76 04-20-77	2.7 35
03349700	Little Cicero Creek near Arcadia, Ind.	Lat 40°10'32", long 86°02'45", in NE¼NW¼ sec.23, T.20 N., R.4 E., Hamilton County, on left bank on downstream side of county road bridge, 0.5 mile downstream from Taylor Creek, 1.3 miles west of Arcadia, 3.9 miles upstream from mouth, and 9.3 miles northwest of Noblesville.	40.4	1955-76 ^b 1977 ^a	10-15-76 04-20-77	.32 8.1
03350100	Hinkle Creek near Cicero, Ind.	Lat 40°06'05", long 86°05'10", in NW¼NW¼ sec.16, T.19 N., R.4 E., Hamilton County, on left bank on downstream side of bridge on county road, 3.7 miles above mouth, 4.0 miles upstream from Morse Reservoir Dam, 4.2 miles southwest of Cicero, and 5.7 miles northwest of Nobles- ville.	18.5	1955-76 ^b 1977 ^a	10-15-76 04-20-77	.58 4.2
03352200	Mud Creek at Indianapolis, Ind.	Lat 39°53'30", long 86°00'57", in SE¼NE¼ sec.25, T.17 N., R.4 E., Marion County, on left bank at downstream side of Lantern Road bridge at Indianapolis, 0.2 mile northeast of intersec- tion of 75th Street and Sargent Road, 1.5 miles upstream from mouth, and 2.0 miles southeast of Castleton.	42.4	1958-76 ^b 1977 ^a	10-01-76 11-08-76 04-20-77 08-12-77	2.4 2.3 19 74
03355000	Bear Creek near Trevlac, Ind.	Lat 39°16'40", long 86°20'45", in NE¼NE¼ sec.30, T.10 N., R.2 E., Brown County, on left bank 15 ft west of Bear Creek Road, 100 ft up- stream from Slippery Elm Shoot Road ford, 1.1 miles northwest of Trevlac, and 1.3 miles up- stream from mouth.	6.94	1952-73 ^b 1974-77 ^a	11-05-76 08-03-77	.33 .00
03360600	Smothers Creek near Plainville, Ind.	Lat 38°48'43", long 87°07'48", in SE¼NW¼ sec.1, T.4 N., R.7 W., Daviess County, at county road bridge, 1.3 miles northeast of State Highway 57 in Plainville.	33 ^c	1974-77	11-04-76 04-22-77 08-12-77	4.6 9.3 123
03363450	Little Flatrock Creek at Milroy, Ind.	Lat 39°29'49", long 85°28'24", in NE¼NW¼ sec.13, T.12 N., R.9 E., Rush County, at bridge on State Highway 244, 800 ft east of State Highway 3, and at west edge of Milroy.	34.8	1974-77	11-03-76 04-19-77 08-11-77	2.2 14 27
03372670	Jackson Creek near Bloomington, Ind.	Lat 39°07'17", long 86°30'50", in SW¼SW¼ sec.15, T.8 N., R.1 W., Monroe County, at bridge on Rhorer Road 0.95 mile east of State Highway 37 on the south side of Bloomington.	4.66	1974-76 ^b 1977 ^a	11-05-76 04-19-77 08-03-77	.14 5.2 .00

Discharge measurements made at high-flow, low-flow partial-record stations
during Water Year 1977--Continued

Station No.	Station name	Location	Drainage area (mi ²)	Period of record	Measurements	
					Date	Discharge (ft ³ /s)
OHIO RIVER BASIN--Continued						
03372675	Jackson Creek at Clear Creek, Ind.	Lat 39°06'01", long 86°32'18", in SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 29, T.8 N., R.1 W., Monroe County, at bridge on Rogers Street, 400 ft north of State Highway 37 and 0.5 mile south of Clear Creek Road in Clear Creek.	10.8	1975-77	11-05-76 04-19-77 08-03-77	.59 6.0 .00
03373200	Indian Creek near Springville, Ind.	Lat 38°57'01", long 86°40'30", in SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.18, T.6 N., R.2 W., Lawrence County, on left bank at downstream side of bridge on State Highway 54, 0.2 mile downstream from Popcorn Creek, and 4 miles northwest of Springville.	60.7	1961-73 ^b 1974-77 ^a	11-03-76 08-03-77	8.01 .67
03378450	Black River near Poseyville, Ind.	Lat 38°12'00", long 87°46'51", on line between SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.5, and SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.6, T.4 S., R.12 W., Posey County, at bridge on State Highway 165, 500 ft south of Gibson-Posey County line, and 2.0 miles north of State Highway 68 in Poseyville.	22.9	1974-77	11-04-76 03-29-77 04-21-77 08-11-77	.56 240 7.2 3.1
STREAMS TRIBUTARY TO LAKE MICHIGAN						
04100800	Yellow Creek at Dunlap, Ind.	Lat 41°38'44", long 85°56'00", in NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 27, T.37 N., R.5 E., Elkhart County, at bridge on U.S. Highway 33, at northwest edge of Dunlap.	33 ^C	1974-77	04-19-77 08-04-77	12 3.8
STREAMS TRIBUTARY TO LAKE ERIE						
04179500	Cedar Creek at Auburn, Ind.	Lat 41°21'57", long 85°03'08", in NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec.32, T.34 N., R.13 E., DeKalb County, on right bank 15 ft downstream from Ninth Street bridge in Auburn, and 2 miles upstream from John Diehl ditch.	87.3	1943-73 ^b 1974-77 ^a	10-05-76 10-13-76 11-03-76 03-28-77 04-28-77 08-03-77	3.7 6.77 11.8 471 131 5.75
ILLINOIS RIVER BASIN						
05516000	Yellow River near Bremen, Ind.	Lat 41°25'11", long 86°10'14", in NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec.10, T.34 N., R.3 E., Marshall County, on left bank at downstream side of bridge on East 4th Road, 0.5 mile downstream from Bunch ditch, 2 miles southwest of Bremen, and 4 miles upstream from Dausman ditch.	135	1955-73 ^b 1974-77 ^a	04-19-77	67.7
05516950	Eagle Creek near Grovertown, Ind.	Lat 41°18'44", long 86°31'27", in SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.16, T.33 N., R.1 W., Starke County, at bridge on State Highway 23, 0.3 mile south of County Road 100 North, and 5.2 miles south of U.S. Highway 30 in Grovertown.	32 ^C	1973-77	11-04-76 04-19-77 08-04-77	17 39 8.0

^aNonrecording

^bRecording

^cAbout

Crest-stage partial-record stations

The following table contains annual maximum discharges for crest-stage stations. A crest-stage gage is a device which will register the peak stage occurring between inspections of the gage. A stage-discharge relation for each gage is developed from discharge measurements made by indirect measurements of peak flow or by current meter. The date of the maximum discharge is not always certain but is usually determined by comparison with nearby continuous-record stations, weather records, or local inquiry. Only the maximum discharge for each water year is given. Information on some lower floods may have been obtained but is not published herein. The years given in the period of record represent water years for which the annual maximum has been determined.

Annual maximum discharge at crest-stage partial-record stations

Station No.	Station name	Location	Drainage area (mi ²)	Period of record	Date	Gage Height (ft)	Discharge (ft ³ /s)
GREAT MIAMI RIVER BASIN							
03274730	Whitewater River tributary near Hagerstown, Ind.	Lat 39°54'38", long 85°05'56", in NE¼SE¼NE¼ sec.23, T.17 N., R.12 E., Wayne County, at culvert on State Highway 38, 0.7 mile east of Hagerstown.	0.20	1973-77	02-26-77	5.48	6
03274880	Greens Fork tributary near Lynn, Ind.	Lat 40°01'14", long 84°56'24", in SW¼SW¼SW¼ sec.11, T.18 N., R.14 E., Randolph County, at culvert on U.S. Highway 27, 1.9 miles south of intersection of U.S. Highways 27 and 36 in Lynn.	1.0	1973-77	04-02-77	5.10	63
03275800	West Run near Liberty Ind.	Lat 39°38'24", long 84°57'18", in SE¼SE¼SW¼ sec.2, T.14 N., R.2 W., Union County, at culvert on State Highway 44, 4.8 miles east of Fayette-Union County Line, 1.1 miles west of Liberty.	.30	1972-77	04-02-77	5.32	30
03275900	Templeton Creek near Fairfield, Ind.	Lat 39°31'20", long 84°56'51", in SW¼NW¼NW¼ sec.24, T.10 N., R.2 W., Franklin County, at culvert on State Highway 101, 0.25 mile south of Franklin-Union County Line.	6.0	1973-77	03-03-77	8.96	230
TANNERS CREEK BASIN							
03276640	Tanners Creek tributary near Lawrenceburg, Ind.	Lat 39°09'18", long 84°52'20", in NW¼SW¼NE¼ sec.27, T.6 N., R.1 W., Dearborn County, at culvert 0.25 mile east of Salt Fork Road on State Highway 1.	.25	1973-77	05-05-77	15.10	270
LAUGHERY CREEK BASIN							
03276770	Laughery Creek tributary near Napoleon, Ind.	Lat 39°13'18", long 85°20'07", in SE¼SE¼SE¼ sec.18, T.9 N., R.11 E., Ripley County, at culvert on U.S. Highway 421, 1.1 miles north of Napoleon.	.10	1973-77	03-04-77	6.63	30
03276950	Uhlman Creek tributary near Avonburg, Ind.	Lat 38°53'33", long 85°11'04", in NW¼NW¼SW¼ sec.10, T.4 N., R.12 E., Switzerland County, at culvert on State Highway 129, 1.5 miles north of State Highway 250 at Pleasant.	.10	1973-77	04-02-77	7.75	63
OHIO RIVER BASIN							
03277030	Ohio River tributary near Rising Sun, Ind.	Lat 38°59'36", long 84°51'16", in SW¼NW¼SW¼ sec.23, T.4 N., R.1 W., Ohio County, at culvert on State Highway 56, 3.3 miles north of State Highway 262 in Rising Sun.	.10	1973-77	05-05-77	9.68	18
INDIAN-KENTUCK RIVER BASIN							
03277250	Indian Creek tributary near Bennington, Ind.	Lat 38°52'25", long 85°07'24", in NE¼NW¼NE¼ sec.5, T.4 N., R.3 W., Switzerland County, at culvert on State Highway 250, 3.7 miles east of State Highway 129 at Pleasant.	.10	1973-77	04-02-77	6.31	54
FOURTEENMILE CREEK BASIN							
03292350	Flag Run tributary near New Washington, Ind.	Lat 38°31'08", long 85°32'29", in NW¼NW¼NE¼ sec.20, T.1 N., R.9 E., Clark County, at culvert on State Highway 62, 3.0 miles south of New Washington.	.20	1973-77	09-30-77	5.87	15
INDIAN CREEK BASIN							
03302350	Georgetown Creek tributary near Georgetown, Ind.	Lat 38°17'30", long 85°56'26", in SW¼NW¼SW¼ sec.35, T.25 N., R.5 E., Floyd County, at culvert on State Highway 64, 1.8 miles east of Georgetown.	.20	1973-77	07-21-73 11-28-74 04-24-75 06-16-76 06-28-77	9.90 ^a 6.02 11.11 ^a 9.83 ^a 11.29	100 55 200 170 192

Annual maximum discharge at crest-stage partial-record stations--Continued

Station No.	Station name	Location	Drainage area (mi ²)	Period of record	Date	Gage Height (ft)	Discharge (ft ³ /s)
BLUE RIVER BASIN							
03302690	Middle Fork Blue River tributary near Farabee, Ind.	Lat 38°32'44", long 86°02'14", in NE $\frac{1}{4}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec.2, T.1 N., R.4 E., Washington County, at culvert on State Highway 60, 3.3 miles west of State Highway 56.	0.10	1972-77	08-12-77	6.15	22
03302760	Licking Creek near Palmyra, Ind.	Lat 38°23'20", long 86°04'29", in SE $\frac{1}{4}$ SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec.28, T.1 S., R.4 E., Harrison County, at culvert on U.S. Highway 150, 2.1 miles east of intersection of U.S. Highway 150 and State Highway 135 in Palmyra.	.75	1973-77	08-22-77	9.39	180
ANDERSON RIVER BASIN							
03303140	Bird Hollow Creek tributary near English, Ind.	Lat 38°21'49", long 86°28'00", in SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec.12, T.2 S., R.1 W., Crawford County, at culvert on State Highway 37, 1.6 miles north of State Highway 64 in English.	.20	1977	04-22-77	8.16	120
03303250	Sigler Creek tributary at Uniontown, Ind.	Lat 38°13'21", long 86°41'50", in NW $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.25, T.3 S., R.3 W., Perry County, at culvert on State Highway 145, 0.1 mile south of State Highway 62 and U.S. Highway 460.	.20	1973-77	08-24-77	6.32	26
CROOKED CREEK BASIN							
03303440 ^b	East Fork Crooked Creek tributary near Fulda, Ind.	Lat 38°05'18", long 86°49'12", in NW $\frac{1}{4}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec.14, T.5 S., R.4 W., Spencer County, at culvert on State Highway 545, 1.6 miles south of Fulda.	.25	1973-77	08-24-77	10.60	182
LITTLE PIGEON CREEK BASIN							
03303900	Little Red Creek tributary near Heilman, Ind.	Lat 38°11'35", long 87°05'22", in NE $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.5, T.4 S., R.6 W., Warrick County, at culvert on State Highway 161, 2.4 miles north of Heilman.	.25	1973-77	08-24-77	6.86	44
PIGEON CREEK BASIN							
03322080	Bluegrass Creek tributary near Daylight, Ind.	Lat 38°06'09", long 87°29'02", in NW $\frac{1}{4}$ SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec.12, T.5 S., R.10 W., Vanderburgh County, at culvert on State Highway 57, 0.9 mile north of Daylight.	.60	1973-77	06-28-77	10.91	240
WABASH RIVER BASIN							
03323750	Yarger ditch at Tocsin, Ind.	Lat 40°49'50", long 85°05'49", in NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec.6, T.27 N., R.13 E., Wells County, at culvert on U.S. Highway 224, 0.31 mile west of intersection of U.S. Highway 224 and State Highway 301.	1.00	1975-77	02-26-77	7.67 ^c	-
03323950	Little River tributary near Roanoke, Ind.	Lat 40°55'48", long 85°23'08", in SE $\frac{1}{4}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec.34, T.29 N., R.10 E., Huntington County, at culvert on U.S. Highway 24, 2.3 miles southwest of Roanoke.	1.0	1972-77	08-10-77	5.70	24
03324210	Blaine Run at Blaine, Ind.	Lat 40°24'15", long 85°03'19", in NW $\frac{1}{4}$ SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec.35, T.23 N., R.13 E., Jay County, at culvert on State Highway 67, 0.1 mile north-east of Blaine.	.40	1972-77	10-05-77	5.86	21
03324260	Salamonie River tributary near Montpelier, Ind.	Lat 40°33'06", long 85°19'25", in NW $\frac{1}{4}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec.7, T.24 N., R.11 E., Blackford County, at culvert on State Highway 18, 2.5 miles east of State Highway 3.	1.26	1972-77	04-02-77	6.31	68
03324350	Brook Creek tributary near Warren, Ind.	Lat 40°44'35", long 85°26'42", in SW $\frac{1}{4}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.31, T.27 N., R.10 E., Huntington County, at culvert on State Highway 5, 1.6 miles northwest of Interstate Highway 69.	.60	1972-77	03-04-77	6.28	37
03327510	Little Pipe Creek tributary near New Santa Fe, Ind.	Lat 40°41'38", long 86°00'34", in SW $\frac{1}{4}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.18, T.26 N., R.5 E., Miami County, at culvert on State Highway 21, 1.8 miles northwest of New Santa Fe.	.40	1973-77	08-10-77	5.55	15
03327530	Minnow Creek tributary near Logansport, Ind.	Lat 40°43'46", long 86°17'48", in NW $\frac{1}{4}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.3, T.26 N., R.2 E., Cass County, at culvert on U.S. Highway 35, 4.0 miles southeast of State Highway 29 in Logansport.	1.13	1972-77	08-10-77	5.51	16
03327790	Eel River tributary near Columbia City, Ind.	Lat 41°07'01", long 85°31'21", T.31 N., R.9 E., Columbia Township, Whitley County, at culvert on State Highway 205, 3.8 miles southwest of U.S. Highway 30 in Columbia City.	.30	1972-77	03-03-77	6.30	19

Annual maximum discharge at crest-stage partial-record stations--Continued

Station No.	Station name	Location	Drainage area (mi ²)	Period of record	Date	Gage Height (ft)	Discharge (ft ³ /s)
WABASH RIVER BASIN--Continued							
03327930	Koontz ditch near Sidney, Ind.	Lat 41°07'28", long 85°44'38", in NW¼NW¼SW¼ sec.22, T.31 N., R.7 E., Kosciusko County, at culvert on State Highway 13, 3.5 miles north of State Highway 14.	2.5	1972-77	06-30-77	9.12	135
03328020	Otter Creek tributary near North Manchester, Ind.	Lat 40°59'59", long 85°49'37", in SW¼SE¼SW¼ sec.35, T.30 N., R.6 E., Wabash County, at culvert on State Highway 114, 1.7 miles west of State Highway 13.	1.0	1972-77	06-30-77	6.58	115
03329720	Robinson Branch near Delphi, Ind.	Lat 40°37'10", long 86°37'01", in NE¼NW¼NW¼ sec.14, T.25 N., R.2 W., Carroll County, at culvert on State Highway 25, 2.0 miles northeast of State Highway 218, 3.9 miles northeast of State Highway 39 in Delphi.	5.49	1972-77	03-17-77	5.31	44
03330290	Shanton ditch near Pierceton, Ind.	Lat 41°12'45", long 85°41'10", in NW¼NE¼SW¼ sec.22, T.32 N., R.7 E., Kosciusko County, at culvert on State Highway 13, 0.6 mile north of U.S. Highway 30.	1.0	1972-77	06-30-77	5.54	12
03331376	McMahan ditch near Rochester, Ind.	Lat 41°06'14", long 86°11'18", in NE¼NE¼SE¼ sec.28, T.31 N., R.3 E., Fulton County, at culvert on State Highway 25, 3.0 miles north of State Highway 14 in Rochester.	2.0	1972-77	03-04-77	6.78 ^c	25
03332340	Weltzin ditch tributary near Francesville, Ind.	Lat 40°48'00", long 86°46'33", in SW¼NW¼NW¼ sec.16, T.29 N., R.3 W., Pulaski County, at culvert on State Highway 39, 6.1 miles south of State Highway 14.	1.0	1973-77	03-28-77	4.95	4
03332780	Big Creek near Wolcott, Ind.	Lat 40°41'26", long 87°02'37", in SE¼NE¼NE¼ sec.24, T.26 N., R.6 W., White County, at culvert on U.S. Highway 231, 4.4 miles south of Wolcott.	1.5	1972-77	09-02-77	8.30	84
03333420	Grassy Fork tributary at Point Isabel, Ind.	Lat 40°25'28", long 85°49'28", in NE¼SE¼SE¼ sec.22, T.23 N., R.6 E., Grant County, at culvert on State Highway 13, 1,100 ft north of State Highway 26 in Point Isabel.	.30	1973-77	03-17-77	5.56	30
03333620	Scott Youngman ditch near Kokomo, Ind.	Lat 40°25'10", long 86°04'39", in NW¼NW¼NE¼ sec.28, T.23 N., R.4 E., Howard County, at culvert on State Highway 26, 2.4 miles west of State Highway 19.	1.0	1973-77	03-17-77	6.13	15
03334200	Prairie Creek tributary near Frankfort, Ind.	Lat 40°15'14", long 86°30'36", in NW¼SE¼NE¼ sec.22, T.21 N., R.1 W., Clinton County, at culvert on State Highways 38 and 39, 1.8 miles south of State Highway 28 in Frankfort.	2.00	1972-77	08-06-77	5.15	17
03334900	South Fork Wildcat Creek tributary near Monitor, Ind.	Lat 40°25'13", long 86°46'22", in NE¼SE¼SE¼ sec.20, T.23 N., R.3 W., Tippecanoe County, at culvert on State Highway 26, 0.4 mile northwest of Monitor Springs.	.40	1972-77	03-05-77	5.36	20
03335660	Ilgenfritz ditch near Monroe, Ind.	Lat 40°20'36", long 86°47'49", in NE¼NW¼NE¼ sec.19, T.22 N., R.3 W., Tippecanoe County, at culvert on U.S. Highway 52, 4.9 miles southeast of State Highway 38.	1.39	1972-77	06-13-76	5.56	37 ^a d
03335685	Big Pine Creek tributary near Pine Village, Ind.	Lat 40°25'24", long 87°15'32", in SE¼NW¼SW¼ sec.19, T.23 N., R.7 W., Warren County, at culvert on State Highway 55, 1.9 miles south of State Highway 26 in Pine Village.	.20	1972-77	09-13-77	7.01	150
03335790	Big Shawnee Creek tributary near Attica, Ind.	Lat 40°16'48", long 87°10'29", in NE¼NW¼SE¼ sec.11, T.21 N., R.7 W., Fountain County, at culvert on State Highway 28, 1.4 miles west of State Highway 341 and 4.3 miles east of Attica.	1.00	1973-77	05-18-77	5.71	70
03339230	Woods ditch near Frankfort, Ind.	Lat 40°13'13", long 86°27'34", in NE¼NE¼SW¼ sec.31, T.21 N., R.1 E., Clinton County, at culvert on State Highway 38, 2.2 miles southeast of State Highway 39.	1.50	1972-77	03-03-77	6.82	30
03339250	Waddle ditch near Pike, Ind.	Lat 40°06'24", long 86°28'48", in NE¼SE¼NW¼ sec.12, T.19 N., R.1 W., Boone County, at culvert on State Highway 39, 4.1 miles north of U.S. Highway 52 in Lebanon.	1.10	1972-77	-	-	d
03339400	Sugar Creek tributary near Garfield, Ind.	Lat 40°05'01", long 86°48'13", in SW¼SE¼NW¼ sec.18, T.19 N., R.3 W., Montgomery County, at culvert on State Highway 47, 1.1 miles northeast of Garfield.	1.2	1972-77	06-30-77	11.17	263
03341150	Demeree Creek tributary near Byron, Ind.	Lat 39°52'39", long 87°05'56", in NW¼SW¼NE¼ sec.33, T.17 N., R.6 W., Parke County, at culvert on State Highway 47, 0.5 mile west of Montgomery County Line.	.20	1973-77	03-12-77	6.06	38
03341180	Little Raccoon Creek tributary near Bellmore, Ind.	Lat 39°44'47", long 87°06'19", in NW¼SW¼NW¼ sec.17, T.15 N., R.6 W., Parke County, at culvert on State Highway 59, 0.8 mile south of intersection of State Highways 36 and 59.	.50	1975-77	06-30-77	7.76	82
03341770	Prairie Creek tributary near Pimento, Ind.	Lat 39°18'49", long 87°23'17", in NE¼SW¼NE¼ sec.15, T.10 N., R.9 W., Vigo County, at culvert on U.S. Highways 41 and 150, 2.8 miles north of State Highway 246.	.50	1974-77	08-29-77	7.00	53

Annual maximum discharge at crest-stage partial-record stations--Continued

Station No.	Station name	Location	Drainage area (mi ²)	Period of record	Date	Gage Height (ft)	Discharge (ft ³ /s)
WABASH RIVER BASIN--Continued							
03342180	Kettle Creek tributary near Shelburn, Ind.	Lat 39°10'36", long 87°22'27", in SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec.26, T.9 N., R.9 W., Sullivan County, at culvert on State Highway 48, 1.0 mile east of U.S. Highways 41 and 150.	0.50	1972-77	02-26-77	6.45	50
03346650	River Deshee tributary near Fritchton, Ind.	Lat 38°40'33", long 87°25'47", in SW $\frac{1}{4}$ survey 29, Vincennes tract, Palmyra Township, Knox County, at culvert on new U.S. Highways 50 and 150, 0.5 mile southwest of Fritchton.	1.2	1973-77	03-28-77	6.89	66
03346840	White River tributary at Parker City, Ind.	Lat 40°11'35", long 85°11'34", in SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec.9, T.20 N., R.12 E., Randolph County, at culvert on State Highway 32, 3.3 miles west of intersection of State Highways 1 and 32 in Farmland.	.60	1972-77	02-26-77	6.20	18
03346865	Mud Creek tributary at Selma, Ind.	Lat 40°11'37", long 85°15'26", in SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.10, T.20 N., R.11 E., Delaware County, at culvert on State Highway 32, 0.25 mile east of County Road 650 East in Selma.	.10	1973-77	-	-	d
03348700	White River tributary near Strawtown, Ind.	Lat 40°06'47", long 85°57'10", in NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec.10, T.19 N., R.5 E., Hamilton County, at culvert on State Highway 37, 0.9 mile south of intersection of State Highway 37 and Strawtown Avenue in Strawtown.	.89	1973-77	02-27-77	6.65	24
03349400	Buscher ditch near Atlanta, Ind.	Lat 40°13'26", long 86°02'30", in NE $\frac{1}{4}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.35, T.21 N., R.4 E., Tipton County, at culvert on State Highway 19, 0.5 mile northwest of the Hamilton-Tipton County Line.	2.50	1972-77	-	-	d
03350650	Stony Creek tributary near Lapel, Ind.	Lat 40°05'18" (corrected), long 85°49'22", in NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec.23, T.19 N., R.6 E., Madison County, at culvert on State Highway 32, 2.0 miles northeast of State Highways 13 and 32 in Lapel.	.60	1973-77	02-26-77	6.50	107
03352400	Blue Creek near Castleton, Ind.	Lat 39°53'23", long 86°02'46", in NW $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.26, T.17 N., R.4 E., Marion County, at culvert on State Highway 100, 0.1 mile south of 75th Street, 1.2 miles south of Castleton.	.95	1972-77	08-07-77	6.34	52
03353668	White Lick Creek tributary near Brownsburg, Ind.	Lat 39°53'54", long 86°23'34", in SE $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.22, T.17 N., R.1 E., Hendricks County, at culvert on State Highway 267, 4.0 miles north of U.S. Highway 136 in Brownsburg.	.20	1972-77	07-08-77	5.72	48
03354250	Sartor ditch tributary near Martinsville, Ind.	Lat 39°25'20", long 86°23'59", in NW $\frac{1}{4}$ SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec.2, T.11 N., R.1 E., Morgan County, at culvert on State Highway 37, 0.3 mile southwest of State Highway 252.	.40	1975-77	06-05-77	10.99	26
03356780	Limestone Creek tributary near Gosport, Ind.	Lat 39°21'12", long 86°40'58", in NE $\frac{1}{4}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec.31, T.11 N., R.2 W., Owen County, at culvert on State Highway 67, 0.9 mile west of Gosport.	.80	1972-77	08-06-77	7.73	250
03357010	White River tributary near Spencer, Ind.	Lat 39°16'09", long 86°46'45", in SE $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.30, T.9 N., R.4 W., Owen County, at culvert on State Highway 67 and U.S. Highway 231, 1.3 miles southwest of State Highway 46 in Spencer.	.20	1973-77	-	-	d
03357430	Owl Creek tributary near Bainbridge, Ind.	Lat 39°45'46", long 86°52'53", in SW $\frac{1}{4}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.5, T.15 N., R.4 W., Putnam County, at culvert on U.S. Highway 36, 3.7 miles west of Bainbridge.	.70	1973-77	08-19-77	9.48	107
03360100	Clear Branch at Cory, Ind.	Lat 39°23'20", long 87°11'58", in SE $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.16, T.11 N., R.7 W., Clay County, at culvert on State Highway 46, 4.9 miles west of State Highway 59.	.60	1973-77	08-07-77	6.08	27
03360400	Doans Creek tributary near Doans, Ind.	Lat 38°55'12", long 86°50'54", in SW $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.27, T.6 N., R.4 W., Greene County, at culvert on State Highway 58 at Doans.	.25	1973-77	03-28-77	5.96	34
03360750	Miller ditch tributary near Bicknell, Ind.	Lat 38°47'08", long 87°18'36", in SE $\frac{1}{4}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec.16, T.4 N., R.8 W., Knox County, at culvert on State Highway 159, 0.4 mile north of State Highway 67 in Bicknell.	.60	1973-77	03-27-77	5.25	33
03360850	Veales Creek tributary at Washington, Ind.	Lat 38°37'16", long 87°11'00", in SW $\frac{1}{4}$ SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec.10, T.2 N., R.7 W., Daviess County, at culvert on State Highway 57, 2.3 miles south of U.S. Highway 50 in Washington.	.25	1973-77	03-27-77	5.55	41
03360970	Buck Creek tributary at Dunreith, Ind.	Lat 39°48'15", long 85°26'34", in NW $\frac{1}{4}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.29, T.16 N., R.10 E., Henry County, at culvert on State Highway 3 at northwest edge of Dunreith.	1.50	1973-77	-	-	d
03361660 ^b	Little Sugar Creek tributary at Carrollton, Ind.	Lat 39°42'22", long 85°49'40", in SW $\frac{1}{4}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec.35, T.15 N., R.6 E., Hancock County, at culvert on U.S. Highway 52, 3.4 miles southeast of New Palestine.	.80	1973-77	03-03-77	5.30	32

Annual maximum discharge at crest-stage partial-record stations--Continued

Station No.	Station name	Location	Drainage area (mi ²)	Period of record	Date	Gage Height (ft)	Discharge (ft ³ /s)
WABASH RIVER BASIN--Continued							
03361890	Gilmore Creek near Bargserville, Ind.	Lat 39°30'44", long 86°08'26", in NE¼SE¼ sec.1, T.12 N., R.3 E., Johnson County, at culvert on State Highway 144, 1.0 mile southeast of State Highway 135 east of Bargserville.	1.0	1973-77	03-03-77	6.44	54
03363050	Wolf Creek tributary near Columbus, Ind.	Lat 39°11'58", long 85°58'34", in SW¼SW¼SE¼ sec.21, T.9 N., R.5 E., Bartholomew County, at culvert on State Highway 46, 2.6 miles west of U.S. Highway 31A and 1.0 mile west of Interstate Highway 65.	1.20	1974-77	04-02-77	7.22	120
03363600	Goddard ditch tributary near Rushville, Ind.	Lat 39°35'22", long 85°31'51", in NE¼NE¼SW¼ sec.9, T.13 N., R.9 E., Rush County, at culvert on State Highway 44, 4.3 miles west of Rushville.	.50	1973-77	04-02-77	6.95	10
03364100	Tough Creek near Norristown, Ind.	Lat 39°22'19", long 85°45'38", in SW¼SW¼NW¼ sec.28, T.11 N., R.7 E., Shelby County, at culvert 0.5 mile north of Norristown.	1.50	1973-77	03-28-77	7.62	120
03364570	Fall Fork Clifty Creek tributary near Horace, Ind.	Lat 39°16'01", long 85°34'30", in SW¼SW¼NW¼ sec.31, T.10 N., R.9 E., Decatur County, at culvert on State Highway 3, 2.8 miles south of State Highway 46, 0.4 mile north of Horace.	1.00	1973-77	04-02-77	6.44	33
03366400	Lewis Creek tributary near Kent, Ind.	Lat 38°44'13", long 85°34'39", in NW¼NE¼NE¼ sec.2, T.3 N., R.8 E., Jefferson County, on State Highway 256, 2.8 miles west of Kent.	.20	1973-77	04-02-77	6.45	76
03367600	Flat Creek tributary at New Frankfort, Ind.	Lat 38°44'18", long 85°42'50", in NE¼SE¼SW¼ sec.35, T.4 N., R.7 E., Scott County, at culvert on State Highway 256, 0.2 mile northwest of State Highway 203.	.30	1973-77	03-04-77	5.56	42
03369700	Sixmile Creek tributary near North Vernon, Ind.	Lat 39°01'55", long 85°38'24", in NW¼SW¼SE¼ sec.21, T.7 N., R.8 E., Jennings County, at culvert on State Highway 3, 1.2 miles north of State Highway 7 in North Vernon.	.50	1973-77	03-04-77	5.99	9
03370100	Blau ditch tributary near Crothersville, Ind.	Lat 38°48'17", long 85°50'25", in SW¼SW¼NE¼ sec.10, T.4 N., R.6 E., Jackson County, at culvert on U.S. Highway 31, 1.4 miles north of Crothersville.	.15	1973-77	05-05-77	5.79	11
03371630	North Fork Salt Creek tributary near Nashville, Ind.	Lat 39°11'38", long 86°12'11", in NE¼NE¼NW¼ sec.28, T.9 N., R.3 E., Brown County, at culvert on State Highway 46, 2.6 miles east of State Highway 135 in Nashville.	.36	1973-77	04-03-77	7.56	46
03372680	Clear Creek tributary near Bloomington, Ind.	Lat 39°04'24", long 86°32'39", in SW¼SW¼NE¼ sec.5, T.7 N., R.1 W., Monroe County, at culvert on State Highway 37, 5.5 miles south of Bloomington.	.40	1972-77	03-28-77	6.81	64
03373240	Spring Creek tributary near Springville, Ind.	Lat 38°54'41", long 86°39'09", in SE¼SW¼NE¼ sec.32, T.6 N., R.2 W., Lawrence County, at culvert on State Highway 58, 6.6 miles northwest of State Highway 37 in Oolitic.	.40	1972-77	03-28-77	5.63	20
03373680	French Lick Creek tributary near French Lick, Ind.	Lat 38°30'08", long 86°36'20", in SW¼NW¼SW¼ sec.23, T.1 N., R.2 W., Orange County, at culvert on State Highway 145, 4.3 miles south of intersection of State Highways 145 and 56 in French Lick.	.30	1973-77	03-28-77	8.00	170
03373850	Slate Creek tributary near Haysville, Ind.	Lat 38°33'30", long 86°54'10", in NE¼SW¼SW¼ sec.31, T.2 N., R.4 W., Martin County, at culvert on U.S. Highway 231, 5.5 miles north of intersection of U.S. Highway 231 and State Highway 56, in Haysville or 8.0 miles south of intersection of U.S. Highways 231, 150, and 50 in Loogootee.	.20	1973-77	08-11-77	6.01	47
03376230	Shiloh Drain near Jasper, Ind.	Lat 38°24'26", long 86°58'47", in NW¼NW¼NW¼ sec.28, T.15 N., R.5 W., Dubois County, at culvert on State Highway 56, at Ireland, 2.8 miles northwest of Jasper.	.60	1973-77	05-06-77	8.86	190
03376340	Patoka River tributary near Glezen, Ind.	Lat 38°23'41", long 87°19'05", in NE¼SE¼SE¼ sec.29, T.1 S., R.8 W., Pike County, at culvert on State Highway 57, 7.9 miles south of intersection of State Highways 61, 56, and 57 in Petersburg.	1.00	1973-77	03-27-77	7.81	164
03376600	Patoka River tributary near Patoka, Ind.	Lat 38°23'08", long 87°35'21", in SE¼SW¼NW¼ sec.36, T.15 N., R.11 W., Gibson County, at culvert on old U.S. Highway 41, 1.2 miles south of Patoka River at Patoka.	.40	1973-77	03-27-77	8.65	90
03378570	Little Creek tributary near Kasson, Ind.	Lat 38°01'55", long 87°40'52", in NE¼SE¼NW¼ sec.6, T.6 S., R.11 W., Vanderburgh County, at culvert on State Highway 66 and U.S. Highway 460, 2.8 miles northwest of Kasson.	.40	1973-77	08-24-77	12.75	360
03378590	Olive Creek tributary near Solitude, Ind.	Lat 38°00'14", long 87°53'57", in NW¼SE¼NW¼ sec.17, T.6 S., R.13 W., Posey County, at culvert on State Highway 69, 0.65 mile south of Solitude.	.31	1973-77	07-29-77	7.62	53

Annual maximum discharge at crest-stage partial-record stations--Continued

Station No.	Station name	Location	Drainage area (mi ²)	Period of record	Date	Gage Height (ft)	Discharge (ft ³ /s)
STREAMS TRIBUTARY TO LAKE MICHIGAN							
04095250	East Branch Trail Creek tributary near Springville, Ind.	Lat 41°41'22", long 86°46'42", in NE ¹ SE ¹ NE ¹ sec.5, T.37 N., R.3 W., LaPorte County, at culvert on U.S. Highway 20, 1.4 miles east of U.S. Highway 35.	0.25	1972-77	03-28-77	5.84	18
04099060	Pigeon Creek tributary near Ellis, Ind.	Lat 41°37'43", long 84°54'56", in NW ¹ NW ¹ NW ¹ sec.34, T.37 N., R.14 E., Steuben County, at culvert on State Highway 1, 0.25 mile south of U.S. Highway 20.	1.00	1972-77	03-28-77	7.16	34
04099745	Truesdale ditch near Shipshewana, Ind.	Lat 41°43'36", long 85°35'38", in NE ¹ NE ¹ NW ¹ sec.27, T.38 N., R.8 E., Lagrange County, at culvert on State Highway 120, 0.6 mile west of State Highway 5.	3.5	1972-77	02-24-77	6.80	28
04100165	Wible Lake inlet near Kendallville, Ind.	Lat 41°29'15", long 85°16'13", in NW ¹ NW ¹ SW ¹ sec.16, T.35 N., R.11 E., Noble County, at culvert on State Highway 3, 1.9 miles north of U.S. Highway 6 in Kendallville.	2.0	1972-77	06-25-77	4.51	40
04100700	Christophel ditch tributary near Wakarusa, Ind.	Lat 41°30'24", long 86°00'07", in NW ¹ NW ¹ NW ¹ sec.7, T.35 N., R.5 E., Elkhart County, at culvert on State Highway 19, 0.1 mile south of State Highway 119, 2.1 miles south of Wakarusa.	2.5	1972-77	03-04-77	9.24	111
MAUMEE RIVER BASIN							
04179510	Cecil Metcalf ditch near Auburn, Ind.	Lat 41°21'55", long 85°01'07", in SW ¹ NE ¹ NW ¹ sec.34, T.34 N., R.13 E., DeKalb County, at culvert on State Highway 8, 2.0 miles east of State Highway 427 in Auburn.	.81	1972-77	06-25-77	8.57	170
04183050	Schumacher ditch near New Haven, Ind.	Lat 41°03'30", long 84°58'31", in SW ¹ SW ¹ NE ¹ sec.7, T.30 N., R.15 E., Allen County, at culvert on State Highway 14, 0.5 mile west of State Highway 101.	1.01	1972-77	02-26-77	7.22	5,9
04191310	Flatrock Creek tributary near Monroeville, Ind.	Lat 40°53'42", long 84°51'42", in NW ¹ SW ¹ SW ¹ sec.8, T.28 N., R.15 E., Adams County, at culvert on State Highway 101, 1.8 miles south of Adams-Allen County Line.	.91	1972-77	02-26-77	6.40	38
ILLINOIS RIVER BASIN							
05515216	Potato Creek tributary near Lakeville, Ind.	Lat 41°32'06", long 86°20'16", on line between secs.30 and 31, T.36 N., R.2 E., St. Joseph County, at culvert on State Highway 4, 3.4 miles west of U.S. Highway 31.	5.0	1975-77	09-18-77	7.85	142
05516150	Walt Kimble ditch near LaPaz, Ind.	Lat 41°26'59", long 86°14'16", in SW ¹ SE ¹ SE ¹ sec.25, T.35 N., R.2 E., Marshall County, at culvert on U.S. Highway 6, 3.8 miles east of U.S. Highway 31.	2.0	1972-77	03-18-77	9.85	205
05517400	West Arm Payne ditch near North Judson, Ind.	Lat 41°12'55", long 86°52'13", in SW ¹ SW ¹ SE ¹ sec.16, T.32 N., R.4 W., Starke County, at bridge on State Highway 10, 1.3 miles east of U.S. Highway 421.	3.0	1973-77	03-29-77	4.95	17
05517780	Sievers Creek tributary near Valparaiso, Ind.	Lat 41°24'41", long 87°08'08", in NE ¹ NE ¹ SW ¹ sec.8, T.34 N., R.6 W., Porter County, at culvert on State Highway 2, 5.7 miles southwest of Valparaiso.	.50	1972-77	03-12-77	6.80	36
05518600	Bryant ditch near Dinwiddie, Ind.	Lat 41°17'22", long 87°18'45", in SE ¹ SW ¹ SW ¹ sec.23, T.33 N., R.8 W., Lake County, at bridge on State Highway 2, 0.6 mile west of Interstate Highway 65.	4.0	1972-77	03-20-77	4.83	58
05524300	Yeoman ditch tributary near Rensselaer, Ind.	Lat 40°56'27", long 87°14'10", in SW ¹ SW ¹ SW ¹ sec.21, T.29 N., R.7 W., Jasper County, at culvert on State Highway 114, 4.5 miles west of U.S. Highway 231 in Rensselaer.	.75	1972-77	06-18-77	9.20	220
05524650	Clark ditch tributary near Morocco, Ind.	Lat 40°54'16", long 87°26'04", in SW ¹ SE ¹ NW ¹ sec.3, T.28 N., R.9 W., Newton County, at culvert on U.S. Highway 41, 2.5 miles south of State Highway 114.	1.00	1972-77	08-10-77	7.80	56
05524700	Talley ditch near Kentland, Ind.	Lat 40°46'02", long 87°24'31", in SW ¹ SW ¹ SE ¹ sec.23, T.27 N., R.9 W., Newton County, at culvert on U.S. Highway 24, 1.6 miles east of U.S. Highways 41 and 52.	4.00	1972-77	08-10-77	7.38	245
05525400	Gretencord ditch near Free, Ind.	Lat 40°37'08", long 87°26'44", in NW ¹ NW ¹ NE ¹ sec.16, T.25 N., R.9 W., Benton County, at culvert on State Highway 18, 2.4 miles east of State Highway 71.	1.00	1972-77	08-13-77	6.55	45

^aRevised discharge^bRevised station number^cResult of backwater^dNo peak recorded

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Annual maximum stage and discharge at high-flow, low-flow partial-record stations
during Water Year 1977

Station No.	Station name	Date	Gage Height (feet)	Discharge (ft ³ /s)
03277000	Laughery Creek near Farmers Retreat, Ind.	07-01-77	9.45	6,120
03302730	South Fork Blue River near Palmyra, Ind.	03-04-77	14.57	1,370
03303050	Bird Hollow Creek at English, Ind.	04-22-77	15.20	3,300
03323150	Rock Creek near Rockford, Ind.	03-04-77	12.14	1,120
03324050	Clear Creek near Huntington, Ind.	03-04-77	10.68	130
03332300	Little Indian Creek near Royal Center, Ind.	09-14-77	5.05	193
03332400	Big Monon Creek near Francesville, Ind.	03-29-77	12.00	1,260
03334000	Wildcat Creek at Owasco, Ind.	03-29-77	--	1,200 ^a
03349500	Cicero Creek near Arcadia, Ind.	03-29-77	8.28	1,370
03349700	Little Cicero Creek near Arcadia, Ind.	03-29-77	4.90	206
03350100	Hinkle Creek near Cicero, Ind.	03-29-77	3.98	685
03352200	Mud Creek near Indianapolis, Ind.	02-27-77	5.29	317
03355000	Bear Creek near Trevlac, Ind.	04-02-77	5.47	691
03360600	Smothers Creek near Plainville, Ind.	03-29-77	15.61	850
03363450	Little Flatrock River at Milroy, Ind. ^b	04-04-77	11.45	1,060
03372670	Jackson Creek near Bloomington, Ind.			
03372675	Jackson Creek at Clear Creek, Ind. ^b			
03373200	Indian Creek near Springville, Ind.	03-03-77	7.34	2,100
03378450	Black River near Poseyville, Ind.	03-28-77	14.35	2,300
04100800	Yellow Creek at Dunlap, Ind.	03-29-77	11.67	460
04179500	Cedar Creek at Auburn, Ind.	03-05-77	7.79	808
05516000	Yellow River near Bremen, Ind.	03-30-77	13.08	1,170
05516950	Eagle Creek near Grovertown, Ind.	--	-- ^c	--

a About.

b Not enough data for publishing peaks in 1977.

c Peak did not reach bottom of gage.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES
Measurements at miscellaneous sites

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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 1977
(and some made in 1975 and 1976 water years)

Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Date	Discharge (ft ³ /s)
OHIO RIVER BASIN						
South Hogan Creek	Hogan Creek	Lat 39°04'55", long 85°07'45", in NW¼SW¼ sec.6, T.7 N., R.13 E., Ripley County, at State Highway 101, 200 ft above unnamed tributary, and 2.8 miles south of Milan.			05/25/77	0.32
South Hogan Creek	Hogan Creek	Lat 39°02'38", long 85°03'20", in NW¼NW¼ sec.1, T.5 N., R.3 W., Dearborn County, 150 ft above mouth of Whitaker Creek, 1.8 miles north of Dillsboro.			05/25/77	1.4
Whitaker Creek	South Hogan	Lat 39°02'37", long 85°03'19", in NE¼NW¼ sec.1, T.5 N., R.3 W., Dearborn County, at mouth, 1.8 miles north of Dillsboro.			05/25/77	.14
Blue River	Eel River	Lat 41°10'52", long 85°27'24", in SW¼ sec.35, T.32 N., R.9 E., Whitley County, at county highway bridge, 0.6 mile east of State Highway 9, 2.2 miles northeast of Columbia City, and 2.5 miles downstream from Thorn Creek.	61.0	^a 1961-67	09/09/76 09/14/76 09/21/76	7.9 6.1 7.0
Wildcat Creek	Wabash River	Lat 40°27", long 85°57", on line between secs.9 and 10, T.23 N., R.5 E., Howard County, on left bank at downstream side of bridge on State Highway 213, 1.5 miles south of Greentown.	158	^b 1944-61	09/10/76 09/15/76 09/21/76 09/30/76 10/05/76 10/12/76	9.1 7.3 6.4 7.9 6.3 7.1
Sugar Mill Creek	Sugar Creek	Lat 39°56'23", long 87°12'36", in NE¼ sec.9, T.17 N., R.7 W., Parke County, at bridge on County Road 1260 North, 1.7 miles downstream from Panther Creek, and 4.5 miles southwest of Wallace.	59.5		08/06/77	10,400
Middle Prong Green Creek	East Prong Green Creek	Lat 39°56'36", long 87°14'30", in SW¼ sec. 5, T.17 N., R.7 W., Parke County, at bridge on County Road 1260 North, 2.4 miles upstream from East Prong Green Creek, and 4.3 miles northeast of Tangier.	1.69		08/06/77	1,020
West Fork Rush Creek	Rush Creek	Lat 39°56'28", long 87°18'06", in SW¼ sec. 3, T.17 N., R.8 W., Parke County, at county road bridge, 3.7 miles upstream from East Fork and 1.5 miles north of Tangier.	3.10		08/06/77	1,600
West Fork Rush Creek tributary	West Fork Rush creek	Lat 39°56'27", long 87°18'07", in SE¼ sec.3, T.17 N., R.8 W., Parke County, at county road bridge, 0.8 mile upstream from West Fork Rush Creek, and 1.7 miles northeast of Tangier.	1.47		08/06/77	1,640
East Fork Rush Creek	Rush Creek	Lat 39°55'09", long 87°18'23", in NE¼ sec.15, T.17 N., R.8 W., Parke County, at county road bridge, 2.1 miles upstream from mouth and 0.6 mile east of Tangier.	2.91		08/06/77	2,400
Rush Creek	Sugar Creek	Lat 39°53'55", long 87°18'53", in SW¼ sec.22, T.17 N., R.8 W., Parke County, at county road bridge, 0.2 mile downstream from confluence of West Fork and East Fork Rush Creek, and 1.4 miles south of Tangier.	11.9		08/06/77	11,000
White River	Wabash River	Lat 40°08'32", long 85°54'44", in SW¼NW¼ sec.33, T.20 N., R.6 E., Madison County, at Perkinsville, 250 ft upstream from State Highway 13 bridge.	555		09/30/76 05/16/77	104 199
Pipe Creek	White River	Lat 40°09'20", long 85°51'45", in NW¼SW¼ sec.28, T.20 N., R.6 E., Madison County, 125 ft upstream from State Highway 13 bridge, 1.3 miles upstream from mouth, and 0.8 mile north of Perkinsville.			09/30/76 05/16/77	13 42
Dyers Creek	White River	Lat 40°07'37", long 85°53'32", in SW¼NE¼ sec.6, T.19 N., R.6 E., Hamilton County, at the Strawtown Ave. bridge, 0.7 mile upstream from White River, and 2.1 miles southwest of Perkinsville.			05/16/77	.81
White River	Wabash River	Lat 40°07'11", long 85°56'12", in NW¼SW¼ sec.2, T.19 N., R.5 E., Hamilton County, 1,500 ft upstream from State Highway 37 bridge at Strawtown.	720		09/30/76 05/16/77	121 244

Discharge measurements made at miscellaneous sites during water year 1977-Continued
(and some made in 1975 and 1976 water years)

Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements	
					Date	Discharge (ft ³ /s)
OHIO RIVER BASIN--Continued						
White River	Wabash River	Lat 40°04'28", long 85°59'40", in SW¼SW¼ sec.20, T.19 N., R.5 E., Hamilton County, 200 ft upstream from Cumberland Ave. bridge, and 2.4 miles downstream from bridge at Riverwood.			05/16/77	293
Ingerman ditch	White River	Lat 40°04'26", long 86°00'10", in SW¼SE¼ sec.19, T.19 N., R.4 E., Hamilton County, 80 ft upstream from Edith Ave. bridge, 200 ft upstream from mouth.			05/16/77	.66
Mallery Granger ditch	White River	Lat 40°03'42", long 86°01'00", in SE¼SE¼ sec.25, T.19 N., R.4 E., Hamilton County, 75 ft upstream from State Highway 19 bridge.			05/16/77	.25
Cicero Creek	White River	Lat 40°01'53", long 86°02'04", in SE¼SE¼ sec.2, T.18 N., R.4 E., Hamilton County, 800 ft upstream from River Ave., 1.0 mile upstream from White River, and 1.4 miles southwest of post office at Noblesville.			05/16/77	66
Stony Creek tributary	Stony Creek	Lat 40°01'52", long 86°00'43", in SE¼SE¼ sec.6, T.18 N., R.4 E., Hamilton County, 80 ft downstream from State Highway 238 bridge, 200 ft upstream from Stony Creek, and 1.0 miles southeast of post office at Noblesville.			05/16/77	.23
White River	Wabash River	Lat 39°59'56", long 86°01'24", in NW¼NE¼ sec.24, T.18 N., R.4 E., Hamilton County, 1,000 ft downstream from State Highway 234 bridge, and 2.1 miles downstream from Stony Creek.	1,147		05/16/77	410
White River	Wabash River	Lat 39°52'46", long 86°08'46", in NE¼NE¼ sec.35, T.17 N., R.3 E., Marion County, at North College Ave. bridge in Indianapolis, and 0.2 mile downstream from Williams Creek.	1,261		11/23/76 07/07/77	20 3.9
White River	Wabash River	Lat 39°52'16", long 86°09'22", in SE¼SW¼ sec.35, T.17 N., R.3 E., Marion County, at North Meridian Street bridge in Indianapolis.		1962, 1964	11/23/76 07/07/77 08/04/77	21 4.3 9.5
Fall Creek	White River	Lat 39°47'39", long 86°10'40", in NW¼ sec. 35, T.16 N., R.3 E., Marion County, 0.3 mile downstream from Indianapolis Water Company Canal, and 0.4 mile upstream from 16th Street bridge.			10/01/76 10/04/76	72 70
Fall Creek	White River	Lat 39°47'20", long 86°10'40", in NW¼ sec. 35, T.16 N., R.3 E., Marion County, at 16th Street bridge.			10/01/76 10/04/76	76 68
Fall Creek	White River	Lat 39°46'50", long 86°11'12", in NW¼NE¼ sec.3, T.15 N., R.3 E., Marion County, 600 ft above mouth, 0.5 mile downstream from 10th Street bridge in Indianapolis.		1965, 1973, 1974	08/05/77	55
White Lick Creek	White River	Lat 39°51'56", long 86°23'42", on line between sec.2, T.16 N., R.1 E., and sec. 34, T.17 N., R.1 E., Hendricks County, at bridge on county highway, 350 ft west of State Highway 267, and 1.5 miles north of Brownsburg.	28.7	^a 1960-67	09/08/76 09/14/76 09/21/76 09/28/76 10/05/76 10/12/76	.003 .004 0 .07 0 .07
East Fork White Lick Creek	White Lick Creek	Lat 39°38'47", long 86°20'47", in SE¼ sec. 18, T.14 N., R.2 E., Hendricks County, at bridge on Mooresville Road, 0.8 mile west of Friendswood, and 3.0 miles northeast of Mooresville.	37.4	^a 1965, 1968-70	09/09/76 09/14/76 09/21/76 09/28/76 10/04/76 10/12/76	4.4 3.0 4.1 4.8 1.8 2.4
Little Blue River	Big Blue River	Lat 39°33'16", long 85°43'08", on line between secs.23 and 26, T.13 N., R.7 E., Shelby County, at bridge on county highway, 2.8 miles west of Rays Crossing.	97.0	^a 1960-65, 1967	09/09/76 09/13/76 09/23/76 10/01/76 10/05/76 10/13/76	1.6 2.2 1.4 2.9 2.5 3.0
Big Blue River	Driftwood River	Lat 39°26'39", long 85°53'18", in NE¼SW¼ sec.32, T.12 N., R.6 E., Shelby County, at bridge on County Road 550 South, and 0.3 mile west of Marietta.	559	1966-67	04/25/75 04/25/75 04/28/75 05/15/75 06/11/75 04/04/77	3,700 3,960 2,570 471 402 2,000
Driftwood River	East Fork White River	Lat 39°12'29", long 85°56'45", in SW¼NW¼ sec.23, T.9 N., R.5 E., Bartholomew County, 0.7 mile downstream from Interstate 65, 1.4 miles upstream from confluence with Flatrock River and 1.4 miles west of post office in Columbus.	1,164		08/05/76 08/10/76 08/11/76 08/23/76	227 353 308 229
Flatrock River	East Fork White River	Lat 39°48'24", long 85°21'29", in NW¼SE¼ sec.25, T.16 N., R.10 E., Henry County, at bridge on U.S. Highway 40 at Lewisville.	47.8	^a 1954, 1960-67	09/08/76 09/17/76 09/22/76	3.7 4.2 3.6

Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements		
					Date	Discharge (ft ³ /s)	
OHIO RIVER BASIN--Continued							
Flatrock River	East Fork White River	Lat 39°36'15", long 85°26'39", in NW¼SW¼ sec.5, T.13 N., R.10 E., Rush County, at bridge on U.S. Highway 52, 0.3 mile south of courthouse in Rushville.	168	a1969-70	09/08/76	7.0	
					09/17/76	7.2	
					09/22/76	5.9	
					09/29/76	11	
					10/04/76	6.3	
Clear Creek	Salt Creek	Lat 39°02'03", long 86°34'01", in NW¼ sec. 19, T.7 N., R.1 W., Monroe County, on left bank at downstream side of county road bridge, 1.9 miles northwest of Harrodsburg, 3.9 miles upstream from Little Clear Creek, and 5.1 miles upstream from mouth.	55.2	b1960-68	10/13/76	7.8	
					09/13/76	8.0	
					09/23/76	7.2	
					09/29/76	13	
					10/05/76	11	
Flatrock River	East Fork White River	Lat 39°12'48", long 85°55'39", in NW¼NW¼ sec.24, T.9 N., R.5 E., Bartholomew County, 0.3 mile upstream from U.S. Highway 31A, 0.6 mile northwest of post office in Columbus and 0.7 mile upstream from confluence with Driftwood River.			08/05/76	69	
					08/10/76	102	
					08/11/76	88	
					08/23/76	60	
Patoka River	Wabash River	Lat 38°22'48", long 87°13'00", in SW¼ sec. 32, T.1 S., R.7 W., Pike County, at abandoned bridge abutment, 65 ft upstream from bridge on State Highway 61, 100 ft downstream from dam of Winslow Water Company, and 41.3 miles above mouth.	603	b1963-74	09/15/76	58	
					09/29/76	10	
					03/02/77	1,520	
					03/29/77	2,340	
STREAMS TRIBUTARY TO LAKE ERIE							
Cedar Creek	St. Joseph River	Lat 41°26'14", long 85°01'03", in NW¼ sec. 3, T.34 N., R.13 E., DeKalb County, at bridge on U.S. Highway 427, 0.3 mile northeast of Waterloo.	48.8	a1968-75	09/14/76	3.1	
					09/21/76	3.7	
					09/29/76	4.5	
					10/05/76	3.9	
					10/13/76	4.3	
UPPER MISSISSIPPI RIVER BASIN							
Grand Calumet River	Little Calumet River	Lat 41°37'28", long 87°31'05", in NE¼ sec. 36, T.37 N., R.10 W., Lake County, at Hohman Avenue in Hammond, 0.4 mile upstream from Indiana-Illinois State line and 0.55 mile downstream from Calumet Avenue bridge.			10/28/76	27	
					11/23/76	22	
					01/05/77	21	
					02/08/77	18	
					03/17/77	14	
					04/19/77	15	
					05/24/77	27	
					07/06/77	25	
					08/10/77	41	
					09/14/77	34	
Grand Calumet River	Little Calumet River	Lat 41°37'14", long 87°30'31", in NE¼ sec. 36, T.37 N., R.10 W., Lake County, at Calumet Avenue in Hammond, 0.55 mile upstream from Hohman Avenue bridge and 0.95 mile upstream from Indiana-Illinois State line.			1955,	10/28/76	30
					1956,	11/23/76	37
					1964	01/05/77	36
						02/08/77	21
						03/17/77	31
						04/19/77	17

^aFormer low-flow partial-record station.

^bFormer gaging station.

The following table lists all discontinued stream-gaging stations in Indiana. Continuous daily streamflow records were collected and published for the period of record shown for each station.

Station no.	Station name	County	Drainage area (mi ²)	Period of Record
OHIO RIVER BASIN				
03277000	Laughery Creek near Farmers Retreat	Ohio	248	1940-73 ^a
03304000	Little Pigeon Creek near Tennyson	Warrick	187	1943-47
03323000	Wabash River at Bluffton	Wells	532	1930-71 ^b
03326000	Mississinewa River near Eaton	Delaware	310	1952-71 ^b
03329500	Wabash River at Delphi	Carroll	4,072	1939-71
03331000	Tippecanoe River near Warsaw	Kosciusko	126	1943-49
03332000	Tippecanoe River at Pulaski	Pulaski	1,089	1928-31
03332300	Little Indian Creek near Royal Center	White	35.0	1959-73 ^a
03332400	Big Monon Creek near Francesville	Pulaski	152	1959-73 ^a
03333500	Wildcat Creek at Greentown	Howard	168	1944-61
03334000	Wildcat Creek at Owasco	Carroll	396	1943-73 ^a
03339120	Coal Creek at Coal Creek	Fountain	214	1964-72
03339150	Little Vermilion River near Newport	Vermillion	237	1964-72
03340000	Sugar Creek near Byron	Parke	670	1940-71 ^b
03341000	Big Raccoon Creek at Mansfield	Parke	248	1939-58 ^c
03341200	Little Raccoon Creek near Catlin	Parke	134	1956-71 ^{c,d}
03341420	Brouilletts Creek near Universal	Vermillion	321	1966-71 ^b
03341470	North Coal Creek near Terre Haute	Vigo	1.91	1974-76
03342350	Buttermilk Creek near Paxton	Sullivan	16.5	1966-73
03342800	South Fork Smalls Creek at Bruceville	Knox	4.94	1972-75 ^{b,d}
03348100	Killbuck Creek near Anderson	Madison	97.8	1964-68 ^b
03348500	White River near Noblesville	Hamilton	828	1928-74 ^b
03349500	Cicero Creek near Arcadia	Hamilton	131	1915-26,
03349700	Little Cicero Creek near Arcadia	Hamilton	40.4	1928-73
03350000	Cicero Creek near Cicero	Hamilton	196	1954-76 ^a
03350100	Hinkle Creek near Cicero	Hamilton	18.5	1955-76 ^a
03352000	Lawrence Creek at Fort Benjamin Harrison	Marion	2.74	1952-56,
03352200	Mud Creek at Indianapolis	Marion	42.4	1957-69
03355000	Bear Creek near Trelvac	Brown	6.94	1958-76 ^a
03356500	Bean Blossom Creek near Bloomington	Monroe	112	1952-73 ^a
03357000	White River at Spencer	Owen	2,988	1931-32
03359500	Deer Creek near Putnamville	Putnam	59.0	1925-71 ^c
03366000	Graham Creek near Vernon	Jennings	77.2	1954-65,
03367000	Muscatatuck River near Austin	Jackson	359	1967-72
03367500	Stucker Creek near Austin	Scott	127	1955-73
03370000	Vernon Fork near Crothersville	Jackson	391	1932-43
03370500	Muscatatuck River near Tampico	Washington	960	1932
03371000	Muscatatuck River near Vallonia	Jackson	1,134	1939
03371600	South Fork Salt Creek at Kurtz	Jackson	38.2	1932
03371650	North Fork Salt Creek at Nashville	Brown	76.1	1960-71 ^c
03372000	North Fork Salt Creek near Belmont	Brown	120	1962-76
03372700	Clear Creek near Harrodsburg	Monroe	55.2	1946-71
03373000	Salt Creek near Peerless	Lawrence	573	1960-71
03373200	Indian Creek near Springville	Lawrence	60.7	1939-50
03374100	White River at Hazleton	Gibson	11,305	1957-71 ^c
03376000	Patoka River near Jasper	Dubois	348	1961-73 ^a
03376300	Patoka River at Winslow	Pike	603	1927-38
03378500	Wabash River at New Harmony	Posey	29,234	1943-47 ^d

STREAMS TRIBUTARY TO LAKE MICHIGAN

04093200	Little Calumet River at Gary	Lake	5.82	1958-67,
04098000	Fawn River at Orland	Steuben	86.4	1968-71
04099500	Pigeon Creek and Hogback Lake near Angola	Steuben	103	1943-47
04100000	Christiana Creek at Elkhart	Elkhart	127	1945-74
04100220	North Branch Elkhart River near Cosperville	Noble	134	1947-52
				1950-71

STREAMS TRIBUTARY TO LAKE ERIE

04178500	St. Joseph River at Hursh	Allen	734	1950-54
04179500	Cedar Creek near Auburn	DeKalb	87.3	1943-73 ^a
04180500	St. Joseph River near Ft. Wayne	Allen	1,057	1905-06,
				1941-55
04182700	St. Marys River at Ft. Wayne	Allen	810	1905-06

Station no.	Station name	County	Drainage area (mi ²)	Period of Record
UPPER MISSISSIPPI RIVER BASIN				
05516000	Yellow River near Bremen	Marshall	135	1955-73 ^a
05518500	Singleton ditch near Hebron	Lake	34.2	1949-51
05519500	West Creek near Schneider	Lake	54.7	1948-51, 1954-72
05521500	Oliver ditch near Aix	Jasper	79.6	1948-51

^aContinued as a crest-stage and low-flow partial-record station.^bSome quality of water data available.^cContinued as a stage only station.^dSome record fragmentary.

For many years records of the water-surface elevations of many of the lakes in Indiana have been collected by the Geological Survey under cooperative agreement with the Indiana Department of Natural Resources. Basic data for a few selected lakes have been published in WSP 1363, entitled "Hydrology of Indiana Lakes." Records which have not been published are available in the files of the District Office of the Geological Survey in Indianapolis, Indiana. In general, the records are based on once-daily readings of a staff gage by a local observer and consist of daily, monthly, and yearly mean water-surface elevations as well as graphs showing the fluctuation in elevation. Discharge measurements, made at the outflow, are also available in some instances.

The lakes for which records have been collected are listed by downstream order number in the following table. The established level, sometimes referred to as the legal level, is that elevation set by the courts to which the average level of the lake is to be held; it is normally set at about the average level that has prevailed for a number of years prior to the establishment of the level. Surface area and capacity of lake is that surface area and capacity at the established level. Depth contour maps are only those surveyed by the Lake Section of Water Resources Division of the Geological Survey.

Lakes in the Ohio River basin for which records are available

Lake	County	Drainage Area (square mile)	Surface Area (acres)	Established Level	Capacity (acre-feet)	Depth Contour Map available	Records available
LAUGHERY CREEK BASIN							
03-2768.00 Versailles Lake near Versailles	Ripley	168.0	232	-	-	-	1957-77
BAYOU DRAIN BASIN							
03-3223.00 Hovey Lake near Mount Vernon	Posey	6.36	253	-	-	-	1950-69
WABASH RIVER BASIN							
03-3275.50 Everett Lake at Levert	Allen	1.07	43	835.13	650	+	1946-66
03-3276.00 Blue Lake near Churubusco	Whitley	3.58	239	850.28	5,010	+	1946-69, 1976-77
03-3276.50 Shriner Lake at Tri-Lakes	Whitley	.94	111	907.04	-	-	1943-75
03-3277.00 Cedar Lake at Tri-Lakes	Whitley	.79	131	901.90	-	-	1943-49
03-3277.50 Round Lake at Tri-Lakes	Whitley	3.36	125	901.90	-	-	1943-53
03-3278.00 Wilson Lake near Larwill	Whitley	.46	29	865.39	390	+	1946-52
03-3278.50 Little Wilson Lake near Larwill	Whitley	.52	8	865.39	130	+	1946-52
03-3281.00 Long Lake at Laketon	Wabash	.55	48	751.19	760	+	1946-51, 1959-77
03-3282.50 North Little Lake at Silver Lake	Kosciusko	2.89	12	861.73	170	+	1947-77
03-3283.50 Silver Lake at Silver Lake	Kosciusko	6.31	102	861.73	1,520	+	1947-77
03-3284.00 Lukens Lake near Disko	Wabash	1.76	46	-	1,010	+	1948-49, 1959-77
03-3300.20 Crooked Lake near Wolflake	Noble	1.51	206	905.69	9,040	+	1943-53
03-3300.40 Big Lake near Wolflake	Noble	8.89	228	898.18	5,630	+	1943-75
03-3300.60 Goose Lake near Lorane	Whitley	1.51	84	910.96	2,180	+	1945-53
03-3300.80 Loon Lake at Ormas	Whitley	11.1	222	895.14	5,730	+	1943-66
03-3301.00 New Lake near Etna	Whitley	.29	50	903.91	880	+	1945-53
03-3301.20 Old Lake near Etna	Whitley	2.81	32	898.07	620	+	1949-66
03-3301.40 Smalley Lake near Washington Center	Noble	27.1	69	-	1,520	+	1943-77
03-3301.60 Gilbert Lake near Washington Center	Noble	.37	28	-	490	+	1954-77
03-3301.80 Horseshoe Lake nr Washington Center	Noble	1.62	18	901.80	250	+	1945-66
03-3302.00 Baugher Lake near Washington Center	Noble	31.0	32	878.52	390	+	1945-51
03-3302.20 Wilnot Pond at Wilnot a	Noble	35.2	10	-	-	-	1945-51
03-3302.40 Webster Lake at North Webster	Kosciusko	49.2	774	852.75	-	-	1943-77
03-3302.43 James Lake at Oswego	Kosciusko	55.9	282	836.40	7,580	+	1943-77
03-3302.60 Robinson Lake near Pierceton	Kosciusko	7.15	59	851.09	1,170	+	1946-51
03-3302.80 Troy Cedar Lake near Lorane	Whitley	5.33	93	905.41	2,540	+	1945-52
03-3303.00 Ridinger Lake near Pierceton	Kosciusko	34.6	136	843.12	2,900	+	1943-77
03-3303.20 Kuhn Lake near North Webster	Kosciusko	3.85	137	837.50	1,290	+	1945-77
03-3303.40 Big Barbee Lake near North Webster	Kosciusko	44.7	304	837.50	5,640	+	1945-77
03-3303.60 Little Barbee Lake nr North Webster	Kosciusko	49.0	74	837.50	960	+	1945-77
03-3303.80 Shoe Lake near Oswego	Kosciusko	.34	40	841.57	-	-	1946-53, 1972-74, 1976-77
03-3304.00 Banning Lake near North Webster	Kosciusko	.48	12	837.50	110	+	1945-77
03-3304.20 Irish Lake near North Webster	Kosciusko	50.9	182	837.50	2,330	+	1945-77
03-3304.40 Sechrist Lake near North Webster	Kosciusko	.58	105	837.50	2,490	+	1945-77
03-3304.60 Sawmill Lake near North Webster	Kosciusko	51.8	36	837.50	370	+	1945-77
03-3304.80 Tippecanoe Lake at Oswego	Kosciusko	113	768	836.40	28,380	+	1943-77
03-3304.95 Oswego Lake at Oswego	Kosciusko	113	83	836.40	780	+	1943-77
03-3310.10 Big Chapman Lake near Warsaw b	Kosciusko	4.17	581	827.75	6,080	+	1945-72, 1976-77
03-3310.20 Little Chapman Lake near Warsaw	Kosciusko	7.13	177	827.75	1,990	+	1945-72, 1976-77
03-3310.40 Pike Lake at Warsaw	Kosciusko	41.5	203	805.64	2,830	+	1954-77
03-3310.60 Fish Lake near Warsaw	Kosciusko	4.93	15	845.52	-	-	1951-66
03-3310.80 Muskelonge Lake near Warsaw	Kosciusko	11.8	32	842.67	300	+	1943-53, 1959-71
03-3311.00 Carr Lake near Claypool	Kosciusko	2.27	79	848.88	1,340	+	1947-53
03-3311.20 Sherburn Lake near Pierceton c	Kosciusko	5.51	15	881.00	230	+	1954-77
03-3311.40 Winona Lake at Warsaw	Kosciusko	32.1	562	811.06	16,680	+	1943-77
03-3311.60 Center Lake at Warsaw	Kosciusko	.73	120	803.86	2,060	+	1945-77
03-3311.80 Palestine Lake at Palestine	Kosciusko	32.4	290	-	1,170	+	1954-77
03-3312.00 Crystal Lake near Atwood	Kosciusko	.45	76	789.69	930	+	1945-51
03-3312.20 Hoffman Lake at Atwood	Kosciusko	8.07	180	785.85	3,160	+	1945-53
03-3312.40 Beaver Dam Lake near Silver Lake	Kosciusko	2.83	146	868.95	3,280	+	1947-53
03-3312.60 Loon Lake near Silver Lake	Kosciusko	3.59	40	865.74	670	+	1947-53
03-3312.80 McClures Lake near Silver Lake	Kosciusko	1.29	32	865.85	410	+	1945-52

Lakes in the Ohio River basin for which records are available--Continued

Lake	County	Drainage Area (square mile)	Surface Area (acres)	Estab- lished Levelxx	Capacity (acre- feet)	Depth Contour Map available	Records available	
WABASH RIVER BASIN--Continued								
03-3313.00	Hill Lake near Silver Lake	Kosciusko	0.85	67	871.50	1,300	+	1952-77
03-3313.20	Diamond Lake near Silver Lake	Kosciusko	3.92	79	-	1,280	+	1954-77
03-3313.40	Yellow Creek Lake near Silver Lake	Kosciusko	11.1	151	860.50	4,730	+	1945-53
03-3313.60	Rock Lake near Akron	Kosciusko	2.74	56	847.29	360	+	1946-66
03-3313.70	Town Lake near Akron	Fulton	2.77	23	-	220	+	1949-50
03-3313.80	Lake Manitou at Rochester	Fulton	44.2	1,156	778.41	10,163	+	1943-77
03-3313.90	Zink Lake near Rochester	Fulton	1.11	19	810.68	-	-	1952-55
03-3314.00	Nyona Lake near Greenoak	Fulton	7.59	104	793.91	1,340	+	1946-77
03-3314.20	South Mud Lake near Fulton	Fulton	4.53	94	793.42	1,020	+	1946-66
03-3314.38	King Lake near Delong	Fulton	1.98	18	-	180	+	1971-77
03-3314.40	Maxinkuckee Lake at Culver	Marshall	13.7	1,864	733.12	45,600	+	1943-77
03-3314.60	Lost Lake near Culver d	Marshall	14.2	40	732.00	-	-	1954-77
03-3314.80	Langenbaum Lake near Monterey	Starke	.72	48	717.96	260	+	1954-66
03-3317.00	Bruce Lake at Bruce Lake	Pulaski	6.38	245	723.69	1,790	+	1943-53
03-3322.00	Fletcher Lake at Fletcher	Fulton	.67	45	783.20	880	+	1946-53
03-3709.00	Starve Hollow Lake near Vallonia	Jackson	6.67	145	-	980	+	1946-61, 1963-71
03-3717.00	Ogle Lake near Nashville	Brown	1.03	20	-	250	+	1954-77

Lakes in the St. Lawrence River basin for which records are available

STREAMS TRIBUTARY TO LAKE MICHIGAN

04-0925.00	Wolf Lake at Hammond j	Lake	5.72	999	-	-	-	1946-49
04-0929.90	Lake George at Hobart	Lake	124	282	602.23	-	-	1946-77
04-0975.20	Lake Pleasant near Nevada Mills	Steuben	3.18	424	-	3,490	+	1954-71
04-0975.50	Lake George at Jamestown	Steuben	h14.7	488	985.28	-	-	1946-77
04-0975.96	Marsh Lake near Fremont	Steuben	14.9	-	-	-	-	1967-69
04-0976.00	Little Otter Lake near Fremont	Steuben	15.7	34	965.18	740	+	1946-53
04-0976.40	Big Otter Lake near Fremont	Steuben	21.3	69	965.18	1,780	+	1946-53
04-0976.50	Snow Lake at Lake James	Steuben	h40.2	310	964.96	7,998	+	1943-49
04-0976.60	Lake James at Lake James	Steuben	h47.8	1,034	964.96	33,585	+	1943-49
04-0976.80	Jimmerson Lake at Nevada Mills e	Steuben	h51.6	434	964.66	4,394	+	1946-77
04-0977.80	Loon Lake near Angola	Steuben	2.13	138	1,011.98	630	+	1954-66
04-0978.50	Crooked Lake at Crooked Lake	Steuben	10.4	828	988.17	10,557	+	1946-77
04-0979.50	Lake Gage at Panama	Steuben	h17.3	332	954.25	10,140	+	1946-77
04-0979.60	Lime Lake at Panama	Steuben	h17.5	57	954.25	427	+	1946-77
04-0981.00	Wall Lake near Orland	Lagrange	1.61	141	942.25	1,640	+	1953-54
04-0981.10	Mud Lake near Orland	Steuben	1.85	25	939.01	-	-	1956-67
04-0983.00	Cedar Lake near Ontario	Lagrange	1.60	120	871.90	1,020	+	1948-51
04-0990.50	Pigeon Lake near Angola	Steuben	h35.2	61	988.24	930	+	1954-63
04-0991.00	Fox Lake near Angola	Steuben	h1.25	142	1,018.83	3,150	+	1946-53
04-0991.90	Pleasant Lake at Pleasant Lake	Steuben	h1.12	53	963.52	1,190	+	1946-66
04-0992.00	Long Lake at Moonlight	Steuben	h67.9	92	-	1,540	+	1946-77
04-0992.50	Bower Lake near Pleasant Lake	Steuben	h84.6	25	948.50	280	+	1946-71, 1976-77
04-0992.60	Golden Lake near Pleasant Lake	Steuben	h88.8	119	948.50	1,810	+	1946-71, 1976-77
04-0994.00	Silver Lake near Angola	Steuben	h3.79	238	959.40	2,540	+	1945-53
04-0994.30	Bass Lake near Angola	Steuben	h.39	61	979.68	450	+	1954-66
04-0994.40	Howard Lake near Angola	Steuben	h3.90	27	977.34	130	+	1954-63
04-0995.00	Hogback Lake near Angola	Steuben	h103	146	948.50	1,450	+	1946-77
04-0995.20	Otter Lake near Flint	Steuben	h6.91	118	934.15	1,960	+	1954-66
04-0995.40	Story Lake near Hudson	DeKalb	3.16	77	942.20	1,020	+	1946- 1954-66
04-0995.60	Big Turkey Lake at Stroh	Lagrange	35.8	450	926.61	7,300	+	1945-66
04-0995.75	McClish Lake near Helmer	Lagrange	1.28	35	951.09	1,210	+	1951-74, 1976-77
04-0995.80	Lake of the Woods near Helmer	Lagrange	5.25	136	951.09	5,470	+	1951-74, 1976-77
04-0996.00	Big Long Lake near Stroh	Lagrange	4.77	388	956.21	-	-	1954-77
04-0996.20	Pretty Lake near Stroh	Lagrange	2.89	184	965.50	4,720	+	1949-53, 1963-65
04-0996.40	Little Turkey Lake at Elmira	Lagrange	56.5	135	925.72	1,550	+	1945-66
04-0996.60	Royer Lake near Plato	Lagrange	4.69	69	936.50	1,630	+	1952-77
04-0996.70	Fish Lake near Plato	Lagrange	h10.6	100	936.50	4,050	+	1945-77
04-0997.00	North Twin Lake near Howe	Lagrange	1.54	135	843.56	2,120	+	1953-77
04-0997.10	South Twin Lake near Howe	Lagrange	2.22	116	843.56	3,600	+	1953-70
04-0997.40	Shipshewana Lake near Shipshewana	Lagrange	h6.74	202	852.04	1,350	+	1951-77
04-0997.60	Fish Lake near Scott	Lagrange	h6.21	139	814.42	2,560	+	1954-73, 1976-77
04-0997.80	Stone Lake near Scott	Lagrange	1.51	152	818.76	2,060	+	1954-73, 1976-77
04-0998.00	Emma Lake near Emma	Lagrange	13.6	42	880.87	700	+	1954-66
04-0998.10	Cass Lake near Shipshewana	Lagrange	.68	89	-	873	+	1970-77
04-0998.20	Hunter Lake near Middleburg	Elkhart	.51	99	856.90	1,120	+	1946-53
04-0998.40	Wolf Lake near Goshen	Elkhart	h1.29	100	813.00	-	-	1947-57

Lakes in the St. Lawrence River basin for which records are available--Continued

			Drainage Area (square mile)	Surface Area (acres)	Estab- lished Levelxx	Capacity (acre- feet)	Depth Contour Map available	Records available
Lake		County						
STREAMS TRIBUTARY TO LAKE MICHIGAN--Continued								
04-0998.60	Heaton Lake near Elkhart	Elkhart	9.33	87	767.30	640	+	1946-53, 1969-74, 1976-77
04-0998.80	Simonton Lake near Elkhart	Elkhart	7.44	282	772.19	1,560	+	1946-77
04-0999.50	Indiana Lake near Bristol	Elkhart	.62	122	759.73	3,400	+	1946-53
04-1000.10	Cree Lake near Kendallville	Noble	4.85	58	945.23	910	+	1949-66
04-1000.20	Blackman Lake near Wolcottville	Lagrange	.98	67	974.20	1,210	+	1953-59
04-1000.30	Adams Lake near Wolcottville	Lagrange	5.62	308	953.59	7,690	+	1946-77
04-1000.40	Atwood Lake near Wolcottville	Lagrange	1.23	170	899.99	1,560	+	1948-53
04-1000.50	Witmer Lake near Wolcottville	Lagrange	36.1	204	897.36	7,040	+	1945-77
04-1000.60	Westler Lake near Wolcottville	Lagrange	37.8	88	897.36	1,770	+	1945-77
04-1000.70	Dallas Lake near Wolcottville	Lagrange	39.8	283	897.36	9,970	+	1945-77
04-1000.80	Martin Lake near Valentine	Lagrange	4.93	26	899.45	890	+	1945-77
04-1000.90	Olin Lake near Valentine	Lagrange	5.81	103	899.45	9,180	+	1945-77
04-1001.00	Oliver Lake near Valentine	Lagrange	11.1	362	899.45	-	-	1945-77
04-1001.10	Hackenburg Lake near Wolcottville	Lagrange	55.4	42	897.36	510	+	1945-77
04-1001.20	Messick Lake near Wolcottville	Lagrange	56.4	68	897.36	1,450	+	1945-77
04-1001.30	Jones Lake near Cosperville f	Noble	70.3	114	885.55	960	+	1948-77
04-1001.40	Bixler Lake at Kendallville	Noble	5.28	120	963.65	2,090	+	1945-77
04-1001.50	Round Lake at Kendallville	Noble	3.47	99	954.50	2,140	+	1954-77
04-1001.60	Little Long Lake at Kendallville	Noble	4.55	71	954.50	1,750	+	1954-77
04-1001.70	Latta Lake near Rome City	Noble	2.52	42	918.71	900	+	1954-66
04-1001.80	Sylvan Lake at Rome City	Noble	33.8	575	916.20	-	-	1943-77
04-1001.90	Sacarider Lake near Kendallville	Noble	1.43	33	-	740	+	1954-63
04-1002.00	Tamarack Lake near Cosperville	Noble	15.9	50	885.55	880	+	1948-77
04-1002.10	Steinbarger Lake near Cosperville	Noble	24.3	73	885.55	1,590	+	1948-77
04-1002.20	Waldron Lake near Cosperville	Noble	134	216	885.55	3,120	+	1948-77
04-1002.30	Long Lake near Burr Oak	Noble	12.0	40	895.82	630	+	1954-71
04-1002.40	Sand Lake near Burr Oak	Noble	14.9	47	893.56	1,270	+	1946-51
04-1002.50	Rivir Lake near Burr Oak	Noble	18.6	24	-	380	+	1954-65
04-1002.58	High Lake near Wolflake	Noble	4.43	123	896.35	1,240	+	1961-77
04-1002.60	Bear Lake near Wolflake	Noble	6.98	136	894.60	3,030	+	1943-77
04-1002.80	Muncie Lake near Burr Oak	Noble	42.8	47	-	580	+	1954-77
04-1002.90	Silver Lake near Wolflake	Noble	.28	34	-	220	+	1953-63
04-1003.00	Skinner Lake near Albion	Noble	14.0	125	927.74	1,750	+	1945-72
04-1003.10	Pleasant Lake near Wolflake	Noble	.29	20	-	540	+	1952-53
04-1003.20	Upper Long Lake near Wolflake	Noble	2.08	86	891.19	1,900	+	1956-77
04-1003.30	Lower Long Lake near Albion	Noble	4.35	66	889.81	1,560	+	1946-52
04-1003.40	Eagle Lake near Kimmel	Noble	3.22	81	-	1,050	+	1946-48
04-1003.50	Diamond Lake near Wawaka	Noble	4.80	105	-	2,580	+	1946-75
04-1003.60	Sparta Lake at Kimmel	Noble	.69	31	888.50	170	+	1946-51
04-1003.70	Engle Lake near Ligonier	Noble	h4.19	48	-	670	+	1956-71
04-1003.80	Harper Lake near Washington Center	Noble	2.76	11	878.25	160	+	1946-77
04-1003.90	Knapp Lake near Washington Center	Noble	6.02	88	878.25	3,040	+	1946-77
04-1004.00	Moss Lake near Washington Center	Noble	6.12	9	878.25	80	+	1946-77
04-1004.10	Hindman Lake near Washington Center	Noble	8.66	13	878.25	140	+	1946-77
04-1004.20	Gordy Lake near Cromwell	Noble	9.40	31	876.68	680	+	1953-66
04-1004.25	Rider Lake near Cromwell	Noble	10.9	5	876.68	30	+	1953-66
04-1004.30	Duely Lake near Cromwell g	Noble	11.2	21	876.68	180	+	1953-66
04-1004.40	Village Lake near Cromwell	Noble	12.0	12	876.68	160	+	1953-66
04-1004.46	Flatbelly Lake near Syracuse	Kosciusko	4.66	326	-	-	-	1964-69
04-1004.48	Papakeechee Lake near Syracuse	Kosciusko	5.52	300	-	-	-	1964-69
04-1004.50	Wawasee Lake at Wawasee	Kosciusko	36.9	3,060	858.89	67,210	+	1943-66
04-1004.60	Syracuse Lake at Syracuse	Kosciusko	38.2	414	858.87	5,360	+	1943-77
04-1004.70	Dewart Lake near Leesburg	Kosciusko	h8.05	551	867.70	9,000	+	1945-77
04-1004.80	Wabee Lake near Milford	Kosciusko	h14.6	187	829.79	4,750	+	1946-53

STREAMS TRIBUTARY TO LAKE ERIE

04-1772.00	Clear Lake at Clear Lake	Steuben	6.86	800	1,037.38	24,990	+	1943-77
04-1772.10	Round Lake at Clear Lake	Steuben	7.25	30	1,037.38	340	+	1943-77
04-1773.00	Long Lake near Ray	Steuben	2.80	154	-	1,840	+	1961-63
04-1776.80	Ball Lake near Hamilton	Steuben	11.6	87	894.76	3,520	+	1961-77
04-1777.00	Hamilton Lake at Hamilton	Steuben	16.5	802	898.83	16,600	+	1943-77
04-1792.00	Indian Lake near Corunna	DeKalb	3.76	56	-	1,220	+	1957
04-1793.00	Cedar Lake near Waterloo	DeKalb	23.4	28	896.76	230	+	1943-56

Lakes in the Upper Mississippi River basin for which records are available

ILLINOIS RIVER BASIN

05-5147.40	Saugany Lake near Rolling Prairie	LaPorte	h2.34	74	781.21	2,190	+	1946-50
05-5147.41	Hudson Lake at Hudson Lake	LaPorte	7.92	432	763.09	5,060	+	1946-77
05-5147.50	North Chain Lake at Lydick	St. Joseph	h3.89	88	721.17	1,400	+	1946-53
05-5147.60	South Chain Lake at Westfield	St. Joseph	h6.32	90	717.04	270	-	1946-53
05-5147.70	Wharton Lake near South Bend	St. Joseph	1.85	-	-	-	-	1960-77
05-5149.00	Silver Lake near Rolling Prairie	LaPorte	1.72	54	795.20	-	-	1946-66

Lakes in the Upper Mississippi River basin for which records are available--Continued

Lake	County	Drainage Area (square mile)	Surface Area (acres)	Estab- lished Levelxx	Capacity (acre- feet)	Depth Contour Map available	Records available
ILLINOIS RIVER BASIN--Continued							
05-5152.00 Upper Fish Lake near Stillwell	LaPorte	h9.65	139	688.22	1,040	+	1946-53
05-5152.10 Lower Fish Lake near Stillwell	LaPorte	h10.4	134	688.22	870	+	1946-53
05-5152.20 Pine Lake at LaPorte	LaPorte	h10.7	564	796.20	-	-	1946-75
05-5152.30 Stone Lake at LaPorte	LaPorte	h10.7	140	796.20	-	-	1946-75
05-5152.40 Clear Lake at LaPorte	LaPorte	.65	106	798.20	760	+	1942-49, 1952-75
05-5156.00 Koontz Lake at Koontz Lake	Starke	h6.25	346	714.56	3,170	+	1943-77
05-5158.00 Riddles Lake near Lakeville	St. Joseph	h11.7	77	817.50	640	+	1946-73
05-5162.00 Lake of the Woods near Bremen	Marshall	h9.45	416	803.85	6,810	+	1945-77
05-5166.00 Pretty Lake near Plymouth	Marshall	.85	97	787.36	2,140	+	1954-66
05-5167.00 Myers Lake near Twin Lakes	Marshall	1.41	96	768.69	2,000	+	1945-53
05-5168.00 Mill Pond and Kreighbaum Lake near Twin Lakes	Marshall	h5.34	168	767.75	1,020	+	1945-53
05-5169.00 Eagle Lake near Ober	Starke	h25.5	24	713.25	160	+	1946-53
05-5171.00 Skitz Lake near Knox	Starke	-	1,000	-	-	-	1949-53
05-5172.00 Bass Lake at Bass Lake	Starke	5.18	1,400	713.65	-	-	1943-77
05-5176.00 Wauhob Lake near Valparaiso	Porter	.40	21	-	-	-	1946-77
05-5176.50 Long Lake near Valparaiso	Porter	1.31	65	797.66	520	+	1947-52
05-5176.70 Spectacle Lake near Valparaiso	Porter	.53	62	812.82	540	+	1946-53
05-5177.00 Flint Lake near Valparaiso	Porter	2.62	86	797.66	-	-	1946-77
05-5178.00 Lake Eliza near Beatrice	Porter	1.70	45	-	-	-	1954-74, 1976-77
05-5187.00 Cedar Lake at Cedar Lake	Lake	8.14	781	-	6,750	+	1943-77
05-5188.00 Dalecarlia Lake near Creston	Lake	20.1	193	-	-	-	1947-52
05-5213.00 Ringneck Lake near Medaryville	Jasper	1.94	1,400	-	-	-	1949-55
05-5257.00 J.C. Murphy Lake near Morocco	Newton	13.0	1,515	-	-	-	1952-61

+ Depth contour maps available for sale by Indiana Department of Natural Resources, State Office Building, Indianapolis, Indiana.

xx Elevation, in feet, above mean sea level.

a Formerly published as Rider Lake at Wilmot.

b Formerly published as Chapman Lake near Warsaw.

c Formerly published as Johnson Lake near Pierceton.

d Formerly published as Hawks Lake near Culver.

e Formerly published as Jimmerson Lake at Nevada Mills.

f Formerly published as Sanford Lake near Cosperville.

g Formerly published as Duley Lake near Cromwell, and Druley Lake near Cromwell, and Druley Lake near Cromwell.

h Contains drainage area (5 percent or greater) that does not contribute directly to surface-water runoff.

j Same as Wolf Lake at Chicago, Illinois District.

The lakes in Indiana which are not included in the cooperative stabilization program but which have been mapped for recreational purposes are shown in the following table. Surface area and capacities are related to reference mean sea level elevation at time of mapping. Additional data is shown on map which are available for sale by the Indiana Department of Natural Resources, State Office Building, Indianapolis, Indiana.

Lake	County	Surface Area (acres)	Capacity (acre-feet)	Lake	County	Surface Area (acres)	Capacity (acre-feet)
OHIO RIVER BASIN							
Barr Lake	Fulton	22	470	Lake 16	Fulton	27	220
Bischoff Reservoir	Ripley	200	1,920	Larwill Lake	Whitley	9	170
Black Lake	Whitley	24	400	Lenape Lake	Greene	36	330
Bowen Lake	Scott	7	60	Lincoln Park Lake	Spencer	58	520
Brown Lake	Whitley	23	580	Little Pike Lake	Kosciusko	25	140
Caldwell Lake	Kosciusko	45	800	McColley Lake	Wabash	28	410
Crane Lake	Noble	28	360	Round Lake	Wabash	48	540
Crosley Lake	Jennings	14	130	Scales Lake	Warrick	66	520
Ferdinand Lake	Dubois	42	440	Schlam Lake	Clark	19	170
Frank Lake	Clark	9	70	Sellers Lake	Kosciusko	32	340
Hartz Lake	Starke	28	370	Shakamak Lake	Clay	56	610
Kunkel Lake	Wells	25	150	Twin Lakes	Wabash	18	190
Lake Freeman	Carroll	1,547	26,000	Whitewater Lake	Union	199	3,650
Lake Shafer	White	1,291	13,120	Yellowwood Lake	Brown	133	1,890

STREAMS TRIBUTARY TO LAKE MICHIGAN

Appleman Lake	Lagrange	52	590	Mateer Lake	Lagrange	18	150
Bartley Lake	Noble	34	430	Miller Lake	Noble	11	160
Barton Lake	Steuben	94	1,340	Millers Lake	Noble	28	410
Bell Lake	Steuben	38	510	Mud Lake	Noble	8	70
Boner Lake	Kosciusko	40	370	Norman Lake	Noble	14	280
Bowen Lake	Noble	30	1,080	Pigeon Lake	Lagrange	61	1,160
Bristol Lake	Noble	27	740	Port Mitchell Lake	Noble	15	180
Buck Lake	Lagrange	18	150	Rainbow Lake	Lagrange	16	250
Center Lake	Steuben	46	390	Schockopee Lake	Noble	21	280
Cline Lake	Lagrange	20	350	Shock Lake	Kosciusko	37	1,210
Deer Lake	Noble	36	420	Smith Hole	Lagrange	2	10
Dock Lake	Noble	16	230	Still Lake	Lagrange	30	620
Eve Lake	Lagrange	31	670	Sweet Lake	Noble	16	210
Fish Lake	Steuben	59	750	Tamarack Lake	Noble	84	1,340
Hog Lake	LaPorte	59	690	Walters Lake	Steuben	53	550
Hog Lake	Steuben	48	570	Weir Lake	Lagrange	6	70
Lime Lake	Steuben	30	330	Wible Lake	Noble	49	650
Little Turkey Lake	Steuben	58	780	Williams Lake	Noble	46	1,070
Marl Lake	Noble	30	510	Wyland Lake	Kosciusko	6	100

STREAMS TRIBUTARY TO LAKE ERIE

Dunton Lake	DeKalb	21	340	Mirror Lake	Steuben	9	120
Handy Lake	Steuben	16	290	Terry Lake	DeKalb	17	160
Lake Anne	Steuben	17	280				

UPPER MISSISSIPPI RIVER BASIN

Cook Lake	Marshall	93	1,650	Gilbert Lake	Marshall	37	490
Dixon Lake	Marshall	33	480	Holem Lake	Marshall	40	390
Flat Lake	Marshall	26	210	Lawrence Lake	Marshall	69	1,580

GROUND-WATER LEVELS

ALLEN COUNTY

410426084495201. Local number, AL 5.

LOCATION.--Lat 41°04'26", long 84°49'52", Hydrologic Unit 04100005, 1.3 mi (2.1 km) west of Edgerton.
Owner: Noel Gerig.

AQUIFER.--Salina Formation.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 4 in (0.1 m), depth 97 ft (30 m) cased to 40 ft (12.2 m), open end.
Instrumentation: Water-level recorder.

DATUM.--Altitude of land-surface datum is 760 ft (232 m). Measuring point: Top of floor of shelter 0.17 ft (0.05 m) above land-surface datum.

REMARKS.--Water level affected by nearby quarry operations.

PERIOD OF RECORD.--July 1962 to December 1971. January 1973 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 10.04 ft (3.06 m) below land-surface datum July 8, 9, 1962; lowest, 38.41 ft (11.71 m) below land-surface datum, May 4, 1967.

HIGHEST WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	NR	36.50	36.95	36.85	36.40	36.00	35.40	35.85	36.15	36.25	36.00	35.85
10	36.15	36.15	36.70	36.25	36.45	36.45	NR	36.20	36.55	36.30	35.70	35.80
15	36.05	36.65	NR	36.65	36.40	36.15	NR	36.25	36.50	36.20	35.80	35.80
20	36.40	36.50	36.30	36.55	36.45	35.90	35.85	36.45	36.25	36.05	35.65	35.35
25	36.40	NR	36.60	36.50	36.05	36.45	35.70	36.45	36.15	35.75	35.90	35.15
EOM	36.20	36.86	36.75	36.55	36.55	36.25	36.15	36.05	36.00	35.80	36.05	35.10

WTR YEAR 1977 MAX 35.10 Sept. 26, 30, 1977

MIN 37.40 Jan. 12, 1977

ALLEN COUNTY

410932084561101. Local number, AL 6.

LOCATION.--Lat 41°09'32", long 84°56'11", Hydrologic Unit 04100005, at the intersection of Ehle and Thimler Roads, about 10 mi (16.1 km) northeast of New Haven.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in (0.15 m), depth 84 ft (26 m) cased to 81.5 ft (24.8 m), screened to 83.5 ft (25.5 m).
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 760 ft (232 m). Measuring point: Top of floor of shelter 2.50 ft (0.76 m) above land-surface datum.

REMARKS.--Water level affected by pumpage.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 8.20 ft (2.50 m) below land-surface datum, May 1, 1970; lowest, 14.52 ft (4.43 m) below land-surface datum, Oct. 26, 1974, Feb. 7, 1977.

HIGHEST WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	13.67	13.91	14.12	14.26	14.30	12.78	10.05	9.62	12.13	11.66	12.77	12.64
10	13.75	13.91	14.07	14.17	14.37	12.43	10.45	9.95	12.11	11.87	12.65	12.77
15	13.75	13.94	14.12	14.30	14.23	12.28	10.74	10.50	12.23	12.09	12.27	12.67
20	13.77	13.98	14.11	14.32	14.05	11.80	11.08	11.04	12.40	12.15	12.38	11.97
25	13.81	14.01	14.18	14.30	13.65	11.40	9.29	11.45	12.62	12.27	12.47	11.93
EOM	13.86	14.06	14.25	14.33	13.34	10.27	9.68	11.77	12.35	12.51	12.56	12.80

WTR YEAR 1977 MAX 9.26 Apr. 26, 1977

MIN 14.52 Feb. 7, 1977

BARTHOLOMEW COUNTY

391320085534601. Local number, BA 3.

LOCATION.--Lat 39°13'20", long 85°53'46", Hydrologic Unit 05120205, in northeast corner of Lincoln Park in the city of Columbus.
Owner: City of Columbus.

AQUIFER.--Sand and Gravel of Quaternary Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 6 in (0.15 m), depth 123 ft (37.5 m), cased to 116 ft (35 m), screened to 121 ft (37 m).
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 639.8 ft (195.0 m). Measuring point: Top of floor of shelter 2.50 ft (0.76 m) above land-surface datum.

REMARKS.--Water level affected by pumpage for water and sewage utilities.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 16.75 ft (5.11 m) below land-surface datum Feb. 24, 25, 1975; lowest, 28.74 ft (8.76 m) below land-surface datum, Oct. 9, 1971.

HIGHEST WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	19.37	19.35	19.47	19.57	19.70	18.61	17.79	17.79	18.32	18.43	19.82	18.84
10	19.40	19.35	19.49	19.53	19.69	18.66	18.03	17.74	18.41	18.53	19.67	18.90
15	19.39	19.40	19.47	19.61	19.18	18.67	18.19	17.96	18.49	18.49	18.94	18.91
20	19.41	19.46	19.48	19.61	19.26	18.66	18.33	18.13	18.55	18.77	18.83	18.88
25	19.35	19.45	19.52	19.63	18.96	18.73	17.75	18.24	18.52	19.10	18.75	18.91
EOM	19.34	19.42	19.60	19.71	18.90	18.44	17.88	18.12	18.50	19.60	18.78	18.93

WTR YEAR 1977 MAX 17.66 May 8, 1977 MIN 19.89 August 8, 9, 1977

BARTHOLOMEW COUNTY

391627085534401. Local number, BA 4.

LOCATION.--Lat 39°16'27", long 85°53'44", Hydrologic Unit 05120205, by a cemetery on the north side of Bakalar AFB at the northern city limits of Columbus.
Owner: Bartholomew County.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 6 in (0.15 m), depth 93 ft (28 m), cased to 85 ft (26 m), screened to 90 ft (27 m).
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 646 ft (197 m). Measuring point: Top of floor of shelter 2.60 ft (0.79 m) above land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 14.44 ft (4.40 m) below land-surface datum May 1, 1975; lowest, 21.15 ft (6.47 m) below land-surface datum, Feb. 11, 12, 1977.

HIGHEST WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	19.96	20.30	20.56	20.82	21.10	20.77	20.24	19.21	18.50	18.90	19.23	19.51
10	20.01	20.34	20.61	20.87	21.14	20.65	20.00	19.02	18.58	18.93	19.30	19.57
15	20.07	20.38	20.65	20.91	21.09	20.54	19.73	18.81	18.64	18.97	19.36	19.63
20	20.13	20.43	20.70	20.95	21.06	20.47	19.54	18.64	18.70	19.02	19.39	19.69
25	20.18	20.48	20.73	21.00	20.90	20.42	19.42	18.54	18.78	19.08	19.41	19.75
EOM	20.25	20.52	20.79	21.05	20.86	20.38	19.34	18.48	18.86	19.16	19.47	19.81

WTR YEAR 1977 MAX 18.48 May 31, June 1, 1977 MIN 21.15 Feb. 11, 12, 1977

GROUND-WATER LEVELS

BARTHOLOMEW COUNTY

390950085553501. Local number, BA 8.

LOCATION.--Lat 39°09'50", long 85°55'35", Hydrologic Unit 05120206, on property of Meadows Metal Products Co. about 4 mi (6.4 km) south of Columbus.
 Owner: Meadows Metal Products Co., Inc.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 6 in (0.15 m), depth 49 ft (15 m).
 Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 618.5 ft (188.5 m). Measuring point: Top of floor of shelter 3.00 ft (0.91 m) above land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 8.06 ft (2.46 m) below land-surface datum June 3, 1968; lowest, 23.00 ft (7.01 m) below land-surface datum, Feb. 12, 13, 1977.

HIGHEST WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	NR	NR	NR	22.44	22.88	22.66	21.65	19.80	19.99	21.05	21.68	22.23
10	NR	NR	NR	22.46	22.96	22.41	21.27	19.62	20.17	21.19	21.81	22.32
15	NR	NR	NR	22.47	22.93	22.20	20.94	19.52	20.36	21.21	21.92	22.42
20	NR	NR	NR	22.48	22.97	22.05	20.73	19.53	20.55	21.29	21.98	22.51
25	NR	NR	22.42	NR	22.88	21.97	20.44	19.65	20.73	21.39	22.05	22.59
EOM	NR	NR	22.43	NR	22.81	21.81	20.07	19.81	20.91	21.55	22.15	22.68
WTR YEAR 1977	MAX	19.51	May 16-18, 1977			MIN	23.00	Feb. 12, 13, 1977				

BARTHOLOMEW COUNTY

391035085560401. Local number, BA 9.

LOCATION.--Lat 39°10'35", long 85°56'04", Hydrologic Unit 05120206, at the Bartholomew County Home on the 4-H Fairgrounds about 3.0 mi (4.8 km) south of Columbus.
 Owner: City of Columbus.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 6 in (0.15 m), depth 115 ft (35 m) cased to 106 ft (32 m), screened to 111 ft (34 m).
 Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 621.5 ft (189.4 m). Measuring point: Top of floor of shelter 1.65 ft (0.50 m) above land-surface datum.

REMARKS.--Water level affected by pumpage from municipal supply well field.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 12.75 ft (3.89 m) below land-surface datum Apr. 27-30, 1973; lowest, 38.75 ft (11.81 m) below land-surface datum, Sept. 15, 1977.

HIGHEST WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	32.22	32.67	33.03	33.95	34.67	34.93	34.32	33.87	34.95	35.13	NR	36.75
10	32.37	32.87	33.34	33.99	35.04	34.98	33.74	33.74	34.82	35.83	NR	37.35
15	32.46	32.79	33.34	34.15	34.53	35.95	33.92	33.50	34.58	36.05	NR	37.30
20	32.63	33.05	33.50	34.33	34.51	34.31	34.16	33.97	34.96	NR	NR	37.13
25	32.40	32.93	33.56	34.38	34.89	34.66	33.54	34.27	35.02	NR	NR	36.99
EOM	32.51	33.02	33.71	34.44	34.62	35.75	33.79	34.36	35.37	NR	36.96	37.34
WTR YEAR 1977	MAX	32.20	Oct. 1, 1977			MIN	38.75	Sept. 30, 1977				

CASS COUNTY

403407086175701. Local number, CS 3.

LOCATION.--Lat 40°34'07", long 86°17'57", Hydrologic Unit 05120105, at intersection of State Highway 18 and County Road 400 East, 2.5 mi (4.0 km) east of Young America.
Owner: U.S. Geological Survey.

AQUIFER.--Dolomitic Limestone of Devonian-Silurian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in (0.15 m), depth 130 ft (40 m), cased to 78 ft (24 m), open end.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 780 ft (238 m). Measuring point: Top of floor of shelter 2.65 ft (0.81 m) above land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 3.85 ft (1.17 m) below land-surface datum Feb. 2, 1968; lowest, 7.95 ft (2.42 m) below land-surface datum, Feb. 11, 15, 16, 1977.

HIGHEST WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	6.95	7.15	7.35	7.35	NR	7.00	6.24	6.05	6.57	6.26	6.58	6.22
10	7.05	7.15	7.25	7.25	NR	7.15	6.58	6.51	6.59	6.35	6.21	6.26
15	7.00	7.20	7.20	7.45	7.85	6.97	6.60	6.62	6.73	6.30	6.27	6.20
20	7.05	7.20	7.20	NR	7.65	6.97	6.28	6.62	6.75	6.40	6.19	6.19
25	7.10	7.25	7.30	NR	7.30	6.74	5.99	6.77	6.75	6.34	6.25	6.13
EQM	7.05	7.30	7.40	NR	7.40	6.80	5.83	6.57	6.09	6.34	6.23	6.15

WTR YEAR 1977 MAX 5.74 May 2, 1977

MIN 7.95 Feb. 11, 15, 16, 1977

DECATUR COUNTY

392022085371801. Local number, DC 2.

LOCATION.--Lat 39°20'22", long 85°37'18", Hydrologic Unit 05120206, at the intersection of County Roads 50 North and 750 West, about 7.5 mi (12.1 km) west of Greensburg.
Owner: U.S. Geological Survey.

AQUIFER.--Limestone of Devonian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in (0.15 m), depth 49 ft (15 m), cased to 12.5 ft (3.8 m), open end.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 845 ft (258 m). Measuring point: Top of floor of shelter 3.02 ft (0.92 m) above land-surface datum.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.16 ft (0.05 m) below land-surface datum Dec. 10, 1966; lowest, 9.25 ft (2.82 m) below land-surface datum, Feb. 9-11, 1977.

HIGHEST WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	8.80	8.63	8.82	9.05	9.16	2.00	1.20	4.70	6.45	7.01	7.75	7.52
10	8.76	8.75	8.87	9.08	9.25	3.90	2.65	3.65	6.73	7.18	7.58	7.67
15	8.77	8.80	8.91	9.10	7.96	4.05	3.95	4.32	6.95	6.66	6.60	7.69
20	8.82	8.87	8.94	9.14	7.80	4.25	4.60	4.95	7.12	7.03	7.08	5.79
25	8.65	8.90	8.98	NR	4.43	4.60	4.40	5.55	7.25	7.30	7.09	6.08
EQM	8.58	8.71	9.02	NR	4.22	3.85	5.05	6.10	7.15	7.56	7.29	6.55

WTR YEAR 1977 MAX 0.65 Apr. 1, 1977

MIN 9.25 Feb. 9-11, 1977

GROUND-WATER LEVELS

DELAWARE COUNTY

400541085213701. Local number, DW 4.

LOCATION.--Lat 40°05'41", long 85°21'37", Hydrologic Unit 05120201, on property owned by Monroe Township Conservation Club about 8.0 mi (13 km) south of Muncie.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in (0.15 m), depth 91 ft (28 m), cased to 89 ft (27 m), screened to 91 ft (28 m).
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 1,005 ft (306 m). Measuring point: Top of floor of shelter 2.88 ft (0.88 m) above land-surface datum.

PERIOD OF RECORD.--October 1966 to October 1971. October 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 45.65 ft (13.90 m) below land-surface datum Feb. 23, 1975; lowest, 49.50 ft (15.09 m) below land-surface datum, Oct. 13, 14, 1966.

HIGHEST WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	49.21	49.15	49.20	49.25	49.10	47.95	48.30	48.80	49.01	49.12	49.09	48.83
10	49.20	49.17	49.23	49.22	49.18	48.30	48.51	48.78	48.88	49.16	49.11	48.92
15	49.20	49.20	49.24	49.20	48.94	48.55	48.69	48.83	48.96	49.19	48.77	48.82
20	49.19	49.20	49.24	49.17	49.07	48.67	48.80	48.88	49.03	49.22	48.73	48.76
25	49.15	49.20	49.25	49.19	48.67	48.70	48.71	48.93	49.05	48.82	48.86	48.84
EOM	49.15	49.19	49.27	49.06	48.00	48.62	48.74	48.96	49.08	49.00	48.76	48.93

WTR YEAR 1977 MAX 47.90 Feb. 27, 1977 MIN 49.27 Jan. 28-31, Feb. 1, 1977

ELKHART COUNTY

413121085481301. Local number, EH 4.

LOCATION.--Lat 41°31'21", long 85°48'13", Hydrologic Unit 040500001, at the southwest corner of Goshen Municipal Airport.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 6 in (0.15 m), depth 62 ft (19 m), cased to 58 ft (18 m), screened to 60 ft (18 m).
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 818 ft (249 m). Measuring point: Top of floor of shelter 2.60 ft (0.79 m) above land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 12.30 ft (3.75 m) below land-surface datum Apr. 16, 1973; lowest, 16.18 ft (4.93 m) below land-surface datum, Dec. 1-5, 1971.

HIGHEST WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	14.05	14.40	14.65	14.97	15.20	14.50	13.38	13.40	14.07	14.23	15.02	15.11
10	14.05	14.45	14.70	15.00	15.25	14.37	13.28	13.48	14.07	14.34	15.01	15.16
15	14.10	14.50	14.80	15.07	15.22	14.31	13.27	13.54	14.11	14.45	15.02	15.18
20	NR	14.50	14.84	15.11	15.27	14.29	13.28	13.61	14.18	14.52	15.02	15.12
25	14.30	14.55	14.88	15.15	14.81	14.25	13.31	13.71	14.29	14.73	15.05	15.04
EOM	14.35	14.55	14.93	15.20	14.75	13.87	13.38	13.82	14.34	14.88	15.10	14.98

WTR YEAR 1977 MAX 13.26 Apr. 13, 1977 MIN 15.28 Feb. 22, 1977

ELKHART COUNTY

414419085544601. Local number, EH 5.

LOCATION.--Lat 41°44'19", long 85°54'46", Hydrologic Unit 04050001, on the inlet to Heaton Lake, about 3.5 mi (5.6 km) east of Elkhart.
Owner: State of Indiana.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 1.5 in (0.04 m), depth 13 ft (4 m), cased to 11 ft (3.4 m), screened to 13 ft (4 m).
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 770 ft (235 m). Measuring point: Top of floor of shelter 2.10 ft (0.64 m) above land-surface datum.

PERIOD OF RECORD.--May 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 2.37 ft (0.72 m) below land-surface datum Mar. 4, 1976; lowest, 5.57 ft (1.70 m) below land-surface datum, Jan. 28, 1977.

HIGHEST WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	4.97	5.16	5.11	5.39	5.48	3.85	2.97	3.23	NR	4.11	4.99	4.82
10	4.83	5.20	5.17	5.42	5.52	3.67	3.09	NR	4.21	4.32	4.98	4.93
15	4.99	5.22	5.25	5.45	NR	3.43	3.16	NR	4.24	4.39	5.00	4.75
20	5.01	5.28	5.29	5.48	NR	3.34	3.23	NR	4.35	4.56	4.99	4.39
25	5.07	5.32	5.31	5.52	4.41	3.27	3.23	NR	4.44	4.84	4.99	4.17
EOM	5.14	5.00	5.34	5.49	4.28	2.91	3.29	NR	3.97	5.00	5.00	4.17

WTR YEAR 1977 MAX 2.90 Mar. 30, 1977 MIN 5.57 Jan. 28, 1977

ELKHART COUNTY

414351085540401. Local number, EH 6.

LOCATION.--Lat 41°43'51", long 85°54'04", Hydrologic Unit 04050001, on the southeast shore of Heaton Lake, 4.0 mi (6.4 km) east of Elkhart.
Owner: State of Indiana.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 1.5 in (0.04 m), depth 22 ft (6.7 m), cased to 20 ft (6.1 m), screened to 22 ft (6.7 m).
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 770 ft (235 m). Measuring point: Top of floor of shelter 2.50 ft (0.76 m) above land-surface datum.

PERIOD OF RECORD.--May 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 6.62 ft (2.02 m) below land-surface datum May 18, 1976; lowest, 10.31 ft (3.14 m) below land-surface datum, Feb. 25, 26, 1977.

HIGHEST WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	NR	9.93	NR	NR	NR	9.77	7.33	7.65	8.58	8.87	9.48	9.79
10	NR	9.93	NR	NR	NR	9.28	7.30	7.73	8.75	8.88	9.47	9.78
15	NR	NR	NR	NR	NR	8.94	7.34	7.85	8.84	8.87	9.48	9.78
20	NR	NR	NR	NR	NR	8.71	7.40	8.01	8.87	8.87	9.48	9.63
25	9.88	NR	NR	NR	NR	8.44	7.44	8.20	8.87	9.35	9.47	9.39
EOM	9.91	NR	NR	NR	NR	7.58	7.57	8.37	8.87	9.48	9.89	9.18

WTR YEAR 1977 MAX 7.24 Apr. 7, 1977 MIN 10.31 Feb. 25, 26, 1977

GROUND-WATER LEVELS

FRANKLIN COUNTY

392416085004301. Local number, FR 5.

LOCATION.--Lat 39°24'16", long 85°00'43", Hydrologic Unit 05080003, adjacent to property of Franklin County Conservation Club about 1.0 mi (1.6 km) south of Brookville.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 6 in (0.15 m), depth 61 ft (19 m), cased to 57 ft (17 m), screened to 59 ft (18 m).
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 625 ft (190 m). Measuring point: Top of floor of shelter 2.71 ft (0.83 m) above land-surface datum.

PERIOD OF RECORD.--March 1968 to October 1971. September 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 11.95 ft (3.64 m) below land-surface datum May 24, 1968; lowest, 27.32 ft (8.33 m) below land-surface datum, Feb. 1, 1977.

HIGHEST WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	27.09	26.25	26.65	27.15	27.30	23.97	23.70	25.44	26.32	26.21	26.99	26.85
10	26.95	26.22	26.80	27.18	27.30	24.65	24.37	24.98	26.46	26.44	26.82	26.91
15	26.94	26.35	26.95	27.20	26.40	24.90	25.10	25.32	26.55	26.58	26.54	26.83
20	26.83	26.40	27.00	27.20	26.50	25.25	25.52	25.50	26.65	26.77	26.67	26.52
25	26.60	26.50	27.05	27.25	24.85	24.45	25.75	25.80	26.66	26.90	26.53	26.50
EOM	26.35	26.42	27.10	27.27	24.92	25.30	25.95	26.00	26.30	26.92	26.73	26.51

WTR YEAR 1977 MAX 23.68 Apr. 6, 1977 MIN 27.32 Feb. 1, 1977

FULTON COUNTY

405829086175801. Local number, FU 7.

LOCATION.--Lat 40°58'29", long 86°17'58", Hydrologic Unit 05120106, about 2.5 mi (4.0 km) northwest of Fulton.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in (0.15 m), depth 102 ft (31 m), cased to 96 ft (29 m), screened to 102 ft (31 m).
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 780 ft (238 m). Measuring point: Top of floor of shelter 2.50 ft (0.76 m) above land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 6.35 ft (1.94 m) below land-surface datum Apr. 23-27, 1973; lowest, 12.60 ft (3.84 m) below land-surface datum, Feb. 7, 8, 1977.

HIGHEST WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	11.73	11.90	12.05	12.28	12.45	11.75	9.29	9.85	10.45	10.89	11.62	10.90
10	11.72	11.89	12.05	12.20	12.57	11.50	9.50	9.91	10.53	11.05	11.26	10.92
15	11.75	12.03	12.05	12.34	12.47	11.25	9.66	10.00	10.61	11.16	10.87	10.42
20	11.82	12.00	12.10	12.40	12.40	10.90	9.78	10.15	10.67	11.26	10.82	9.85
25	11.83	12.00	12.18	12.45	12.25	10.60	NR	10.29	10.79	11.33	10.92	9.73
EOM	11.85	12.00	12.20	12.50	12.15	9.67	NR	10.38	10.77	11.51	11.00	9.82

WTR YEAR 1977 MAX 9.29 Apr. 5, 1977 MIN 12.60 Feb. 28, 1977

GRANT COUNTY

402322085481901. Local number, GT 8.

LOCATION.--Lat 40°23'22", long 85°48'19", Hydrologic Unit 05120107, located on County Road 700 West right of way about 1.0 mi (1.6 km) northwest of Rigdon.
Owner: U. S. Geological Survey.

AQUIFER.--Limestone of Silurian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in (0.15 m), depth 35 ft (11 m), cased to 20 ft (6 m), open end.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 880 ft (268 m). Measuring point: Top of floor of shelter 3.10 ft (0.94 m) above land-surface datum.

PERIOD OF RECORD.--October 1966 to October 1971. July 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 1.30 ft (0.40 m) below land-surface datum Feb. 24, 1975; lowest, 10.66 ft (3.25 m) below land-surface datum, Oct. 29, 1966.

HIGHEST WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	7.63	8.12	8.68	9.22	9.20	4.88	2.55	2.40	NR	5.60	6.88	5.03
10	7.75	8.36	9.00	9.43	9.20	4.88	3.58	2.85	4.84	5.52	6.56	5.31
15	7.76	NR	8.95	NR	8.76	5.00	4.05	3.63	4.95	5.71	5.46	3.56
20	7.87	NR	9.00	9.00	8.55	3.90	4.35	4.12	5.00	5.91	4.52	3.87
25	7.90	NR	9.12	9.20	7.55	3.95	3.04	4.43	5.12	6.07	4.93	4.28
EOM	7.85	NR	9.40	9.18	6.43	3.35	3.63	NR	5.27	6.45	4.84	4.58

WTR YEAR 1977 MAX 2.35 May 7, 1977 MIN 9.65 Jan. 11, 1977

HAMILTON COUNTY

40000086023001. Local number, HA 5.

LOCATION.--Lat 40°00'00", long 86°02'30", Hydrologic Unit 05120201, on Gray Road, about 3.5 mi (5.6 km) southwest of Noblesville.
Owner: Earlham College, Richmond, Ind.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 6 in (0.15 m), depth 100 ft (30 m), cased to 80 ft (24 m), screened to 85 ft (26 m).
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 758 ft (231 m). Measuring point: Top of floor of shelter 2.76 ft (0.84 m) above land-surface datum.

PERIOD OF RECORD.--July 1965 to September 1971. July 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 8.07 ft (2.46 m) below land-surface datum Feb. 25, 1975; lowest, 11.66 ft (3.55 m) below land-surface datum, Sept. 19, 1966.

HIGHEST WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	10.87	10.86	10.96	11.05	11.13	10.06	9.86	10.16	NR	10.86	11.13	10.92
10	10.88	10.88	10.97	11.06	11.14	10.02	9.91	9.98	NR	10.87	11.80	10.98
15	10.90	10.91	10.98	11.10	10.94	10.07	10.05	10.06	NR	10.95	10.65	11.01
20	10.91	10.92	11.00	11.10	10.93	10.11	10.14	10.18	NR	10.00	10.75	11.02
25	10.85	10.94	11.03	11.11	10.74	10.13	10.15	10.30	NR	11.07	10.81	11.05
EOM	10.86	10.94	11.03	11.11	10.26	10.12	10.22	NR	NR	NR	NR	11.07

WTR YEAR 1977 MAX 9.86 Apr. 5-8, 1977 MIN 11.17 Aug. 4, 1977

GROUND-WATER LEVELS

HARRISON COUNTY

382323086044501. Local number, HR 8.

LOCATION.--Lat 38°23'23", long 86°04'45", Hydrologic Unit 05140104, on Harrison County Road right of way, 2.0 mi (3.2 km) southeast of Palmyra.
Owner: U.S. Geological Survey.

AQUIFER.--Limestone of Mississippian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in (0.15 m), depth 93 ft (28 m), cased to 54 ft (16 m), open end.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 827 ft (252 m). Measuring point: Top of floor of shelter 3.08 ft (0.94 m) above land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 1.30 ft (0.40 m) below land-surface datum Apr. 22, 1972; lowest, 19.71 ft (6.01 m) below land-surface datum, Nov. 5, 1966.

HIGHEST WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	15.45	16.40	17.10	NR	19.20	9.55	4.53	6.50	NR	NR	NR	NR
10	15.82	16.55	17.30	NR	19.33	8.20	4.95	5.70	NR	NR	NR	NR
15	16.15	16.80	17.37	NR	16.40	5.00	6.03	6.78	NR	NR	NR	6.96
20	16.47	17.08	17.50	18.60	15.85	4.60	7.20	8.00	12.72	NR	NR	7.51
25	16.68	17.35	NR	18.85	14.05	4.80	7.65	9.07	13.08	NR	NR	8.27
EOM	16.58	17.10	NR	19.05	13.25	4.26	7.95	10.10	11.24	NR	NR	9.09

WTR YEAR 1977 MAX 3.43 Mar. 29, 1977 MIN 19.33 Feb. 10, 1977

HENDRICKS COUNTY

394025086400801. Local number, HD 4.

LOCATION.--Lat 39°40'25", long 86°40'08", Hydrologic Unit 05120203, at the intersection of State Highway 75 and County Road 600 South on county right of way 1.0 mi (1.6 km) south of Coatesville.
Owner: U.S. Geological Survey.

AQUIFER.--Sandstone of Mississippian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in (0.15 m), depth 85 ft (26 m), cased to 70 ft (21 m), open end.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 860 ft (262 m). Measuring point: Top of floor of shelter 1.92 ft (0.59 m) above land-surface datum.

REMARKS.--Water level affected by pumpage.

PERIOD OF RECORD.--October 1966 to September 1971. November 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 18.65 ft (5.68 m) below land-surface datum Jan. 30, 1976; lowest, 28.0 ft (8.53 m) below land-surface datum, January 1977.

HIGHEST WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	26.20	NR	NR	NR	NR	24.91	21.97	22.84	23.66	24.20	23.54	23.85
10	26.06	NR	NR	NR	NR	23.81	21.93	22.08	23.69	23.46	23.54	23.96
15	26.20	NR	NR	NR	NR	23.61	22.18	22.10	23.74	23.17	23.36	24.04
20	26.44	NR	NR	NR	NR	23.35	22.69	22.81	23.70	23.18	23.55	24.14
25	NR	NR	NR	NR	26.39	23.56	23.11	23.46	23.90	23.28	23.48	23.98
EOM	NR	NR	NR	NR	26.24	22.72	23.02	23.39	24.14	23.26	23.96	24.01

WTR YEAR 1977 MAX 21.92 Apr. 6, 1977 MIN 28.0 January 1977 (exact day unknown)

JASPER COUNTY

410249087011201. Local number, JP 4.

LOCATION.--Lat 41°02'49", long 87°01'12", Hydrologic Unit 07120002, on property of William Gehring, Inc., 0.9 mi (1.4 km) east of Newland.

Owner: William Gehring, Inc.

AQUIFER.--Limestone of Devonian Age.

WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 16 in (0.41 m), depth 300 ft (91 m).
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 680 ft (207 m). Measuring point: Top of floor of shelter 0.00 ft (0.00 m) above land-surface datum.

REMARKS.--Water level affected by pumpage.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.95 ft (0.29 m) below land-surface datum Apr. 8, 1962; lowest, 38.70 ft (11.80 m) below land-surface datum, July 24, 1977.

HIGHEST WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	NR	6.40	5.20	4.80	4.59	4.13	2.72	5.57	20.22	28.66	24.33	10.42
10	NR	5.95	5.00	4.47	4.64	4.02	3.01	5.22	23.28	29.22	15.97	10.74
15	NR	5.75	4.80	4.60	4.66	3.83	4.23	6.49	16.78	33.54	13.28	10.20
20	NR	5.45	4.70	4.55	4.52	3.62	4.53	7.49	15.59	32.64	12.52	8.80
25	8.20	5.20	4.80	4.53	4.29	3.64	4.59	13.06	24.89	28.32	11.61	9.00
EOM	6.95	5.30	4.90	4.63	4.40	3.23	5.39	17.43	28.62	18.07	11.10	9.49

WTR YEAR 1977 MAX 2.66 Apr. 4, 1977

MIN 38.70 July 24, 1977

KNOX COUNTY

383247087361001. Local number, KN 7.

LOCATION.--Lat 38°32'47", long 87°36'10", Hydrologic Unit 05120113, in the right of way of Sixth Street, 9.8 mi (15.8 km) south of Vincennes.

Owner: Michael J. Kelley.

AQUIFER.--Sand and Gravel of Quaternary Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in (0.15 m), depth 43 ft (13 m), cased to 16 ft (4.9 m), slotted to 19 ft (5.8 m), open end.
Instrumentation: Water-stage recorder. Prior to April 1968, handtaped monthly.

DATUM.--Altitude of land-surface datum is 405 ft (123 m). Measuring point: Top of floor of shelter 2.42 ft (0.74 m) above land-surface datum.

PERIOD OF RECORD.--November 1956 to December 1972. January 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 3.27 ft (1.00 m) below land-surface datum Jan. 30, 1969; lowest, 11.35 ft (3.46 m) below land-surface datum, Feb. 1-13, 1977.

HIGHEST WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	11.10	NR	11.20	11.25	11.35	NR	NR	9.85	10.34	10.60	10.41	9.59
10	11.10	NR	11.20	11.25	11.35	10.20	NR	9.55	10.42	10.49	10.49	9.80
15	11.15	NR	11.20	11.25	NR	10.00	9.50	9.63	10.51	9.96	9.95	9.96
20	11.15	11.20	11.20	11.30	NR	NR	NR	9.93	10.58	10.14	9.99	10.03
25	11.15	11.20	11.20	11.30	NR	NR	NR	10.10	10.65	10.25	8.24	9.66
EOM	11.15	11.20	11.25	11.30	NR	NR	NR	10.24	10.49	10.32	9.08	9.86

WTR YEAR 1977 MAX 10.07 Sept. 20, 1977

MIN 11.35 Feb. 1-13, 1977

GROUND-WATER LEVELS

KOSCIUSKO COUNTY

411839085451601. Local number, KO 4.

LOCATION.--Lat 41°18'39", long 85°45'16", Hydrologic Unit 05120106, on the county right of way of Armstrong Road, 2.0 mi (3.2 km) east of Oswego.
Owner: State of Indiana.

AQUIFER.--Sand of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 1.5 in (0.04 m), depth 22 ft (6.7 m), cased to 20 ft (6.1 m), screened to 22 ft (6.7 m).
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 852 ft (260 m). Measuring point: Top of floor of shelter 3.00 ft (0.91 m) above land-surface datum.

PERIOD OF RECORD.--May 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 10.04 ft (3.06 m) below land-surface datum Mar. 24; lowest, 12.94 ft (3.94 m) below land-surface datum, Oct. 29-31, 1976.

HIGHEST WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	12.86	NR	NR	NR	NR	NR	11.71	11.96	12.40	12.43	12.74	12.67
10	12.84	NR	NR	NR	NR	NR	11.65	12.06	12.44	12.39	12.62	12.71
15	12.86	NR	NR	NR	NR	NR	11.63	12.14	12.43	12.38	12.60	12.72
20	12.87	NR	NR	NR	NR	12.23	11.70	12.19	12.53	12.43	12.59	12.49
25	12.88	NR	NR	NR	NR	12.12	11.82	12.25	12.54	12.53	12.64	12.31
EOM	12.94	NR	NR	NR	NR	11.91	11.92	12.33	12.54	12.66	12.69	12.24

WTR YEAR 1977 MAX 11.63 Apr. 15, 16, 1977 MIN 12.94 Oct. 29-31, 1976

KOSCIUSKO COUNTY

412500085384501. Local number, KO 5.

LOCATION.--Lat 41°25'00", long 85°38'45", Hydrologic Unit 04050001, in the southeast corner of Wawasee Airport, 3.5 mi (5.6 km) east of Syracuse.
Owner: State of Indiana.

AQUIFER.--Sand of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 1.5 in (0.04 m), depth 13 ft (4 m), cased to 11 ft (3.4 m), screened to 13 ft (4 m).
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 870 ft (265 m). Measuring point: Top of floor of shelter 2.70 ft (0.82 m) above land-surface datum.

PERIOD OF RECORD.--May 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 3.25 ft (0.99 m) below land-surface datum Apr. 26, 1976; lowest, 6.06 ft (1.85 m) below land-surface datum, Mar. 1-5, 8-10, 1977.

HIGHEST WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	5.52	5.73	5.89	6.04	NR	6.04	NR	NR	4.73	4.79	5.41	5.60
10	5.47	5.76	5.92	6.04	NR	6.06	NR	NR	4.78	4.89	5.33	5.69
15	5.57	5.81	5.94	NR	6.04	NR	NR	NR	4.87	4.97	5.45	5.55
20	5.62	5.85	6.01	NR	6.03	NR	NR	NR	4.95	5.01	5.51	5.26
25	5.63	5.90	6.02	NR	6.04	NR	NR	4.38	5.03	5.14	5.58	5.25
EOM	5.70	5.82	6.04	NR	6.04	NR	NR	4.54	4.76	5.27	5.63	5.34

WTR YEAR 1977 MAX 4.38 May 25, 1977 MIN 6.06 Mar. 1-5, 8-10, 1977

LAKE COUNTY

411038087284701. Local number, LK 12.

LOCATION.--Lat 41°10'38", long 87°28'47", Hydrologic Unit 07120001, on the northern edge of Kankakee River State Park, 2.0 mi (3.2 km) southwest of Schneider.
Owner: U. S. Geological Survey.

AQUIFER.--Dolomite of Silurian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in (0.15 m), depth 82 ft (25 m), cased to 52 ft (16 m), open end.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 629 ft (192 m). Measuring point: Top of floor of shelter 1.55 ft (0.47 m) above land-surface datum.

REMARKS.--Water level may be affected by pumping.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.15 ft (0.05 m) below land-surface datum Jan. 12, 1973; lowest, 14.35 ft (4.37 m) below land-surface datum, Sept. 9, 1974.

HIGHEST WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	NR	NR	5.05	4.57	4.67	4.19	2.92	3.11	3.89	4.19	12.94	10.00
10	NR	NR	4.89	4.45	4.70	3.98	3.04	3.03	3.94	6.40	13.13	9.10
15	NR	NR	4.82	4.51	4.63	3.81	3.09	3.20	3.86	8.86	11.56	8.06
20	6.70	NR	4.72	4.47	4.52	3.60	3.16	3.32	3.80	10.13	11.30	7.19
25	NR	5.31	4.67	4.51	4.37	3.48	3.17	3.49	3.87	10.41	11.75	6.51
EOM	NR	5.20	4.62	4.61	4.32	3.12	3.25	3.83	3.87	11.68	12.05	6.23

WTR YEAR 1977 MAX 2.91 Apr. 4, 1977

MIN 13.51 Aug. 9, 1977

LA PORTE COUNTY

413700086445401. Local number, LP 8.

LOCATION.--Lat 41°37'00", long 86°44'54", Hydrologic Unit 07120001, at the west end of Soldiers Memorial Park in La Porte.
Owner: State of Indiana.

AQUIFER.--Sand and Gravel of Quaternary Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 1.5 in (0.04 m), depth 22 ft (6.7 m), cased to 20 ft (6.1 m), screened to 22 ft (6.7 m).
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 807 ft (246 m). Measuring point: Top of floor of shelter 2.60 ft (0.79 m) above land-surface datum.

PERIOD OF RECORD.--May 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 4.15 ft (1.26 m) below land-surface datum May 27, 29, 1976; lowest, 6.51 ft (1.98 m) below land-surface datum, Aug. 4-7, 1977.

HIGHEST WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	5.51	5.65	5.69	5.80	5.80	5.69	5.27	5.42	5.96	6.06	6.51	NR
10	5.46	5.61	5.68	5.75	5.84	5.73	5.46	5.50	6.02	6.06	6.46	NR
15	5.54	5.66	5.70	5.78	5.77	5.61	5.46	5.59	6.05	6.18	6.48	NR
20	5.60	5.71	5.72	5.72	5.81	5.52	5.50	5.68	6.07	6.26	NR	NR
25	5.61	5.68	5.74	5.79	5.66	5.55	5.47	5.77	6.13	6.34	NR	NR
EOM	5.65	5.63	5.78	5.82	5.76	5.39	5.57	5.89	6.02	6.43	NR	NR

WTR YEAR 1977 MAX 5.27 Apr. 4, 5, 1977

MIN 6.51 Aug. 4-7, 1977

GROUND-WATER LEVELS

LA PORTE COUNTY

412350086512801. Local number, LP 9.

LOCATION.--Lat 41°23'50", long 86°51'28", Hydrologic Unit 07120001, at the intersection of County Roads 1450 South and 825 West, about 3.0 mi (4.8 km) southeast of Wanatah.
 Owner: U.S. Geological Survey.

AQUIFER.--Sand of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in (0.15 m), depth 32 ft (9.8 m), cased to 27 ft (8.2 m), screened to 32 ft (9.8 m).
 Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 708 ft (216 m). Measuring point: Top of floor of shelter 1.60 ft (0.49 m) above land-surface datum.

PERIOD OF RECORD.--June 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 2.22 ft (0.68 m) below land-surface datum June 30, 1976; lowest, 7.68 ft (2.34 m) below land-surface datum, Sept. 16, 17, 1977.

HIGHEST WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	NR	7.03	NR	7.31	7.60	6.38	4.03	3.82	5.76	6.43	7.13	7.59
10	6.71	7.03	NR	7.32	7.65	6.31	4.34	4.55	5.94	6.55	NR	7.63
15	6.76	7.09	NR	7.40	7.50	6.09	4.57	4.81	6.01	6.62	NR	7.68
20	6.85	7.12	7.18	7.44	7.62	5.82	4.76	5.08	6.11	6.72	7.40	6.74
25	6.91	7.14	7.21	7.50	6.45	5.35	4.93	5.32	6.23	6.84	7.48	6.57
EOM	6.97	7.12	7.27	7.55	6.66	4.17	5.20	5.57	6.26	7.00	7.57	6.55

WTR YEAR 1977 MAX 3.74 May 6, 1977

MIN 7.68 Sept. 16, 17, 1977

MARION COUNTY

395218086082701. Local number, MA 32.

LOCATION.--Lat 39°52'18", long 86°08'27", Hydrologic Unit 05120201, in Broad Ripple, City of Indianapolis.
 Owner: Indianapolis Water Company.

AQUIFER.--Limestone of Devonian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 10 in (0.25 m), depth 308 ft (94 m). cased to 60 ft (18 m), open end.
 Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 720 ft (219 m). Measuring point: Top of floor of shelter 3.15 ft (0.96 m) above land-surface datum.

REMARKS.--Water level affected by earthquakes.

PERIOD OF RECORD.--May 1958 to August 1971. January 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 5.85 ft (1.78 m) below land-surface datum Jun. 17, 1958; lowest, 15.15 ft (4.62 m) below land-surface datum, Oct. 5, 1965.

HIGHEST WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	10.88	NR	10.36	10.42	NR	9.40	9.65	9.85	11.36	11.34	NR	11.41
10	NR	NR	10.38	10.52	NR	9.63	NR	9.73	10.24	11.46	NR	11.23
15	NR	10.43	10.36	10.43	NR	9.70	NR	10.91	11.32	11.66	NR	10.63
20	NR	10.39	10.42	10.42	10.25	9.67	NR	11.04	11.73	11.54	11.31	10.96
25	NR	10.38	10.39	10.40	10.07	9.70	NR	11.51	11.07	11.56	11.37	10.61
EOM	NR	10.38	10.46	NR	9.45	9.33	NR	11.46	11.69	NR	11.43	10.75

WTR YEAR 1977 MAX 9.30 Mar. 28, 1977

MIN 12.97 July 9, 1977

MARTIN COUNTY

383659086545901. Local number, MT 5.

LOCATION.--Lat 38°36'59", long 86°54'59", Hydrologic Unit 05120208, on private property 0.25 mi (0.4 km) southwest of Whitfield.
Owner: Joseph Arvin.

AQUIFER.--Sandstone of Pennsylvanian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in (0.15 m), depth 143 ft (44 m), cased to 53 ft (16 m), open end.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 565 ft (172 m). Measuring point: Top of floor of shelter 1.0 ft (0.30 m) above land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 25.40 ft (7.74 m) below land-surface datum Apr. 18, 19, 1975; lowest, 34.10 ft (10.39 m) below land-surface datum, Jan. 1, 5, 22, 23, 1960 and Dec. 18, 19, 1964.

HIGHEST WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	27.55	28.30	NR	28.15	NR	27.90	28.20	27.80	27.63	28.06	28.28	28.33
10	27.75	27.85	NR	27.80	28.95	27.95	28.55	28.00	27.92	28.07	28.18	28.36
15	27.65	28.20	28.35	28.25	28.85	27.70	28.30	27.90	27.94	28.20	28.36	28.37
20	27.90	28.00	28.00	28.20	28.80	27.05	28.20	27.87	27.78	28.16	28.29	28.30
25	27.85	28.10	NR	NR	28.25	NR	28.00	27.85	27.78	27.99	28.41	28.08
EOM	27.70	28.35	NR	NR	28.05	NR	28.20	27.66	27.68	28.05	28.45	28.11
WTR YEAR 1977	MAX	26.55	Mar. 18, 1977			MIN	29.15	Mar. 2, 1977				

MONTGOMERY COUNTY

400247086482101. Local number, MY 7.

LOCATION.--Lat 40°02'47", long 86°48'21", Hydrologic Unit 05120110, on the county right of way at the intersection of State Highway 32 and County Road 525 East, about 4.5 mi (7.2 km) east of Crawfordsville.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in (0.15 m), depth 111 ft (34.0 m), cased to 107 ft (32.6 m), screened to 109 ft (33.2 m).
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 801 ft (244 m). Measuring point: Top of floor of shelter 2.38 ft (0.73 m) above land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 26.10 ft (7.96 m) below land-surface datum Apr. 13, 1974; lowest, 32.06 ft (9.77 m) below land-surface datum, June 4, 1977.

HIGHEST WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	30.52	30.72	31.19	31.45	NR	31.18	30.66	31.31	31.92	31.54	31.43	30.69
10	30.59	30.73	31.15	31.30	31.63	31.13	31.24	31.41	31.76	31.30	31.15	30.68
15	30.59	30.88	31.15	NR	31.54	31.03	31.35	31.49	31.63	31.29	30.98	30.57
20	30.70	30.88	31.15	NR	31.51	31.14	31.33	31.56	31.56	31.29	31.01	30.50
25	30.70	30.92	31.28	NR	31.30	31.24	31.14	31.68	31.50	31.24	30.92	30.47
EOM	30.62	31.12	31.44	NR	31.36	30.98	31.34	31.82	31.36	31.30	30.74	30.40
WTR YEAR 1977	MAX	30.36	Oct. 6, 1976			MIN	32.06	June 4, 1977				

GROUND-WATER LEVELS

NEWTON COUNTY

405105087173301. Local number, NE 6.

LOCATION.--Lat 40°51'05", long 87°17'33", Hydrologic Unit 07120002, on the right of way of County Road 1000 South, 1.0 mi (1.6 km) south of Foresman.

Owner: U.S. Geological Survey.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 6 in (0.15 m), depth 80 ft (24 m), cased to 76 ft (23 m), screened to 78 ft (24 m).

Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 653 ft (199 m). Measuring point: Top of floor of shelter 2.15 ft (0.66 m) above land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 8.42 ft (2.57 m) below land-surface datum Apr. 24, 1973; lowest, 15.67 ft (4.78 m) below land-surface datum, Oct. 14, 1967.

HIGHEST WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	NR	14.15	14.39	14.62	14.96	14.14	10.97	12.05	12.77	13.25	14.64	13.56
10	NR	14.12	14.37	14.54	15.05	13.78	11.37	11.39	12.85	13.51	14.29	13.53
15	NR	14.25	14.39	14.66	14.93	13.48	11.65	11.59	12.93	13.76	13.69	12.76
20	14.10	14.27	14.40	14.70	14.82	13.05	11.84	11.90	12.82	13.92	13.65	11.73
25	14.10	14.26	14.46	14.78	14.52	12.50	12.00	12.18	12.00	14.09	13.79	11.56
EOM	14.09	14.35	14.58	14.89	14.41	11.49	12.30	12.55	13.06	14.32	13.88	11.80

WTR YEAR 1977 MAX 10.97 Apr. 5, 1977 MIN 15.08 Feb. 7, 1977

NEWTON COUNTY

405959087282901. Local number, NE 7.

LOCATION.--Lat 40°59'59", long 87°28'29", Hydrologic Unit 07120002, in the Willow Slough Game Preserve, about 2.0 mi (3.2 km) southwest of Enos.

Owner: State of Indiana.

AQUIFER.--Limestone of Silurian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in (0.15 m), depth 150 ft (46 m), cased to 136 ft (41.5 m), open end.

Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 681 ft (208 m). Measuring point: Top of floor of shelter 2.03 ft (0.62 m) above land-surface datum.

PERIOD OF RECORD.--February 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 34.77 ft (10.6 m) below land-surface datum May 2, 1976; lowest, 68.22 ft (20.79 m) below land-surface datum, Aug. 25, 1977.

HIGHEST WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	53.99	47.00	43.73	41.49	40.05	39.08	37.93	37.42	38.38	50.10	NR	63.20
10	53.00	46.26	43.23	41.02	39.92	38.95	38.17	37.48	39.28	55.96	NR	61.59
15	51.96	45.67	42.71	40.87	39.78	38.73	38.08	37.41	39.72	NR	NR	59.92
20	49.16	44.98	42.33	40.58	39.55	38.52	37.99	37.54	40.02	NR	NR	58.59
25	48.45	44.48	42.06	40.33	39.26	38.59	37.83	37.64	41.10	NR	67.86	57.30
EOM	47.60	44.18	41.82	40.20	39.33	38.32	37.84	37.75	44.43	NR	65.31	56.37

WTR YEAR 1977 MAX 37.39 May 14, 1977 MIN 68.22 Aug. 25, 1977

NEWTON COUNTY

410428087231501. Local number, NE 8.

LOCATION.--Lat 41°04'28", long 87°23'15", Hydrologic Unit 07120001, in the Beaver Lake Prairie Chicken Refuge, 3.0 mi (4.8 km) north of Enos.
Owner: State of Indiana.

AQUIFER.--Limestone of Silurian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in (0.15 m), depth 150 ft (45.7 m) cased to 97 ft (29.6 m), open end.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 665 ft (203 m). Measuring point: Top of floor of shelter 2.83 ft (0.86 m) above land-surface datum.

PERIOD OF RECORD.--February 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 4.04 ft (1.23 m) below land-surface datum May 31, 1976; lowest, 42.85 ft (13.06 m) below land-surface datum, July 12, 1977.

HIGHEST WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	26.74	NR	12.26	10.61	NR	8.36	7.24	6.68	7.03	28.97	NR	28.36
10	27.44	NR	12.05	10.16	NR	8.28	7.43	6.73	11.95	39.15	NR	27.10
15	28.10	NR	11.55	10.04	NR	8.07	7.33	6.63	10.98	NR	NR	25.72
20	NR	NR	11.25	9.43	8.81	7.89	7.21	6.63	10.75	NR	NR	24.61
25	NR	12.37	10.99	9.30	8.50	7.91	7.04	6.64	11.05	NR	NR	23.54
EOM	NR	12.22	10.75	NR	8.58	7.62	7.06	6.48	19.33	NR	32.56	22.81

WTR YEAR 1977 MAX 6.45 June 1, 1977

MIN 42.85 July 12, 1977

NOBLE COUNTY

411922085221801. Local number, NO 8.

LOCATION.--Lat 41°19'22", long 85°22'18", Hydrologic Unit 04050001, near the east edge of Chain O' Lakes State Park, about 5.0 mi (8.0 km) south of Albion.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 6 in (0.15 m), depth 190 ft (58 m), cased to 146 ft (44.5 m), screened to 148 ft (45.1 m).
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 928 ft (283 m). Measuring point: Top of floor of shelter 2.65 ft (0.81 m) above land-surface datum.

PERIOD OF RECORD.--December 1966 to September 1971. August 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 29.14 ft (8.88 m) below land-surface datum July 7, 1975; lowest, 32.49 ft (9.90 m) below land-surface datum, Jan. 18, 1967.

HIGHEST WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	30.45	30.65	NR	31.10	31.05	31.09	30.50	30.54	30.67	30.93	31.01	30.96
10	30.55	30.50	NR	30.68	31.20	31.15	30.97	30.77	30.94	31.00	30.93	30.95
15	30.38	30.80	NR	NR	31.25	31.00	30.90	30.79	30.93	31.00	31.07	31.08
20	30.58	30.78	NR	NR	31.25	30.87	30.81	30.73	30.82	30.93	31.03	30.88
25	30.58	30.60	NR	NR	30.95	31.21	30.62	30.74	30.81	30.80	31.12	30.80
EOM	30.45	30.95	NR	31.15	31.35	30.90	30.87	30.68	30.76	30.86	31.05	30.91

WTR YEAR 1977 MAX 30.38 Oct. 15, 1976

MIN 31.57 Feb. 7, 1977

GROUND-WATER LEVELS

NOBLE COUNTY

413106085232701. Local number, NO 9.

LOCATION.--Lat 41°31'06", long 85°23'27", Hydrologic Unit 04050001, at the intersection of County Roads 175 East and 1150 North about 2.0 mi (3.2 km) west of Wolcottville.
Owner: U.S. Geological Survey.

AQUIFER.--Sand of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled observation artesian water-table well, diameter 6 in (0.15 m), depth 159 ft (48 m), cased to 39 ft (12 m), screened to 42 ft (13 m).
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 930 ft (283 m). Measuring point: Top of floor of shelter 2.60 ft (0.79 m) above land-surface datum.

PERIOD OF RECORD.--June 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 10.45 ft (3.19 m) below land-surface datum Apr. 4, 5, 1977; lowest, 16.90 ft (5.15 m) below land-surface datum, Feb. 7, 1977.

HIGHEST WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5										13.56	NR	NR
10									13.74	13.98	NR	NR
15									14.18	14.15	NR	NR
20									14.03	14.63	NR	NR
25									13.30	14.10	NR	NR
EOM									13.19	14.07	NR	15.98

HIGHEST WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	16.03	NR	16.09	16.38	16.70	13.96	10.45	12.29	13.86	13.55	15.30	15.61
10	15.58	16.14	16.08	16.26	16.78	13.82	11.34	12.22	14.19	14.05	15.23	15.76
15	15.66	16.18	16.11	16.43	16.64	13.89	11.92	12.67	14.31	14.33	15.44	15.88
20	15.84	16.27	16.12	16.55	16.59	13.30	12.29	13.01	14.44	14.50	15.26	15.09
25	NR	16.27	16.13	16.53	15.20	12.52	12.17	13.26	14.29	14.68	15.54	15.00
EOM	NR	16.03	16.32	16.71	15.18	10.64	12.40	13.58	13.94	15.01	15.60	14.88

WTR YEAR 1977 MAX 10.45 Apr. 4, 5, 1977 MIN 16.90 Feb. 7, 1977

OWEN COUNTY

391731086421401. Local number, OW 7.

LOCATION.--Lat 39°17'31", long 86°42'14", Hydrologic Unit 05120202, at the east edge of McCormicks Creek State Park about 3.0 mi (4.8 km) east of Spencer.
Owner: U.S. Geological Survey.

AQUIFER.--Limestone of Mississippian Age.

WELL CHARACTERISTICS.--Drilled observation artesian well, diameter 6 in (0.15 m), depth 150 ft (46 m), cased to 15 ft (4.6 m), open end.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 805 ft (245 m). Measuring point: Top of floor of shelter 2.38 ft (0.73 m) above land-surface datum.

REMARKS.--Water level affected by White River.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 98.77 ft (30.11 m) below land-surface datum May 24, 1968; lowest, 121.25 ft (36.96 m) below land-surface datum, June 6, 1973.

HIGHEST WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	NR	116.05	116.05	NR	116.10	114.80	NR	115.40	115.85	NR	NR	115.96
10	116.05	116.05	116.10	NR	116.10	115.60	NR	115.40	115.90	NR	115.94	116.00
15	116.05	116.05	116.05	116.05	NR	115.60	NR	115.60	115.95	NR	115.95	116.00
20	116.10	116.05	116.05	116.10	NR	115.65	NR	115.70	115.95	NR	115.96	115.85
25	116.00	116.05	116.10	116.10	NR	NR	NR	115.75	115.80	NR	115.88	115.93
EOM	115.95	116.05	116.10	116.10	NR	NR	115.55	115.80	115.85	NR	115.90	115.95

WTR YEAR 1977 MAX 112.00 in March, 1977 MIN 116.10 various dates in October, 1976 to February, 1977

POSEY COUNTY

380758087551001. Local number, PY 3.

LOCATION.--Lat 38°07'58", long 87°55'10", Hydrologic Unit 05120113, on property of the New Harmony Park Board, at the east edge of New Harmony.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in (0.15 m), depth 58 ft (18 m), cased to 54 ft (16 m), screened to 56 ft (17 m).
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 380 ft (116 m). Measuring point: Top of floor of shelter 3.00 ft (0.91 m) above land-surface datum.

REMARKS.--Water level affected by Wabash River floods.

PERIOD OF RECORD.--April 1967 to September 1971. September 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 5.78 ft (1.76 m) below land-surface datum Apr. 25, 1975; lowest, 21.25 ft (6.48 m) below land-surface datum, Feb. 15-20, 1977.

HIGHEST WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	19.25	19.80	20.25	20.72	21.15	20.87	16.58	16.69	16.72	16.88	17.88	16.35
10	19.35	19.85	20.32	20.80	21.22	20.50	16.36	16.75	17.00	17.12	17.44	16.50
15	19.45	19.94	20.40	20.87	21.25	20.06	16.36	16.60	17.23	17.12	16.68	16.76
20	19.56	20.02	20.45	20.93	21.25	19.80	16.58	16.68	17.44	17.31	16.63	16.97
25	19.65	20.10	20.55	21.00	21.20	19.15	16.68	15.97	17.65	17.47	15.95	16.90
EOM	19.75	20.17	20.63	21.10	21.14	17.21	16.83	16.41	16.60	17.67	16.10	16.95

WTR YEAR 1977 MAX 15.95 Aug. 25, 1977

MIN 21.25 Feb. 15-20, 1977

PULASKI COUNTY

405916086530701. Local number, PU 6.

LOCATION.--Lat 40°59'16", long 86°53'07", Hydrologic Unit 05120106, on private property at the north edge of Francesville.
Owner: Earl Overmeyer.

AQUIFER.--Limestone of Devonian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 8 in (0.20 m), depth 663 ft (202 m), cased to 11 ft (3.4 m), open end.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum 680 ft (207 m). Measuring point: Top of floor of shelter 3.00 ft (0.91 m) above land-surface datum.

REMARKS.--Water level affected by pumpage and earthquakes.

PERIOD OF RECORD.--July 1956 to February 1971. January 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 4.03 ft (1.23 m) below land-surface datum June 15, 1958; lowest, 18.81 ft (5.73 m) below land-surface datum, Feb. 25, 1977.

HIGHEST WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	NR	15.69	16.17	NR	NR	15.01	9.35	9.90	10.93	NR	NR	13.71
10	14.76	15.76	16.42	NR	NR	14.11	10.55	9.40	NR	NR	NR	13.20
15	14.83	15.72	16.19	NR	NR	13.56	10.05	9.77	NR	NR	NR	12.27
20	14.92	15.88	15.95	NR	NR	12.71	10.25	10.20	NR	NR	13.92	NR
25	15.17	15.95	16.05	NR	17.11	11.66	10.30	10.52	NR	NR	14.02	NR
EOM	15.40	16.21	NR	NR	15.96	9.99	10.95	10.73	NR	NR	13.99	NR

WTR YEAR 1977 MAX 9.35 Apr. 4, 5, 1977

MIN 18.81 Feb. 25, 1977

GROUND-WATER LEVELS

PULASKI COUNTY

410739086365201. Local number, PU 7.

LOCATION.--41°07'39", long 86°36'52", Hydrologic Unit 05120106, in the Winamac State Fish and Game area, about 0.8 mi (1.3 km) southwest of Beardstown.

Owner: U.S. Geological Survey.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in (0.15 m), depth 105 ft (32 m), cased to 98 ft (30 m), screened to 100 ft (30.5 m).

Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 715 ft (218 m). Measuring point: Top of floor of shelter 2.50 ft (0.76 m) above land-surface datum.

PERIOD OF RECORD.--August 1967 to September 1971. September 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 5.27 ft (1.61 m) below land-surface datum Apr. 6, 1968; lowest, 11.10 ft (3.38 m) below land-surface datum, Feb. 11, 1977.

HIGHEST WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	10.25	10.50	10.60	10.80	11.05	10.20	NR	8.10	8.93	9.48	10.33	10.70
10	10.25	10.50	10.65	10.85	11.10	9.85	NR	7.75	9.10	9.67	10.33	10.78
15	10.25	10.55	10.65	10.95	11.05	9.60	NR	7.90	9.17	9.80	10.44	10.71
20	10.35	10.60	10.70	11.00	11.05	9.30	NR	8.20	9.25	9.91	10.51	10.49
25	10.40	10.60	10.75	11.00	10.65	8.90	NR	8.45	9.40	10.00	10.60	10.35
EOM	10.40	10.60	10.80	11.00	10.50	8.00	NR	8.76	9.43	10.17	10.68	10.36

WTR YEAR 1977 MAX 7.73 May 9, 10, 1977 MIN 11.10 Feb. 11, 1977

PUTNAM COUNTY

393254086590401. Local number, PN 4.

LOCATION.--Lat 39°32'54", Long 86°59'04", Hydrologic Unit 05120203, in the well field of Brazil Water Works about 8.0 mi (12.9 km) east of Brazil.

Owner: Brazil Water Company.

AQUIFER.--Sand and Gravel of Holocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 12 in (0.3 m), depth 60 ft (18 m), cased to 20 ft (6.1 m), slotted to 60 ft (18 m).

Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 612 ft (186 m). Measuring point: Top of floor of shelter 1.80 ft (0.55 m) above land-surface datum.

REMARKS.--Water level affected by Big Walnut Creek floods, and by pumpage from municipal well field.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.20 ft (0.06 m) below land-surface datum Apr. 9, 1961; lowest, 19.95 ft (6.08 m) below land-surface datum, Jan. 15-25, 1977

HIGHEST WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	18.45	NR	18.95	19.65	19.15	16.30	14.85	16.40	17.25	NR	17.45	17.35
10	18.35	18.75	19.00	19.70	18.40	16.85	15.60	15.05	16.80	15.20	17.35	17.50
15	18.20	18.85	19.10	19.85	16.50	17.00	16.10	16.00	NR	16.65	17.40	17.45
20	18.55	18.90	19.15	NR	16.90	16.90	16.40	16.50	NR	16.65	17.50	17.30
25	18.45	18.95	19.25	19.75	16.95	NR	16.30	16.85	NR	16.90	17.20	17.40
EOM	18.50	18.85	19.55	19.75	16.60	NR	16.65	17.10	NR	17.25	17.15	17.55

WTR YEAR 1977 MAX 13.95 Mar. 20-30, 1977 MIN 19.95 Jan. 15-25, 1977

RANDOLPH COUNTY

401532085085301. Local number, RA 3.

LOCATION.--Lat 40°15'32", long 85°08'53", Hydrologic Unit 05120103, at the east edge of Purdue University Agriculture Experiment Station, about 5.5 mi (8.9 km) north of Farmland.
Owner: U.S. Geological Survey.

AQUIFER.--Limestone of Silurian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in (0.15 m), depth 54 ft (16 m), cased to 33 ft (10 m), open end.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 970 ft (296 m). Measuring point: Top of floor of shelter 3.86 ft (1.18 m) above land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 7.98 ft (2.43 m) below land-surface datum May 27, 1968; lowest, 15.00 ft (4.57 m) below land-surface datum, Feb. 10, 1977.

HIGHEST WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	NR	14.50	NR	NR	NR	12.60	10.82	10.73	11.85	12.89	13.90	13.28
10	NR	14.40	NR	NR	14.95	12.70	11.36	10.71	12.10	13.07	13.56	13.52
15	NR	14.45	NR	NR	14.70	NR	11.50	11.04	12.26	13.31	13.06	13.19
20	14.45	14.50	NR	NR	14.60	NR	11.71	11.47	12.38	13.43	12.95	13.08
25	14.40	14.45	NR	NR	14.00	11.80	11.50	11.73	12.50	13.33	13.14	13.05
EQM	14.30	14.65	14.80	NR	13.25	11.37	11.48	11.81	12.64	13.57	13.20	13.21

WTR YEAR 1977 MAX 10.61 May 8, 1977 MIN 15.00 Feb. 10, 1977

SHELBY COUNTY

393943085490901. Local number, SH 2.

LOCATION.--Lat 39°39'43", long 85°49'09", Hydrologic Unit 05120204, on the county right of way at the intersection of County Roads 950 North and 200 West, 3.0 mi (4.8 km) south of Carrollton.
Owner: U.S. Geological Survey.

AQUIFER.--Limestone of Devonian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in (0.15 m), depth 150 ft (46 m), cased to 128 ft (39 m), open end.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 818 ft (249 m). Measuring point: Top of floor of shelter 3.00 ft (0.91 m) above land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 15.90 ft (4.85 m) below land-surface datum May 27, 1968; lowest, 22.65 ft (6.91 m) below land-surface datum, Feb. 7, 1977.

HIGHEST WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	21.35	21.70	22.00	22.20	22.45	19.70	19.15	19.70	20.15	20.60	21.25	21.20
10	21.50	21.65	22.00	22.15	22.50	19.80	19.55	18.80	20.35	20.70	21.10	21.35
15	21.50	21.80	22.00	22.30	21.95	20.05	19.80	19.15	20.55	20.85	21.10	21.48
20	21.50	21.80	22.00	22.45	21.75	20.15	19.95	19.55	20.55	20.80	21.15	21.50
25	21.55	21.85	22.10	22.35	20.90	20.40	19.55	19.80	20.65	20.70	21.15	21.56
EQM	21.50	21.95	22.30	22.45	20.20	19.70	19.60	20.00	20.65	21.00	21.15	21.54

WTR YEAR 1977 MAX 18.80 May 10, 1977 MIN 22.65 Feb. 7, 1977

GROUND-WATER LEVELS

STARKE COUNTY

411342086365601. Local number, SK 2.

LOCATION.--Lat 41°13'42", long 86°36'56", Hydrologic Unit 07120001, on private property in the southeast angle of intersection of U.S. Highway 35 and County Road 500 South, about 5.0 mi (8.0 km) south of Knox.

Owner: Samuel A. Craigmile.

AQUIFER.--Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in (0.15 m), depth 85 ft (26 m), cased to 77 ft (23 m), screened to 85 ft (26 m).

Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 710 ft (216 m). Measuring point: Top of floor of shelter 3.00 ft (0.91 m) above land-surface datum.

PERIOD OF RECORD.--October 1935 to December 1952, random instantaneous; August 1963 to October 1966. June 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.83 ft (0.25 m) below land surface datum June 17, 1949; lowest, 6.99 ft (2.13 m) below land-surface datum Aug. 2, 1939.

HIGHEST WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5										4.57	5.29	5.87
10									4.76	4.80	5.29	5.82
15									4.66	5.01	5.25	5.98
20									4.30	5.16	5.48	5.93
25									3.90	5.17	5.61	6.03
EOM									4.11	5.04	5.74	5.95

HIGHEST WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	5.96	5.99	5.84	6.00	6.03	4.73	3.63	4.55	5.38	5.20	5.99	5.92
10	5.83	5.90	5.79	5.98	6.06	4.83	4.08	4.66	5.27	5.45	5.91	6.07
15	5.88	5.94	5.84	6.01	5.80	4.62	4.36	4.91	5.26	5.60	6.09	5.64
20	5.93	5.99	5.86	6.01	5.79	4.33	4.50	5.05	5.33	5.70	6.17	5.25
25	5.97	6.00	5.91	6.04	5.12	4.17	4.59	5.17	5.46	5.84	6.27	5.37
EOM	5.98	5.66	5.98	6.02	5.26	3.59	4.78	5.31	4.95	5.92	6.31	5.50

WTR YEAR 1977 MAX 3.30 Mar. 29, 1977

MIN 6.35 Aug. 28, 1977

STARKE COUNTY

411419086340401. Local number, SK 12.

LOCATION.--Lat 41°14'19", long 86°34'04", Hydrologic Unit 07120001, in the Bass Lake State Fish Hatcheries on the northeast shore of the lake, about 5.0 mi (8.0 km) southeast of Knox.

Owner: State of Indiana.

AQUIFER.--Sand of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 1.5 in (0.04 m), depth 17 ft (5.2 m), cased to 15 ft (4.6 m), screened to 17 ft (5.2 m).

Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 720 ft (219 m). Measuring point: Top of floor of shelter 2.30 ft (0.70 m) above land-surface datum.

PERIOD OF RECORD.--May 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 1.37 ft (0.42 m) below land surface datum Oct. 8, Mar. 30, 1977; lowest, 2.94 ft (0.90 m) below land-surface datum Nov. 16, Apr. 18-20, 1977.

HIGHEST WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5									2.14	NR	1.91	NR
10									2.29	NR	1.84	NR
15									1.91	NR	NR	NR
20									NR	NR	NR	NR
25									NR	NR	NR	NR
EOM								1.74	NR	1.98	NR	NR

HIGHEST WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	NR	NR	2.81	2.59	2.70	1.71	1.86	1.50	2.03	2.04	2.21	2.07
10	1.87	NR	2.58	2.58	2.70	2.21	2.70	1.73	1.78	2.04	2.17	2.24
15	2.14	2.89	2.71	2.47	2.54	2.33	2.90	2.06	1.96	1.98	2.12	1.47
20	NR	2.88	2.58	2.52	2.46	2.22	2.86	2.04	2.09	2.13	2.20	1.62
25	NR	2.81	2.71	2.58	1.78	2.34	2.01	2.07	2.23	2.28	2.33	1.95
EOM	NR	2.67	2.75	2.65	2.02	1.43	1.69	2.18	1.57	2.12	2.23	2.18

WTR YEAR 1977 MAX 1.37 Oct. 8, 1976; Mar. 30, 1977 MIN 2.94 Nov. 16, 1976; Apr. 18-20, 1977

STARKE COUNTY

411255086364501. Local number, SK 13.

LOCATION.--Lat 41°12'55", long 86°36'45", Hydrologic Unit 07120001, on state property in the public parking area at the west end of Bass Lake.
Owner: State of Indiana.

AQUIFER.--Sand of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 1.5 in (0.04 m), depth 13 ft (4.0 m), cased to 11 ft (3.4 m), screened to 13 ft (4.0 m).
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 705 ft (215 m). Measuring point: Top of floor of shelter 2.20 ft (0.67 m) above land-surface datum.

PERIOD OF RECORD.--May 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 1.44 ft (0.44 m) below land-surface datum Mar. 28, 1977; lowest, 3.21 ft (0.98 m) below land-surface datum Aug. 28, 1977.

HIGHEST WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5									2.12	2.36	2.32	2.92
10									2.36	2.46	2.49	2.57
15									1.98	2.58	2.24	2.90
20									2.04	2.70	2.66	2.63
25									1.53	2.50	2.74	NR
EOM								1.64	1.84	2.20	2.83	NR

HIGHEST WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	NR	2.49	2.58	2.76	2.66	1.94	1.88	1.97	2.65	2.44	3.03	2.62
10	2.41	2.50	2.61	2.79	2.56	2.29	2.24	2.29	2.58	2.58	2.64	2.84
15	2.61	2.62	2.69	2.75	2.46	2.15	2.39	2.54	2.45	2.83	2.94	2.02
20	2.59	2.68	2.59	2.71	2.57	2.00	2.35	2.58	2.50	2.87	2.97	2.14
25	2.61	2.63	2.74	2.65	2.11	2.04	2.37	2.64	2.64	2.95	3.05	2.36
EOM	2.56	2.43	2.75	2.68	2.32	2.06	2.42	2.74	1.89	2.96	2.96	2.56

WTR YEAR 1977 MAX 1.44 Mar. 28, 1977 MIN 3.21 Aug. 28, 1977

TIPPECANOE COUNTY

402543086533401. Local number, TC 4.

LOCATION.--Lat 40°25'43", long 86°53'34", Hydrologic Unit 05120108, on flood plain of Wabash River, in the Lafayette Water Department well field at North Canal and Tippecanoe Streets in Lafayette.
Owner: Lafayette Water Department.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 12 in (0.30 m), depth 97 ft (30 m).
Instrumentation: Water-stage recorder.

DATUM.--Elevation of land-surface datum is 520.9 ft (158.8 m). Measuring point: Top of floor of shelter 15.43 ft (4.70 m) above land-surface datum.

REMARKS.--Water level affected by Wabash River floods and by pumpage from municipal supply well field.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 8.2 ft (2.5 m) above land-surface datum Jan. 6, 7, 1950; lowest, 40.14 ft (12.23 m) below land-surface datum, Aug. 4, 1944.

HIGHEST WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	20.20	21.35	21.05	19.25	21.65	NR	14.65	20.48	23.48	21.27	24.60	20.68
10	NR	20.00	NR	NR	20.20	18.30	13.50	17.34	23.33	24.77	22.79	22.65
15	21.80	20.40	20.70	21.80	17.85	22.00	18.86	22.74	21.01	23.43	20.42	18.39
20	NR	19.20	NR	20.90	18.40	17.35	17.69	21.25	24.68	26.90	18.88	15.99
25	NR	19.80	20.50	20.10	17.45	18.34	16.72	24.56	24.02	24.53	21.30	18.03
EOM	17.50	19.35	18.45	NR	17.10	15.46	18.74	26.10	23.82	23.19	20.65	18.42

WTR YEAR 1977 MAX 12.50 Mar. 30, 1977 MIN 30.03 July 20, 1977

GROUND-WATER LEVELS

TIPPECANOE COUNTY

402603086535101. Local number, TC 8.

LOCATION.--Lat 40°26'03", long 86°53'51", Hydrologic Unit 05120108, on the right bank of the Wabash River in West Lafayette.
Owner: West Lafayette Water Company.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 12 in (0.30 m), depth 84 ft (26 m).
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 528.6 ft (161 m). Measuring point: Top of floor of shelter 13.54 ft (4.13 m) above land-surface datum.

REMARKS.--Water level affected by Wabash River floods and by pumpage from municipal supply wells.

PERIOD OF RECORD.--November 1945 to December 1949. February 1967 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 3.06 ft (0.93 m) below land-surface datum Feb. 3, 1949; lowest, 39.9 ft (12.16 m) below land-surface datum, Sept. 16, 1967.

HIGHEST WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	23.5	NR	NR	23.4	NR	NR	17.85	21.53	24.05	23.94	25.24	23.13
10	NR	23.3	23.7	23.5	24.5	19.9	19.55	20.54	23.27	24.06	22.80	23.57
15	23.3	23.3	NR	NR	23.8	20.9	20.39	21.34	23.42	24.49	21.47	20.18
20	NR	NR	NR	NR	NR	20.33	21.44	22.16	23.54	25.01	21.79	20.26
25	NR	NR	NR	NR	NR	20.38	21.54	23.13	23.85	24.62	22.65	21.46
EOM	NR	NR	NR	NR	NR	17.90	21.61	23.90	24.54	25.16	23.43	21.82

WTR YEAR 1977 MAX 17.85 Apr. 5, 1977

MIN 27.00 July 30, 1977

VANDERBURGH COUNTY

380608087395901. Local number, VA 6.

LOCATION.--Lat 38°06'08", long 87°39'59", Hydrologic Unit 05120113, on county right of way at the intersection of Buente and New Harmony Roads, 1.0 mi (1.6 km) southwest of Armstrong.
Owner: U.S. Geological Survey.

AQUIFER.--Limestone of Pennsylvanian Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in (0.15 m), depth 125 ft (38 m), cased to 80 ft (24 m), open end.
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 447 ft (136 m). Measuring point: Top of floor of shelter 3.47 ft (1.06 m) above land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 24.88 ft (7.58 m) below land-surface datum Apr. 3, 4, 1968; lowest, 33.00 ft (10.06 m) below land-surface datum, Feb. 7, 1977.

HIGHEST WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	32.00	32.00	NR	32.35	32.70	32.35	31.35	31.05	31.80	31.50	31.55	31.30
10	32.00	32.05	NR	32.20	32.80	32.35	31.75	31.10	31.95	31.50	31.40	31.40
15	32.00	32.10	32.25	32.25	32.70	32.10	31.70	31.15	31.90	31.45	31.35	NR
20	32.05	32.10	32.20	32.30	32.70	31.90	31.60	31.40	31.80	31.65	31.45	NR
25	31.95	32.15	32.30	32.50	32.50	31.95	31.35	31.45	31.65	31.60	31.25	30.85
EOM	32.05	NR	32.20	32.85	32.55	31.30	31.35	31.45	31.30	31.40	31.25	30.92

WTR YEAR 1977 MAX 30.85 Sept. 25, 1977

MIN 33.00 Feb. 7, 1977

VIGO COUNTY

393201087232101. Local number, VI 6.

LOCATION.--Lat 39°32'01", long 87°23'21", Hydrologic Unit 05120111, on property of the American Brass Co., at the north edge of Terre Haute.

Owner: American Brass Company.

AQUIFER.--Sand and Gravel of Quaternary Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in (0.15 m), depth 138 ft (42 m), cased to 137 ft (41.7 m), with perforated pipe.

Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 511 ft (156 m). Measuring point: Top of floor of shelter 3.47 ft (1.06 m) above land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 42.43 ft (12.93 m) below land-surface datum June 28, 1958; lowest, 52.25 ft (15.93 m) below land-surface datum, Nov. 15-25, 1966.

HIGHEST WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	50.20	50.65	50.80	51.15	51.60	51.80	51.40	50.40	50.25	50.69	51.20	51.36
10	50.25	50.65	50.85	51.20	51.65	51.80	51.15	50.35	50.26	50.76	51.25	51.32
15	50.30	50.65	50.90	51.30	51.70	51.80	50.90	50.35	50.28	50.91	51.31	51.29
20	50.40	50.70	50.95	51.35	51.75	51.75	50.80	50.32	50.41	51.02	51.40	NR
25	50.50	50.70	51.00	51.40	51.80	51.70	50.70	50.27	50.54	51.09	51.40	NR
EOB	50.55	50.70	51.10	51.50	51.80	51.55	50.50	50.25	50.64	51.15	51.39	NR

WTR YEAR 1977 MAX 50.15 Oct. 1, 2, 1976

MIN 51.80 Feb. 23-28, Mar. 1-16, 1977

VIGO COUNTY

392820087242601. Local number, VI 7.

LOCATION.--Lat 39°28'20", long 87°24'26", Hydrologic Unit 05120111, on the campus of Indiana State University, in Terre Haute.

Owner: U.S. Geological Survey.

AQUIFER.--Sand and Gravel of Holocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 6 in (0.15 m), depth 70 ft (21 m), cased to 67 ft (20.4 m), screened to 70 ft (21 m).

Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 502 ft (153 m). Measuring point: Top of floor of shelter 3.00 ft (0.91 m) above land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 41.80 ft (12.74 m) below land-surface datum June 7, 1974; lowest, 51.90 ft (15.82 m) below land-surface datum, Sept. 29 to Oct. 1, 1972.

HIGHEST WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	48.75	48.95	49.20	49.70	50.35	50.80	49.85	49.65	50.13	50.96	51.43	51.20
10	48.80	49.00	49.25	49.80	50.45	50.75	49.55	49.70	50.29	51.09	51.50	51.23
15	48.85	49.05	49.30	49.90	50.55	50.60	49.35	49.60	50.43	51.19	51.43	51.27
20	48.90	49.05	49.45	50.05	50.65	50.45	49.35	49.64	50.55	51.27	51.26	51.17
25	48.90	49.10	49.55	50.15	50.75	50.30	49.45	49.77	50.72	51.34	51.16	50.92
EOB	48.95	49.15	49.65	50.25	50.80	50.15	49.50	49.95	50.86	51.36	51.16	50.75

WTR YEAR 1977 MAX 48.65 Jan. 1, 1977

MIN 51.52 Aug. 12, 13, 1977

GROUND-WATER LEVELS

WAYNE COUNTY

394426085080601. Local number, WE 6.

LOCATION.--Lat 39°44'26", long 85°08'06", Hydrologic Unit 05080003, on county right of way near the intersection of State Highway 1 and Bentonville Road, about 4.0 mi (6.4 km) south of East Germantown.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 6 in (0.15 m), depth 49 ft (15 m), cased to 47 ft (14 m), screened to 49 ft (15 m).
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 888 ft (271 m). Measuring point: Top of collar in shelter 3.25 ft (0.99 m) above land-surface datum.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 10.55 ft (3.22 m) below land-surface datum Apr. 30 to May 2, 1975; lowest, 21.68 ft (6.61 m) below land-surface datum, Feb. 1, 1977.

HIGHEST WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	19.85	20.45	20.85	NR	21.65	19.95	18.15	17.45	17.66	18.65	19.63	20.05
10	20.00	20.50	20.95	NR	21.70	19.50	17.70	17.35	17.85	18.75	19.76	20.12
15	20.05	20.60	21.00	NR	21.50	19.20	17.50	17.30	18.03	18.90	19.84	20.20
20	20.20	20.70	21.05	NR	21.35	19.00	17.50	17.30	18.20	19.07	19.88	20.28
25	20.30	20.75	21.15	21.55	20.60	18.85	17.45	17.40	18.40	19.25	19.93	20.35
EOM	20.40	20.80	21.20	21.60	20.35	18.70	17.45	17.55	18.55	19.45	19.99	20.43

WTR YEAR 1977 MAX 17.30 May 15, 20, 1977

MIN 21.68 Feb. 1, 1977

WHITLEY COUNTY

410337085264201. Local number, WY 3.

LOCATION.--Lat 41°03'37", long 85°26'42", Hydrologic Unit 05120104, on the county right of way of Evergreen Road, 0.75 mi (1.2 km) north of Laud.
Owner: U.S. Geological Survey.

AQUIFER.--Sand and Gravel of Pleistocene Age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 6 in (0.15 m), depth 191 ft (58 m), cased to 187 ft (57 m), screened to 191 ft (58 m).
Instrumentation: Water-stage recorder.

DATUM.--Altitude of land-surface datum is 870 ft (265 m). Measuring point: Top of floor of shelter 2.68 ft (0.82 m) above land-surface datum.

PERIOD OF RECORD.--December 1966 to September 1971. August 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 49.30 ft (15.03 m) below land-surface datum Mar. 27, 1976; lowest, 52.59 ft (16.03 m) below land-surface datum, Jan. 18, 1967.

HIGHEST WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	51.00	51.25	51.60	51.70	51.80	52.00	51.60	51.68	51.90	52.05	52.10	52.05
10	51.10	51.25	51.50	51.40	52.00	52.05	52.05	51.84	52.00	52.15	52.00	52.15
15	51.00	51.35	51.50	51.65	52.00	51.90	51.95	51.93	52.05	52.15	52.10	52.05
20	51.10	51.25	51.35	51.65	52.00	51.80	51.90	51.97	52.00	52.10	52.00	52.00
25	51.15	51.25	51.50	51.75	51.85	52.15	51.70	51.99	52.10	52.05	52.15	51.85
EOM	51.10	51.50	51.65	51.80	52.05	51.95	51.85	51.95	51.90	52.07	52.15	51.90

WTR YEAR 1977 MAX 50.95 Oct. 1, 1976

MIN 52.25 Mar. 1, 10, Sept. 11, 1977

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FACTORS FOR CONVERTING U.S. CUSTOMARY UNITS TO INTERNATIONAL SYSTEM UNITS (SI)

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

Multiply U.S. customary units	By	To obtain SI units
<i>Length</i>		
inches (in)	2.54×10^1	millimeters (mm)
	2.54×10^{-2}	meters (m)
feet (ft)	3.048×10^{-1}	meters (m)
miles (mi)	1.609×10^0	kilometers (km)
<i>Area</i>		
acres	4.047×10^3	square meters (m ²)
	4.047×10^{-1}	square hectometers (hm ²)
	4.047×10^{-3}	square kilometers (km ²)
square miles (mi ²)	2.590×10^0	square kilometers (km ²)
<i>Volume</i>		
gallons (gal)	3.785×10^0	liters (L)
	3.785×10^0	cubic decimeters (dm ³)
	3.785×10^{-3}	cubic meters (m ³)
million gallons	3.785×10^3	cubic meters (m ³)
	3.785×10^{-3}	cubic hectometers (hm ³)
cubic feet (ft ³)	2.832×10^1	cubic decimeters (dm ³)
	2.832×10^{-2}	cubic meters (m ³)
cfs-days	2.447×10^3	cubic meters (m ³)
	2.447×10^{-3}	cubic hectometers (hm ³)
acre-feet (acre-ft)	1.233×10^3	cubic meters (m ³)
	1.233×10^{-3}	cubic hectometers (hm ³)
	1.233×10^{-6}	cubic kilometers (km ³)
<i>Flow</i>		
cubic feet per second (ft ³ /s)	2.832×10^1	liters per second (L/s)
	2.832×10^1	cubic decimeters per second (dm ³ /s)
	2.832×10^{-2}	cubic meters per second (m ³ /s)
gallons per minute (gal/min)	6.309×10^{-2}	liters per second (L/s)
	6.309×10^{-2}	cubic decimeters per second (dm ³ /s)
	6.309×10^{-5}	cubic meters per second (m ³ /s)
million gallons per day	4.381×10^1	cubic decimeters per second (dm ³ /s)
	4.381×10^{-2}	cubic meters per second (m ³ /s)
<i>Mass</i>		
tons (short)	9.072×10^{-1}	megagrams (Mg) or metric tons

